January 13, 2012

Enclosed are the comments from the afternoon and evening sessions of the Fermi Unit 3 Public Meeting held on December 15, 2011

Comments submitted by Richard G. Micka

47 E. Elm Ave., Monroe, MI 48162
December 15, 20ll

Chief, Rule Making, Directives and Editing Branch, Division
of Administrative Service, Offices of Administration,
Mailstop TWB – 05-BO1M
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555-0001

To Whom It May Concern:

My name is Richard Micka. I have lived in the City of Monroe, MI, for many years. I am also what some would call a "civic booster". I am an outdoorsman and an avid conservationist. I have the great honor to serve as the Chairman of the Detroit River International Wildlife Refuge Alliance, a Friends organization that helps the U. S. Fish and Wildlife Service to deliver on the mission of the Refuge. I am here this afternoon offering my personal perspective as a resident, booster and conservationist.

As a resident, I believe that when it comes to electricity, we can't put all our eggs in one basket. We need something more than coal, and I don't think wind and hydro are going to be of much help … certainly, not here in the southeast corner of Michigan. We need more nuclear energy in the mix, so I welcome continued progress on a new unit at Fermi.

As a civic booster, I have long observed and admired DTE Energy's involvement in Monroe County. I've had the pleasure to work shoulder-to-shoulder with many men and women from the Company, and, to a person, they are great examples of what good neighbors should be.

As a conservationist, I've worked over the years with what I term the "Big Four" of local environmental stewardship – the Fish and Wildlife Service, the Michigan Department of Natural Resources, the Huron-Clinton Metropolitan Authority, and the Utilities. DTE Energy and its involvement with the Wildlife Habitat Council is a great example of environmental stewardship. Of course, DTE Energy was the first business partner within the Wildlife Refuge, entering into a cooperative management agreement with the Fish and Wildlife Service, enabling the Service to protect and manage wildlife and fish populations on 656 acres at Fermi.

I am aware that about 30 acres of wetlands will be impacted by Fermi 3 – only 9 of which are to be permanently affected. My experience with other projects where wetlands have been restored is that wetlands along the west shore of Lake Erie recover quickly. I can point to the reclamation of the Brancheau Tract on Swan Creek. It had been actively farmed for more than a century, but it did not take long after Ducks Unlimited and the Fish and Wildlife Service turned it back into productive wetlands. My belief is that we will see a similar success with the 80 acres to be restored along LaPlaisance Bay south of the River Raisin and Plum Creek Bay. In closing: 80 acres of restored wetlands for 9 acres of permanently impacted wetlands; a multi-billion expansion of operations involving one of our biggest and best community partners; and greater diversification of our energy portfolio…sounds like a win/win scenior to me. Thank you.

Richard G. Micka

RICHARD G MICKA
47 E Elm Ave.
Monroe, MI 48162-2648

U.S. Fish & Wildlife Service

Detroit River

International Wildlife Refuge

Humbug Marsh, USFWS

"Detroit River International Wildlife Refuge is creating a new model for conservation where passionate citizens join progressive governments, businesses, and foundations to make metro areas better places for wildlife and people."

Congressman John D. Dingell

Long known for industry and its environmental consequences, the Detroit area entered the 21st Century a changed region. More than thirty years of committed pollution prevention and conservation created waterways and shorelines that once again support wildlife and inspire people.

The Detroit River International Wildlife Refuge symbolizes the region's re-birth. The first of its kind in North America, it conserves more than 5,000 acres on the lower Detroit River and western shore of Lake Erie. The U.S. Fish and Wildlife Service, working with public and private organizations, manages the refuge to benefit wildlife and people. Visitors can hunt, fish, hike, and watch wildlife on the refuge.

Eagle Island Marsh,
Automotive Components Holdings

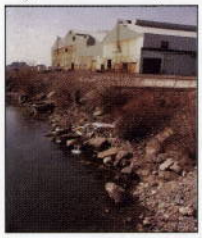
Flying scaup, Ducks Unlimited

From Industrial Icon to Environmental Example

Located at the intersection of the Atlantic and Mississippi flyways, the Detroit River and western Lake Erie have been important to migratory birds for eons. Waterfowl traveling between summer and winter homes rely on the area's marshes for resting and refueling. Both the Detroit River and Lake Erie have long been important transportation routes for people and goods as well.

The Twentieth Century brought the automobile and steel industries to Detroit and, with them, environmental threats. By the 1960s and 1970s, most rivers and lakes in the area were polluted; the Detroit River and Lake Erie were no exceptions.

U.S. Steel shoreline before cleanup...



...and after!
Nativescape

Thanks to dramatic pollution prevention and cleanup efforts, the area made one of the most impressive environmental recoveries in North America. Today, the Detroit River and western Lake Erie support healthy wildlife and fish populations, and people from around the world come to enjoy outdoor recreation. Marking this ecological comeback, Congress created the Detroit River International Wildlife Refuge in 2001 from lands that were part of Wyandotte National Wildlife Refuge – Grassy Island and Mamajuda Shoal. Additional parcels came through both purchases and cooperative agreements. The refuge is a unit of the National Wildlife Refuge System, a 96-million-acre network of Federal lands set aside for wildlife.

Sharp-shinned Hawk, USFWS

A Wild Variety in a Civil Setting

Detroit River Refuge protects islands, coastal wetlands, shoals, and riverfront lands along 48 miles of the lower Detroit River and western Lake Erie. These habitats support 300 species of birds, including 30 species of waterfowl, 23 species of raptors, and 31 species of shorebirds, plus 117 kinds of fish…all within an urban area of six million people.

Wood duck,
J. Mattsson, USFWS

More than three million waterfowl migrate through the Great Lakes area annually. American black ducks gather in the marshes of western Lake Erie before completing their fall journey south. Migrating canvasbacks rest and feed on beds of wild celery in the lower Detroit River. Wood ducks, mallards, and blue-winged teal nest in the area.

Lesser yellowlegs,
LeBlanc

A wide variety of wading birds and shorebirds lives here during the summer months. Great blue herons and common egrets hunt in the shallows. Dunlins, spotted sandpipers, yellowlegs, and dowitchers probe the sands for tasty morsels. The Lake Erie shoreline has been named a Site of Regional Shorebird Importance in the Western Hemispheric Shorebird Reserve Network.

Bald eagles use the refuge year-round, plucking fish from the waters and perching on high, bare branches to eat and rest. There are several active bald eagle nests within the refuge boundary.

Red-winged blackbirds, tundra and trumpeter swans, American woodcock, common loons, belted kingfishers, and many species of songbirds call this area home during the spring and summer months. Ring-necked pheasants and bob-white quail are year-round residents.

Photos from top:
Bald Eagles, Trumpeter Swan, Ring-necked Pheasant,
K. LeBlanc

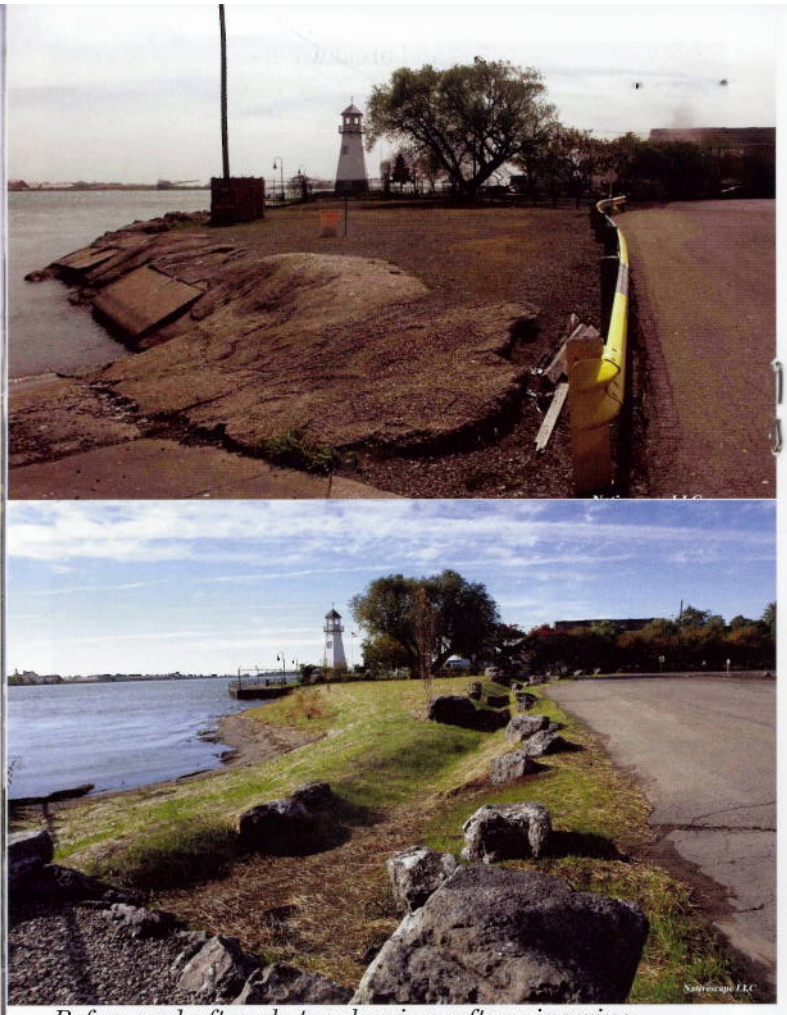
14-lb walleye,
J. Barta

More than 10 million walleye migrate through the Detroit River each year. Lake sturgeon, threatened with extinction in 19 of the 20 states in their range, once spawned in swift currents on the rocky river bottom near Grassy Island. Recent research shows that the fish are reproducing in the lower Detroit River once again. Lake whitefish are also spawning there for the first time in 90 years.

Young lake sturgeon,
USFWS

Painted turtle,
K. Sommerer

The Detroit River and western Lake Erie have been noted for their variety of plants and animals in the North American Waterfowl Management Plan, the United Nations Convention on Biological Diversity, and the Biodiversity Investment Area Program of Environment Canada and the U.S. Environmental Protection Agency.



Before-and-after photos showing soft engineering techniques at DTE's River Rouge Power Plant, Nativescape

Closer to Nature

Like most national wildlife refuges, the Detroit River International Wildlife Refuge is actively managed to provide habitat for wildlife. Refuge staff work with industrial corporations, other government agencies, municipalities, and non-profit organizations to return grasslands, wetlands, and shorelines to healthy condition.

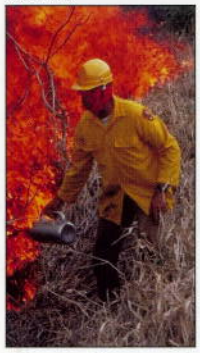
Staff and partners use soft engineering techniques to restore portions of the lower Detroit River and Lake Erie shorelines. By replacing concrete with natural materials, they stabilize the banks while improving wildlife habitat.

Dabbling for food, K. Barr USFWS

Dikes and breakwaters on the Lake Erie shore let managers control water levels in some areas, mimicking natural cycles. Water is drained during the summer, allowing sunlight to reach underwater plants and promote growth. In the fall, deeper water provides migrating waterfowl with a place to rest and feed.

Spraying noxious weeds, USFWS

Prescribed fire, Shallenberger, USFWS



Non-native plants, such as common reed, purple loosestrife, and reed canary grass, spread into natural habitats, replacing native species important to wildlife. Refuge staff and partners fight the invaders using mowing, plowing, prescribed fire, water-level control, and chemical application. They control purple loosestrife with a beetle that eats the plant, but does not harm other vegetation.

Common terns benefit from habitat restoration, Bill McBride

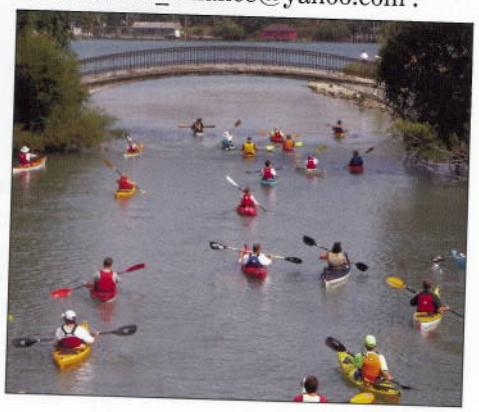
Working with lake sturgeon, USFWS

Refuge staff and volunteers monitor populations of birds, fish, amphibians, reptiles, and insects on the refuge. By tracking numbers from year to year, managers can identify species that are declining and may need help.

A Group Effort

The Detroit River International Wildlife Refuge is a product of partnerships. The U.S. Fish and Wildlife Service manages refuge lands cooperatively, with public and private organizations. Partners in the United States include DTE Energy, International Transmission Company, Praxair, Huron Clinton Metropolitan Authority, Wayne County, The Nature Conservancy, BASF Corporation, General Motors Corporation, Ford Motor Company, Chrysler Corporation, Ducks Unlimited, and many more. In Canada, Environment Canada, Essex Region Conservation Authority, the City of Windsor, and others contribute to the refuge's mission.

