Environmental Assessment

Remediating Native Fish Spawning Habitat in the St. Clair – Detroit River System

March, 2014

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APPENDICES

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APPENDIX B. Documentation Relevant to Social Impacts
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APPENDIX A. LETTERS OF SUPPORT FROM PARTNER AND COOPERATING AGENCIES

- U.S. Fish and Wildlife Service, Midwest Region, Alpena Fish and Wildlife Conservation Office
- Michigan Department of Natural Resources, Fisheries Division
- The National Oceanic and Atmospheric Administration, Habitat Restoration Center
- National Fish and Wildlife Foundation, Sustain our Great Lakes Program
- Michigan Department of Environmental Quality, Office of the Great Lakes
- Letter from Sturgeon for Tomorrow, St. Clair – Detroit River Chapter
Esther Eng
Chief, Environmental Management Branch
U.S. Geological Survey
12201 Sunrise Valley Drive MS-207
Reston, VA 20192

Dear Esther Eng:

Over the past ten years, the U.S. Fish and Wildlife Service-Alpena Fish and Wildlife Conservation Office (Alpena FWCO) has collaborated with Bruce Manny (USGS), Jennifer Read (University of Michigan) and others to develop, study, and refine methods for creating spawning habitat in the St. Clair-Detroit River System. The Alpena FWCO has been part of the planning for three completed spawning reef projects and participated in meetings and field work to develop the scope for the proposed work described in the Environmental Assessment: Restoring Fish Spawning Habitat in the Huron-Erie Corridor.

Lake sturgeon are a priority species for the U.S. Fish and Wildlife Service, in part because this fish species is listed as threatened or of special concern in all but one of the Great Lakes states and provinces. The proposed restoration work provides an important opportunity to study population dynamics and aid the recovery of lake sturgeon in the Great Lakes.

The Alpena FWCO will support the proposed spawning habitat creation work in a number of ways. Staff at the Alpena FWCO possesses the unique capacity to evaluate adult and juvenile fish use of the spawning reef using multiple gear types. This field work is typically accomplished through agreements with U.S. Geological Survey and the Michigan Department of Natural Resources. In addition, the U.S. Fish and Wildlife Service’s Coastal Program has provided additional funds to expand several past and future reef projects. As such, the Alpena FWCO has been and will continue to be a key partner in the proposed spawning habitat restoration work, supporting both the science and public relations.

Please do not hesitate to contact me if you have any questions about the work described in the Environmental Assessment: Restoring Fish Spawning Habitat in the Huron-Erie Corridor.

Sincerely,

Scott Koproski, Project Leader
Alpena Fish and Wildlife Conservation Office
(989) 356-3052
scott_koproski@fws.gov
March 25, 2014

Dear Esther Eng:

I am the Lake Erie Basin Coordinator with the Michigan Department of Natural Resources (MDNR) Fisheries Division. MDNR has worked closely with Bruce Manny (USGS) and Jennifer Read (U. Michigan) and others to develop, study and refine methods for creating spawning habitat in the St. Clair-Detroit River System. MDNR has been part of the planning for two completed spawning reef projects and participated in meetings and field work to develop the scope for the proposed work described in the Environmental Assessment: Remediating Native Fish Spawning Habit in the St. Clair – Detroit River System.

Lake sturgeon are an important species for MDNR because the fish is listed as threatened in Michigan as well as most other Great Lakes states and provinces. The proposed restoration work provides an important opportunity to study population dynamics and aid the recovery of lake sturgeon in the Great Lakes.

MDNR Fisheries has supported past spawning reef projects in a few ways, and at least some of these activities are likely to continue in support of the proposed projects. The MDNR Lake St. Clair Field Station is conveniently located on the shores of Lake St. Clair and has provided office space, docks, equipment, personnel and other support for field teams in the St. Clair delta and river. MDNR’s unique research capacity and long-term monitoring program have helped choose reef sites, evaluate project impacts and interpret results. In addition, we have supported proposals for restoration funding by providing valuable non-federal match for several grant applications. As such, MDNR has been and will continue to be a partner in the proposed spawning habitat restoration work, supporting both the science and public relations.
We support the on-going planning and development of the proposed reef projects described in the *Environmental Assessment: Remediating Native Fish Spawning Habitat in the St. Clair – Detroit River System*. Do not hesitate to contact me if you have any questions.

Sincerely,

James Francis
Lake Erie Basin Coordinator
Michigan DNR-Fisheries Division
525 W. Allegan Street
Lansing, MI 48933
Esther Eng  
Chief, Environmental Management Branch  
U.S. Geological Survey  
12201 Sunrise Valley Drive MS-207  
Reston, VA 20192  

November 20, 2013  

Dear Esther Eng:  

I am a Federal Program Officer for the Great Lakes Region for the National Oceanic and Atmospheric Administration (NOAA) Restoration Center. We provide grant funds and technical advice for restoration projects that will improve coastal and near shore habitats in the Great Lakes. In 2010, we provided a $890,233 grant to Michigan Sea Grant (PI: Jennifer Read; Grant Number: NA10NMF4630409) to create a fish spawning reef in the Middle Channel of the St. Clair River. We awarded this grant through a competitive funding opportunity where it was one of the top scoring proposals based on a merit-based technical review and subsequent panel review process. The proposal was selected based on the proposed benefits the restoration work would have to native fish communities in the St. Clair – Detroit River System; the overall qualifications of the project team; and collaboration among multiple federal and state agencies.  

The Middle Channel Reef project has been a successful habitat restoration project. The team created an acre of spawning habitat in 2012 and observed lake sturgeon spawning on the reef in 2012 and 2013. The restoration team included a number of state and federal agencies with unique research and monitoring capacity. USGS scuba divers captured video footage of spawning lake sturgeon and lake sturgeon eggs on the reef, which has attracted the attention of the media and public. The project proceeded without controversy, and local residents and permitting agencies were supportive of the project from the beginning.  

Through funding or technical expertise, the Restoration Center supports approximately 100 habitat restoration projects each year. Each project is assessed for NEPA compliance by determining the environmental impacts of project activities using a programmatic NEPA document developed by the NOAA Restoration Center. For the Middle Channel Reef project, we coordinated with the Michigan State Historic Preservation Office and U.S. Fish and Wildlife Service and completed our own detailed review of the project. We found the Middle Channel Reef project to have no significant impact on the local or regional environment.  

We expect the team led by Jen Read and Bruce Manny to fully evaluate all possible ecological and social impacts of their reef construction projects and to work closely with state and federal permitting
agencies. Based on our experience, reef construction projects that follow the planning and implementation process used successfully for the Middle Channel Reef are unlikely to have any significant impact on the human environment. Do not hesitate to contact me if you have any questions about NEPA compliance for the Middle Channel Reef project.

Sincerely,

Jessica Berrio
Federal Program Officer
NOAA Restoration Center
jessica.berrio@noaa.gov
Ph: 301-427-8654
February 21, 2014

Esther Eng
Chief, Environmental Management Branch
U.S. Geological Survey
12201 Sunrise Valley Drive MS-207
Reston, VA 20192

Dear Esther Eng:

The National Fish and Wildlife Foundation manages a grants program called Sustain Our Great Lakes, which supports habitat restoration in the Great Lakes basin. The program awards funding from several sources, including the federal Great Lakes Restoration Initiative (GLRI). Our grants supported with GLRI funding are subject to requirements under the National Environmental Policy Act (NEPA), the Endangered Species Act (ESA), and the National Historic Preservation Act, and we work with the U.S. Fish and Wildlife Service (USFWS) to ensure compliance with those requirements.

In 2012, Sustain Our Great Lakes provided a grant of $799,226 to the University of Michigan to create approximately one acre of spawning habitat in the Detroit River at Fort Wayne. Because GLRI funding was used to support that grant, the USFWS Regional Office in Bloomington, MN reviewed the project for potential impacts. Following its review, the USFWS concluded the project was covered by the following standard Fish and Wildlife Categorical Exclusion under NEPA: "the construction of new, or the addition of, small structures or improvements, including structures and improvements for the restoration of wetland, riparian, instream, or native habitats, which result in no or only minor changes in the use of the affected local area" (Reference: DOI Department Manual 516 DM 8, Section 8.5.B.3). In addition, the USFWS concluded the project was not likely to adversely affect listed or candidate species or critical habitat designated under the ESA, and a review by the Michigan State Historic Preservation Office indicated no historic properties would be affected within the action area of the project.

Since those reviews were completed, the project location has changed, and the new plan is to build a reef upstream of Belle Isle or Grassy Island rather than at Fort Wayne. Given this change, we will work with the USFWS to complete a new set of reviews, using a process similar to the one described above.

Please don’t hesitate to contact me (612-564-7286; todd.hogrefe@nfwf.org) if you have any questions.

Sincerely,

Todd C. Hogrefe
Great Lakes Program Director
Ms. Esther Eng, Chief  
Environmental Management Branch  
United States Geological Survey  
12201 Sunrise Valley Drive, MS-207  
Reston, VA 20192

Dear Ms. Eng:

I am the Deputy Director of the Office of the Great Lakes within the Michigan Department of Environmental Quality (MDEQ). We are responsible for a number of Great Lakes programs including the Area of Concern program under the Great Lakes Water Quality Agreement. I am writing to express support for the Michigan Sea Grant’s proposed work described in the document entitled *Environmental Assessment: Restoring Fish Spawning Habitat in the St. Clair – Detroit River System.*

The MDEQ works closely with the United States Environmental Protection Agency and Public Advisory Councils to oversee the planning and delisting processes for Michigan’s Areas of Concern (AOCs). Both the St. Clair and Detroit Rivers were identified as AOCs under the United States-Canada Great Lakes Water Quality Agreement (Annex 2 of the 1987 Protocol) because they experienced severe environmental degradation resulting in a number of Beneficial Use Impairments. The fish habitat restoration work proposed by the Michigan Sea Grant has been identified by both AOCs as essential to addressing Beneficial Use Impairments related to lost fish and wildlife habitat and degraded fish and wildlife populations. Recent reports referenced these reef construction projects as part of the delisting targets for both the St. Clair River (updated in 2012) and the Detroit River (updated in 2013).

In addition, the MDEQ’s Water Resources Division provides permits for each reef construction project. Over the past 10 years, the MDEQ has2\s provided permits to construct spawning reefs at two locations in the St. Clair River (Middle Channel and Pointe aux Chenes) and two locations in the Detroit River (Southeast Belle Isle and Fort Wayne).

