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Public Notice

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CONNEAUT CREEK GREAT LAKES FISHERY AND ECOSYSTEM RESTORATION (GLFER) – SEA LAMPREY BARRIER PROJECT CONNEAUT CREEK, ERIE COUNTY, PENNSYLVANIA

This Public Notice has been prepared pursuant to Section 404(a) of the Clean Water Act (CWA). It is being administered in conformance with U.S. Army Corps of Engineers (USACE) regulation, "Practice and Procedure: Final Rule for Operation and Maintenance of Army Corps of Engineers Civil Works Projects involving the Discharge of Dredged Materials into Waters of the United States or Ocean Waters," 33 Code of Federal Regulations (CFR) 337.1. The purpose of this public notice is to specify what dredged or fill materials would be discharged into waters of the United States by implementation of the proposed action, advise all interested parties of the proposed project, and to provide an opportunity to submit comments or request a public hearing.

Since 1954, the Great Lakes Fishery Commission (GLFC) has been implementing a comprehensive sea lamprey control program to reduce impacts of the invasive sea lamprey population on native fish stocks in the Great Lakes. Current sea lamprey control methods depend heavily on the use of chemical lampricides, and lampricide is applied in Conneaut Creek every two to five years to eliminate or reduce larval sea lamprey populations. Significant cost as well as public and ecological concern are associated with continued and repeated use of lampricide. As such, the GLFC has committed to reduce lampricide application through the implementation of alternative lamprey control strategies, including the use of barriers to block sea lamprey migration into spawning areas.

The study area for this project is the mainstem of Conneaut Creek in Pennsylvania between the Ohio-Pennsylvania border at river mile (RM) 24.5 and the confluence of the East Branch of Conneaut Creek at RM 38.5 (Figure 1). This study evaluates the feasibility of implementing a permanent sea lamprey control alternative in Conneaut Creek, Pennsylvania. The objectives of this study are to provide the sponsor, the GLFC, with a more efficient and effective means to prevent or significantly reduce the numbers of sea lamprey from reaching approximately 50 river miles of spawning habitat in Conneaut Creek, reduce the need to use lampricide in Conneaut Creek, and to maintain or improve the stream habitat quality for desirable fish species. Over the course of this study, seven alternatives were formulated and screened down to a focused array of

five alternatives. The focused array of alternatives included the no-action alternative as well as four types of barriers with accompanying fish passage and recreational mitigation structures that include a high fixed crest barrier, an electric barrier, a low fixed crest and electric barrier, and a low adjustable crest and electric barrier.

The Recommended Plan and National Ecosystem Restoration (NER) Plan, Alternative 4a, consists of a seasonally operated adjustable low crest barrier that uses an Obermeyer gate and electrical barrier with trap and sort and jumping pool at Griffey Road (Figures 1 – 3). Alternative 4a provides a more efficient and effective means to prevent or significantly reduce the numbers of sea lamprey reaching spawning habitat in Conneaut Creek while minimizing environmental impacts and inundation on adjacent properties. Pending additional engineering evaluations conducted in the design phase and Pennsylvania Department of Transportation approval, the barrier would tie into the existing Griffey Road bridge abutment and embankment on the right bank. The existing bridge abutment and embankment, along with the low crest barrier, will serve to impound water to achieve a difference in upstream and downstream water levels.

