CREWS TO REMOVE HARMFUL INVASIVE SEA LAMPREYS FROM LAKE ERIE’S GRAND RIVER

Open house about Grand River sea lamprey control scheduled for April 20; Sea lamprey control treatment to take place April 27-May 4

ANN ARBOR AND MINNEAPOLIS—Sea lamprey control experts will remove harmful, invasive sea lampreys from Lake Erie’s Grand River in Ohio, downstream of the Harpersfield Dam, starting on April 27, 2022. Prior to the treatment, on April 20, officials will be on hand for an open house to talk about sea lampreys and the Grand River removal effort. Sea lampreys destroy native and desirable Great Lakes fish and harm the ecosystem and the economy. Sea lamprey control treatments, which have occurred eight times on the Grand River since 1986, are conducted using a selective pesticide known as a lampricide. The U.S. Fish and Wildlife Service (USFWS), under contract with the binational Great Lakes Fishery Commission (GLFC), will carry out the control measures.

- A community open house to discuss the Grand River treatment will occur on April 20th from 5-7 pm at the Painesville Township Park, a part of the Lake County Metroparks.

- Sea lamprey control will take place approximately April 27th to May 4th at various locations on the Grand River between the Harpersfield Dam and Lake Erie. Exact dates are weather dependent.

Sea lampreys, native to the Atlantic Ocean, are invasive to the Great Lakes. They entered the basin through shipping canals and were first seen in Lake Erie in November 1921. Sea lampreys spawn in streams once and then die. Their offspring live as harmless larvae in river bottoms for several years before the larvae transform into parasitic adults and migrate to open lake. In the lake, sea lampreys spend about 18 months feeding on fishes’ body fluids using a large suction-cup mouth filled with sharp, horn-shaped teeth surrounding a razor sharp rasping tongue. Each sea lamprey is capable of killing up to 40 pounds (18kg) of fish.

Sea lampreys prey upon a wide variety of Lake Erie fishes including lake trout, salmon, steelhead, smallmouth bass, walleye, yellow perch, whitefish, burbot, and even sturgeon. Within a few decades of their arrival in Lake Erie, sea lampreys had colonized all areas of the Great Lakes basin and caused major economic losses. They also contributed to significant ecosystem disruption.
The sea lamprey control program is a highly coordinated effort between the United States and Canada. The program was established by the Convention on Great Lakes Fisheries of 1954, a treaty between the two nations. Since 1958, the program has used the lampricide TFM to control sea lamprey in the Great Lakes. TFM was discovered in 1957 after more than 6,000 compounds were tested to uncover a selective sea lamprey control method. TFM is fully registered with the U.S. Environmental Protection Agency and with Health Canada as a safe and effective pesticide. Licensed and trained technicians apply TFM in streams to remove sea lamprey larvae. TFM does not pose a risk to human health or the environment when applied at concentrations necessary to control larval sea lampreys.

As with any pesticide, the public is advised to use discretion and minimize unnecessary exposure. Lampricides are selectively toxic to sea lampreys, but some fish, insects and broadleaf plants are sensitive. Persons confining baitfish or other organisms in stream water are advised to use an alternate water source because lampricides may cause mortality among aquatic organisms stressed by crowding and handling. Agricultural irrigation must be suspended for 24 hours, during and following a treatment. Along with TFM, the sea lamprey control program uses barriers and traps to control sea lamprey populations in the Great Lakes.

In 1986, a control program for sea lamprey began in Lake Erie. The Grand River is a major sea lamprey producing stream in Lake Erie. If left untreated, the river would contribute 20 percent of the sea lampreys in the lake, which would lead to the gruesome death of tens of thousands of native and desirable fishes in Lake Erie. Sea lamprey larvae are removed from the Grand River every three to four years through the use of TFM. TFM is applied at various locations downstream of the dam in Harpersfield, Ohio, which serves as a barrier to further lamprey migration. History in Lake Erie has shown that even a short-term relaxation of sea lamprey control, or the deference of some rivers, allows sea lampreys to rebound quickly and inflict damage on the fishery.

“The Lake Erie fishery is incredibly productive and valuable to the people of the United States and Canada,” said GLFC Commissioner William Taylor of Michigan State University. “On the U.S. side alone, the Lake Erie fishery generates nearly $1 billion annually in economic activity. This value benefits commercial, recreational, and charter fishers, along with fish processors, on both sides of the lake. Fishing is the lifeblood of Lake Erie communities, big and small.”

“The Lake Erie fishery and ecosystem is dependent on sea lamprey control, and because of sea lamprey control, fishery agencies have a valuable fishery to manage,” Taylor continued. “The Great Lakes Fishery Commission sets sea lamprey control targets at levels consistent with state and provincial fishery management needs. The U.S. Fish and Wildlife Service carries out a highly precise sea lamprey control operation to meet those targets. Adherence to the targets protects a delicate balance of cooperation among the state and provincial jurisdictions. If the sea lamprey targets are not met, the health and prosperity of the fishery are severely undermined.”

“Thanks to aggressive sea lamprey control during the past decade, Lake Erie sea lamprey populations are now at the lowest level since the program began in 1986,” said Commissioner Charlie Wooley, USFWS Midwest Regional Director. “The low number of sea lampreys is outstanding news for the fish of Lake Erie and the people who depend on them for income and recreation.”

“Sea lamprey control is highly precise and based on the particular conditions of each river we treat,” said Jenna Tews, USFWS Ludington Biological Station Supervisor. “Each treatment is different in terms of stream chemistry, geography, water level, and weather. Often, conditions change after a treatment has begun. We are ready for those changes. Using mobile laboratories, we constantly monitor the stream chemistry at multiple sites throughout each treatment and make adjustments accordingly. We can remove
tens of thousands of lamprey larvae from streams and protect hundreds of thousands of fish in Lake Erie that otherwise would have met an unnatural and premature death.”

“With our streamside science, and decades of experience, we are able to be as precise as possible in our treatments, and each treatment is an improvement on the one before,” said Wooley. “Ultimately, sea lamprey control protects the native and desirable fish that are so valuable to the people of the United States and Canada. We have always appreciated the support of the state and provincial fishery agencies, and of the community, as we carry out these control measures that are so critical to the health of Lake Erie.”

The Great Lakes Fishery Commission is an international organization established by the United States and Canada through the 1954 Convention on Great Lakes Fisheries. The commission has the responsibility to support fisheries research, control the invasive sea lamprey, and facilitate cross-border management. Visit glfc.org to learn more.

The mission of the U.S. Fish and Wildlife Service is working with others to conserve, protect and enhance fish, wildlife, plants and their habitats for the continuing benefit of the American people. We are both a leader and trusted partner in fish and wildlife conservation, known for our scientific excellence, stewardship of lands and natural resources, dedicated professionals and commitment to public service. For more information on our work and the people who make it happen, visit fws.gov.