The spawning habitat restoration work described in this Environmental Assessment is important to the goals and work of the MDEQ’s AOC program, and we see no potential adverse impacts associated with these proposed projects.

If you need further information or assistance, please do not hesitate to contact Mr. Rick Hobrla at hobrla@michigan.gov, or at 517-284-5043, or you may contact me.

Sincerely,

Lynelle Marolf  
Deputy Director  
517-284-5035

cc: Mr. Rick Hobrla
Dear Esther Eng:

I am the president and one of the founding members of the St. Clair – Detroit River Sturgeon for Tomorrow. In addition, I am a lifelong resident of Marine City and Algonac and a regular fisherman and boater. I first connected with Bruce Manny (USGS) and Jennifer Read (U. Michigan) when they were building a spawning reef in the Middle Channel of the St. Clair River.

I have provided assistance for the completed and planned reef projects in a few ways. The team often asks for my advice about conditions on the river and how to best work with residents. I participated in several public events about the reef projects and have been working to raise money to add additional signage to the river front about sturgeon habitat restoration. In addition, I helped talk with shoreline homeowners living adjacent to the Harts Light Reef to request letters of permission. Although not everyone feels a personal connection with lake sturgeon, public officials and residents are realizing that the St. Clair River and its unique fish communities are an incredible asset to the towns and should be protected, enhanced and promoted. Here are just a few examples illustrating public interest in lake sturgeon restoration. Efforts are underway to designate Clay Township the Sturgeon Angling Capitol of Michigan, because this is one of the few places in the Great Lakes where sturgeon can be legally and reliably caught by recreational anglers. Michigan Out-of-Doors (a popular TV show) recently filmed an episode about lake sturgeon fishing in the St. Clair River. After a recent rotary event about sturgeon and spawning habitat restoration, a group of residents volunteered to form a sturgeon task force to reduce sturgeon poaching. I am excited to support efforts to create additional spawning habitat for these unique and charismatic fish, benefiting the environment and local communities.

The only local concern with the proposed reef projects has come from a small group of people who live on Russell Island and depend on a ferry to get to their seasonal cottages. These residents were worried that reef construction, monitoring vessels or anglers fishing the reef would interfere with their ferry. However, there was some confusion about the actual location of the Pointe aux Chenes Reef, which is actually more than 300 feet upstream from the ferry route and unlikely to interfere with the ferry operation. This stretch of the St. Clair North Channel is very popular with recreational boaters. A small amount of additional activity in the river during construction will be minimal in comparison with the existing boat traffic.
The reef projects described in this Environmental Assessment: Remediating Native Fish Spawning Habitat in the St. Clair–Detroit River System are seen as important to the goals of Sturgeon for Tomorrow and we see no potential adverse impacts associated with these proposed projects. Do not hesitate to contact me if you have any further questions.

Sincerely,

Jim Felgenauer, President
St. Clair-Detroit River Sturgeon for Tomorrow
810 343-1192
jfelgenauer@gmail.com
APPENDIX B. DOCUMENTATION RELEVANT TO SOCIAL IMPACTS

- Example Email Consultation with the Lake Carriers Association
- Letter from the Lake Carriers Association about the Pointe Aux Chenes Permit
- Letter from resident and local angler and boater in support of Pointe Aux Chenes Permit
- Letter from Aamjiwnaang First Nation in support fish spawning reefs at Fighting Island
Good morning, Glen.

Please find attached a four page pdf. The first two pages show the proposed Harts Light reef locations in the St Clair -- we're in the process of developing permit applications for these sites as well so feedback on them will be important for us as we move forward. The next two pages show three alternate sites for the Detroit River, two up at Belle Isle and one just upstream of Grassy Island.

We realize that some of these locations are in or close to the shipping channel but there are very few areas of deep water (>20 ft), fast-moving current (>0.65 m/s) and smooth, hard river bottom where there's unlikely to be existing habitat to disturb that are outside the shipping channel. We really appreciate your help locating those sweet spots that won't also impact your members.

Looking forward to feedback from your members.

Best, Jen

Jennifer G Read, Ph.D.
Deputy Director, University of Michigan Water Center
A center of the Graham Sustainability Institute
and
Executive Director, Great Lakes Observing System

p: 734.763.2642
c: 734.769.8898

Jen, I'll get this out this morning.

Best,

Glen
From: Jennifer Read [mailto:jenread@umich.edu]
Sent: Friday, August 02, 2013 11:14 AM
To: Glen Nekvasil
Cc: Lynn Vaccaro
Subject: Proposed Alternate Detroit River Reef Sites and St Clair Sites

[Quoted text hidden]

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Morning Jennifer:

FYI and for discussion tomorrow hopefully
We’ve reviewed the proposed sites and can tentatively approve two of the three.

The Belle Isle Reef, Upper Detroit, Location A is acceptable as drawn, but what’s the water depth at A (and at B)?

Location B also appears acceptable, provided it’s near a 26-foot depth and does not extend into the Federal channel. Ice can pile up in this area, so it is very important that we maintain the water depths as currently stated.

Grassy Island Reef, Detroit River is acceptable as long as it is near a 26-foot foot depth within 100 feet of the Federal channel.

Harts Light Reef, St. Clair is not acceptable to commercial navigation. The reef would be in the middle of the western 1/3rd of the navigation channel. Ships transit directly over this area and barges and survey boats would be a real hazard to commercial navigation. We must ask that you look elsewhere.

Please keep us abreast of developments. We’ll always review and help find a location that works for all.

Sincerely,

Glen

Glen G. Nekvasil
Vice President
Lake Carriers' Association
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Fwd: St Clair River Harts Light Location for Spawning Bed

Jennifer Read <jenread@umich.edu>  
To: Glen Nekvasil <nekvasil@lcaships.com>  
Cc: Lynn Vaccaro <lvaccaro@umich.edu>

Good afternoon Glen

Please find attached a revised layout for the Harts Light location in the St Clair River. In revising the layout, the project team carefully considered the concerns of your members. Based on your input, we significantly revised the reef layout to keep the reefs in deep water close to shore, which meant eliminating the third, southernmost unit and changing the dimensions and placement of the other reef units. In addition, during construction and assessment we will require that contractors and research vessels yield to commercial freighters. We also agree that commercial navigation interests will not be held liable for any accidental damage to the reef. We are sharing these revised drawings that we plan to submit for permitting toward the middle of next week and would appreciate your feedback regarding your membership's level of comfort with the revised plan. In our permit application, we will inform the Corps that we worked with LCA in finalizing our plans prior to seeking permits.

The attached document is 5 pp total including:

- Cover drawing showing lay-out of the proposed project relative to river's edge and placement in the river;
- Two following drawings (pp 2-3) showing depth at various points on the proposed reefs;
- Two final drawings (pp 4-5) showing latitudinal and longitudinal cross sections.

We very much appreciate your feedback and continued support of our efforts to restore fish populations.

Best, Jen

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Jennifer G Read, Ph.D.
Deputy Director, University of Michigan Water Center
A center of the Graham Sustainability Institute
and
Executive Director, Great Lakes Observing System

p: 734.763.2642

c: 734.769.8898

On Mon, Sep 9, 2013 at 8:34 AM, Glen Nekvasil <Nekvasil@lcaships.com> wrote:

Jennifer:

We reviewed this and have the following comments:

Based on Corp surveys there is much more water in that area than project
depth. Depths range between 38-39 feet at low water datum along the western channel limits. So, the portion of the reef that is positioned in the Federal channel must always be at least 8 feet lower than project depth. We would not want to see the reef built up to near project depths, especially in times of lower water.

We would need guarantees that the outer, eastern limits of the reef would not extended anymore than 400 feet into the river. As it is the reef is extending into more than a quarter of the river's width in this area.

Contactors and research vessels must be required to move/yield when a vessel is approaching.

Commercial navigation is not liable for any damages of any type or proportion to the sections of the artificial reef that lay within the Federal navigation channel.

If this is amenable to you, we can accept the reef.

Let me know.

Best,

Glen Nekvasil

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Re: Revised St Clair River Harts Light Location for Spawning Bed

1 message

Jennifer Read <jenread@umich.edu>  
To: Glen Nekvasil <Nekvasil@lcaships.com>  
Cc: Lynn Vaccaro <lvaccaro@umich.edu>

Thank you Glen. We really appreciate the chance to work with you and your members in advance to stream line our permitting process!

Best, Jen

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

Jennifer G Read, Ph.D.  
Deputy Director, University of Michigan Water Center  
A center of the Graham Sustainability Institute  
and  
Executive Director, Great Lakes Observing System

p: 734.763.2642  
c: 734.769.8898

On Tue, Nov 12, 2013 at 12:14 PM, Glen Nekvasil <Nekvasil@lcaships.com> wrote:

This meets our needs. Thank all for their cooperation and flexibility.

Glen

Glen G. Nekvasil  
Vice President  
Lake Carriers' Association  
20325 Center Ridge Rd.  
Suite 720  
Rocky River, OH 44116  
Phone: 440-333-9996
Cell: 216-702-6360

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Proposed Fish Spawning Habitat in the St. Clair River at Algonac, Michigan

Lake Carriers’ Association (“LCA”) represents 17 American companies that operate 57 U.S.-flag vessels (“lakers”) on the Great Lakes and carry the raw materials that drive the nation’s economy: iron ore and fluxstone for the steel industry, aggregate and cement for the construction industry, coal for power generation, as well as salt, sand and grain. Collectively, our members can transport more than 115 million tons of dry-bulk cargo per year and employ more than 1,600 men and women, all of whom are U.S. citizens or legally admitted aliens, and provide annual wages and benefits of approximately $125 million. In turn, the cargos our members carry generate and sustain more than 103,000 jobs in the eight Great Lakes and have an economic impact of more than $20 billion.

We have reviewed the application and determined that the spawning ground will not interfere with commercial navigation. Therefore, we have no objection to the project and wish all involved every success.

Very respectfully,

James H. I. Weakley
President
8-26-2013

Mr. Stan Cowton
US Army Corps of Engineers
Regulatory Office
477 Michigan Avenue
Detroit, MI 48226-2550

Re: Corp File No. LRE-2013-00487-12

Dear Mr. Cowton,

It was a pleasure to meet you at the public meeting held at the parking lot of the Russell Island Ferry in Algonac this morning. Though I am the president and one of the founding members of St. Clair-Detroit River Sturgeon for Tomorrow, I am writing this as a life long resident of Marine City and Algonac and as a regular fisherman and boater.