The International Wildlife Refuge Alliance formed in 2005. This nonprofit coalition supports the Fish and Wildlife Service in its mission for the Detroit River International Wildlife Refuge. The Alliance fosters conservation on refuge lands, increases refuge visibility, and supports refuge projects. It has published *Byways to Flyways*, which features detailed descriptions of 27 sites across the Windsor-Detroit area known for their exceptional bird watching opportunities. The group partners in wildlife observation events, a "Paddle By Your Refuge" event, and stewardship projects like building a wildlife observation deck. For info contact: iwr_alliance@yahoo.com .



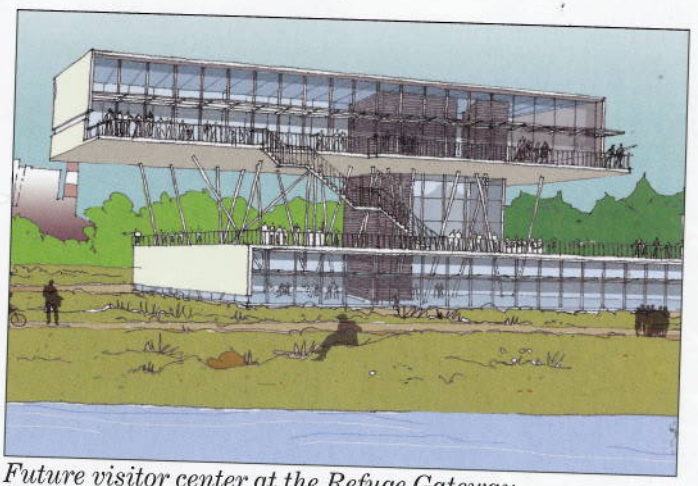
Paddle By Your Refuge kayak event, Janis Layne

Wildlife comes first!

Enjoying the Refuge

Wildlife comes first at the Detroit River International Wildlife Refuge. Human activities must be compatible with the needs of wildlife. Six recreational uses are encouraged:

- hunting,
- fishing,
- wildlife observation,
- photography,
- environmental education and
- interpretation.

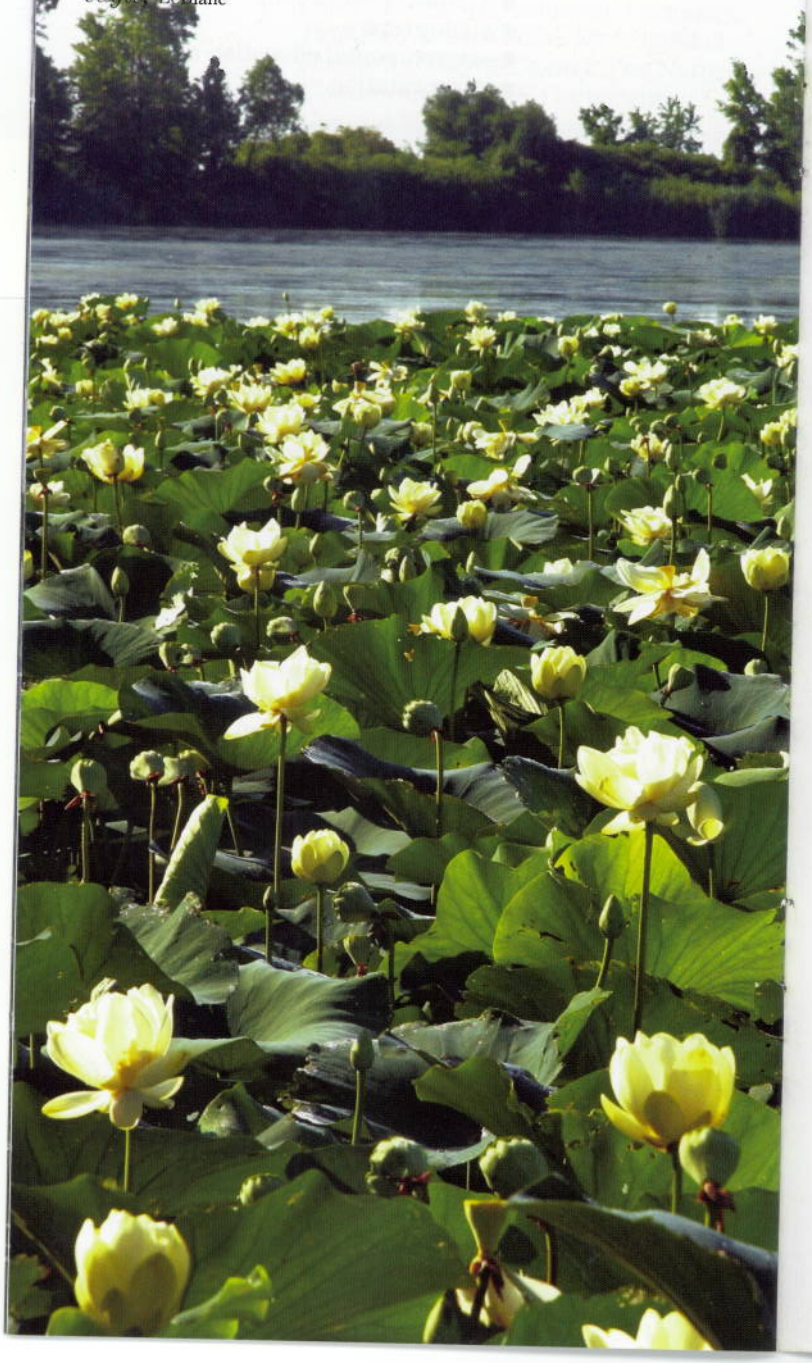


Future visitor center at the Refuge Gateway, Hamilton Anderson Associates

The 410-acre Humbug Marsh Unit, the last mile of natural Detroit River shoreline on the U.S. mainland, has trails and an observation deck that offer excellent bird watching and hiking. Next to Humbug Marsh is the 44-acre Refuge Gateway, where the refuge headquarters and visitor center are being created in partnership with Wayne County, Huron Clinton Metropolitan Authority, the International Wildlife Refuge Alliance, Friends of the Detroit River, Detroit Audubon, Wayne County Community College, Michigan Sea Grant and others. The visitor center will provide educational and interpretive displays and programs, and will allow visitors to explore Humbug Marsh.

Juvenile bald eagle, LeBlanc

Almost three miles of trails at Lake Erie MetroPark take hikers along the Detroit River and Lake Erie shorelines and through coastal marshes, and dense hawthorn thickets. The annual Hawkfest celebrates the migration of birds of prey in September.



Youth duck hunt, Gibraltar Duck Hunters Association

Rising mallard,
K. Barr, USFWS

Waterfowl hunting has been popular in the area for centuries. Many hunters use layout boats and large rafts of decoys to attract diving ducks on the open waters of the Detroit River and western Lake Erie. State law allows duck and goose hunting along the Detroit River and Lake Erie, as long as the hunter is standing in the water, shooting his or her gun away from the shoreline, and at least 450 feet from an occupied building. Pointe Mouillee State Game Area, owned and managed by the Michigan Department of Natural Resources and not part of the refuge, is open to hunting and has a boat launch.

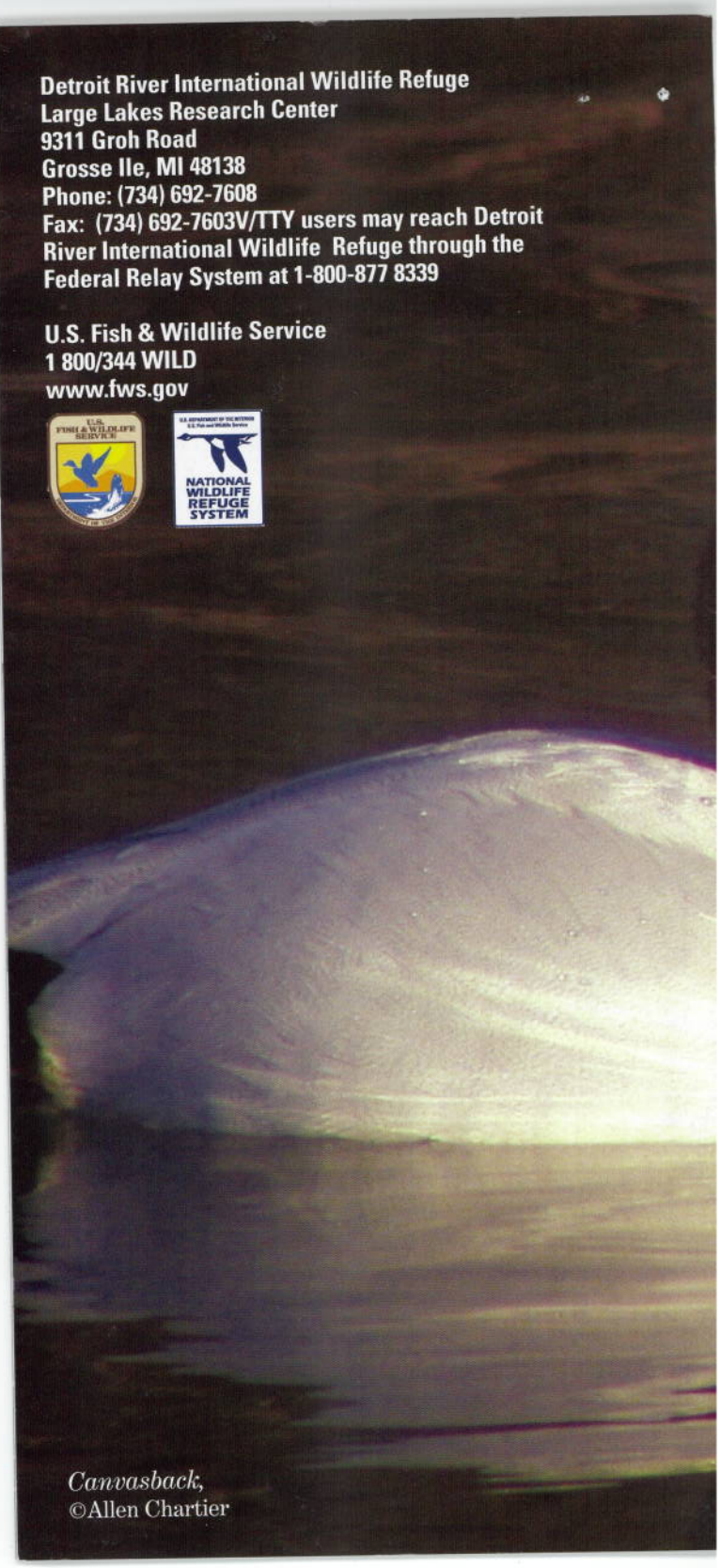
Fishing,
E. Hester, USFWS

Refuge waters are open to sport fishing, following State regulations. Pointe Mouillee State Game Area, Wayne County's Elizabeth Park, and Lake Erie MetroPark provide public access for both shoreline and boat fishing. Walleye, yellow perch, smallmouth bass, white bass, rockbass, and white perch are common.

Lake Erie Metro Park,
Huron Clinton Metropolitan Authority

Detroit River International Wildlife Refuge
Large Lakes Research Center
9311 Groh Road
Grosse Ile, MI 48138
Phone: (734) 692-7608
Fax: (734) 692-7603V/TTY users may reach Detroit River International Wildlife Refuge through the Federal Relay System at 1-800-877 8339

U.S. Fish & Wildlife Service
1 800/344 WILD
www.fws.gov



Canvasback,
©Allen Chartier

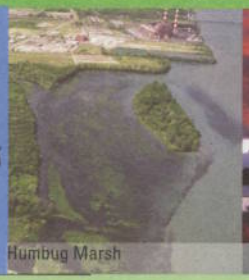
INTERNATIONAL WILDLIFE
REFUGE ALLIANCE

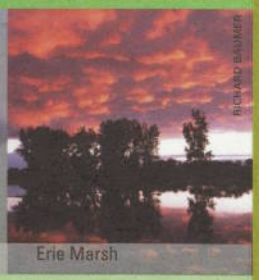
Discover Our Wild Side

INTERNATIONAL
WILDLIFE
REFUGE ALLIANCE

The mission of the International Wildlife Refuge Alliance is to support the first international wildlife refuge in North America by working through partnerships to protect, conserve, and manage the Refuge's wildlife and habitats; and to create exceptional conservation, recreational, and educational experiences to develop the next generation of conservation stewards.

WHO IS THE INTERNATIONAL WILDLIFE REFUGE ALLIANCE?


Humbug Marsh



Erie Marsh

The International Wildlife Refuge Alliance is a 501 (c) (3) nonprofit organization dedicated to helping the U.S. Fish and Wildlife Service deliver the mission of the Detroit River International Wildlife Refuge. We are an alliance of individuals and organizations committed to the success of the Refuge.

Events & Partnerships

- Annual Benefit Dinner – *April*
- Pointe Mouillee Waterfowl Festival – *September*
- Hawkfest – *September*
- Paddle By Your Refuge – *September*
- State of the Strait Conference – *Every two years*
- Monroe County Lotus Garden Club Tour – *August*
- Christmas Bird Counts – *December*

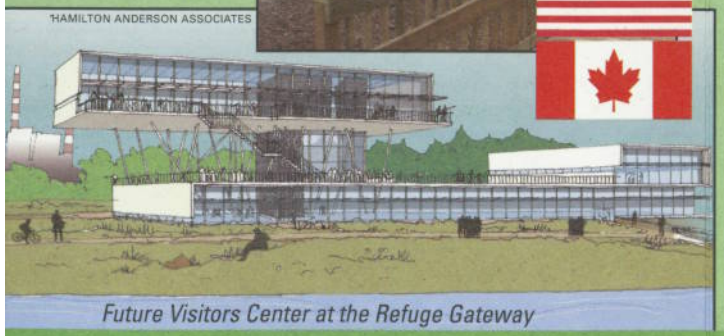
...and Much More to come!