The adjustable crest barrier will be approximately five feet in height above the current creek bed and approximately 110 feet wide, excluding the abutments at each bank (Figures 2 - 4). During the design phase, the design team will consider the best location for the electric barrier, measures to prevent fish mortality under the adjustable crest barrier, and bracing details for the adjustable crest to ensure the barrier functions as intended. To accommodate fish passage, the Recommended Plan includes a trap and sort system to trap fish and remove lamprey and a jumping pool (Figure 2). The size and effectiveness of a jumping pool will be investigated during the detailed design phase. Currently the plan is to not include a fishway for fish passage. The barrier will be lowered to approximately match the current creek bottom when lamprey are not running upstream (8 months) (Figure 5). This will allow other fish species to pass the barrier during different times of the year. To accommodate recreational use of Conneaut Creek and ensure public safety, the Recommended Plan includes a portage that will allow boaters to pull out of the water upstream of the barrier, safely cross Griffey Road, and return to the creek downstream of the barrier (Figure 2). Overall, Alternative 4a provides an estimated 160 average annual habitat units (AAHUs) by limiting sea lamprey migration into Conneaut Creek and reducing the need for lampricide applications upstream of the barrier. This alternative also maximizes ecological benefits while minimizing burdens to upstream property owners.

The primary materials that would be required to construct the proposed project would be concrete for the foundation of the barrier, right and left bank abutment walls. Clean gravel and granular fill will be used for the access road and backfill of the right bank abutment wall. Jersey barriers and sandbags will be used to control water flow during diversions under low flow conditions to construct half of the barrier at a time in the dry.

There will be a permanent loss of 0.03 acre of wetlands and 25 LF of Conneaut Creek for site access and construction of the support facilities for the electric barrier and earthen berms on both

sides of the creek. This will require excavating 290 cubic yards of gravel and shale and placing 290 cubic yards of concrete to construct the barrier and foundation for Obermeyer gates, excavating 190 cubic yards of granular material and soil and then placement of 70 cubic yards of concrete and 190 cubic yards of granular backfill material to construct the right bank abutment wall. Excavating 10 cubic yards of loose material along the bank face, placement of 40 cubic yards of concrete and backfill 10 cubic yards of concrete against the face as part of the new abutment concrete. Any material excavated on-site and not used will be disposed of at a suitable off-site location. In addition, the 3.8-acre seasonal inundation area upstream of the low adjustable crest barrier is likely to permanently convert some of the existing 0.98 acre of forested scrub-shrub wetlands and forested riparian corridor within this area to open water or from forested/scrub shrub areas to emergent vegetated areas as well as temporarily impound approximately 1489.4 LF of Conneaut Creek and 324.5 LF intermittent stream resulting in a minor detrimental impact (Figure 4). The increase in hydrology in the inundation area will also convert adjacent areas that are currently upland to wetlands compensating for the conversion of some of the existing wetlands to open water thereby creating or restoring wetlands and mitigating the impacts to existing wetlands. This periodic disturbance will likely cause a change in the vegetation from its current composition, but less of a change than those anticipated with the fixed crest barrier alternatives. This conversion of adjacent upland areas to wetlands, and only seasonal impoundment of stream upstream of the barrier coupled with the benefits of the overall project offset the minor detrimental impacts to the functions and values of the wetlands and streams impacted. Thus, the project will not require compensatory mitigation.

The proposed project may result in minor, localized, and short-term increased turbidity in Conneaut Creek during project construction. To avoid and minimize impacts the construction is proposed to be performed during the low flow periods and use temporary cofferdams to enable work to be performed in the dry while maintaining suitable flow and passage for aquatic organisms. After construction, the seasonal impoundment of 0.98 acres of wetlands, 2.66 acres of perennial stream and 0.16 acre of forested riparian uplands would potentially increase water temps and decrease DO levels in the impoundment area and a portion of the downstream area when the barrier is operational and then a temporary increase in turbidity after the barrier is lowered and sediment trapped while the barrier was up would be released resulting in a minor temporary detrimental impact on water quality. The barrier would be operational during the lamprey spawning season (1 March – 30 June) and then lowered for the remainder of the year (Figures 4 - 5). This temporary minor detrimental impact for water quality would be compensated for by the protection of over 513 acres of stream habitat upstream from sea lamprey and the need to apply lampricides periodically to help control them.

Overall, the proposed sea lamprey barrier project is not expected to result in any significant adverse environmental impacts.