Your Public Notice of July 31, 2013 regarding this file indicates that all factors which may be relevant to the proposal will be considered including land use, navigation and recreation. At the meeting this morning some other local area residents with homes on Russell Island, including the ferry operator, expressed a specific concern that reef construction would result in increased recreational angling over the site therefore impeding ferry operations and access to the island. I would like to address those concerns.

1. Most fishing pressure occurs in the springtime. Up until recently the Russell Island ferry was located slightly over 2000 feet upstream of the present location in an area of higher angling pressure in the springtime. Recreational Anglers jigging for walleyes, including myself, commonly finish their drift below that location. Though inconvenient, I cannot recall there ever being a collision between the ferry and a fishing boat. There is much less fishing activity at the current dock location. Please also understand the primary species sought in the St. Clair River is walleyes. Fishing pressure is higher in the spring due to the fact that most of the fish in the system are caught during the post-spawn dispersal from spawning sites further downstream. Some fish remain in the river and are caught throughout the summer but fishing pressure subsides as many of the walleyes move into lower Lake Huron and Memorial Day brings higher numbers of large cabin cruisers to the river. Smallmouth bass are sporadically targeted by tournament fishermen during the summer. The little fishing pressure that occurs in the area of the proposed reef during the spring walleye run subsides during the rest of the year. There may be some slight additional pressure in the spring if walleyes are using the reef as a spawning or holding area. But it is unlikely that they will occupy the site through the summer.

2. I am sure you must have noticed during your visit this morning that heavy cruisers are more commonly seen plying this narrow channel bordered by a long seawall. The St. Clair River has a very high level of boat traffic that the Russell Island ferry must contend with on a daily basis. Most of this traffic is from large recreational boats, not fishermen. In this particularly narrow part of the river, boat wakes make navigation and anchoring difficult at best for recreational anglers. This is one of the roughest areas of the river in which to try to fish. Most fishermen are on the river early and off by mid morning to avoid being run over or thrown about in the wakes of these large boats. It is sad to say that many of those driving the big boats do not know the rules of the
road, are in many cases intoxicated, and are inconsiderate. A go-fast boat ran into the Harsens Island Ferry this past Saturday night. I am an avid fisherman that would never consider fishing over a reef near the middle of the fairway, in a narrow channel dominated by big boats, with less than considerate or competent operators. That is one of the very reasons I would never attempt to fish the reef in the upper middle channel. You should look at the view of this part of the river on Google Earth. You will understand completely if you do.

3. Another reason I do not expect heavy fishing pressure at the location of the reef is that most fishermen will not even be aware of the fact that it is there. As much as we try to publicize the reef, many people do not take the time for keep up with current events. Even if they know it is there, they are not likely to spend much time fishing there. Anglers, including most of my friends, are creatures of habit. We all have our favorite lures and fishing locations and tend to stick with what we have done in the past. I almost always anchor in the same spot when fishing for sturgeon. There is an old adage that you do not leave fish to find fish. You have to go with your confidence. Again, I believe the reef will not hold the primary target species throughout the year.

4. The reef completed in the upper part of the middle channel one year ago has not drawn a plethora of anglers to it. I would have expected that if there were going to be more activity on that reef that it would have occurred by now. I expect this precedent to be followed when a reef is constructed at the south end of Algonac.

To summarize. Anglers cannot fish over the top of a reef they do not know exists. The Russell Island Ferry is located in a busy, narrow channel. On a daily basis the ferry operator must contend with a high level of traffic which is dominated by large cruisers but does at times include some fishermen. Admittedly, some fishermen are inconsiderate of the fact that their activities might cause some inconvenience to the ferry and maintain their right of way as boats not under power. Most fishing boats are much smaller than the ferry and would not fare well in a collision. Most fisherman in my experience are much more considerate than the cruiser operators more commonly encountered by the ferry operator. Though there may be some slight additional fishing activity in the springtime or early morning, that activity will not persist through the summer because the primary target species will have moved off the reef. It is unsafe, unwise and very uncomfortable to try to fish in that location in the presence of the large volume of heavy cruiser traffic. Most fishermen will not put themselves through that any more than they would ride their bicycle down the middle lane of the freeway during rush hour. Anglers are creatures of habit and are more likely to continue to fish where they have had past success. Any slight increase in fishing activity that would be likely to occur in the early spring or early morning is minimal compared to what the ferry operator already must contend with on a daily basis.

I can be reached almost anytime on my cell phone at 810 343-1192 or by email at jfelgenauer@gmail.com if you have any additional questions. I appreciate the opportunity to comment.

Jim Felgenauer
President, St. Clair-Detroit River Sturgeon for Tomorrow
378 North Avenue
Algonac, MI 48001
810 794-5036
September 23, 2013

LGL Limited,
Environmental Research Associates
22 Fisher Street,
P.O. Box 280
King City, ON
L7B 1A6

Attention: Joseph Cavallo, B.Sc.

Re: Reef Expansion Project near Fighting Island

Dear Mr. Cavallo:

The project involving the expansion of the spawning reef near Fighting Island is one of great interest to Aamjiwnaang First Nation. The initial building of the spawning reef was successful as it is a man-made reef that the Lake Sturgeon have used and continue to use as a spawning area. This area has excellent conditions available for fish spawning for the Lake Sturgeon and other species as well. An expansion of this area would provide a larger area available for spawning to occur and further enhance reproduction and survival of the species in the traditional territory of Aamjiwnaang First Nation.

The sturgeon species is representative in the First Nations people’s heritage and culture. It is an important piece represented as part of the Clan system. The sturgeon clan is very wise and was responsible for teaching the other clans. To the Anishinaabe people, the sturgeon stands for strength and depth. The sturgeon clan teachings include: Be thoughtful of the ancient ones, your ancestors. There is much wisdom from the past for this is where we can learn so much about life from others and their experiences. The survival of the species is very important to First Nations people as it represents wisdom so should the species die, the representation of wisdom also dies. Wisdom is an important part of the Seven Grandfather teachings amongst First Nations peoples.

The sturgeon has also provided many traditional uses for and by First Nation peoples. Some examples include flesh for food, oil for medicinal purposes, bones for needles, spears or arrowheads, drum coverings and glue or paint. Celebrations also were held at spawning events as important social gatherings where religious ceremonies and traditional teachings would occur.

“Saving our Home and Native Land”
Aamjiwnaang First Nation supports the expansion of the spawning reef project near Fighting Island and would be appreciative of Goderich Management Port Corporation (GMPC) also supporting the project as part of the Goderich Harbour Wharf Expansion Fish Habitat Compensation Strategy.

If you have any questions, please feel free to contact me.

Sincerely,

[Signature]

Sharilyn Johnston
Environmental Coordinator
Aamjiwnaang First Nation
sjohnston@aamjiwnaang.ca

"Saving our Home and Native Land"
APPENDIX C. COORDINATION WITH THE STATE HISTORIC PRESERVATION OFFICE

- Concurrence letter for all reef areas described in EA. Figures 9, 10, 12, 13, 14 were provided to the State Historic Preservation Office for review in fall of 2013.
January 28, 2014

DR BRUCE MANNY
USGS GREAT LAKES SCIENCE CENTER
1451 GREEN ROAD
ANN ARBOR MI 48105

RE: ER13-546 The Restoration of Fish Spawning Habitat Project in the Huron Erie Corridor,
City of Detroit & St Clair Township, Wayne & St Clair Counties (USGS)

Dear Dr. Manny,

Under the authority of Section 106 of the National Historic Preservation Act of 1966, amended, we have reviewed the above-cited undertaking at the location noted above. Based on the information provided for our review, it is the opinion of the State Historic Preservation Officer (SHPO) that **no historic properties are affected** within the area of potential effects of this undertaking.

This letter evidences the USGS’s compliance with 36 CFR § 800.4 “Identification of historic properties,” and the fulfillment of the USGS’s responsibility to notify the SHPO, as a consulting party in the Section 106 process, under 36 CFR § 800.4(d)(1) "No historic properties affected." **If the scope of work changes in any way, or if artifacts or bones are discovered, please notify this office immediately.**

The State Historic Preservation Office is not the office of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions, please contact Brian Grennell, Cultural Resource Management Specialist, at (517) 335-2721 or by email at GrennellB@michigan.gov. **Please reference our project number in all communication with this office regarding this undertaking.** Thank you for this opportunity to review and comment, and for your cooperation.

Sincerely,

Brian G. Grennell
Cultural Resource Management Specialist

for Brian D. Conway
State Historic Preservation Officer

SAT:BGG:sb

Copy: Douglas Denison, SmithGroupJJR
APPENDIX D. PERMITS

- MDEQ Permit for the Pointe Aux Chenes Reef
- USACE Permit for the Pointe Aux Chenes Reef
- MDEQ Permit for the Harts Light Reef
- USACE Permit for the Harts Light Reef
MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER RESOURCES DIVISION
PERMIT

ISSUED TO:
Attn: Mr. Doug Alexander
City of Algonac
805 St. Clair River Drive
P.O. Box 454
Algonac, MI 48001

 Permit No. 13-74-0101-P
 Issued August 23, 2013
 Extended
 Revised
 Expires August 23, 2018

This permit is being issued by the Michigan Department of Environmental Quality (MDEQ) under the provisions of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), and specifically:

☑ Part 301, Inland Lakes and Streams
☑ Part 325, Great Lakes Submerged Lands
☑ Part 303, Wetlands Protection
☑ Part 31, Floodplain/Water Resources Protection
☐ Part 315, Dam Safety
☐ Part 323, Shorelands Protection and Management
☐ Part 353, Sand Dunes Protection and Management

Permission is hereby granted, based on permittee assurance of adherence to State of Michigan requirements and permit conditions, to:

Permitted Activity:

Construct a fish spawning reef offshore of Riverfront Park, otherwise known as Pointe Aux Chenes, in the City of Algonac. Place approximately 9,681 cubic yards of 4 to 8 inch diameter limestone in an area measuring 525 feet long by 248 feet wide by 2 feet deep on the bottomlands of the St. Clair River. All work shall be completed in accordance with the attached plans and conditions of this permit.