Projects

A Bird Driving Tour of SE MI and SW Ontario

BYWAYS to FLYWAYS

Wildlife observation deck at Humbug Marsh



Future Visitors Center at the Refuge Gateway

Each year the Detroit River International Wildlife Refuge hosts over 300,000 diving ducks, 75,000 shorebirds, and several hundred thousand land birds that nest, rest, overwinter or migrate through the Refuge corridor.

Canvasbacks congregate by the thousands on the Detroit River each fall.

The DRIWR is one of the best places in North America to watch hawks.

Known as a world-class fishing hot spot, more than ten million walleye migrate through the Detroit River attracting thousands of anglers. It is known as the "Walleye Capital of the World" – hosting international walleye and bass tournaments offering millions of dollars in prize money.

The DRIWR is working with numerous partners to restore habitat for the lake sturgeon throughout the Detroit River.

The American lotus is the state symbol for clean water in Michigan. It grows within Great Lakes coastal marshes in the lower Detroit River and western Lake Erie.

Join us in building the first International Wildlife Refuge in North America!

Become a partner!
Partners working in the Refuge have contributed countless hours to bettering this unique ecosystem. The Alliance is seeking volunteers for:

- Clean-ups, trail building and habitat restoration
- Alliance committees and fundraisers
- Nature tours and outreach activities
- Monitoring plants and wildlife
- Construction projects
- Administrative support, including office work and mailings

Become an annual supporter!

$15	Mayfly (Sticker)
$30	Canvasback (Car Decal)
$60	Walleye (Free Admission to an Alliance Family Event)
$100	Great Blue Heron (License Plate)
$250	Lake Sturgeon (Two tickets to the Annual Benefit Dinner and License Plate)
$500	Mallard (Four tickets to the Annual Benefit Dinner, two VIP reception confirmations and recognition at the Dinner)
	Other _____

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

E-mail: _____ Phone: _____

Would you like to volunteer? Y or N

Does your employer have a gift matching program? Y or N

Donation Amount: _____

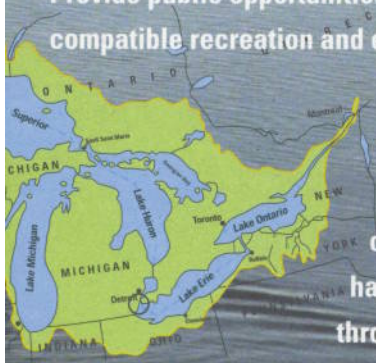
Please make checks payable to the International Wildlife Refuge Alliance.
Mail to: IWRA, 9311 Groh Rd. Grosse Ile, MI 48138

- Please contact us for more information on major partner sponsorship opportunities for the Annual Spring Benefit Dinner.
- All supporters receive a seasonal newsletter, e-announcements on DRIWR updates and activities, the national Wildlife Refuge magazine, invitations to special events, and an Alliance pin.
- For detailed information on the Capital Campaign, Endowment Contributions, or Project Funding Initiatives, please contact us.
- Donations of equipment, tools, outreach, and educational materials are welcome.

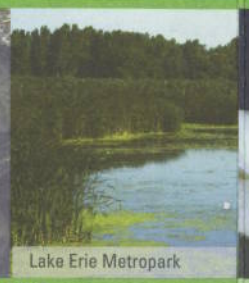
Nestled amidst the southern Detroit metropolitan area, the Detroit River International Wildlife Refuge (DRIWR) is a shining example of the resurgence of native species within an urban region. Established in 2001, the DRIWR includes 48 miles of Detroit River and western Lake Erie shoreline, stretching from southwest Detroit to Erie Marsh, north of Toledo. The Refuge has grown to over 5,000 acres.

Our priorities for the International Wildlife Refuge:

- **Restore habitat for fish and wildlife**
- **Grow Refuge lands and partners through cooperative agreements and acquisitions**
- **Provide public opportunities for wildlife-compatible recreation and environmental education**



The DRIWR is a new model for conservation: restoring habitat in an urban area through public-private partnerships. It is a blueprint for the revitalization of nature in urban centers across the nation.



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Working to support the mission of the Detroit River International Wildlife Refuge

www.fws.gov/midwest/detroitriver/

International Wildlife Refuge Alliance
9311 Groh Rd., Grosse Ile, MI 48138
T: (734) 692-7671; F: (734) 692-7603
iwr_alliance@yahoo.com

An affiliate of:

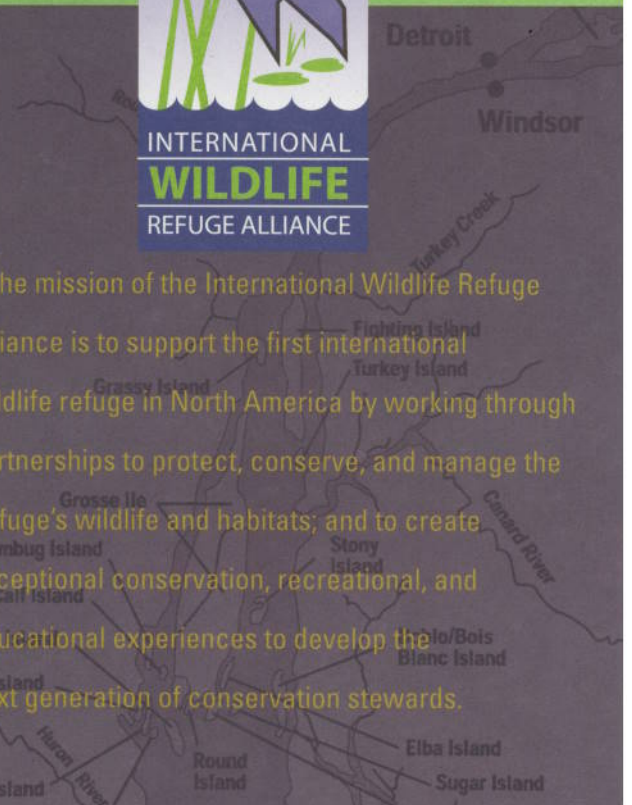
National Wildlife Refuge Association

www.refugenet.org

INTERNATIONAL WILDLIFE REFUGE ALLIANCE

Discover Our Wild Side

INTERNATIONAL WILDLIFE REFUGE ALLIANCE



The mission of the International Wildlife Refuge Alliance is to support the first international wildlife refuge in North America by working through partnerships to protect, conserve, and manage the Refuge's wildlife and habitats; and to create exceptional conservation, recreational, and educational experiences to develop the next generation of conservation stewards.

THE WILDSIDE

A newsletter for the supporters of the International Wildlife Refuge Alliance and the Detroit River International Wildlife Refuge

FALL 2011/WINTER 2012

IN THIS ISSUE:

- Upcoming Events!
- State of the Strait!
- Big Changes at the Refuge Gateway!

...and more!

Photo: Jerry Jourdan

ABOUT DRIWR & IWRA

The Detroit River International Wildlife Refuge (DRIWR) is located along the lower Detroit River and western shoreline of Lake Erie. Established in 2001 as the first International Wildlife Refuge in North America, it includes islands, coastal wetlands, marshes, shoals, and waterfront lands along 48 miles of shoreline. Its unique location in a large urban area allows significant opportunities for the public to experience fish, wildlife and plants in their natural habitat. The International Wildlife Refuge Alliance (IWRA) is a 501 (c) (3) nonprofit organization- a "Friends" group that works to support the U.S. Fish & Wildlife Service in the development of the DRIWR. We invite you to become a supporter of IWRA.

Visit *iwralliance.org , fws.gov/midwest/DetroitRiver and facebook.com/DetroitRiverIWR* for more periodic updates.

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IWR Office: 734.692.7671

FWS Email: jamie.lanier@fws.gov
FWS Office: 734.692.7649

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Steve Dushane, Assistant Refuge Manager
Jamie Lanier, Visitor Services Manager
Greg Norwood, Biologist
Anna Cook, Biological Technician
Allison Krueger, Landscape Designer

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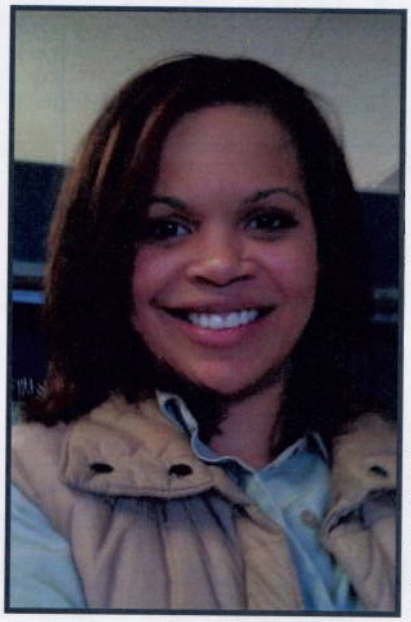
Message from the Alliance Chair:

The topics of **Urban Refuges** and **Landscape Conservation Cooperatives** came up at the FWS Visioning Conference, "Conserving the Future": *Wildlife Refuges and the Next Generation* held in Madison, WI this past July. U.S. Fish and Wildlife Service Director, Dan Ashe, directed his staff to convene a forum on these matters within 30 days and mandated a refined final vision document be published by National Wildlife Refuge Week in mid-October. The Detroit River International Wildlife Refuge plays a key role in this process and deserves our undivided attention.

To learn more, visit: *http://AmericasWildlife.org/conference* or *http://youtube.com/AmericasWildlife*

Richard Micka, Chair
International Wildlife Refuge Alliance Board

Welcome the New Park Ranger!



A new Visitor Services Manager has arrived! Jamie Lanier joined the Refuge staff in mid-June and will oversee the Refuge's entire public use program. Lanier holds a B.S. degree in Wildlife Management from Purdue University and has worked exclusively with the US Fish and Wildlife Service in the National Wildlife Refuge System since 2006. She has enjoyed a diverse career with stints at multiple refuges, including Quivira National Wildlife Refuge, Bear River Migratory Bird Refuge, Rocky Mountain Arsenal National Wildlife Refuge, and most recently, Okefenokee National Wildlife Refuge.

A self-proclaimed "city kid" from Chicago, she considers herself lucky to have been given the opportunity to join the US Fish and Wildlife Service family and spends her days working to foster a love of the natural world and a sense of stewardship for the earth in today's urban youth.

Lanier resides in Brownstown with her mini poodle, Tangles Lynn, and her cat, Barack. During her free time, she enjoys hiking, kayaking, skydiving, reading, and shopping. She is thrilled to return to the Midwest and looks forward to the many exciting challenges she will encounter as the Refuge continues to flourish and grow. Jamie can be reached at 734-692-7649 or at *Jamie_Lanier@fws.gov.*

Corrections:

Page 7 of the Spring/Summer Issue photo credit of aerial picture of Humbug Marsh should have been Rick Johnstone.

From the Refuge Manager...


John H. Hartig
Refuge Manager

Reflections from Madison, Wisconsin

On July 11-15, 2011, Dick and Jeannie Micka, Jamie Lanier, Joann Van Aken, and I attended the National Wildlife Refuge System conference in Madison, Wisconsin. The conference was titled "Conserving the Future: *Wildlife Refuges and the Next Generation.*" Over 1,200 U.S. Fish and Wildlife Service employees, Friends Group representatives, and refuge partners attended. A vision document was prepared to guide and aid current and the next generation of Service employees to help administer the Refuge System during the coming decades. What an opportunity to be part of that!

For me, I think the draft vision statement says it all:

We are caring stewards of the world's premier system of lands and waters dedicated to the conservation of fish, wildlife, plants, and the healthy, resilient habitats that sustain them. We will continue to be leaders in fish and wildlife conservation, who are known and trusted for scientific excellence, professionalism, and commitment to partnerships and public service.

It was truly an inspiring conference with outstanding motivational speakers and practical breakout and discussion sessions. Some of the key conference messages included:

- Using science to ensure that we are doing the right things in the right places;
- Practicing adaptive management that assesses, sets priorities, and takes action in an iterative fashion for continuous improvement;
- Ensuring that land acquisitions are based on clear priorities and rigorous biological monitoring;
- Elevating the priority of inventory and monitoring of wildlife and habitats to inform management;
- Developing and nurturing community partnerships;
- Working beyond the boundaries of refuges;
- Creating an urban refuge initiative that defines and evaluates excellence in urban refuges;
- Developing a comprehensive communications strategy to promote the Service's mission; and
- Supporting and enhancing appropriate recreational opportunities on national wildlife refuges.

It was indeed heartening for me to realize that we are already doing many of the things that the new vision calls for. I want you all to know how proud I am of the work you do and to be part of this team. I encourage each of you to visit the Conserving the Future website and experience some of the excitement for our new vision (*http://americaswildlife.org*).

