

Southern Lake Huron Management Unit



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What is the SLHMU?

The Southern Lake Huron Management Unit (SLHMU) encompasses the southern Michigan shores of Lake Huron including Saginaw Bay and all of the waters that make up the watersheds that drain into the southern portion of Lake Huron. Our work area includes all or portions of the following counties: Arenac, Bay, Clare, Genesee, Gladwin, Gratiot, Huron, Iosco, Isabella, Lapeer, Livingston, Midland, Oakland, Ogemaw, Roscommon, Saginaw, Sanilac, Shiawassee, St. Clair, and Tuscola. Fisheries staff working in this unit include a Unit Manager and Management Biologist who work out of the Bay City Operations Service Center, a Management Biologist stationed at the Lapeer State Game Area, a technician staff who work out of the Bay City Fisheries Warehouse, and 5 Fisheries Assistants (creel clerks) who work out of various ports.



Who we are.

We are public trustees employed to fulfill the mission, vision, and values of the Michigan DNR, Fisheries Division.

Fisheries Division Mission

To protect and enhance Michigan's aquatic life and habitats for the benefit of current and future generations.

Fisheries Division Vision

To provide world-class freshwater fishing opportunities, supported by healthy aquatic environments, which enhance the quality of life in Michigan.

Fisheries Division Values

The following six values guide the work for the Michigan Department of Natural Resources, Fisheries Division:

Integrity

Leadership

Innovation

Professionalism

Collaboration

Transparency

Southern Lake Huron Fishery

Saginaw Bay and Lake Huron Fishing – 2014 Forward

Changes and Challenges

Fishing effort on Saginaw Bay and the Saginaw River and tributaries increased to 891,618 angler-hours in 2014, up from 763,238 angler-hours in 2013. The increase was most likely due to the cold winter, which produced excellent conditions for ice fishing. Walleye fishing on the bay and the rivers was excellent. Anglers took home 221,488 walleyes from the bay and rivers combined, up from 213,590 in 2013. The 2014 walleye harvest was the highest since 2009.

Unfortunately, yellow perch continued to decline. The perch catch from Saginaw Bay (ice and open water combined) fell to 101,488, the lowest level in modern times.

The fortunes of walleye and perch are intertwined. Since alewife collapsed in 2003, reproduction of both species has taken a quantum leap. Alewife suppressed reproduction of both species, because adult alewives ate newly-hatched perch and walleye fry. With alewife out of the picture, vastly improved fry survival made large annual year classes of both species a reality. The other side of the coin was that, with alewife extinct, adult walleyes were deprived of one of their main food fishes. All those hungry walleyes have to eat something, and a large part of that something is young yellow perch.

Currently, Saginaw Bay's walleye population is self-sustaining and fully recovered from the near-extinction it suffered in the early 1970's. Yellow perch continue to reproduce, but nearly all young-of-year perch are eaten by predators before they reach their first birthday.

The Fisheries Division is evaluating several options aimed at lowering predation pressure on young yellow perch. Among these are fishing regulation changes to increase walleye harvest and thin the population, evaluation of cormorant predation on yellow perch with an eye toward population control, and introduction of another self-sustaining forage fish to fill the void left by the disappearance of alewife and act as a predation buffer for perch. These options will be assessed by the Division and public input will be sought in 2015 so that initial steps toward balancing the Saginaw Bay food web and improving perch populations can move forward in 2016. Watch DNR websites and the outdoor press for more information.

The blue-water fishery in southern Lake Huron continues a slow rebound from the loss of the Chinook salmon fishery, another casualty of the alewife crash. Initiation of steelhead plants at Harbor Beach has produced solid returns to the fishery, including a substantial return of steelheads into the harbor. This makes the steelies seasonally available to shore, pier, and small boat anglers.

The new Atlantic salmon program is still in its infancy, with more details of rearing needing to be worked out in order to produce smolts that can survive and return to the fishery.

Nevertheless, early spring trolling off Lexington, Port Sanilac, Harbor Beach, Grindstone City, and Port Austin produces an excellent mixed bag of salmon and trout including Chinooks, Cohos, pink salmon, steelheads, and lake trout. This fishery begins at ice-out and runs until the end of May. These same harbors and near-shore waters close by produce excellent smallmouth bass fishing in May and June.



Dam Projects

Shiatown Dam (Shiawassee River)

The Friends of the Shiawassee River (FOSR) continue to lead the charge to remove the Shiatown Dam located near Bancroft, MI. Funding to remove the concrete structure has been secured from grants from the DNR, Dams Grant Management Program, U.S. Fish and Wildlife Service, and the Saginaw Bay Watershed Initiative Network. GEI Consultants have worked with the FOSR to provide engineering and cost estimates. A DEQ permit has been issued and the physical removal of the concrete is planned for the summer of 2015.