Water Course Affected: St. Clair River
Property Location: St. Clair County, City of Algonac, Section 10
Subdivision, Lot Town/Range 2N, 16E Property Tax No. 74-01-110-0012-000

Authority granted by this permit is subject to the following limitations:
A. Initiation of any work on the permitted project confirms the permittee’s acceptance and agreement to comply with all terms and conditions of this permit.
B. The permittee, in exercising the authority granted by this permit, shall not cause unlawful pollution as defined by Part 31, Water Resources Protection, of the NREPA.
C. This permit shall be kept at the site of the work and available for inspection at all times during the duration of the project or until its date of expiration.
D. All work shall be completed in accordance with the approved plans and specifications submitted with the application and/or plans and specifications attached to this permit.
E. No attempt shall be made by the permittee to forbid the full and free use by the public of public waters at or adjacent to the structure or work approved.
F. It is a requirement of this permit that the permittee give notice to public utilities in accordance with Act 53 of the Public Act of 1974 and comply with each of the requirements of that Act.
G. This permit does not convey property rights in either real estate or material, nor does it authorize any injury to private property or invasion of public or private rights, nor does it waive the necessity of seeking federal assent, all local permits, or complying with other state statutes.
H. This permit does not prejudice or limit the right of a riparian owner or other person to institute proceedings in any circuit court of this state when necessary to protect his rights.
I. Permittee shall notify the MDEQ within one week after the completion of the activity authorized by this permit, by completing and forwarding the attached preaddressed postcard to the office addressed thereon.
J. This permit shall not be assigned or transferred without the written approval of the MDEQ.
K. Failure to comply with conditions of this permit may subject the permittee to revocation of permit and criminal and/or civil action as cited by the specific state act, federal act, and/or rule under which this permit is granted.

L. All dredged or excavated materials shall be disposed of in an upland site (outside of floodplains, unless exempt under Part 31, and wetland).

M. In issuing this permit, the MDEQ has relied on the information and data that the permittee has provided in connection with the submitted application for permit. If, subsequent to the issuance of a permit, such information and data prove to be false, incomplete, or inaccurate, the MDEQ may modify, revoke, or suspend the permit, in whole or in part, in accordance with the new information.

N. The permittee shall indemnify and hold harmless the State of Michigan and its departments, agencies, officials, employees, agents, and representatives for any and all claims or causes of action arising from acts or omissions of the permittee, or employees, agents, or representative of the permittee, undertaken in connection with this permit. The permittee’s obligation to indemnify the State of Michigan applies only if the State (1) provides the permittee or its designated representative written notice of the claim or cause of action within 30 days after it is received by the State and (2) consents to the permittee’s participation in the proceeding on the claim or cause of action. It does not apply to contested case proceedings under the Administrative Procedures Act challenging the permit. This permit shall not be construed as an indemnity by the State of Michigan for the benefit of the permittee or any other person.

O. Noncompliance with these terms and conditions and/or the initiation of other regulated activities not specifically authorized shall be cause for the modification, suspension, or revocation of this permit, in whole or in part. Further, the MDEQ may initiate criminal and/or civil proceedings as may be deemed necessary to correct project deficiencies, protect natural resource values, and secure compliance with statutes.

P. If any change or deviation from the permitted activity becomes necessary, the permittee shall request, in writing, a revision of the permitted activity from the MDEQ. Such revision request shall include complete documentation supporting the modification and revised plans detailing the proposed modification. Proposed modifications must be approved, in writing, by the MDEQ prior to being implemented.

Q. This permit may be transferred to another person upon written approval of the MDEQ. The permittee must submit a written request to the MDEQ to transfer the permit to the new owner. The new owner must also submit a written request to the MDEQ to accept transfer. The new owner must agree, in writing, to accept all conditions of the permit. A single letter signed by both parties which includes all the above information may be provided to the MDEQ. The MDEQ will review the request and if approved, will provide written notification to the new owner.

R. Prior to initiating permitted construction, the permittee is required to provide a copy of the permit to the contractor(s) for review. The property owner, contractor(s), and any agent involved in exercising the permit are held responsible to ensure that the project is constructed in accordance with all drawings and specifications. The contractor is required to provide a copy of the permit to all subcontractors doing work authorized by the permit.

S. Construction must be undertaken and completed during the dry period of the wetland. If the area does not dry out, construction shall be done on equipment mats to prevent compaction of the soil.

T. Authority granted by this permit does not waive permit requirements under Part 91, Soil Erosion and Sedimentation Control, of the NREPA, or the need to acquire applicable permits from the County Enforcing Agent.

U. Authority granted by this permit does not waive permit requirements under the authority of Part 305, Natural Rivers, of the NREPA. A Natural Rivers Zoning Permit may be required for construction, land alteration, streambank stabilization, or vegetation removal along or near a natural river.

V. The permittee is cautioned that grade changes resulting in increased runoff onto adjacent property is subject to civil damage litigation.

W. Unless specifically stated in this permit, construction pads, haul roads, temporary structures, or other structural appurtenances to be placed in a wetland or on bottomland of the waterbody are not authorized and shall not be constructed unless authorized by a separate permit or permit revision granted in accordance with the applicable law.

X. For projects with potential impacts to fish spawning or migration, no work shall occur within fish spawning or migration timelines (i.e., windows) unless otherwise approved in writing by the MDNR, Fisheries Division.

Y. Work to be done under authority of this permit is further subject to the following special instructions and specifications:

1. Authority granted by this permit does not waive any jurisdiction of the United States Army Corps of Engineers or the need for a federal permit, if required. For more information on USACE jurisdiction please contact Mr. Stanley F. Cowton, Jr. at Stanley.F.Cowton@usace.army.mil or 313-226-2219.

2. All fill shall consist of clean, washed rock or stone that is free of fines, other soil materials, any contaminants, or pollutants.

3. Fish habitat structures shall be placed in such a manner as to prevent hazards to navigation.

4. In accordance with the requirements of the United States Coast Guard, should it become necessary to allow watercraft to pass through the project area at any time during the authorized construction, then appropriate measures shall be taken to allow for watercraft passage.
5. Notification shall be made to the United States Coast Guard, 30 days prior to starting the project. Notify: United States Coast Guard, 9th Coast Guard District, 1240 East Ninth Street, Cleveland, Ohio, 44199-2060; Attention: O.B.R.

6. The authority to conduct the activity as authorized by this permit is granted solely under the provisions of the governing act as identified above. This permit does not convey, provide, or otherwise imply approval of any other governing act, ordinance, or regulation, nor does it waive the permittee's obligation to acquire any local, county, state or federal approval or authorization, necessary to conduct the activity.

7. This permit is being issued for the maximum time allowed and no extensions of this permit will be granted. Initiation of the construction work authorized by this permit indicates the permittee’s acceptance of this condition. The permit, when signed by the MDEQ, will be for a five-year period beginning at the date of issuance. If the project is not completed by the expiration date, a new permit must be sought.

Should you require further information regarding this permit you can contact Katie Fairchild in writing at MDEQ, Water Resources Division, Resources Unit, 27700 Donald Court, Warren, Michigan, 48092-2793, by e-mail at fairchildk@michigan.gov, or by phone at 586-753-3864.

By: [Signature]
Katie Fairchild
Water Resources Division

cc: USACE (File No. LRE-2013-00487-12)
    Clay Township Clerk
    Beth Wenner, Regents of the University of Michigan
    Paul Evanoff, SmithGroup JJR
    Elizabeth Hay-Chmielewski, MDNR Fisheries Division
    Melanie Foose, MDEQ - OGL
NOTES:

1. BATHYMETRIC SURVEY DATA SUPPLIED BY THE U.S. GEOLOGICAL SURVEY. HORIZONTAL REFERENCE IS MICHIGAN STATE PLANE, SOUTH ZONE, INTERNATIONAL FEET. VERTICAL REFERENCE IS IGLD85, INTERNATIONAL FEET. THE WATER LEVEL (572.51, IGLD85) IS BASED ON WATER LEVEL MEASURED AT TIME OF SURVEY FROM 2000.

2. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH SECTION 02481.

3. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES CROSSINGS IN THE RIVER PRIOR TO COMMENCEMENT OF WORK.

4. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND SERVICING LAND SIDE ACCESS POINTS FOR STAGING REEF CONSTRUCTION.

5. FINAL REEF LOCATIONS AND DIMENSIONS ARE PROPOSED AND COULD VARY DEPENDING ON COST OF MATERIAL, LAND OWNER PERMISSION AND PERMITTING.
REEF LOCATION PLAN - PAC

PROPOSED REEF MATERIAL
(3 ACRES, 4'-6' DIAMETER LIMESTONE)

CONSTRUCTION LINE

STA: 2+25
N: 411810.44
E: 13616970.82

STA: 4+74
N: 411548.76
E: 13617366.31

STA: 7+00
N: 411330.99
E: 13617216.93

SCALE: 1"=400'

RECEIVED
JUL 11 2013
WRD/WRU
SEMI DIST.
REEF LOCATION PROFILE - PAC

PERMIT APPLICATION

DRAWING TITLE: REEF LOCATION PROFILE - PAC

DRAWING NUMBER: CP-3

ISSUED TO: UNIVERSITY OF MICHIGAN/ MICHIGAN SEA GRANT

DRAWING REFERENCE:

P:\50350.001\CAD\GIS\Clare Reef\50332-St Clair Reef.dwg

50350.001 7/9/2013

PROJECT NAME: POINTE AUX CHENES PROJECT

DATE: 7/9/2013

DRAWING SCALE

PROJECT NORTH

WATER LEVEL AT TIME OF SURVEY (572.51, IGLD85)

PROPOSED REEF 4"-3" DIAMETER WITH SMOOTH LIMESTONE SURFACE, MIN 2" THICK

EXISTING RIVER BOTTOM

SCALE: 1"=200' HORIZ./1"=20' VERT.

RECEIVED

JUL 11 2013

WRD/WRU SEMI DIST.
December 19, 2013

Engineering & Technical Services
Regulatory Office
File No. LRE-2013-00487-12

Peter Gerard
University of Michigan
Office of Contract Administration
5000 Wolverine Tower
3003 South State Street
Ann Arbor, Michigan 48109-1273

Dear Mr. Gerard:

We are enclosing Department of the Army Permit No. LRE-2013-00487-12. Any material changes in the location or plans of the work authorized herein must be submitted to the District Engineer prior to commencement of work. As required by law, the revised plans must have written approval of the Department of the Army.