Pursuant to the Clean Water Act of 1972, as amended, the discharge of dredged or fill material associated with the Recommended Plan has preliminarily been found to be compliant with the Section 404(b)(1) Guidelines (40 CFR 230). A Clean Water Act Section 404(b)(1) Evaluation

has been drafted and is found in Appendix A-6 of the DPR/EA. This evaluation will be finalized prior to the project's pre-construction engineering and design phase following issuance of this Clean Water Act Section 404(a) public notice and consideration of all applicable comments related to this proposed discharge.

Also pursuant to Section 401 of the Clean Water Act, USACE has provided a copy of this public notice to the Pennsylvania Department of Environmental Protection (PADEP) and will obtain a water quality certification from PADEP prior to construction.

There are no listed historic properties or properties determined as being eligible for listing in the National Register of Historic Places that would be affected by this project. Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended, the USACE determined that the recommended plan has no effect on historic properties. Coordination with the Pennsylvania State Historic Preservation Office (SHPO) has been completed. A response was received on March 29, 2024, from SHPO stating, based upon the information received and available within our files, it is our opinion that the proposed project will have No Effect on archaeological resources or above ground historic properties, including historic buildings, districts, structures, and/or objects

Pursuant to Section 7 of the Endangered Species Act of 1973, as amended, the USACE determined that the Recommended Plan will have no effect on federally listed species or their designated critical habitat. The project is within the range of several species that are listed as threatened or endangered. However, the project will have no effect on these species. The project may affect, but will not adversely affect, the Indiana bat and northern long-eared bat due to restrictions on seasonal vegetation clearing restrictions. The tricolored bat is not currently listed but likely will be before the project goes to construction. Based on the information provided on the USFWS website, this species may use a wide range of habitat but is anticipated that similar tree cutting dates to Indiana bat and northern long eared bat will apply. The salamander mussel is also not currently listed but likely will be before the project goes to construction. The USFWS is also proposing critical habitat for this species and the proposed project location at Griffey Road is within the 62 river miles of Conneaut Creek currently proposed as critical habitat. Detailed surveys conducted by PADEP and Pennsylvania Department of Conservation and Natural Resources (PADCNR) have not identified salamander mussels within the reach of stream near Griffey Road. This proposed project would reduce or eliminate the application of lampricide over approximately 50 miles of stream upstream of Griffey Road, with much of that being within this proposed critical habitat for salamander mussels. Thus, despite this project potentially impacting some of the proposed critical habitat during construction and seasonal inundation, the project would protect a much larger portion of this critical habitat from lampricide application. Coordination and informal consultation with USFWS and state and local agencies is ongoing.

Any interested parties and/or agencies desiring to express their views concerning the proposed project may do so by filing their comments, in writing, no later than 30 days from the date of this notice. Any person who has an interest which may be affected by the proposed project may request a public hearing. The request must be submitted in writing to the undersigned within 30

days of the date of this public notice. The request must clearly set forth the interest which may be affected, and the manner in which the interest may be affected, by this activity.

This activity is being coordinated with the following agencies, as well as other appropriate federal, state and local agencies and organizations:

Pennsylvania Department of Environmental Protection
Pennsylvania Fish and Boat Commission
Pennsylvania Historic Preservation Office
Pennsylvania Department of Transportation
Ohio Department of Natural Resources
U.S. Department of the Interior, Fish and Wildlife Service
U.S. Environmental Protection Agency

Interested parties are encouraged to contact the USACE - Buffalo District with their comments regarding the proposed Conneaut Creek GLFER Sea Lamprey Barrier project. Please review this public notice and send your comments in writing within 30 days to the following e-mail address:

ConneautCreekGLFER@usace.army.mil

or via mail to:

U.S. Army Corps of Engineers - Buffalo District
Environmental Analysis Team
478 Main Street
Buffalo, NY 14202
ATTN: Environmental Analysis – Conneaut Creek GLFER Sea Lamprey Barrier