With much gratitude for your significant contributions to conservation,

-John Hartig, *Refuge Manager*

Meet DRIWR's Law Enforcement Officer:

U.S. Fish and Wildlife Service Refuge Law Enforcement Officer Logan Cannon helps ensure visitors to the refuge are safe and in compliance with all federal and state regulations while recreating on Detroit River International Wildlife Refuge. If you have any questions or would like to report a violation please contact the Detroit River International Wildlife Refuge office or email Logan at *logan_cannon@fws.gov*

IWRA 6th Annual Benefit Dinner

was held May 21, 2011 on beautiful Fighting Island, thanks to BASF of Wyandotte. **John D. Dingell Friend of the Refuge Awards were given to U.S. Steel, Metropolitan Affairs Coalition and Dr. Michael Zarull.**

Announcing the 7th Annual IWRA Benefit Dinner will return to BASF Fighting Island May 2012 – watch *www.iwralliance.org* for details!

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Pointe Mouillee Waterfowl Festival (Sept 10 - 11, 2011)
Quality Inn & Suites
Raisin river Jazz Festival
Richard Micka
Robert Stewart
Roberta Urbani and John Leon
Rodney Laura
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State Senate Majority Leader Randy Richardville
State Representative Dale W. Zorn
The Henry Ford, America's Greatest History Attraction
The Resorts of Tullymore & St. Ives
Tom O'Hara
U.S. Forest Service
Utility Lines Construction Services
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Photos courtesy of DTE Energy Photographer, Mark Houston

Big Changes at the Refuge Gateway

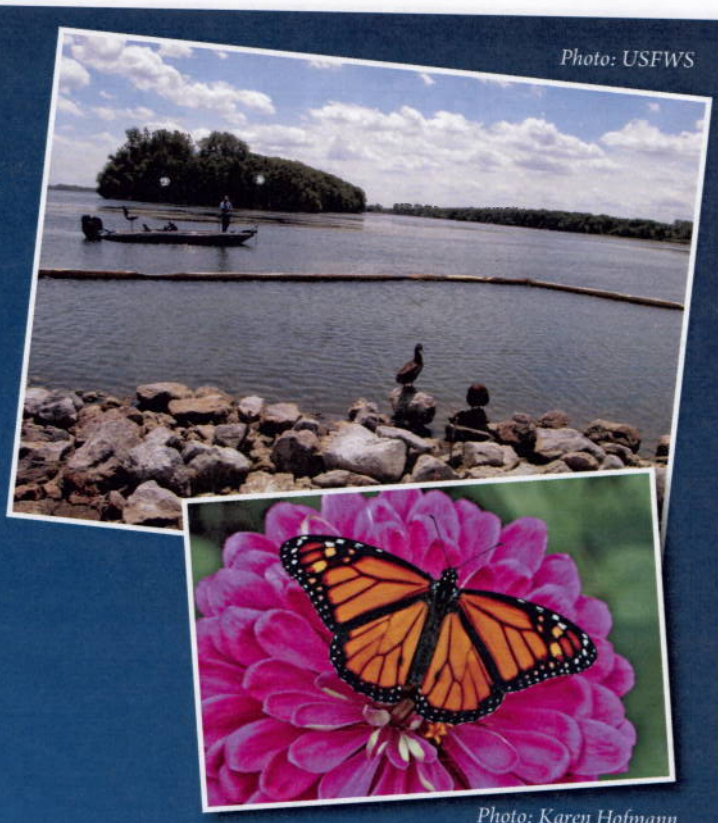

Photo: USFWS

Restoration activities continue to move forward at the Refuge Gateway. By early September we expect to announce the completion of the shoreline restoration and a second access road. These projects will connect visitors to the shoreline for an absolutely outstanding view of the Detroit River and Lake Erie. Even more important, these two projects are restoring vital coastal wildlife habitat.

The Shoreline Restoration project has been an ambitious effort to remove human-placed fill along the shoreline and create a wetland shelf. Also completed were the second access road and adjacent upland habitats. In an area that has lost 97% of previous wetland habitat, the Refuge Gateway project will result in a net gain of 16 acres of coastal wetlands. When all work identified in the master plan is completed, 25 acres of upland buffer habitat will be restored.

Guided tours are planned September 22, 4:00pm-8:00pm. We welcome you to take in the view of the amazing shoreline and witness for yourselves the transformation. Questions? Please contact Allison Krueger, 734-365-0218 or *Allison_krueger@fws.gov*

Photo: Karen Hofmann

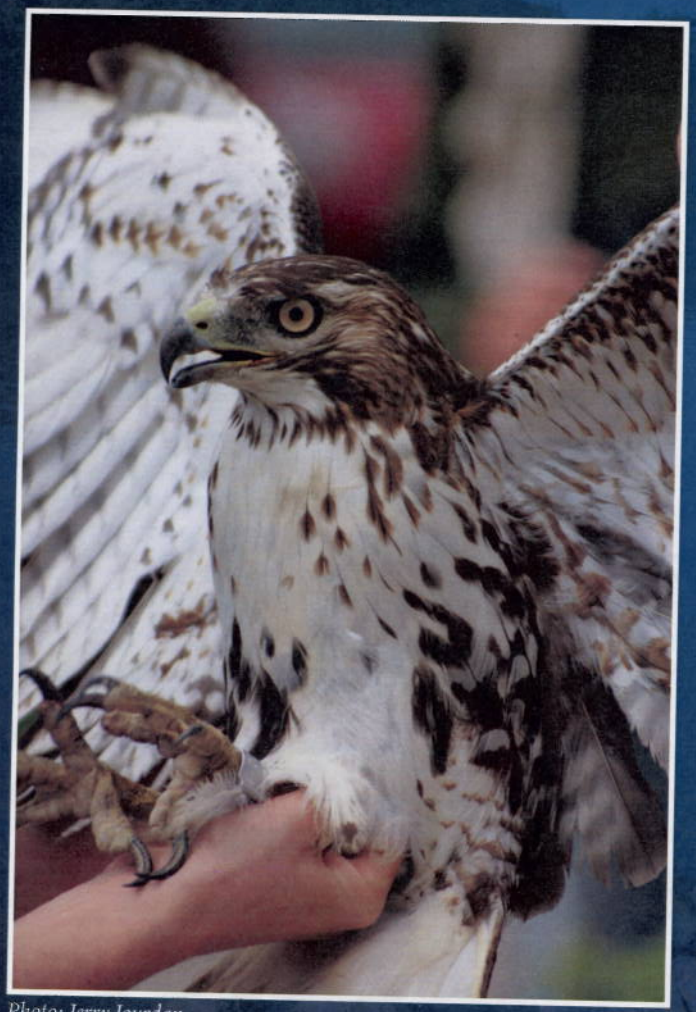

Photo: Jerry Jourdan

The Detroit River Hawk Watch

begins its fourth year of raptor migration monitoring on September 1, 2011 at the mouth of the Detroit River, contributing to a total of 29 years of data. Priorities for the 2011 season were the completion of a scientifically sound monitoring protocol consistent with the Hawk Migration Association of North America. Other recent accomplishments were the completion of a report with the summary statistics of the count data prior to 2008, a new website, and enhanced outreach through a volunteer program with the Lake Erie Metropark. **The count will run each day at the Lake Erie Metropark Boat Launch from September 1st to November 30th staffed by Jonathan Stein** (2011 contractor) **and volunteer observers**. These data contribute to our knowledge of raptor population trends and ensure the remarkable migration through the corridor continues to be well documented.

Two major events will take place during the 2011 season: the first is the **Annual Hawk Fest, hosted by Lake Erie Metropark on September 17th and 18th**. The second will be a public program overviewing the **Detroit River Hawk Watch program on October 1st** with Refuge staff and volunteers on hand to teach visitors the basics of raptor identification, with guest visitors from the Kalamazoo Nature Center. More details will be available at *www.drhawkwatch.org*.

All data can be accessed on the website and are updated daily during the season, and frequent Twitter posts are provided to help people track the migration. All previous reports and count data are readily available under the "Resources" tab of the website. Please consider volunteering for the hawk watch program in outreach or counting duties by contacting *Greg_Norwood@fws.gov* (734-692-7611).

-Greg Norwood, SCEP Biologist

STATE of the STRAIT

By: Anna Cook, Biological Technician

On November 2, 2011 a tradition between the United States and Canada will continue with the **biennial State of the Strait Conference**. This year the conference will be held at the Eastern Michigan University. The U.S and Canada alternate hosting the conference every two years. The theme of the 2011 conference is **"Use of Remote Sensing and GIS to Better Manage the Huron-Erie Corridor"**. Over 300 people, including Canadian and U.S. high school and college students, are expected to attend the event. Topics that will be presented include innovative techniques to map *phragmites* and wetlands, remote sensing- and GIS-facilitated biological monitoring of DRIWR wetlands, and using technology to quantify storm water benefits of green infrastructure.

For more information about the State of the Strait conference, including registration and location, please visit *www.stateofthestrait.org*. **Display space is available for conference sponsors and vendors.**

2011 Youth Conservation Corps Season

By: Anna Cook, YCC Crew Leader and DRIWR Biological Technician

A Youth Conservation Corps (YCC) crew was stationed at the Refuge for the third year in a row. The YCC is a program for students ages 15-18 to work, earn and learn during the summer. The participants carried out conservation work on our refuge, such as trail clearing, bird banding and invasive species removal. This year's crew members were Mariah Chinavare, John Carter, Marissa Cloutier, Drake LaFleur and Mike Brancheau, a YCC participant from last year who returned to be a YCC Youth Leader. They all worked hard to help guide our refuge forward while at the same time understanding and appreciating the natural environment. ***Thank you YCC Crew!***

DRIWR 2011 YCC Crew: *(From left to right: Anna Cook, YCC Leader and DRIWR Bio Tech, Drake LaFleur, John Carter, Mariah Chinavare, Marissa Cloutier, and Mike Brancheau, YCC Youth Leader.)*

Photos: USFWS

DID YOU KNOW?...

Lake Erie Metropark is part of the Detroit River International Wildlife Refuge?
The U.S. Fish and Wildlife Service (USFWS) has a cooperative agreement to manage 680 acres of unique coastal habitats at Lake Erie Metropark. And now, a completed 1.5 mile section of greenway finishes the 3 mile greenway connecting Lake Erie Metropark to the Humbug Marsh Unit and the Refuge Gateway. *You are now able to ride a bike to visit the important coastal habitats protected in these units!* This greenway is part of 50 miles of continuous greenway trail developed through the Downriver Linked Greenways Initiative.

The trail is protected from vehicles and follows a flat landscape - perfect for bikers of all ages. Connecting the units offers the benefit of having a variety of outdoor recreational activites from hiking, swimming, and environmental education programs in the metropark to wildlife observation areas, and a ride along the Humbug Marsh Unit, all in one day. In the future, the greenway will be extended into the Refuge Gateway to connect with the planned Refuge Visitor Center.

USFWS and IWRA will be partnering with other organizations to plan for biking events to celebrate the completed greenway - *we hope to see you on the trail!*

UPCOMING EVENTS

Updated program information can be found at www.iwralliance.org or www.fws.gov/midwest/detroitriver

October 1
Wayne County Conservation Stewards Volunteer Expo at Marshland Museum, Lake Erie Metropark
11:00am

October 2, 9, 16, 23 & 30
Open House at Gibraltar Bay Unit
1:00pm-4:00pm

October 8
Buckthorn Removal at Humbug Marsh
9:00am-12:00pm

October 9
Open House at Humbug Marsh
12:00pm-4:00pm

October 9-15
National Wildlife Refuge Week
Check websites for current events
www.fws.gov/midwest/detroitriver

October 12
Open House at Brancheau Unit
5:00pm-6:30pm
6590 Brancheau Road, Newport, MI

October 12-14
"Healing Our Waters" Conference
Registration required
conference.healthylakes.org

October 15
Bike n' Hike
Celebrating a Greenway Trail linking Humbug Marsh to Lake Erie Metropark - See website for details

October 20
Honeysuckle Removal at Humbug Marsh
5:00pm-7:00pm
5437 W. Jefferson Ave, Trenton

October 22
"Bald Eagles Today" with Matt Stuber, FWS
7:00pm
Lake Erie Metropark Marshland Museum

November 2
Biennial State of the Strait Conference at Eastern Michigan University
Info and registration at www.stateofthestrait.org

November 12
"Bird Photography on a Budget" with Jerry Jourdan
7:00pm
Lake Erie Metropark Marshland Museum

December 21
HAPPY BIRTHDAY!
The Detroit River International Wildlife Refuge is 10 years old!
Birthday Celebration TBA

January 28
Eagle Tour
Watch website for registration

February 2
World Wetlands Day at Gibraltar Carlson High School
3:30pm-4:30pm
Open to the public

February 8
Volunteer Workshop at Westfield Center, Trenton
6:00pm-7:30pm

THANK YOU to all who were a part of the over 5,000 volunteer hours given to the Detroit River International Wildlife Refuge this past year. Perhaps you maintained a trail, planted a tree, helped put up the new sign on the Refuge, volunteered at an Open House or Stewardship event - ***please know, we appreciate you!*** It is with your dedication we can continue to support North America's first international wildlife refuge and develop the next generation of conservation stewards.