Within 30 days of completion of the work, please furnish this office with certification that the artificial reef has been installed in compliance with the approved plans. The certification shall include a survey, conducted by a licensed surveyor, which clearly shows the elevation of the artificial reefs relative to low water datum (572.8 ft. IGLD 1985).

You are responsible for assuring that your contractor abides by the conditions of this permit. Should you have any questions on this matter, please contact Stanley Cowton at the above address, by E-Mail at Stanley.F.Cowton@usace.army.mil, or by telephone at 313-226-2219. In all communications, please refer to File Number LRE-2013-00487-12.
We are interested in your thoughts and opinions concerning your experience with the Detroit District, Corps of Engineers Regulatory Program. If you are interested in letting us know how we are doing, you can complete an electronic Customer Service Survey from our web site at: http://corpsmapu.usace.army.mil/cm_apex/f?p=136:4:0 Or, you may contact us and request a paper copy of the survey that you may complete and return to us by mail or fax. Thank you for taking the time to complete the survey, we appreciate your feedback.

Sincerely,

John Konik
Chief, Regulatory Office
Engineering & Technical Services

Enclosures

Copy Furnished

Jennifer Read (University of Michigan Water Center),
Paul Evanoff (SmithGroupJJR)
MDEQ, 13-74-101
Enforcement
NOAA
DEPARTMENT OF THE ARMY PERMIT

Permittee  University of Michigan

Permit No. LRE-2013-00487-12

Issuing Office  U.S. Army Engineer District, Detroit

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description:

discharge approximately 9,700 cubic yards of angular limestone 4-8 inches in size, on an area of bottom measuring 527 x 248 feet (3.0 acres) at a minimum depth of 37.8 feet below the Low Water Datum elevation of 572.8 feet International Great Lakes Datum (IGLD) 1985 to create fish spawning habitat.

Project Location:

In the North Channel of the St. Clair River, offshore the City of Algonac, Michigan.

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on December 31, 2016. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.

2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

3. If you discover any unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately stop work in that area and notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to
ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions:

1. Your signature, as permittee, indicates that, as consideration for the issuance of this permit, you voluntarily accept and agree to comply with all of the terms and conditions of this permit.

2. The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

Further Information:

1. Congressional Authorities: You have been so authorized to undertake the activity described above pursuant to:

Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act

2. Limits of this authorization.

   a. This permit does not obviate the need to obtain Federal, state, or local authorizations required by law.

   b. This permit does not grant any property rights or exclusive privileges.

   c. This permit does not authorize any injury to the property or rights of others.

   d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

   a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

   b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

   c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

   d. Design or construction deficiencies associated with the permitted work.

   e. Damage claims associated with any future modifications, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance of the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

   a. You fail to comply with the terms and conditions of this permit.
NOTES:

1. BATHYMETRIC SURVEY DATA SUPPLIED BY THE U.S. GEOLOGICAL SURVEY. HORIZONTAL REFERENCE IS MICHIGAN STATE PLANE, SOUTH ZONE, INTERNATIONAL FEET. VERTICAL REFERENCE IS IGLD85, INTERNATIONAL FEET. THE WATER LEVEL (572.51', IGLD85) IS BASED ON WATER LEVEL MEASURED AT TIME OF SURVEY FROM 2000.

2. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH SECTION 02481.

3. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES CROSSINGS IN THE RIVER PRIOR TO COMMENCEMENT OF WORK.

4. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND SERVICING LAND SIDE ACCESS POINTS FOR STAGING REEF CONSTRUCTION.

5. FINAL REEF LOCATIONS AND DIMENSIONS ARE PROPOSED AND COULD VARY DEPENDING ON COST OF MATERIAL, LAND OWNER PERMISSION AND PERMITTING.
2 REEF LOCATION

FILE NUMBER: LRE-2013-00487-12/(13-74-0101-P)
Pte. Aux Chenes Spawning Reef
BY: Regents of the U of M
Algonac, St. Clair County, Michigan
SHEET 2 OF 3
3 REEF LOCATION PROFILE

WATER LEVEL AT TIME OF SURVEY (572.5', IGLD85)

PROPOSED REEF 4'-8'' DIAMETER WITH SMOOTH LIMESTONE SURFACE, MIN 2' THICK

EXISTING RIVER BOTTOM

FILE NUMBER: LRE-2013-00487-12/(13-74-0101-P)
Pte.Aux Chenes Spawning Reef
BY: Regents of the U of M
Algonac, St. Clair County, Michigan
SHEET 3 OF 3

SCALE: 1'=200' HORIZ./1'=20' VERT.
b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

[Signature]

PERMITTEE

[Signature]

The Regents of the University of Michigan

[Signature]

Associate Director
Grants and Contracts

12-13-13

(DATE)

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

[Signature]

John Konik for: (DISTRICT ENGINEER)
Robert J. Ellis
Lieutenant Colonel, U.S. Army

DEC 19 2013

(DATE)

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

[Signature]

TRANSFEREE

[Signature]

(DATE)

ENG FORM 1721, Nov 86

EDITION OF SEP 82 IS OBSOLETE.
STANDARD PERMIT COMPLETION REPORT

CELRE-RG-PE

Chief, Compliance and Enforcement Branch
Regulatory Office
U.S. Army Corps of Engineers
477 Michigan Avenue
Room 603
Detroit, MI 48226-2550

Dear Sir:

You are hereby notified that work under Department of the Army Permit No. LRE-2013-00487-12 to construct/restore fish spawning habitat in the North Channel of the St. Clair River at Algonac, St. Clair County, Michigan, issued to Beth Wenner was completed in accordance with the permit on:

__________________________________________

(Date work completed)

__________________________________________

(Permittee's Signature)

__________________________________________

IMPORTANT

1. This COMPLETION REPORT MUST BE MAILED to the above addressee within 10 days after completion of work covered by the FEDERAL PERMIT to insure an accurate Government record of data affecting navigation.

2. Where dredging soundings are made of projects which include dredging, a copy of the soundings should accompany this report. If the soundings are measured from the water surface and have not been corrected to International Great Lakes Datum plane, the hour and date soundings was made should be noted on sounding reports.

NOTE: Although permits authorizing structures carry an expiration date, REPAIRS that conform to the permit plans are also within the scope of the authorization. Therefore, it is recommended that expired permits NOT be destroyed, but retained as proof that the work to be repaired has received the Corps of Engineers' approval.
This permit is being issued by the Michigan Department of Environmental Quality (MDEQ) under the provisions of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), and specifically:

- Part 301, Inland Lakes and Streams
- Part 303, Wetlands Protection
- Part 325, Great Lakes Submerged Lands
- Part 353, Sand Dunes Protection and Management
- Part 31, Floodplain/Water Resources Protection
- Part 315, Dam Safety
- Part 323, Shorelands Protection and Management

Permission is hereby granted, based on permittee assurance of adherence to State of Michigan requirements and permit conditions, to:

**Permitted Activity:**

Construct 2 fish spawning reefs offshore between 4189 River Road and 4287 River Road, otherwise known as Harts Light, in East China Township. Place approximately 13,053 cubic yards of 4 to 8 inch diameter limestone in an area measuring 798 feet long by 165 feet wide by 2 feet deep and a second area 270 feet long by 165 feet wide by 2 feet deep on the bottomlands of the St. Clair River. All work shall be completed in accordance with the attached plans and conditions of this permit.

**Water Course Affected:** St. Clair River

**Property Location:**
- St. Clair County, East China Township, Section 18
- Subdivision, Lot
- Town/Range 4N, 17E
- Property Tax No.

Authority granted by this permit is subject to the following limitations:

A. Initiation of any work on the permitted project confirms the permittee's acceptance and agreement to comply with all terms and conditions of this permit.
B. The permittee, in exercising the authority granted by this permit, shall not cause unlawful pollution as defined by Part 31, Water Resources Protection, of the NREPA.
C. This permit shall be kept at the site of the work and available for inspection at all times during the duration of the project or until its date of expiration.
D. All work shall be completed in accordance with the approved plans and specifications submitted with the application and/or plans and specifications attached to this permit.
E. No attempt shall be made by the permittee to forbid the full and free use by the public of public waters at or adjacent to the structure or work approved.
F. It is made a requirement of this permit that the permittee give notice to public utilities in accordance with Act 53 of the Public Act of 1974 and comply with each of the requirements of that Act.
G. This permit does not convey property rights in either real estate or material, nor does it authorize any injury to private property or invasion of public or private rights, nor does it waive the necessity of seeking federal assent, all local permits, or complying with other state statutes.
H. This permit does not prejudice or limit the right of a riparian owner or other person to institute proceedings in any circuit court of this state when necessary to protect his rights.
I. Permittee shall notify the MDEQ within one week after the completion of the activity authorized by this permit, by completing and forwarding the attached preaddressed postcard to the office addressed thereon.
J. This permit shall not be assigned or transferred without the written approval of the MDEQ.
K. Failure to comply with conditions of this permit may subject the permittee to revocation of permit and criminal and/or civil action as cited by the specific state act, federal act, and/or rule under which this permit is granted.

L. All dredged or excavated materials shall be disposed of in an upland site (outside of floodplains, unless exempt under Part 31, and wetland).

M. In issuing this permit, the MDEQ has relied on the information and data that the permittee has provided in connection with the submitted application for permit. If, subsequent to the issuance of a permit, such information and data prove to be false, incomplete, or inaccurate, the MDEQ may modify, revoke, or suspend the permit, in whole or in part, in accordance with the new information.

N. The permittee shall indemnify and hold harmless the State of Michigan and its departments, agencies, officials, employees, agents, and representatives for any and all claims or causes of action arising from acts or omissions of the permittee, or employees, agents, or representative of the permittee, undertaken in connection with this permit. The permittee's obligation to indemnify the State of Michigan applies only if the State (1) provides the permittee or its designated representative written notice of the claim or cause of action within 30 days after it is received by the State and (2) consents to the permittee's participation in the proceeding on the claim or cause of action. It does not apply to contested case proceedings under the Administrative Procedures Act challenging the permit. This permit shall not be construed as an indemnity by the State of Michigan for the benefit of the permittee or any other person.

O. Noncompliance with these terms and conditions and/or the initiation of other regulated activities not specifically authorized shall cause for the modification, suspension, or revocation of this permit, in whole or in part. Further, the MDEQ may initiate criminal and/or civil proceedings as may be deemed necessary to correct project deficiencies, protect natural resource values, and secure compliance with statutes.