Shiatown Dam

Frankenmuth Dam (Cass River)

The City of Frankenmuth is leading the charge to replace the Frankenmuth Dam with a rock ramp structure similar to what was done in Chesaning. The U.S. Corps of Engineers have engineered the project. A DEQ permit has been secured and preliminary floodplain work began in fall of 2014. Complete dam removal and rock ramp construction is scheduled for the summer of 2015.



Frankenmuth Dam

Corunna Dam (Shiawassee River)

The Friends of the Shiawassee River (FOSR) received a grant from the U.S. Fish and Wildlife Service and are developing engineering plans to remove/modify this breached structure. In 2015, the FOSR will be working with the Village of Corunna on a final plan and funding sources.



Corunna Dam

Hamilton Dam (Flint River)

The City of Flint has put together a Hamilton Dam Committee to address structural and safety concerns with this dam. The committee has enlisted the services of Rowe Engineering to design an alternative to the dam structure. Conceptual plans for a rock ramp has been drafted with preliminary cost estimates. The removal of this structure has many complex issues associated with it and will require significant funds to accomplish. In 2015, the Hamilton Dam Committee will continue to seek funding sources.



Hamilton Dam

Other Dams

Other dams in Southern Lake Huron are showing signs of age which jeopardizes their structural integrity. In 2014, the Goodrich Dam (Kearsley Creek) in Goodrich, MI developed a leak. The Village was able to draw the impoundment down and fix the leak but other issues of integrity remain a concern. In 2014, a gate on the Caro Dam (Cass River) malfunctioned resulting in a loss of approximately 4 feet of water in the upstream impoundment. Corrective actions are being investigated but the impoundment remains at a lower level. The Trout Lake Dam (Gladwin Co.) has developed a leak resulting in some water loss. This is a DNR owned dam and corrective actions are being investigated.



Goodrich Dam

SLHMU Walleye and Northern Pike Production

Each year, newly hatched walleye (fry) obtained from our hatcheries are put into rearing ponds in April and allowed to grow until they reach 1-2 inches. The fingerlings are then harvested in June and stocked into various water bodies around the State. In 2015, SLHMU raised 1.5 million walleye fingerlings for stocking.

Kawkawlin Rearing Pond	472,304
Auburn East Rearing Pond	116,000
Auburn West Rearing Pond	388,360
Tawas Rearing Pond	352,783
<u>Au Gres Rearing Pond</u>	<u>196,117</u>
	1,525,564

SLHMU also produces northern pike fingerlings from its Sanford Rearing Marsh. Adult northern pike (pairs of males and females) are transferred from Sanford Lake to the rearing marsh and allowed to reproduce naturally and free of predators. After 6 weeks, the rearing marsh is drained and northern pike fingerlings are harvested and stocked into public waters. In 2014, the Sanford Rearing Marsh produced 7,605 fingerlings averaging 4.5 inches.

In 2015, SLHMU plans to operate all 5 walleye rearing ponds along with the Sanford Rearing Marsh. We look forward to another productive year.

To obtain information on where we stock fish, visit the DNR, Fisheries website at: <http://www.michigandnr.com/fishstock/>



Inland Lake and Stream Surveys

During the course of the year, SLHMU conducts a number of inland lake and stream surveys. Typically, habitat and biological data is collected during open water season and analyzed during the winter months. Completed reports are ready in the spring of the following year.

The following surveys were conducted in 2014 and reports are available upon request:

Inland Lakes

Alma Impoundment, Gratiot County
Gorrel Lake, Mecosta County
Grousehaven Lake, Ogemaw County
Otter Lake, Lapeer County
Twin Lake, Lapeer County
Holloway Reservoir, Genesee County

Skidway Lake, Ogemaw County
Tipsico Lake, Oakland County
Wixom Lake, Gladwin County
Cedar Lake, Lapeer County
Lake Chemung, Livingston County

Streams

Shiawassee River, Shiawassee County
N. Br. Tobacco River, Clare County
Cass River, Tuscola County
Sugar Creek, Gratiot County

Houghton Creek, Ogemaw County
Bogue Creek, Livingston County
Gulley Creek, Iosco County

The following lakes and streams are scheduled for surveying in 2015:

Inland Lakes

Shamrock Lake, Clare County
Trout Lake, Gladwin County
Grebe Lake, Ogemaw County
Long Lake, Lapeer County
Holloway Reservoir, Genesee County

