STATE OF MICHIGAN
DEPARTMENT OF NATURAL RESOURCES
LANSING

GRETCHEN WHITMER
GOVERNOR

DANIEL EICHINGER
DIRECTOR

City of Ypsilanti
One South Huron St.
Ypsilanti, MI 48197

March 27, 2019

Dear Mayor Bashert and Ypsilanti City Council Members,

The Huron River watershed drains approximately 900 square miles in southeast Michigan. Its mainstem extends 136 miles from north-central Oakland County down to Lake Erie and is fragmented by 19 dams. The highest gradient stretch of river runs from Ann Arbor to Belleville and is now a series of nearly back-to-back impoundments formed by dams built between 1914 – 1932, of which Peninsular Dam is one.

Fisheries Division is highly supportive of the removal of Peninsular Dam on the Huron River given the increased connectivity and quality of fish habitat that would be provided. Dam removal would result in approximately 1.25 miles of impoundment returning to natural stream conditions and over 3 miles of connected river. The habitat in this stretch of the Huron is rare in the watershed and very valuable to a range of fish species and macroinvertebrates. Both DEQ and DNR surveys (see attachment for further details) have indicated fish and macroinvertebrate community health in this stretch of river is excellent and organisms would greatly benefit from an extension of this stretch of open river.

Peninsular Dam sits on one of the highest gradient (change in elevation) areas on the mainstem (Huron River Assessment, Chmielewski 1995). In the 1.25 miles from the dam upstream to end of the impoundment, the slope of the natural river bottom averages 10 feet/mile. This is much higher than the average gradient of the mainstem (2.95 feet/mile). River gradient has a strong influence on channel habitat. Higher gradient stretches have faster flows and a variety of habitats with pool-riffle sequences to support various life stages and functions of many species. Fish and other aquatic life are most diverse and productive in stretches of river with gradients at, or greater than, 10 feet/mile. Unfortunately, due to the topography of Michigan, these gradients are rare and are the most likely to have been dammed. In the Huron River, only 6 miles (4%) of the mainstem has this most desirable gradient of between 10 – 69.9 ft/mi and 2.4 miles of this are impounded and not available to fish as river habitat. Removal of Peninsular dam would return 52% of this to useable high gradient, diverse river habitat for aquatic organisms.

The river bottom in the Huron River between Peninsular dam and the start of Ford Lake is made up primarily of gravel and cobble, along with boulders. Based on the gradient and surveys done by Princeton Hydro, it is expected that once the river returns to its natural state, that this will be the dominant substrate type in formerly impounded area

as well. This would almost double the length of river that fish coming up from Ford Lake would have access to for spawning, as well as an important nursery area for juvenile fish. Ford Lake has the only self-sustaining population of walleye in inland waters of southeast Michigan because they can spawn in the small stretch of rocky, high velocity habitat just below Peninsular Dam. Ford Lake is a very popular fishing destination with high catch rates. Increasing the stretch of river available for spawning would increase the successful reproduction of walleye and other species such as smallmouth bass and white bass, benefitting anglers in both the Huron River and Ford Lake.

Based on sediment results from the dam removal assessment and feasibility study and samples collected in 2013, there are no major concerns about detrimental impacts to the ecology of downstream systems. The major concern DNR would have would be sedimentation of habitat downstream of the dam by release of sediment when the dam is removed. This could be addressed as suggested by the planner, by removing the bulk of the sediment immediately upstream of the dam. If dam removal were to occur, DNR would work closely with the engineers and contractors to ensure sediment transport was handled properly.

Although this is on a relatively small scale compared to some dam removals, the habitat and gradient that would then be available to fish in this part of the Huron River is of much higher quality than in many dam removal situations. Removal of Peninsular Dam would also open the door to future increased connectivity in the Huron River with potential installation of fish ladders and/or other dam removals. Game fish species, such as smallmouth bass, walleye, and white bass would benefit greatly from the increased access to prime spawning habitat, nursery areas and likely cooler water temperatures that would result from Peninsular dam removal. This could increase opportunity for fishing at public areas along this stretch of river as well as in Ford Lake, which had the third highest open water fishing effort per acre in a survey of 20 lakes during 2000-2006. Given the increased open stretch and uncovered riffles, this would also likely be a very popular destination for paddle sport enthusiasts.

We hope this information on the fisheries benefits of Peninsular Dam removal is helpful as you make your decision. As the fisheries manager for inland waters in southeast Michigan, I would be willing to submit letters of support in grant applications for dam removal if that is the direction you choose. Please do not hesitate to contact me with any questions (thomass35@michigan.gov, 248-666-7443).

Sincerely,

Sara Thomas

Michigan DNR-Fisheries Division
Lake Erie Unit Manager
Waterford Fisheries Station

Attachment A: Summary of Recent DEQ and DNR surveys in Huron River below Peninsular dam and Ford Lake

1) **Huron River, Heritage Park (downstream of Peninsular Dam) - August 2001**
   - Collected fish via electrofishing in a 1,200 foot segment
   - Collected 4,242 fish and 26 species
   - Dominant species collected indicative of good water quality
   - Fish community on borderline between cool and warm water fish
     - Coolwater fish found include: smallmouth bass, greenside and rainbow darter, rock bass, logperch, white sucker
     - Warmwater fish found include: bluegill, largemouth bass, bullheads, bluntnose minnow
   - Multiple species sensitive to sedimentation and pollution were present, a very positive sign (rainbow darter, stonecat, logperch, northern hogsucker).
   - Abundance of smaller smallmouth bass indicates this stretch is an important nursery area

2) **Ford Lake - DNR Fisheries survey, May 2006**
   - Collected fish via trap nets, seines and electrofishing
   - Collected 3,236 fish and 28 species
   - Panfish (primarily bluegill & black crappie) accounted for 67% of fish caught
   - Large game fish accounted for 25% of fish by number caught
   - Walleye captured had excellent growth, being 2.2 inches above the state average
   - Numbers of yellow perch collected were good for a southeast Michigan lake
   - Predators and desirable game fish such as channel catfish, walleye and bass are much more abundant compared to the 1970s-1990d and rough fish (common carp and sucker) are much less dominant

3) **Ford Lake – DNR Angler survey, April 1 – October 31, 2006**
   - Both shore and boat anglers were interviewed 5 days a week (both weekend days, 3 weekdays
   - Estimated 12,272 angler hours of boat fishing effort, and 15,406 angler hours of shore fishing effort (over 9,000 angler trips)
   - third highest open water fishing effort per acre in a survey of 20 lakes during 2000-2006
   - Total estimated catch of over 30,000 fish
   - Smallmouth bass catches are dramatically up from the last survey in 1974-1977. They accounted for only 4% of the catch in the 1970s but were 25% of catch in this 2006 survey.

- Top species caught were bluegill (14,755 fish), smallmouth bass (7,383 fish), walleye (2,634 fish), yellow perch (1,550 fish) and black crappie (1,232 fish)

4) **Huron River, La Forge Road – DEQ Biological Survey, June and August 2012**
   - used MDEQ standard non-wadeable stream protocols to sample habitat and the macroinvertebrate community at 32 sites throughout the watershed
   - One site was located at La Forge Road, directly downstream from Peninsular Dam.
   - This stretch of the mainstem was rated as excellent for both the macroinvertebrate community and habitat and was the highest scoring of the 8 mainstem sites.
   - There were 28 macroinvertebrate taxa collected, which was the second highest out of 29 stations sampled for these animals.
   - Mayflies, stoneflies and caddisflies, which are all known for their high water quality requirements, contributed 33% of all individuals collected.