P. If any change or deviation from the permitted activity becomes necessary, the permittee shall request, in writing, a revision of the permitted activity from the MDEQ. Such revision request shall include complete documentation supporting the modification and revised plans detailing the proposed modification. Proposed modifications must be approved, in writing, by the MDEQ prior to being implemented.

Q. This permit may be transferred to another person upon written approval of the MDEQ. The permittee must submit a written request to the MDEQ to transfer the permit to the new owner. The new owner must also submit a written request to the MDEQ to accept transfer. The new owner must agree, in writing, to accept all conditions of the permit. A single letter signed by both parties which includes all the above information may be provided to the MDEQ. The MDEQ will review the request and if approved, will provide written notification to the new owner.

R. Prior to initiating permitted construction, the permittee is required to provide a copy of the permit to the contractor(s) for review. The property owner, contractor(s), and any agent involved in exercising the permit are held responsible to ensure that the project is constructed in accordance with all drawings and specifications. The contractor is required to provide a copy of the permit to all subcontractors doing work authorized by the permit.

S. Construction must be undertaken and completed during the dry period of the wetland. If the area does not dry out, construction shall be done on equipment mats to prevent compaction of the soil.

T. Authority granted by this permit does not waive permit requirements under Part 91, Soil Erosion and Sedimentation Control, of the NREPA, or the need to acquire applicable permits from the County Enforcing Agent.

U. Authority granted by this permit does not waive permit requirements under the authority of Part 305, Natural Rivers, of the NREPA. A Natural Rivers Zoning Permit may be required for construction, land alteration, streambank stabilization, or vegetation removal along or near a natural river.

V. The permittee is cautioned that grade changes resulting in increased runoff onto adjacent property is subject to civil damage litigation.

W. Unless specifically stated in this permit, construction pads, haul roads, temporary structures, or other structural appurtenances to be placed in a wetland or on bottomland of the waterbody are not authorized and shall not be constructed unless authorized by a separate permit or permit revision granted in accordance with the applicable law.

X. For projects with potential impacts to fish spawning or migration, no work shall occur within fish spawning or migration timelines (i.e., windows) unless otherwise approved in writing by the MDNR, Fisheries Division.

Y. Work to be done under authority of this permit is further subject to the following special instructions and specifications:

1. Authority granted by this permit does not waive any jurisdiction of the United States Army Corps of Engineers or the need for a federal permit, if required. For more information on USACE jurisdiction please contact Mr. Robert Morningstar at Robert.L.Morningstar©usace.army.milo or 313-226-2015.

2. All fill shall consist of clean, washed rock or stone that is free of fines, other soil materials, any contaminants, or pollutants.

3. Fish habitat structures shall be placed in such a manner as to prevent hazards to navigation.

4. In accordance with the requirements of the United States Coast Guard, should it become necessary to allow watercraft to pass through the project area at any time during the authorized construction, then appropriate measures shall be taken to allow for watercraft passage.

5. Notification shall be made to the United States Coast Guard, 30 days prior to starting the project. Notify: United States Coast Guard, 9th Coast Guard District, 1240 East Ninth Street, Cleveland, Ohio, 44199-2060; Attention: O.B.R.
6. The permittee is responsible for acquiring all necessary landowner permissions, easements, or rights-of-way before commencing any work authorized by this permit. All construction operations relating to or part of this project shall be confined to the existing landowner permissions, right-of-way limits, or other acquired easements.

7. This project shall be constructed as shown on the attached plans and riparian interest area estimate. The authorization for this project was based upon the receipt of written authorization(s) from the affected adjacent riparian owner(s). These written authorizations must be updated if the property ownership changes or the landowner revokes the authorization during the term of this permit.

8. The authority to conduct the activity as authorized by this permit is granted solely under the provisions of the governing act as identified above. This permit does not convey, provide, or otherwise imply approval of any other governing act, ordinance, or regulation, nor does it waive the permittee's obligation to acquire any local, county, state or federal approval or authorization, necessary to conduct the activity.

9. This permit is being issued for the maximum time allowed and no extensions of this permit will be granted. Initiation of the construction work authorized by this permit indicates the permittee’s acceptance of this condition. The permit, when signed by the MDEQ, will be for a five-year period beginning at the date of issuance. If the project is not completed by the expiration date, a new permit must be sought.

Should you require further information regarding this permit you may contact Katie Fairchild in writing at MDEQ, Water Resources Division, Resources Unit, 27700 Donald Court, Warren, Michigan, 48092-2793, by e-mail at fairchildk@michigan.gov, or by phone at 586-753-3864.

By: Katie Fairchild
Water Resources Division

cc: USACE (File No. LRE-2013-00867-12)
   East China Township Clerk
   Jennifer Read, University of Michigan Water Center
   Paul Evanoff, SmithGroup JJR
   Elizabeth Hay-Chmielewski, MDNR Fisheries Division
   Melanie Foose, MDEQ - OGL
GENERAL NOTES:

1. SPOT ELEVATIONS REPRESENT CHANNEL BOTTOM ELEVATIONS BASED ON NGLD 85.

2. WATER DEPTH IS FROM THE LOW WATER DATUM WATER LEVEL TO THE TOP OF THE PROPOSED REEF.

3. NORTHINGS AND EASTINGS REPRESENT STATE PLANE COORDINATES IN INTERNATIONAL FEET.
1 NORTH REEF LATITUDINAL CROSS SECTION PROFILE

2 NORTH REEF LONGITUDINAL CROSS SECTION PROFILE

ST. CLAIR REEF PROJECT
EAST CHINA
ST. CLAIR COUNTY, MICHIGAN

Owner:
UNIVERSITY OF MICHIGAN
MICHIGAN SEA GRANT

SMITHGROUPJJR
203 DEPOT STREET
SECOND FLOOR
ANN ARBOR, MI 48104
734.992.4657
www.smithgroupjr.com

PERMITTING 11/13/2013
DRAWING SIZE
HARTS LIGHT NORTH REEF PROFILES

SCALE: 1"=200' HORIZ./1"=20' VERT.

0350.001
PROJECT NUMBER

FIGURE 4
DRAWING NUMBER
LOW WATER DATUM (574.3', IGLD85)
WATER LEVEL AT TIME OF SURVEY (574.08', IGLD85)

PROPOSED SOUTH HARTS REEF
4'-8' DIAMETER LIMESTONE,
2' THICK

EXISTING RIVER BOTTOM

SCALE: V=200' HORIZ. V=20' VERT.

FIGURE 5
HARTS LIGHT SOUTH REEF PROFILES
DEPARTMENT OF THE ARMY PERMIT

Permittee  Regents of the University of Michigan

Permit No. LRE-2013-00867-12

Issuing Office  U.S. Army Engineer District, Detroit

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description:

Discharge a combined total of approximately 13,100 cubic yards of 4 to 8 inch quarried limestone rock in two adjacent areas measuring 798 feet by 165 feet and 270 feet by 165 feet. The stone is to be placed a maximum of two (2) feet thick. The north reef is to be constructed to not exceed an elevation of 36.9 feet below the Low Water Datum (LWD) elevation of 574.3 feet International Great Lakes Datum (IGLD) 1985 and the southern reef is to be constructed not to exceed an elevation of 35.5 feet below LWD.

Project Location:

In the St. Clair River, offshore properties located on River Road, East China Township, St. Clair County, Michigan (T4N, 17E, Section 18).

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on December 31, 2017. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.

2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

3. If you discover any unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately stop work in that area and notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
4. If you sell the property associated with this permit, you must obtain the signature of the new
owner in the space provided and forward a copy of the permit to this office to validate the
transfer of this authorization.

5. If a conditioned water quality certification has been issued for your project, you must comply
with the conditions specified in the certification as special conditions to this permit. For your
convenience, a copy of the certification is attached if it contains such conditions.

6. You must allow representatives from this office to inspect the authorized activity at any time
deemed necessary to ensure that it is being or has been accomplished in accordance with the
terms and conditions of your permit.

Special Conditions:

1. Your signature, as permittee, indicates that, as consideration for the issuance of this permit,
you voluntarily accept and agree to comply with all of the terms and conditions of this permit.

2. The permittee understands and agrees that, if future operations by the United States require
the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the
opinion of the Secretary of the Army or his authorized representative, said structure or work shall
cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will
be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the
structural work or obstructions caused thereby, without expense to the United States. No claim
shall be made against the United States on account of any such removal or alteration.

3. Within 30 days of completion of the work, the permittee must furnish this office with
certification that the artificial reefs have been installed in compliance with the approved plans.
The certification shall include a survey, conducted by a licensed surveyor, which clearly shows
the elevation of the artificial reefs relative to low water datum (574.3 IGLD 1985).

4. The permittee shall contact the U.S. Coast Guard in writing, a minimum of 14 days prior to
the start of work, and request that a notice to mariners be published. The permittee shall
provide this office a concurrent copy of their request.

5. The permittee shall contact the U.S. Coast Guard to determine whether installation of
navigational lighting is required.

6. The structures and appurtenances authorized herein are located within the authorized
Federal channel limits. The permittee is responsible for the removal of any structures and
appurtenances that interfere with Federal dredging or other maintenance activities on the
channel.

7. The permittee, associated teams members, agents and/or contractors, understand and
agree to move their vessels to yield to commercial vessels if requested.

Further Information:

1. Congressional Authorities: You have been so authorized to undertake the activity
described above pursuant to:
Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act.

2. Limits of this authorization.

   a. This permit does not obviate the need to obtain Federal, state, or local authorizations required by law.

   b. This permit does not grant any property rights or exclusive privileges.

   c. This permit does not authorize any injury to the property or rights of others.

   d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

   a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

   b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

   c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

   d. Design or construction deficiencies associated with the permitted work.

   e. Damage claims associated with any future modifications, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance of the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

   a. You fail to comply with the terms and conditions of this permit.

   b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).

   c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

   Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective
measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

(PERMITTEE)  

(DATE)

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

Wally Gauthier for:  
(DISTRICT ENGINEER)  
Robert J. Ells  
Lieutenant Colonel, U.S. Army

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

(TRANSFEREE)  

(DATE)
GENERAL NOTES:

1. SPOT ELEVATIONS REPRESENT CHANNEL BOTTOM ELEVATIONS BASED ON KGD 86.

2. NORTINGS AND EASTINGS REPRESENT STATE PLANE COORDINATES FOR REGION, MICHIGAN SOUTH, IN INTERNATIONAL FEET.

SOUTH REEF

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<thead>
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<th>LOCATION</th>
<th>NORTHING</th>
<th>EASTING</th>
<th>WATER DEPTH</th>
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</tr>
</tbody>
</table>

*WATER DEPTH IS FROM 674.3, THE LOW WATER DATUM WATER LEVEL TO THE TOP OF THE PROPOSED REEF.