HUNT PLAN UPDATE

Steve Dushane, Assistant Refuge Manager

The Detroit River International Wildlife Refuge hunting plan and environmental assessment was made available for public comment in 2011. Many of the comments from the public have been addressed and the plan is undergoing final revisions needed. The next step will be to work on the exact language to be placed in the Code of Federal Regulations (CFR). It is our hope that the hunting plan will be published in the CFR in early 2012 and that hunting on the refuge will be approved by fall 2012. The Refuge is very excited and looking forward to offering hunting as an approved public use in the near future.

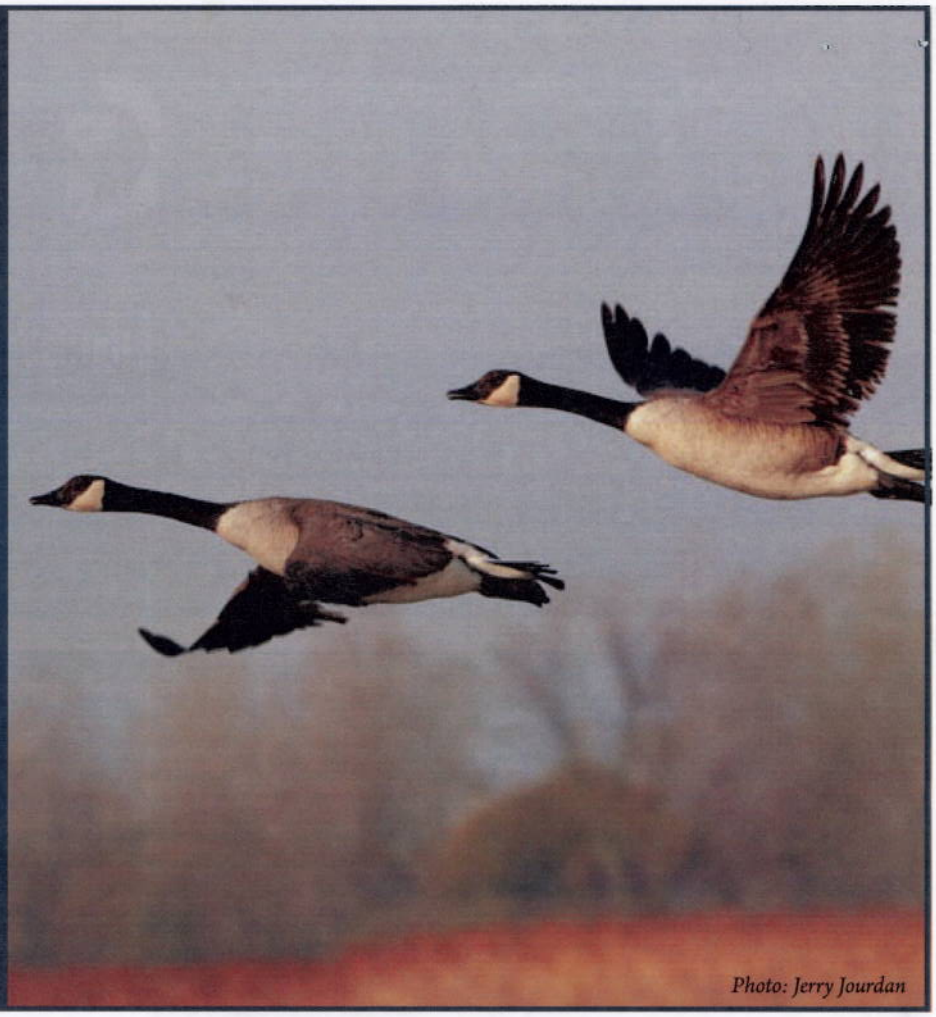

Photo: Jerry Jourdan

International Wildlife Refuge Alliance
9311 Groh Road
Grosse Ile, Michigan 48138
iwralliance.org

Comments submitted by Donald A. Spencer

Preparing today's students
for tomorrow's world.

Public Commentary Concerning DTE Application for Fermi III
December 15, 2011

Thank you for giving me a few moments to express my opinion on the licensing request by DTE Energy regarding the Enrico Fermi III. I strongly support DTE Energy's application. This opinion is grounded in my observations as a citizen and as an educator for 36 years in Monroe County.

The generation of energy comes with a cost. Over my lifetime, I have watched as rescue workers seek to free coal miners trapped in underground mines. I have had friends and neighbors go to fight in far off places due to our dependence on foreign oil. In recent years we are beginning to see the results of global warming which, to a great extent, is the result of our dependence on fossil fuels.

During my time I have also been exposed to living in the vicinity of a nuclear energy plant operated by DTE Energy, Fermi II. As a school leader, I cannot begin to tell you how impressed I have been with the community outreach provided by DTE through company representatives like Molly Luempert-Coy. In addition, over the years, DTE Energy and their employees have worked to include us in grant programs and provided us with many volunteers. The Monroe County Intermediate School District and the thousands of county students whom we serve also greatly benefit from the tax base generated by Fermi II. DTE Energy has publically supported our countywide technology millage, the only such millage in the state, which generates over $5 million annually for technology in our county schools. But there is no amount of money that would cause me to stand up here and express my support for DTE's license application if I did not believe that they maintain the highest industry standards and then some.

Our region of the state has undergone a traumatic time in recent years. The poverty rate has sky-rocketed amongst the children in our communities. Still the reality is that because of Fermi II and DTE's presence, Monroe County has not been hit as hard as other areas in southeastern Michigan. The DTE Fermi III and its many potential jobs, career opportunities and outstanding employees give me hope as an educational leader, as a father and as a grandfather to be. I want our state to be able to meet its energy needs in the future, to provide a strong economic base for our community and to provide a clean and environmentally responsible energy alternative. For these reasons I strongly support the DTE Energy licensing request to construct Fermi III.

Submitted by,

Donald A. Spencer
Superintendent
Monroe County Intermediate School District
1101 S. Raisinville Road
Monroe, MI 48161

Comments submitted by R. LaMar Frederick

Comments
R. LaMar Frederick
Chairperson
Monroe County Board of Commissioners

Good Afternoon:

I am R. LaMar Frederick. I currently serve as chairman of the Monroe County Board of Commissioners and thank you for the opportunity to speak today before this board.

I am here today to endorse the work of the NRC staff members engaged in conducting the recently released comprehensive environmental review and assembling the Draft Environmental Impact Statement for the proposed Fermi 3 unit in Monroe County. It is my view and that of my fellow commissioners that the negative impacts of the proposal before you are few and we are further convinced DTE Energy will do whatever is necessary to mitigate those impacts.

The Board of Commissioners strongly agrees with the conclusion the license should be issued.

Unfortunately, Monroe County was not spared the effects of a decade-long decline in automotive and other manufacturing activity particularly during the most recent economic downturn. Included in the Draft Environmental Impact Statement is the point that Monroe County "lost jobs in manufacturing, construction and the retail and wholesale trade but has experienced growth in other sectors for a very small net gain in jobs between 2000 and 2008. The Draft EIS correctly acknowledges that the recent recession pushed unemployment in Monroe County to more than 14% at its height.

However, we are now beginning to see the first signs that we may be turning the corner. We are still concerned about the rate of change and if it can be sustained. But, the economic activity and jobs created in preparing for construction and building of a new unit at the Fermi complex will be a much-needed shot in the arm for this county and the region.

DTE Energy is one of the county's larger employers with roughly 1,500 employees. I for one would welcome the additional permanent high-paying jobs that a new unit would bring, not to mention the additional short-term jobs associated with periodic refueling activities.

On behalf of the Board of Commissioners I encourage the Commission to adopt the Draft Environmental Impact Statement recommendation and in due course issue the C-O-L sought by DTE.

Thank you.

Comments submitted by Ed McArdle

SIERRA CLUB MICHIGAN CHAPTER

COMMENTS TO NUCLEAR REGULATORY COMMISSION DECEMBER 15, 2011 ON DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR FERMI 3

There are many deficiencies in the DEIS that I believe need to be considered and addressed. First is the biased premise that there is a need for a large baseload electrical plant and the resulting conclusion that there is no alternative except to build this plant. In fact many alternatives exist now and are being developed. DTE's energy efficiency programs were given one paragraph based on outdated information from 2009. I would point out that DTE is doing a decent job of advertising and implementing successful energy efficiencies for their customers saving megawatts of electricity. However, the state law requiring only 1% reductions per year is the least required by most other states and countries. Environmental groups are requesting that the legislature double this requirement to 2%. We have barely started to reap the benefits of energy efficiency.

Other sources of energy overlooked by the review team is the potential for co-generation of waste heat or "gray power" from present sources such as steel mills, food processors, paper mills and other industrial facilities. According to an analysis by Recycled Energy Development, the Libby glass plant in Toledo, the Arcelor Mittal steel mill in Cleveland and the Cognis Chemical plant in Cincinnati produce enough waste heat to generate 145 – 285 MW of electricity. The study indicates that Ohio has enough co-generation potential to retire up to eight nuclear power plants. According to the Oak Ridge National Laboratory this strategy would cost less than half of a coal plant and have a payback period of approximately three years. Michigan also has steel mills, paper mills and various industrial facilities that could be tapped. This would also have the double strategy of enabling these industries to be more competitive and save jobs.

Michigan's law requires each utility to produce only 10% of their total electrical output with renewable sources such as wind and solar by 2017. This is the lowest of all the surrounding Great Lakes states. Again, environmental groups are pushing for 25% renewable power. Michigan has good wind that could be further developed. The review casually dismissed the potential of offshore wind in Lake Michigan. Their reasoning being that there should be electricity generated within the DTE territory. However, DTE is currently in partnership with the pump facility in Ludington which is far northwest of the DTE service area. There is strong likely hood of offshore wind development and there are other proposals for large wind farms.

Baseload power could become more irrelevant as more smaller distributed energy comes on line. Distributed power could be ramped up with a feed in tariff type program such as our neighbors in Ontario have passed. Distributed power produced by small businesses, farms, homes and community buildings and spaces would also negate the need for large transmission build-outs. Smaller sized wind designs are improving constantly as well as solar efficiencies.

GHG emissions within the uranium fuel cycle may be underestimated.
Presently, USEC in Paducah, KY. Is the largest single user of electricity in the U.S. this plant also emits CFC-114 which is 9,300 times more destructive to the atmosphere than CO2. It is also recognized as being the chemical most damaging to the ozone layer. USEC has promised to phase out this chemical but when? According to EPA TRI data from 2002, USEC self reported emitting 716,000 lbs. of this chemical alone.

The carbon footprint for the fabrication of the large reactor components are not apparent. GE-Hitachi has shipped 6 large forgings for the ESBWR from Japan Steel to Spain for the manufacture of the reactor vessel. It takes 6 of these large forgings for each reactor vessel. Steam condensers for the large reactor being built in Vogtl, Ga. Weigh 3,600 tons. Large components such as this would require large inputs of energy and emissions.

Also not addressed in the life cycle of uranium both as part of the carbon footprint and the potential human and ecological effects of radiation exposurre is the refurbishing of large aging components or recycling of other "so-called" low level parts and scrap. A new venture called Nu-Green is proposed to do this very thing on the Lake Erie shore near
Cleveland, Oh. Large steam generators were slated to be shipped from Bruce Power on the Canadian side of Lake Huron to Sweden for "free release" into the global scrap metal supply. We understand some of this activity is being carried out by the same Swedish company who has a facility in Memphis, TN.

Radiation releases from refueling.
A recent study from Germany revealed that refueling operations caused large spikes in radiation. I am including a copy of the article with web links and request that it be addressed in the final EIS.

The DEIS only partly identified the role of biocides and other chemicals used in cooling towers and the effect on the food chain of these unidentified chemicals.

Thank you for the opportunity to present these concerns.

Ed McArdle
Conservation Committee Chair
Michigan Sierra Club
18841 Reed St.
Melvindale, MI 48122 or
ecoguy2@netzero.net

NETZERO Message Center

Print Message | Close

From : kay Cumbow <kcumbow@greatlakes.net>
To : (Recipient list suppressed)
Subject : IPPNW: Large spikes in radioactive releases during the refuelling of German nuclear reactors
Date : Fri, Dec 02, 2011 06:31 PM

Thanks to Gordon Edwards for passing this on. - This looks like critical information. - Kay

IPPNW Germany Press Release
[IPPNW = International Physicians for the Prevention of Nuclear War]
November 11 2011

For the first time, recent German data reveal large spikes in radioactive releases during the refuelling of nuclear power stations.

In September 2011, Gundremmingen NPP (located between Ulm and Augsburg in Southern Germany) emitted much larger amounts of radioactive noble gases during inspection / refuelling than are emitted during normal power operation. According to the International Physicians for the Prevention of Nuclear War (IPPNW) in Germany, the normal emission concentration of released radioactive noble gases during the year is about 3 kBq/m³.

However during inspection/refuelling on September 22nd, this concentration suddenly increased to an average of ~500 kBq/m³ with a peak of 1,470 kBq/m³. During the following week (September 22nd - 29th), the concentrations were still much higher (average 150 kBq/m³) than during normal power operation.