Gut Lake, Clare County
Indian Lake, Livingston County
Sanford Lake, Midland County
Buell Lake, Genesee County
Lake Chemung, Livingston County

Streams

Pine River, Gratiot County
Squaw Creek, Lapeer County
N. Br. Tobacco River, Clare County
Shiawassee River, Saginaw County

Coldwater River, Isabella County
Beaver Creek, Saginaw County
Houghton Creek, Ogemaw County
Pine River, Isabella County

Status of the fishery reports are available for select waters and are listed by county. Check this link to see them:

http://www.michigan.gov/dnr/0,4570,7-153-10364_52259_19056-46374--00.html



Fish Passage at Chesaning-Update

The Chesaning Rock Ramp was designed to pass fish and allow them access to historic river habitat. Of particular importance was the passage of walleye – a fish notoriously sluggish when it comes to swimming past inclines with high velocity flow. Each spring, walleye from Saginaw Bay ascend the Shiawassee River to spawn. When the dam was in place, these walleye were blocked and they congregated downstream.

Since 2010, DNR Fisheries Division and Central Michigan University have been evaluating walleye in the Shiawassee River and their passage upstream beyond the Chesaning Rock Ramp. An electrofishing boat is used to capture the fish. The electrofishing boat momentarily stuns the fish so it can be netted for biological processing. The fish is then returned alive to the water. Sampling has been conducted each spring and summer upstream and downstream of the rock ramp.

From 2010 to 2014, spring sampling downstream of the rock ramp yielded 100's of walleye. Our "best guess" estimate of the spring spawning walleye population in the Shiawassee River is that it is in the realm of 10,000 to 30,000 fish. It's a fairly significant population and a definite contributor to the Saginaw Bay fishery.

Upstream sampling between 2010 and 2011 yielded only a few walleye and it was felt that perhaps the boulders on the upper weirs were not gapped sufficiently to allow fish to pass through them. In summer of 2011, the contractor repositioned the upper weir boulders with wider spacing to facilitate better passage. Upstream sampling in 2012 and 2013 yielded more walleye but still did not compare with what was observed downstream. We looked hard at the flow rates but could not see any definitive reason for walleye not passing the rock ramp in higher numbers. It was a mystery.

Also evidenced from the 2010-2013 sampling was that a few walleye not only passed the rock ramp, they remained upstream into the summer creating a new fishery. Having a year-round population of walleye upstream is a good thing but it also meant we were losing our ability to definitely state the fish were coming from downstream.

So in 2014, Fisheries Division modified their evaluation technique to include tagging walleye downstream of the Chesaning Rock Ramp. Metal jaw tags were attached to 1,000 walleye in April 2014. In addition to providing evidence of passage during our evaluations, angler reports could now be used for additional information. If an angler catches a tagged fish they are encouraged to report it to the DNR. This information is extremely valuable to Fisheries Division to document fish movement and angler harvest.

Upstream sampling in 2014 also yielded some unexpected results. In a single electrofishing effort we captured 87 walleye in 45 minutes of shocking time. Seven of the walleye captured displayed jaw tags from downstream – conclusive evidence of passage. These results are more in line of what we expected to occur and the reason for the increased passage became evident in summer when we noticed a displacement of the boulders on the upper weirs widening the gaps even more. This was very encouraging news and an indication of the potential rock ramps have with passing even the most sluggish of fish. In all likelihood, there will always be a higher abundance of fish downstream during the spawning run but, if a significant proportion of them can move upstream of the rock ramp they will encounter new spawning habitat and that bodes well for the fishery.

Fisheries evaluation of the Shiawassee River walleye and passage of the Chesaning Rock Ramp will continue for the next several years. We will return in summer of 2015 to see if more walleye remained upstream and our plans are to continue with downstream tagging for at least 2 more years. So if you catch a tagged fish, please report it to your local Fisheries Division.

Equipment Spotlight—Fyke Net

“Fyke” is a Dutch term that refers to a long bagged fish net held together by hoops. Fish are directed into a funnel system in the net using a long lead anchored to the shore. The net material can be of different mesh sizes which influences the size of fish captured.

When we survey inland lakes, we typically use two different types of fyke nets—small mesh and large mesh. Small mesh fyke nets have net webbing that measures only 3/16 inch and are intended to capture representative samples of small-bodied nongame species and smaller sizes (<3 inch) fishes that inhabit the littoral zone. Large mesh fyke nets have net webbing that measure 1.5 inches and capture larger (>3 inches) fish species that inhabit the littoral zone or that move inshore at night. Fyke nets are live traps which allows us to return the fish back to the water unharmed.

When we conduct our lake surveys our nets are clearly marked with buoys and boaters must be aware of their presence, so be careful.



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