FILE NUMBER: LRE-2013-00867-12 (13-74-149)
Hart's Light Reef Project
BY: Regents of the University of Michigan
St. Clair River
East China, St. Clair County, Michigan
SHEET 4 OF 6
APPENDIX E. DOCUMENTATION RELEVANT TO PUBLIC INVOLVEMENT

• Letter of Support, City of Detroit
• Letter of Support, City of Algonac
• Letter of Support, East China Township
• Project Fact Sheet, highlighting the St. Clair River projects
• Letter distributed to shoreline residents in East China
• Letter signed by all shoreline homeowners adjacent to Harts Light Reef
April 30, 2013

Mr. Andy Hartz
Southeast District Resources Unit Supervisor
MDEQ Water Resources Division
27700 Donald Court
Warren MI 48092-2793

RE- Authorization to Construct on City of Detroit, Ft Wayne Park property for Habitat Enhancements

Dear Mr. Hartz:

The Detroit Recreation Department supports the University of Michigan Board of Regents project to construct habitat enhancements within the Detroit River at a location approximately 150-200 feet offshore of the Historic Fort Wayne city park in Detroit. All appropriate MDEQ/USACE permits will be obtained before any construction pursuant to the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended for work within the Detroit River.

The Detroit Recreation Department authorizes the University Of Michigan Board Of Regents and its agent, SmithGroup JJR, LLC to act in its behalf for construction offshore of the City of Detroit, Ft. Wayne Park property. We understand that you will not need access to the property at Fort Wayne in any way to complete this project.

Should you have any questions regarding the permitting, please contact Mr. Douglas Denison, SmithGroupJJR Project Manager at (734)-669-2662. If you have any questions regarding this authorization feel free to contact the office at (313)-224-1123.

Sincerely,

Alicia C. Minter
Director

cc. D.Denison - (SmithGroupJJR LLC)
S. Brinkmann – (DRD)
T. Karl (GSD)
July 3, 2013

Mr. Andy Hartz
Southeast District Resources Unit Supervisor
MDEQ Water Resources Division
27700 Donald Court
Warren, MI 48091 - 2793

Dear Mr. Hartz:

The City of Algonac owns property along the St. Clair River within City Limits and just onshore of the proposed Pointe aux Chenes spawning reef restoration project. The City Council, by authority of the attached resolution, gives permission to the University of Michigan and their team to add rock to the bottom of the St. Clair River offshore from the park property in order to create a fish habitat reef.

We have been notified about this project and I understand that:

- The reef could be located approximately 300 feet offshore from the park property.
- The reef will be made of quarried limestone, a non-polluting material.
- Rock will be placed on the bottom of the river, forming a bed of loose rock about 2 feet deep, under 35 feet of water, and will not interfere with navigation.
- The project will be entirely within the St. Clair River and no activity will occur on the park property.
- All appropriate MDEQ and USACE permits will be obtained before any construction begins.
- The reef will support the reproduction of lake sturgeon, walleye and lake whitefish and could improve fishing opportunities.

Sincerely,

Doug Alexander
City Manager
A regular meeting of the Algonac City Council was called to order at 7:00 p.m. on Tuesday, July 2nd, 2013 by Mayor Irene Bird. The meeting was held in Council Chambers, 805 St. Clair River Drive, Algonac, MI 48001.

ROLL CALL:
Present: Amy Amiels
Irene Bird, Mayor
Ray Martin
Helen Meldrum
Joe Nugent
Mark Thompson
Gary Tuzinowski, Mayor Pro-Tem

Absent: Others: City Manager Doug Alexander
City Clerk Greenia, Jeri Packer,
Mr. and Mrs. Robert Scruggs,
Diane Strevel, Ada Smith,
John Monte, Cathy Wenz,
Ms. Tietzel

MOMENT OF SILENT PRAYER
Mayor Bird called for a moment of silent prayer.

PLEDGE OF ALLEGIANCE
Mayor Bird led the Pledge of Allegiance.

AMENDMENT OF AGENDA
CO 07-01-13 Amend Agenda
Motion by Meldrum, supported by Amiels to amend the agenda by adding item 8g under new business – HVAC System. Motion unanimously carried.
PUBLIC COMMENT
Robert Scruggs, 735 Townsend, was present to speak to City Council regarding his request for a Special Assessment District to have the canal by his property dredged and the cost put on the property taxes.

CITY MANAGER’S REPORT
CO 07-02-13 Approve City Manager’s Report
   Motion by Thompson supported by Amiels to hear and approve the City Manager’s report of June 28th, 2013 as presented. Motion unanimously carried.

CONSENT AGENDA
The following items were on the Consent Agenda for the July 2nd, 2013 Algonac City Council Meeting:
   1) Consent Agenda
      a) City Council Minutes
         1) Regular Meeting June 18th, 2013
      b) Communications and Notices
         1) Comcast Letter
         2) Legal Opinion Regarding Special Assessment Request
         3) Thank You Note - Patti Ries, Memorial Bench

CO 07-03-13 Approve Consent Agenda
   Motion by Thompson, supported by Amiels to approve the Consent Agenda for the July 2nd, 2013 meeting of the Algonac City Council as presented. Motion unanimously carried.

UNFINISHED BUSINESS
   None at this time.

NEW BUSINESS:
Housing Commission Appointment
CO 07-04-13 Housing Commission Appointment
   Motion by Meldrum, supported by Nugent to appoint Doug Alexander to the Algonac Housing Commission to fill the unexpired term ending on June 11th, 2016. Motion unanimously carried.

DPW Temporary Laborer Wage Scale
CO 07-05-13 Approve DPW Temporary Laborer Wage Scale
Motion by Thompson supported by Nugent to support the recommendation of the City Manager to amend Section 7 of the 2013-14 City of Algonac General Appropriations Act by adding the classification of “DPW Temporary Laborer” at the hourly rate of $14.00 per hour. Motion unanimously carried.

Engineering Services, Phase 2, Seawall
CO 07-06-13 Approve Engineering Services, Phase 2, Seawall Restoration Project

Motion by Nugent supported by Amiels to support the approval of the proposal of Testing Engineers & Consultants to provide additional soils testing services in the amount of $7,030 for the Riverfront Park Seawall Repair Project as outlined in the attached submittal from the firm more fully describing said additional services to be provided. Motion unanimously carried.

Actuarial Valuation – Retiree Health Care
CO 07-07-13 Receive and File OPEB Report

Motion by Meldrum supported by Amiels City Manager Alexander received the attached OPEB Report to receive and file the Actuarial Valuation Report as prepared by Gabriel Roder Smith and Company for the City of Algonac’s OPEB Liabilities through December 31, 2011. Motion unanimously carried.

Health Care Administration Agreement
CO 07-08-13 - Approve Business Associate Agreement – Marwil & Associates – Administering Health Insurance Program

Motion by Thompson supported by Nugent to adopt the recommendation of the City Manager to enter into the attached “Business Associate” Agreement with Marwil and Associates as required by Federal HIPPA regulations and authorize him on behalf of the City of Algonac to execute the same. Motion withdrawn, support withdrawn.

CO 07-09-13 Table Consideration of Health Care Administration Agreement with Marwil and Associates

Motion by Meldrum, supported by Thompson to table consideration of the Health Care Administration Agreement with Marwil & Associates until the next meeting of July 16th, 2013 and request that a representative of Marwil and Associates be present. Motion unanimously carried.
Approval of US Geological Service Reef Fish Spawning Project

Motion by Thompson supported by Amiels to support the recommendation of the City Manager granting the United States Geological Service permission to construct the fish spawning reef, opposite Riverfront Park in the City of Algonac as more fully described in their attached communication of June 21st and further granting the City Manager authorization to execute the attached letter acknowledging the granting of such permission to the USG's. Motion unanimously carried.

Approve HVAC Bid – City Council Chambers

Motion by Nugent, supported by Amiels to approve the bid of $5,485 from Boulier Heating and Cooling to replace the HVAC unit for City Council Chambers, and further that City Council waive any and all mechanical permit fees that may normally apply. Motion unanimously carried.

ACCOUNTS PAYABLE

Motion by Amiels supported by Thompson to approve and pay accounts payable and payroll in the amount of $78,912.06 as presented. Motion unanimously carried.

ITEMS FOR NEXT AGENDA

Marwill and Associates – Business Associate Agreement

COUNCIL COMMENTS

Council Member Thompson wished everyone a Happy 4th of July and reminded them that the Pickerel Tournament was this weekend.

Council Member Martin noted he had walked by the memorial bench and it looked very nice. The staff should be commended for a good job on this. City Manager Alexander said information on this would be in the newsletter.
Council Member Amiels wished everyone a Happy 4th of July, wished them all to be safe, and congratulated her sons for winning First Place in their Little League Baseball division.

Mayor Irene Bird thanked Mr. and Mrs. Scruggs for their input on the dredging project.

Council Member Nugent wished everyone a Happy 4th of July.

Council Member Meldrum wished everyone a Happy 4th of July, and added not to drink and drive.

Mayor Pro-Tem Tuzinowski wished all a Happy 4th of July.

ADJOINTMENT

CO 07-13-13 Adjournment

Motion by Thompson supported by Amiels to adjourn the meeting at 7:55 p.m. Motion unanimously carried.

Signed Respectfully Submitted:

Irene Bird, Mayor Cindi Greenia, Clerk

CERTIFICATION

I certify that the foregoing is a true and complete copy of minutes of the Algonac City Council meeting, County of St. Clair and State of Michigan held on Tuesday, July 2nd, 2013, and public notice of said meeting was given pursuant to and in accordance with the requirements of Act No. 267 of the Public Acts of 1976, as amended, being the Open Meetings Act, and the Minutes of said meeting have been or will be made available as required by said Act.