In order to refuel, reactor pressure vessels must be opened about once a year. This releases to the local environment very large volumes of radioactive gases and vapours, including noble gases, H-3 (tritium), carbon-14, and iodine-131. Until now, the nuclide amounts were only published as annual averages throughout the world. Now, after requests by IPPNW and the Green Party in the Bavarian State Parliament (Landtag), non-averaged values have been made available for scientific evaluation for the first time anywhere in the world.

Analyses by IPPNW Germany and Nuremberg physicist and statistician Dr Alfred Körblein demonstrate dramatic increases in the emissions during the brief inspection and refuelling period at Gundremmingen. Dr Körblein stated "At its maximum value, the concentration of noble gas emissions during refueling was

500 times greater than during normal reactor operation ". See graph, below.

These release spikes result in considerably larger radiation doses to people living nearby. IPPNW Germany warns of the probable health impacts of such large emission spikes. "Especially at risk are unborn children. When reactors are open and releasing gases, pregnant women can incorporate much higher concentrations of radionuclides than at other times, mainly via respiration" said Reinhold Thiel, member of the German IPPNW Board. "Radioactive isotopes inhaled by the mother can reach the unborn child via the blood and placenta with the result that the embryo/fetus is contaminated ('labelled') by radioactive isotopes. This contamination could affect blood-forming cells in the bone marrow later resulting in leukemia. This provides a plausible explanation for the findings of the KiKK study published in 2007 and 2008 that under-fives living near NPPs are considerably more at risk of cancer, particularly leukemia, than children living further away".

He demanded "Up to now, supervisory authorities and nuclear operating companies have kept these spikes secret by only providing annually-averaged figures, despite our repeated requests for disaggregated data. We need these half-hourly data of the releases of each radioactive nuclide from all German NPPs for scientific evaluation. This is necessary for the protection of unborn children near German nuclear reactors. "

Further information:

Current info graphics
http://tinyurl.com/7xbmvxp

Increased carbon-14 concentrations near Neckarwestheim-2.
Increases during fuel handling (info-graphic):
http://tinyurl.com/755knlf

Nuclear refueling more dangerous than previously thought (06/22/2011):
http://tinyurl.com/6uqua5l

IPPNW fact sheet
http://tinyurl.com/7kzmaa9

IPPNW-Film – Childhood Cancers Near Nuclear Reactors
http://tinyurl.com/6nf9kvo

Contacts: Reinhold Thiel, Tel. 0049 172-24 57 852, Henrik Paulitz, Tel. 0049 171-53 888 22

German Section of the

Comments submitted by Dr. David Nixon

Dr. David Nixon, President
Monroe County Community College
December 15, 2011

Good afternoon / evening.

My name is David E. Nixon and I am president of Monroe County Community College (MCCC). It is my honor to welcome once again the Nuclear Regulatory Commission to our campus. I think it is especially fitting for the NRC to host these public meetings here on campus because this institution, itself, has become a hub of nuclear energy-related educational activity.

While the Draft Environmental Impact Statement comments only about a potential increase in demand for education among elementary and high school students for any workers moving into the area, Monroe County Community College has approached the topic from another perspective – that of preparing individuals for positions in the nuclear energy industry. According to Nuclear Education Institute (NEI), to maintain the current nuclear industry work force, an additional 25,000 more workers will be needed by 2015 (NEI April 2011).

Here at Monroe County Community College (MCCC), successful candidates for an Associate of Applied Science degree with a specialization in Nuclear Engineering Technology are prepared for entry-level employment as mechanical technicians, electrical technicians and instrumentation and control – or "I & C" technicians. Those who go on for additional training will have opportunities as radiation protection technicians, non-licensed operators and senior reactor operators.

While DTE Energy personnel were instrumental and invaluable in working with us to develop the program, I would suggest that the entire industry benefits. In fact, the very first graduate of the program in 2009 – someone with a prior degree in construction management who was unemployed and who, ironically, initially wanted to stay in Michigan – was hired for a position in Texas.

Today, the program enlists 44 students. Thirty (30) students have completed and are either working or seeking positions in the in the industry. Twelve (12) of them are working locally.

When MCCC partnered with DTE Energy to offer the selective program, it was decided that we would rise to a level of national standards by participating in the Nuclear Energy Institute's Nuclear Uniform Curriculum. This MCCC-DTE Energy partnership facilitates the transitioning of graduates into the nuclear energy industry utility training programs in accordance with the requirements of the Uniform Curriculum Guide for Nuclear Power Plant Technician, Maintenance and Non-licensed Operations Personnel Associate Degree Programs, as developed by NEI.

Additional curriculum will offered beginning next semester with two courses: NUET 120 Radiation Protection and NUET 130 Plant Systems l.

It should be no surprise then that Monroe County Community College supports the development of a new unit at the Fermi complex.

I am also pleased to say that as a hub of nuclear energy-related activity, Monroe County Community College is proud to be partnering with DTE Energy in terms of preserving the history of Fermi 1 and assisting in the mitigation of the demolition of Fermi 1. The demolition of the decommissioned Fermi 1 unit, which was designated a Nuclear Historic Landmark in 1986 by the American Nuclear Society, is included in the Draft Environmental Impact Statement as a "moderate" impact. Our institution is committed to preserving its history through displays of the artifacts in our new Career Technology Center and the archiving of significant records here on the Monroe campus.

From a broader perspective, you may have heard from other speakers about the need for clean energy. When I came here from Iowa in 2003, my knowledge of alternative energy was limited to wind energy. Since that time, in the past eight years as president of Monroe County Community College and a resident of Monroe County, I have expanded my knowledge of alternative energy to include solar and nuclear. Qualified faculty were hired to teach nuclear and alternative energy courses. Another full-time faculty specializing in alternative energies was hired this past year. I can say with great conviction that the college supports all forms of clean energy alternatives. But personally, I have come to understand and appreciate that the cleanest and <u>most dependable</u> source of electricity is nuclear power.

I commend the NRC staff for its supportive findings in the Draft EIS.

Thank you

David E. Nixon, Ed.D.
President
Monroe County Community College

Comments submitted by James Harrison

My name is James Harrison, and I currently serve as President, Local 223 of the Utility Workers Union of America. I have the honor and privilege to represent the hard working men and women who safely and efficiently operate and maintain the Fermi 2 Power Station.
I am here to provide comment and to inform you that the Utility Workers support moving forward with the licensing process.

Pricing schemes and regulatory oversight for greenhouse gas emissions are increasingly becoming a reality as more countries look to ensure reduction targets, but so does the opportunity for volatility of natural gas prices.

We believe that nuclear power fits into a portfolio of power generation that also includes conventional and renewable generation. Nuclear power must be a key energy component to reduce dependency on foreign fuel sources, as well as meeting state and federal emission reduction targets.

The Utility Workers also comment that for nuclear energy to expand, the public must trust the nuclear industry. It must trust reactor owners to run their reactors safely. The public must trust regulators to ensure there is adequate oversight. And, it must trust reactor designers to create new reactors that do not share the vulnerabilities of older ones. A sober and careful assessment for all new construction must be done to recognize and correct any deficiencies in the industry's approach to construction, environment and safety both long-term and short-term to ensure the highest standards are met

Comments from the Evening Session of the Fermi Unit 3 Public Meeting December 15, 2011

Comments submitted by Bob Clark

Bob Clark, Mayor
City of Monroe
December 15, 2011

Good evening.

My name is Bob Clark and I have the privilege to serve as the mayor of the City of Monroe.

Thank you for this opportunity to comment about the Draft Environmental Impact Statement concerning DTE Energy's proposed new Fermi unit.

I support the N-R-C's Environmental Impact Statement conclusion and I commend the Commission both for reaching that conclusion and the transparency in the process of reviewing DTE's license application and being open to expressions of individual and group concerns.

Transparency is important in matter of the public trust. It's also important in the relationships that create a community.

We are fortunate in the City of Monroe have that kind of relationship with DTE Energy and government officials in Frenchtown Township. That's why when it comes to those items identified as moderate impacts, I have every confidence that they will be mitigated or addressed. DTE has demonstrated that it is proactive in addressing issues. They communicate with elected officials and community leaders and they are true to their word.

I believe it's because DTE isn't just a company doing business in our community, they are a part of our community. Many of their employees live in the city of Monroe or surrounding towns. They are involved in our communities day-to-day, as residents, as patrons of local businesses, as volunteers in community and charitable activities. We see the men and women who work in DTE's Monroe county plants and have personal connections to them as friends and neighbors. That inspires a great deal of confidence.

I would be remiss if I did not acknowledge the tremendous boost in economic activity that our region will see if the license is approved and when the project commences. We saw it with the construction and operation of Fermi 2. I expect we'll see the same thing with a Fermi 3. Individuals will come to our community to work, some – maybe many – of them will decide to stay to live, to raise their families, to become a part of our community.

In short, we welcome the project.

Thank you again for this opportunity.

Robert E Clark
Mayor
City of Monroe
12-15-11

Comments submitted by Lake Erie WATERKEEPER, Inc.

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Lake Erie Waterkeeper Mission: "To preserve, protect, and improve the waters and fish of Lake Erie, the warmest, shallowest, most biologically productive area in all of the Great Lakes through collaboration, education & advocacy.
Member: Waterkeeper Alliance

Nuclear Regulatory Commission
Fermi 3 Hearing
December 15, 2011

Thank you for providing this opportunity to address the Nuclear Regulatory Commission concerning the draft Environmental Impact Statement for Fermi Three.

I am here as Lake Erie Waterkeeper representing an organization whose mission is to promote, protect and preserve Lake Erie. Lake Erie is the shallowest of all the Great Lakes and has over one-half of all the consumable fish in the Great Lakes. Over half of Lake Erie's consumable fish spawn in the far western basin of Lake Erie..

Fermi Three is proposed on the shores of the far western basin of Lake Erie where the average water depth is but 24' and where nearby Maumee Bay waters have an average depth of only 5'.

The Great Lakes Compact passed by Congress and voted on by all Great Lakes states governs water use and withdrawals.

The State of Michigan passed implementing legislation for the Great Lakes Compact and adopted a water withdrawal assessment tool for evaluating water withdrawals in Michigan waters. I see no reference to the Great Lakes Compact, the water withdrawal assessment tool and results in the draft Environmental Impact Statement. It would seem that this assessment is required by law and the results should be publicly shared for comment.

This assessment is particularly important because in the summer/fall of 2011 Lake Erie experienced its worst algal bloom in decades and probably in Lake Erie's history. The algae extended over 100 miles east past Cleveland and in some parts of the central basin of Lake Erie the algae was over 60' in depth and extended over 14 miles from the Ohio shoreline in the western and central basins of Lake Erie. Algae was similarly found along the Ontario shoreline. The algae was so bad that it slowed down boat motors. The algae repulsive to people in boats and fishing.

All research on Lake Erie algae says that the algae originates in the far western basin of Lake Erie where the Maumee, River Raisin and Detroit Rivers are located. Another words where this proposed plant is to be located.

I was here for hearings several years ago and read the reports from Detroit Edison that depicted Lake Erie as healthy – a lake that recovered. At that time the algae blooms were getting worse every year, but the reports on Lake Erie were generally good. That is no more. Lake Erie is now

referred to as the lake that is failing again and the Detroit Edison Fermi Three submissions nor the draft Environmental Impact Statement depict or address impacts of this project on algal growth in Lake Erie and the impacts to water quality and aquatic habitat under current conditions. The reports to do not identify or discuss a declining Lake Erie.

Fermi Three would be the sixth power plant in the western basin of Lake Erie who collectively withdraw over 3 billion gallons of water daily and heat that water about 10 degrees Fahrenheit and collectively entrain billions of larval fish and impinge hundreds of millions of juvenile fish. There is no assessment of the tipping point of additional fish kills to the overall fish population of Lake Erie. There is no assessment of the contribution of additional discharged warmed water on algae growth.

The draft EIS fails to clearly state the proposed volume of water to be used, the additional water temperature at discharge, and the mixing zone of existing power plants in the western basin and the proposed Fermi Three power plant along with algae production because of the heated waters. The draft Environmental Impact Statement goes into great detail about the population and land use in 50 mile and 7.5 miles. The draft EIS shows where preserves are in Ohio, yet fails to show where the nearby power plants are located, the water use, and fails to reveal and assess the fish kills at these power plants. These omissions fail to address critical water quality including water withdrawal and aquatic species impacts to a Lake Erie in distress. Rather the draft EIS shows other nuclear power plants and avoids disclosure and assessment water use and fish kills by coal fired and nuclear power plants in the area.

Also, the draft Environmental Impact Analysis fails to disclose the growing algae problem in western Lake Erie that has been known and scientifically documented since 2003.

When algae is excessive and toxic, it depletes the oxygen and food chain for fish, favoring low end less desirable fish and reducing zooplankton and other vital 'fish food.'

For algae to grow, it needs warm water. Thermal heating of waters helps algae growth.