Cynthia L. Greenia, City Clerk City of Algonac
Mr. Andy Hartz  
Southeast District Resources Unit Supervisor  
MDEQ Water Resources Division  
27700 Donald Court  
Warren, MI  48092 - 2793  

September 25, 2013  

Dear Mr. Hartz:  

A team led by the University of Michigan and the US Geological Survey is interested in adding rock to the bottom of the St. Clair River to create a fish spawning reef. Several reef structures could be located offshore from East China, Michigan, adjacent to private residences on River Road and Clarke Drive.  

The East China Township has been notified about this project and recognizes that:  

- If enough shoreline property owners give their permission, the reef could be located 300 feet offshore homes along River Road and Clarke Drive.  
- The reef will be made of 4 -8 inch limestone rocks, a non-polluting material.  
- Rock will be placed on the bottom of the river, forming a bed of loose rock about 2 feet thick, under at least 35 feet of water, and will not interfere with navigation.  
- The project will be entirely within the St. Clair River and no activity will occur on the upland property of adjacent homes.  
- All appropriate MDEQ and USACE permits will be obtained before any construction begins.  
- The reef will support the reproduction of lake sturgeon, walleye and lake whitefish and could improve fishing opportunities.  

The East China Township is supportive of this project and the goals of restoring fish habitat in the St. Clair River.  

Sincerely,  

Larry Simons  
Supervisor
AN ABUNDANCE OF FISH

Historically, the St. Clair and Detroit rivers supported a diverse and productive fishery. Lake sturgeon, walleye and lake whitefish traveled to these rivers to spawn, depositing and fertilizing their eggs in rocky areas with fast-flowing currents.

Beginning in 1874, however, both the St. Clair and Detroit River were extensively modified. The river bottoms were dredged to create deep channels for large, commercial ships. The dredging and disposal of dredged materials such as dirt, sediment and rocks, changed the flow of the river and damaged the natural limestone reefs where millions of fish spawned (reproduced). These and other impacts — including overfishing and shoreline development — have dramatically reduced the populations of native fish, particularly lake sturgeon.

Despite the decline, the St. Clair and Detroit rivers continue to support one of the largest populations of lake sturgeon remaining in the Great Lakes, in part because most other large rivers are dammed. If the population is able to grow, it could help re-populate other parts of the Great Lakes.

LOST SPAWNING HABITAT

Scientists have conducted a detailed analysis of the damage done to historical spawning areas and searched for the few places where native fish still reproduce. A focus has been on sturgeon since they are listed as threatened or endangered by most of the Great Lakes states and as a species of concern in Ontario.

The team found that more than 60 miles of the Detroit River have been dredged, which destroyed natural limestone reefs in the Livingstone Channel.

Today, the remaining lake sturgeon spawn in only a couple locations in the St. Clair and Detroit rivers. Because very few natural rocky areas remain, sturgeon have been found dropping their eggs on some unusual materials, such as the coal cinders that were dumped in the river when ships unloaded near Algonac, Michigan.

Many natural resource professionals believe that the recovery of native fish is limited by a lack of adequate spawning habitat, but that creating reefs that mimic the lost natural limestone reefs may help rebuild populations.

LEARNING TO RESTORE

Between 2004 and 2012, a team of scientists built three reefs in the St. Clair and Detroit rivers. The team took an adaptive management approach, questioning and evaluating as they went along.

What type of rock should be used?

Each reef was constructed using different types of rock material. Based on these three projects, the team discovered that the target fish species — lake sturgeon, walleye and lake whitefish — weren’t all

FASCINATING FISH

In order to help lake sturgeon recover, scientists have been studying their life cycle, movement and habitat requirements. Lake sturgeon are unlike any other fish in the Great Lakes — they can grow up to 6 feet in length and can weigh up to 300 pounds. They are slow to mature: females take 20-25 years to reach reproductive age, while males take 15 years.

Females spawn only once every four years on average, and males typically spawn every other year. Female sturgeon live 80-150 years, while males live an average of 55 years.

Although lake sturgeon look somewhat like sharks, they don’t have teeth, and instead, suck up invertebrates from the bottom of the river or lake.

Lake sturgeon are considered threatened or endangered in seven of the eight Great Lakes states and estimates indicate that their population is now 1 percent of what it once was.

Despite strict restrictions on fishing and improvements in water quality, lake sturgeon’s recovery has been very slow. Because sturgeon take decades to reach reproductive age, restoration efforts often take as many or more years to see results in the form of growing populations.

After successfully establishing several artificial spawning reefs in the Detroit and St. Clair rivers, a research team is creating three more habitat restoration sites in 2013 to benefit native fish.
that picky, as long as rocks were piled deep enough to form crevices that protect the eggs and that the rocks remain relatively free of silt, algae and mussels.

It was also discovered that some undesirable, invasive species do have a preference for rock type:

- Sea lamprey will build nests in gravel that is less than 1-2 inches in diameter; and
- Round goby are particularly fond of piles of large rocks.

The conclusion: 4-8 inch limestone works best to encourage native species development, while discouraging invasive species.

**Where should the reefs be built?**

Areas with strong currents and deep waters are ideal places to create spawning habitat for the target native species. Scientists at the U.S. Geological Survey developed a computer model using water depth and flows in the St. Clair and Detroit rivers to predict where lake sturgeon would spawn if the river bottom were suitable.

Project partners used the model to identify high-priority places for constructing reefs and then selected specific locations without contaminated sediments or heavy boat traffic.

At a potential reef site, underwater cameras and sonar are used to make sure the river bottom is hard and smooth and lacks any fish habitat. When possible, reefs are placed close to known spawning areas and upstream of wetlands that could protect young fish after they hatch.

**What comes next?**

In 2014, project partners plan to build several spawning reefs in the St. Clair and Detroit rivers based on the lessons learned from earlier habitat restoration.

The design and restoration process for each reef will be very similar, resulting in a single bed of loose, interlocking rock about 2 feet thick.

New spawning reefs will be established in three different areas of the St. Clair and Detroit rivers. Tentatively, they will include:

- A 1-acre reef, at either Grassy Island or East Belle Isle in the Detroit River.
- A 2-acre reef, 300 feet offshore from the City of Algonac in the St. Clair River (Pointe aux Chenes).
- 2 or 3 reefs, 300 feet offshore from East China Township in the St. Clair River, totaling 4 acres (Harts Light).

**How do we know the reefs are effective?**

A diverse team of scientists will study the river before and after the reefs are established. They will use a variety of techniques to determine if fish are depositing eggs on the reef and if the eggs produce healthy young fish. Other scientists will monitor populations of adult and juvenile fish on and near the reefs.

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**GREAT LAKES RESTORATION**

These reef projects are supported by grants from the Great Lakes Restoration Initiative, the Sustain Our Great Lakes Program and the U.S. Fish and Wildlife Service. This work is a result of a long-term collaboration among federal, state and private groups interested in studying and restoring the St. Clair-Detroit River System. Project partners include Michigan Sea Grant, the University of Michigan Water Center, the U.S. Geological Survey, U.S. Fish and Wildlife Service, SmithGroup JJR, Michigan Department of Natural Resources, St. Clair-Detroit River Sturgeon for Tomorrow and the Michigan Wildlife Conservancy.
Dear Yolanda Johnson,

We are seeking your support for an important fish habitat restoration project in the St. Clair River. As you may know, fish populations in the area are suffering because there is a lack of suitable habitat for spawning. We are part of a research team made up of local, state, national and private partners working to bolster the local fish populations. We are doing that by constructing spawning reefs — or areas for fish to deposit their eggs — and we need your assistance.

The area approximately 250 feet from the shore of your property has been identified as an ideal place for us to build a reef. However, we want to make sure we have your support before finalizing plans and applying for permits.

What to Expect
- The proposed reef would be a bed of 4-8 inch limestone rocks, about 2 feet thick, covering 1-2 acres of river bottom, 40 feet underwater.
- When we have permission and permits, a marine construction company will place rock on the river bottom.
- A construction barge could be in the river near your property for an estimated 2-4 weeks. There will be no activity onshore on your property — the construction is strictly performed in the river during normal working hours, Monday through Friday.

The reef will support fish species like sturgeon, walleye and whitefish that, in order to reproduce successfully, require rocky areas in swiftly flowing water. The project will not only enhance the river’s habitat and help fish populations, but should also improve fishing in the river.

Past Success
Over the last 10 years, project partners have built and studied several spawning reef projects in the St. Clair and Detroit rivers that have successfully attracted a range of fish. The most recent project was in the Middle Channel of the St. Clair River, near Algonac. Lake sturgeon were observed spawning on the reef almost immediately — a great success! To read more about the project and see video of lake sturgeon on the new reef, see: www.miseagrant.umich.edu/restoration.

Your Permission
We are asking for your permission to build a spawning reef 300 feet from the shore of your property. If you support this project, please sign and return the enclosed letter of permission or draft your own letter stating support. Please consider attending the meeting on June 26 as mentioned above or contact one of us with questions. We appreciate your consideration and support.

Sincerely,

Lynn Vaccaro
Project Coordinator
Michigan Sea Grant
520 E. Liberty, Suite 310, Ann Arbor, MI 48104
LVaccaro@umich.edu; (734) 763-1530

Jennifer Read
Project Manager
University of Michigan Water Center
214 S. State St., Suite 200, Ann Arbor, MI 48104
jenread@umich.edu; (734) 763-2642
Mr. Andy Hartz  
Southeast District Resources Unit Supervisor  
MDEQ Water Resources Division  
27700 Donald Court  
Warren, MI 48092 - 2793  

Dear Mr. Hartz:

I own property along the St. Clair River in East China Township. I give permission to the University of Michigan and their team to add rock to the bottom of the St. Clair River offshore from my property in order to create a fish habitat reef.

I have been notified about this fish habitat project and I understand that:
- If enough shoreline property owners give their permission, the reef could be located 250 feet offshore from my upland property.
- The reef will be made of 4-8 inch limestone rocks, a non-polluting material.
- Rock will be placed on the bottom of the river, forming a bed of loose rock about 2 feet thick, under 35 feet of water, and will not interfere with navigation.
- The project will be entirely within the St. Clair River and no activity will occur on my upland property.
- All appropriate MDEQ and USACE permits will be obtained before any construction begins.
- The reef will support the reproduction of lake sturgeon, walleye and lake whitefish and could improve fishing opportunities.

Sincerely,

Yolanda S. Johnson  
Date: 10.18.13

Address: 4189 River Road, East China, MI 48054
Parcel Number (if known): 74-18-756-0023-000
Contact Information: 586 945-0469

Name: Yolanda S. Johnson