With the excess nutrient and algae issue in Lake Erie, it is imperative that the NRC require an additional Environmental Impact Analysis from the additional fish kills and water withdrawal and thermal impacts from Fermi Three. What is the environmental impact of Fermi Three's killing of an additional estimated 62.5 million fish as stated in the Environmental Impact Statement? What is Fermi Three's impact of an additional estimated 50 million gallons of thermally heated water on algae growth?

Lake Erie does not know the difference between water use by a coal fired power plant or a nuclear plant or any other intake. Nor does Lake Erie know if the water is from Michigan, Ohio or Ontario. What Lake Erie's waters do know is that too much heat and too many nutrients alter the health of the waters and the abundance of fish. Fermi Three proposes to discharge heated water and kill more fish. For these impacts, **the NRC should either consider recommending Fermi Three be located somewhere outside the western Lake Erie watershed or that there be mitigation that would require the Monroe Detroit coal fired power plant to reduce water use(thermal heating) and fish kills by installing cooling towers..**

The conditions of Lake Erie's water quality and the abundance of fish in deteriorating water quality have unfortunately changed for the worse in the last several years. Forecasts are that the conditions could worsen because of increased temperatures and more frequent intense precipitation events.

The draft E.I.S. also fails to analyze increased temperatures - estimated at 2 to 2.5 degrees Fahrenheit over the last 30 to 40 years and the rain events are also not addressed in the draft EIS.

These factors added to additional fish kills and more thermal heating of the waters will contribute to a more rapidly deteriorating Lake Erie. Again, this is a request for NRC to require additional Environmental Impact Analysis on the fish kills and thermal impacts of Fermi Three.

Water Withdrawals in Michigan

IMPLEMENTING THE GREAT LAKES COMPACT

By Sara R. Gosman

Is water the new oil, a resource that creates conflict as it becomes inevitably more scarce? Michigan—the Great Lakes State—would seem to be the last place to worry about the problem of water scarcity. The state is surrounded by four of the five Great Lakes. Together, the Great Lakes make up 84 percent of all fresh water in North America and 21 percent of fresh water in the world—more than any other source on earth except the polar ice caps.[1] Moreover, Michigan is fortunate to have many inland lakes, rivers, and streams as well as plentiful groundwater.

FAST FACTS:

While Michigan has abundant water resources and is surrounded by four of the five Great Lakes, only 1 percent of the water in the Great Lakes Basin is renewable.

The Great Lakes Compact and Agreement create a comprehensive, cross-border framework to sustainably manage the water resources of the Great Lakes Basin.

Michigan must strengthen its water conservation and regulatory programs to fulfill its commitments under the Compact and Agreement.

Yet Michigan's water resources are more fragile than they appear. Less than 1 percent of the water in the Great Lakes Basin (Basin) is renewable through precipitation, surface water runoff, and groundwater recharge.[2] The rest, if consumed or diverted, is lost to the Basin. Even if water uses remain within that 1 percent, local shortages affect users and degrade a natural environment that relies on plentiful fresh water. In the future, the available fresh water in the region may decrease as a result of climate change.[3] Scientific models predict lower levels in the Great Lakes—as much as 4.5 feet in Lake Michigan and Lake Huron—and a drop in aquifer levels.[4]

The Region Takes Action

In 2005, the governors of the eight Great Lakes states and the premiers of the Canadian provinces of Ontario and Québec unveiled a comprehensive, cross-border framework to sustainably manage the water resources of the Basin. The framework is set out in two documents that are designed to work in concert with each other: the Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement (Agreement) and the Great Lakes-St. Lawrence River Basin Water Resources Compact (Compact).[5]

The Agreement is a nonbinding pact among the Great Lakes states and provinces that was approved by the governors and premiers on December 13, 2005. The Compact, which came into force on December 8, 2008, is a binding accord only among the states.[6] In accordance with the Compact Clause of the United States Constitution, the Compact was ratified by each state legislature, approved by the U.S. House and Senate, and signed by then President George W. Bush.[7]

The Agreement and Compact protect the Basin's water resources in three primary ways. First, they limit new or increased diversions of water from the Basin to only those communities just outside the Basin and only for purposes of public water supply.[8] Certain diversions are subject to review by all the states and provinces, and a subset of these diversions may be vetoed by any state.[9] Second, each jurisdiction is required to oversee water withdrawals that remain within the Basin by implementing a conservation program for all users, as well as a regulatory program for new or increased users.[10] The regulatory program must at minimum employ a decision-making standard from the Compact and Agreement.[11] Third, the jurisdictions must work together to improve Basin-wide management of the resource by sharing information on water uses and collaborating with regional partners on a science strategy to strengthen the basis for action.[12]

This framework strikes a careful balance between the authority of individual states and provinces to manage their water resources and that of the region to protect the Basin as a whole. The jurisdictions are given some flexibility to choose how to fulfill their commitments, but regional entities have significant oversight responsibilities to ensure minimum standards are met. As one example, a regional body composed of the Great Lakes governors and premiers reviews each jurisdiction's conservation and regulatory programs every five years and issues a declaration of finding as to whether the programs meet the minimum requirements.[13]

Michigan's Water Withdrawal Legislation

When Michigan ratified the Compact on July 9, 2008, it also enacted legislation that created a multifaceted approach to regulating water withdrawals in the state. Under the new Part 327, Great Lakes Preservation, of the Natural Resources and Environmental Protection Act, the Michigan Department of Environmental Quality (DEQ) is tasked with the traditional regulatory function of granting permits to large withdrawals.[14] In addition, the DEQ must manage an innovative online screening test that automatically determines whether smaller withdrawals may proceed before registration.[15]

Part 327 prohibits a "[n]ew or increased large quantity withdrawal"—defined as a new or increased withdrawal of more than 100,000 gallons per-day average in any consecutive 30-day period—from causing an "adverse resource impact."[16] An adverse resource impact occurs if fish populations are harmed by a decrease in the amount of water available to a river system or surface water body.[17] For river systems, the harm is measured by the percent decrease in the abundance or density of certain fish populations for each type of river or stream.[18] Fish are the aquatic version of canaries in a coal mine; as organisms at the top of the food chain, they indicate whether the entire water ecosystem is healthy.[19]

Property owners that develop the capacity to make new or increased large-quantity withdrawals must register with the DEQ.[20] Before the owner may register, the proposed withdrawal must first be screened by an assessment tool accessed through the DEQ's website.[21] The tool uses information on the withdrawal—such as the source, location, pumping capacity, and frequency—to determine the risk of harm to fish populations in river systems.[22]

The online tool sorts withdrawals into zones of increasing risk of causing an adverse resource impact.[23] The withdrawals that create little or no risk according to the tool are allowed to register.[24] The withdrawals in the remaining zones must undergo site-specific review by DEQ staff to ensure the tool properly characterized the risk.[25] If the review shows that a withdrawal in fact creates a moderate risk, the withdrawal is registered once the owner self-certifies to either generic or sector-specific conservation measures that the owner considers reasonable.[26] If the review shows that the withdrawal creates a significant risk—that is, it is likely to cause an adverse resource impact—the owner cannot proceed.[27]

Fish are the aquatic version of canaries in a coal mine; as organisms at the top of the food chain, they indicate whether the entire water ecosystem is healthy.

For owners who plan to develop new or increased withdrawal capacity of more than two million gallons per day, the registration process is replaced with traditional permit review.[28] To obtain a Part 327 permit, the applicant must show that a withdrawal will:

- be accompanied by a return of the withdrawn water to the source watershed less the amount consumed;
- not result in individual or cumulative adverse resource impacts;
- comply with other laws and regional agreements;
- have a use that is reasonable under common-law principles of Michigan water law; and
- not violate public or private rights and limitations imposed by Michigan water law or other Michigan common-law duties.[29]

In addition, the applicant must self-certify to environmentally sound and economically feasible water-conservation measures.[30] Community water suppliers that develop the same large capacity must also meet these criteria under the Michigan Safe Drinking Water Act (SDWA), but there is an exception for political subdivisions if the suppliers have no feasible and prudent alternative and the environmental impact of the withdrawal is balanced by the public benefit.[31]

Partial Progress on Implementation

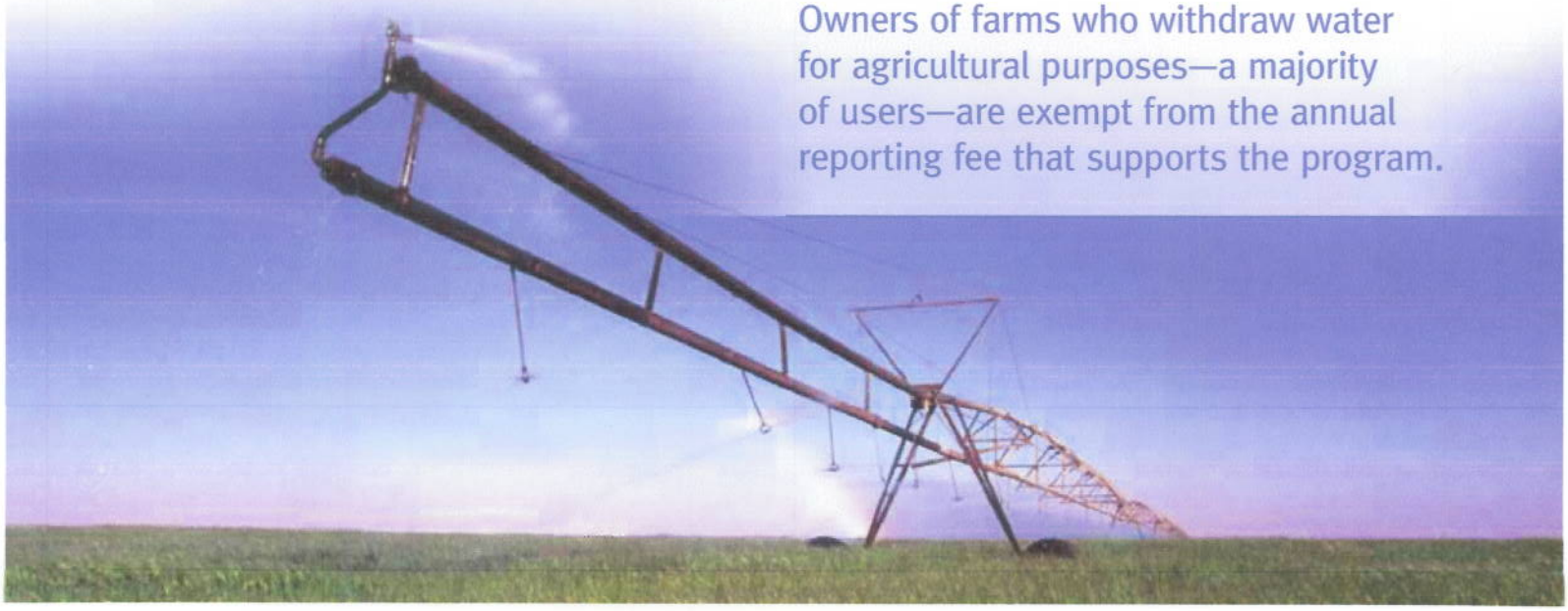
The Compact sets several deadlines for Michigan and the other Great Lakes states to take action.[32] This section will examine Michigan's progress on two key requirements. By December 8, 2010, Michigan should have developed and implemented a water conservation and efficiency program designed to meet state goals and objectives which, in turn, are to be consistent with the region's goals and objectives.[33] By December 8, 2013, Michigan will be required to develop a regulatory program for new or increased withdrawals that at minimum employs a decision-making standard set out in the Compact.[34]

The conservation provisions in Part 327 are weak and arguably do not meet the state's commitment under the Compact as of the 2010 deadline. In essence, the provisions encourage large-quantity water users to adopt conservation measures in a variety of circumstances.[35] While a conservation program under the Compact can be voluntary or mandatory, it must include all users and adjust to new demands and the potential impacts of cumulative effects and climate.[36] The state must also commit to promote environmentally sound and economically feasible conservation measures such as demand-side and supply-side incentives.[37] The Part 327 provisions fail to adequately cohere into a program that targets all users, is adaptable, and truly promotes a range of measures.

An advisory committee was tasked with making recommendations on developing and implementing a conservation program under the Compact.[38] The committee issued its report in November 2009, which included proposed state goals and objectives to guide a program.[39] The goals and objectives were adopted by the deadline, but the rest of the committee's recommendations have not been formally adopted and the committee has been disbanded.

Michigan's permitting programs under Part 327 and the SDWA are closer to the target, but the permitting standard must be strengthened before the 2013 deadline. The Michigan criteria differ in one critical way from the minimum decision-making standard in the Compact and Agreement: while the minimum standard requires that the withdrawal be implemented so as to incorporate conservation measures, Part 327 and the SDWA only require that an applicant "self-certify" compliance with conservation measures.[40] Perhaps feeling itself limited by the statutory language, the DEQ has not conditioned the permits it has issued under this standard on implementation of any specific measures.[41] Instead, the DEQ has required only that the supplier submit an annual report on the status of implementation. The DEQ has also accepted the measures proposed by the suppliers without analyzing whether more could be done to limit the amount of water used.

Owners of farms who withdraw water for agricultural purposes—a majority of users—are exempt from the annual reporting fee that supports the program.



Concluding Thoughts

Michigan's implementing legislation has been in effect for almost three years. One of the most promising aspects of the legislation is the water-withdrawal-assessment process centered on the online tool. This novel means of predicting resource impacts and providing users with a quick determination was supported by stakeholders from business, industry, environmental organizations, and agriculture and has already won three national awards. The process is a tribute to the Compact and Agreement because it was developed to complement Michigan's regulatory program for water withdrawals.

The assessment process is working well. The DEQ began operating the tool in July 2009. Statistics from the first year show that very few withdrawals were prohibited; of 216 proposed withdrawals, only three were ultimately determined to create a likely adverse resource impact.[42] While this result could be attributed to an insufficiently protective standard, the more likely reason is that the tool helps users to choose withdrawals that have lesser impacts on water resources. Indeed, the tool is conservatively designed; it flagged many withdrawals that ultimately showed little risk of harm. Of the 44 withdrawals that were submitted for site-specific review by the tool, DEQ staff found that 41 of them could proceed.[43]

Yet the DEQ's water use program faces severe underfunding. Users who withdraw at least 1.5 million gallons per year are required to pay an annual reporting fee of $200 to support the program.[44] But owners of farms who withdraw water for agricultural purposes—a majority of users—are exempt from the fee.[45] In addition, general funding for the programs has declined from $895,000 in FY2009 to only $100,000 in FY2011.[46] One possible solution to the problem is to create a tiered agriculture fee that protects small family farms while ensuring that larger agribusiness pays its share.[47] But if the agriculture loophole is not closed or the general funding restored, the promise of the assessment process and the state's entire implementation of the Compact and Agreement are at risk. ■

Sara R. Gosman is an attorney advisor to the National Wildlife Federation on water issues, primarily related to the Great Lakes Compact and Agreement. She is also a lecturer on environmental law at the University of Michigan Law School. From 2004 to 2007, she was an assistant attorney general in the Environment, Natural Resources, and Agriculture Division of the Michigan Department of Attorney General.

FOOTNOTES

1. US EPA, Great Lakes: Basic Information <http://epa.gov/greatlakes/basicinfo.html>. All websites cited in this article were accessed March 21, 2011.
2. International Joint Commission, *Protection of the Waters of the Great Lakes* (2000) <http://www.ijc.org/php/publications/html/finalreport.html>.
3. Hall & Stuntz, *Climate Change & Great Lakes Water Resources* (Ann Arbor: National Wildlife Federation, 2007), pp 8–9, available at <http://online.nwf.org/site/DocServer/Climate_Change_and_Great_Lakes_Water_Resources_Report_FI.pdf?docID=2442>.
4. *Id.*
5. The Agreement and Compact can be found at <http://www.cglg.org/projects/water/Agreement-Compact.asp>. The framework was divided into two documents because a binding agreement between the states and provinces would require a treaty at the national level.
6. Because Illinois is subject to a Supreme Court consent decree governing the Chicago diversion, the state is not required to comply with several provisions in the Compact and Agreement. See *Wisconsin v Illinois*, 388 US 426; 87 S Ct 1774; 18 L Ed 2d 1290 (1967).
7. US Const, art I, §10.
8. Agreement, arts 200 to 201; Compact, §§4.8 to 4.9. Diverted water must be returned to the source watershed in the Basin, subject to an allowance for consumptive use. Agreement, art 201; Compact, §4.9.
9. Agreement, art 201; Compact, §4.9.
10. Agreement, arts 202, 304; Compact, §§4.2, 4.10.
11. Agreement, art 203; Compact, §4.11.
12. Agreement, arts 301 to 302; Compact, §§1.4, 4.1.
13. Agreement, art 300. The programs of the states must also undergo review by the Compact Council, made up of the Great Lakes governors. Compact, §3.4.
14. MCL 324.32701 *et seq.*
15. MCL 324.32706.
16. MCL 324.32701(1)(cc); MCL 324.32721(1).
17. MCL 324.32701(1)(a).
18. MCL 324.32701(1)(a)(ii) to (v).
19. See Hamilton & Seelbach, *Determining Environmental Limits to Streamflow Depletion Across Michigan*, in The Book of the States (Council of State Governments, 2010), p 535, available at <http://www.miwwat.org/wateruse/documents/BOS%202010%20Hamilton%20and%20Seelbach.pdf>.
20. MCL 324.32705(1).
21. *Id.* The tool can be found at <http://www.miwwat.org/>.
22. MCL 324.32706a(3); Hamilton & Seelbach, *supra*, p 537.
23. MCL 324.32706b(2). The zones are labeled A, B, C, and D. MCL 324.32701(1)(tt) to (ww).
24. MCL 324.32706b(3).
25. MCL 324.32706b(4); MCL 324.32706c.
26. MCL 324.32706c(4); MCL 324.32708a.
27. MCL 324.32706c(5) to (6).
28. MCL 324.32705(2)(c); MCL 324.32723(1)(a) to (b).
29. MCL 324.32723(6)(a) to (d), (f).
30. MCL 324.32723(6)(e).
31. MCL 325.1004(3) to (4).
32. The Agreement has a different timeline and, unlike the Compact, is not binding on Michigan.
33. Compact, §4.2.2.
34. Compact, §§4.10 to 4.11, 4.12.1.
35. See MCL 324.32706c(4); MCL 324.32707(1)(j); MCL 324.32708(1)(h); MCL 324.32708a; MCL 324.32710(3)(b).
36. Compact, §§4.2.2, 4.2.5.
37. Compact, §4.2.4.
38. MCL 324.32803(4)(f).
39. Water Resources Conservation Advisory Council, Findings and Recommendations, *A Report of the Water Resources Conservation Advisory Council* (November 2009) <http://www.michigan.gov/documents/dnr/WRCAC_November_2009_report_301194_7.pdf>.
40. Compare Compact, §4.11.3, with MCL 324.32723(6)(e); MCL 325.1004(4).
41. See the large-quantity-water-withdrawal permits issued to the City of St. Joseph (August 28, 2009), Genesee County Drain Commission (August 28, 2009), and Benton Charter Township (February 8, 2010). These can be found at <http://www.michigan.gov/deq/0,1607,7-135-3313_3684_45331-220911--,00.html>.
42. Hamilton, DEQ, Water Resources Division, Large Quantity Withdrawals (LQWs) First Year (September 2010) (on file with author).
43. *Id.*
44. MCL 324.32707(7) to (8).
45. MCL 324.32707(7); Hamilton, *supra*. For a list of registrations since July 2009, see <http://www.michigan.gov/documents/deq/deq-wb-dwehs-wwciu-wwatregistrants_301492_7.pdf>.
46. 2008 PA 247; 2010 PA 189.
47. Thanks to Nick Schroeck of the Great Lakes Environmental Law Center for his thoughts on this.

UPDATE: July 9, 2009

Michigan Water Withdrawal Assessment Tool

Implementation of the Water Withdrawal Assessment Tool

The Water Withdrawal Assessment Tool (Assessment Tool) is designed to estimate the likely ecological impact of a proposed water withdrawal on nearby streams and rivers. **This is the implementation version.** Its use is mandatory, effective July 9, 2009, for new or increased large capacity water withdrawals (over 70 gallons per minute). Test versions were available since October 1, 2008. Users made a number of helpful suggestions that were incorporated into this version.

The legislation that authorized implementation of the Assessment Tool was signed into law July 9 2008 (2008 PA185) and limits the amount of water withdrawals that can occur across Michigan. The limit is tied to the type of stream or river affected by a withdrawal and is based on not causing an "adverse resource impact" to streams and rivers. In order to assist in evaluating a withdrawal, the legislation also creates a series of "zones" that describe how much risk a proposed withdrawal poses for creating an adverse resource impact. Withdrawals in Zone A through C can proceed (although some additional steps in the process may be required). A withdrawal in Zone D would likely create an adverse resource impact and cannot take place.

The zones and adverse resource impact line (marking the beginning of Zone D) established in the 2008 legislation became effective February 1, 2009. Withdrawals established before that date still cannot cause an adverse resource impact, although the determination of what constitutes an adverse resource impact would be made by the Department of Environmental Quality (DEQ) under legislation passed in 2006 (2006 PA33). In making this determination, the DEQ would use many of the same concepts underlying the 2008 legislation, but the specific numerical limits set by the 2008 legislation do not apply.

The Assessment Tool is designed as a screening process. It allows a person to efficiently determine whether a proposed withdrawal could safely occur without creating an adverse resource impact (Zone A and in most cases Zone B) or whether additional review is necessary before the proposed withdrawal can occur (Zones C and D).

Registration of a Proposed Withdrawal

Under Michigan law, a Large Quantity Withdrawal (LQW), defined as a water withdrawal of 70 gallons per minute or greater, must be registered with the Michigan Department of Environmental Quality, or with the Michigan Department

of Agriculture if the LQW is for an agricultural purpose, before the withdrawal can begin.

The Assessment Tool is designed to register a new or increased large capacity withdrawal. The results page provides a quick link to submitting a registration. A registration is valid for 18 months; the withdrawal capacity must be installed within that 18 months or the registration becomes void.

Please Provide Your Comments

We are very interested in the experience of users and how to improve the Assessment Tool. If you have suggestions for improving the tool, or any comments, please submit them through the "feedback" quick link found on the results page. Responses to the feedback comments will be posted periodically.

Background and How the Assessment Tool Works

Governor Jennifer Granholm signed the Great Lakes Compact on July 9, 2008, that joins Michigan with all other Great Lakes region states and provinces in a commitment to use responsible and science-based management of the region's water resources. At the same time, she signed laws to implement a new conservation-based water management process designed to provide for the wise use of Michigan's abundant water resources, while protecting the waters and water-dependent natural resources for use by current and future generations. The Michigan Water Withdrawal Assessment Tool is an important piece of the new process.

The Assessment Tool provides an initial, screening-level assessment of the impact of a potential water withdrawal on local stream and river ecosystems. It operates within a Geographic Information System and can be used to examine potential withdrawal sites anywhere in the state. It is designed with some safeguards so that when a proposed withdrawal clearly poses little or no risk to nearby stream and river ecosystems, the Assessment Tool can approve, and facilitate immediate on-line state registration, of the withdrawal. But when a proposed withdrawal triggers concerns of risk to the ecosystems, the Assessment Tool instructs the person to request a more detailed review by Department of Environmental Quality (DEQ) staff.

The Assessment Tool considers the geographic variations in Michigan's stream flows and fish community types when making a determination. Using current scientific understanding, scientists created mathematical models of stream flow, groundwater, and fish ecology. The stream flow model uses information on soils, geology, land use, and precipitation to predict how much flow is available in each stream. The groundwater model uses information about geology, well depth,

pumping rate, and distance from nearby streams to estimate how much a well will reduce the flow in nearby streams. And the fish ecology model determines how a reduction in stream flow is likely to impact the types and abundance of fish that live there. Fish populations are a surrogate representing health of the overall stream ecosystem.

All streams and rivers of the state are classified by size and water temperature. Each stream type has different characteristic fish populations that respond differently to the loss of water. For each type, a maximum amount of water can be withdrawn before it causes an adverse resource impact. The risk of approaching an adverse resource impact is marked by Zones A through D. Zone A has little risk of causing an adverse resource impact, while Zone D means an adverse resource impact would likely occur in the stream. Zones B and C lie between these extremes, indicating increasing risk. The Assessment Tool advises the user what zone their proposed withdrawal is in, and provides instruction on what to do.

Michigan's cold rivers and streams are a unique resource in North America. Users may note that in one set of the cold stream types, only relatively small withdrawals are allowed. Cold transitional rivers and streams are the most sensitive to reductions in flow. Relatively small reductions in flow can dramatically alter their ecosystems so that they will no longer support cold water species like trout. Withdrawals from cold transitional rivers and streams also require more detailed review by DEQ staff.

Prepared by:

David A. Hamilton
Michigan Department of Environmental Quality
July 9, 2009

Comment submitted anonymously

Draft Environmental Impact Statement
Comments Related to the
Enrico Fermi Unit 3
Thursday, December 15, 2011

Commenter Name: _____

Organization Name (if any): none

Address (optional): Thank you to Barry Zalcman

Email Address (optional): —

2 Comments

I 1) DTE officials (privately told me directly) & records show concern for loss of revenue, less demand; less coal-rail hauling revenue projections.
2) DTE Board of Directors & Mgmt team respond to Stockholder/Wall St expectation of decisions to serve stockholders (& bonus/comp incentives)
3) NRC is subject to intense Lobby efforts - political pressures and NEI influence

Therefore:
the conflict of interest - career & professional survival mandate to serve those expectations
DTE's proposal serves stockholders, their industry partners & SEC's historical "oversight"
Risk is all public - not corporate.

II OIG files include, with evidence of false reporting material security violations. Failures in security guards cheating on Scenario Tests & repeated use of cheat sheets & still "terrorists get in"

Nuclear waste corp. Co has had leader organized crime motivated operations resulting in federal law violations

Thus Regulatory oversight - problematic, to say the least

Written comments should be postmarked by JANUARY 11, 2012

You may either hand in your comment tonight to an NRC employee or mail in your comment. If you choose to mail your comment, please fold on the dotted lines with Business Reply side out, tape the bottom, and mail back to the NRC.