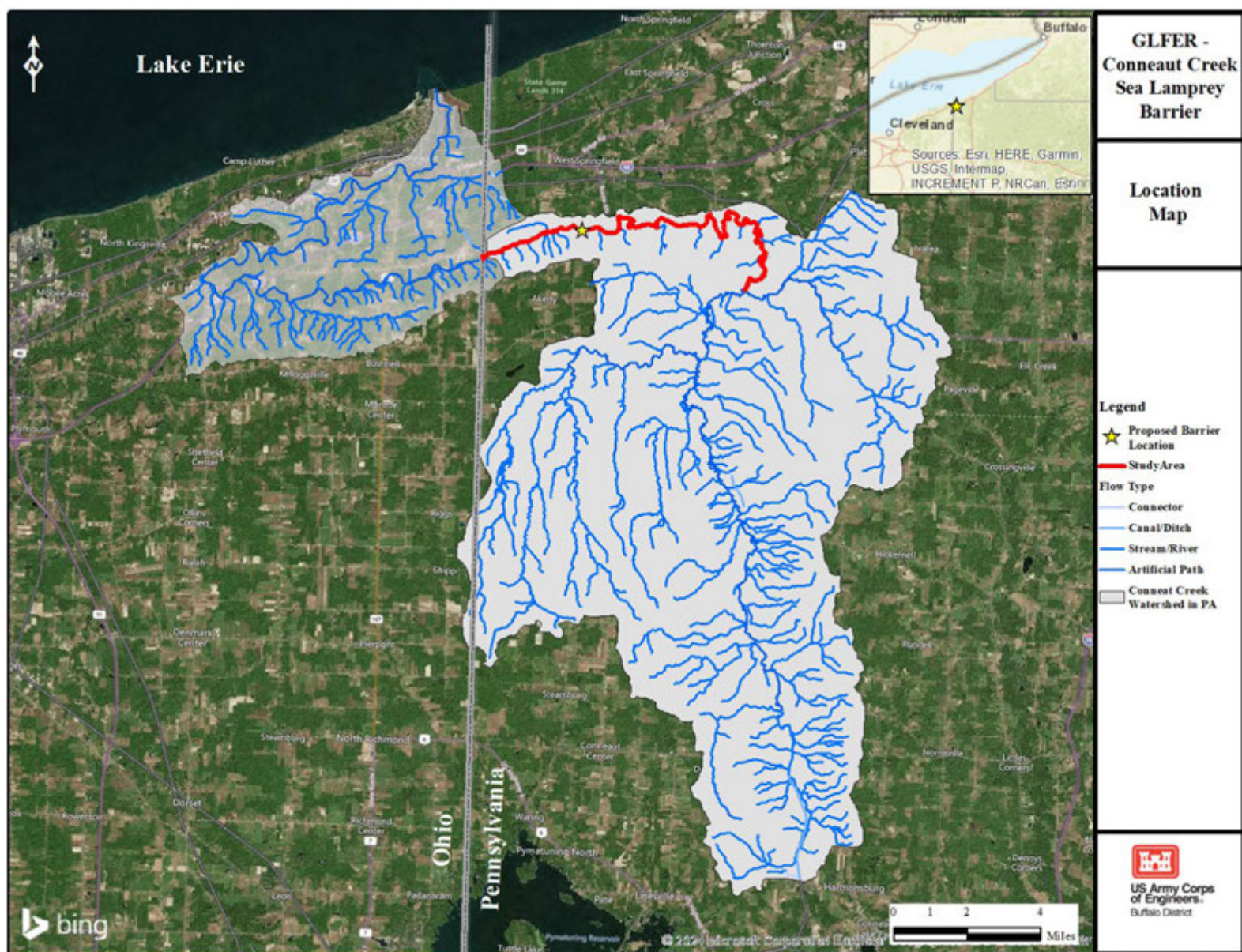


Figure 1: Conneaut Creek GLFER Sea Lamprey Barrier Study Area and Proposed Location.

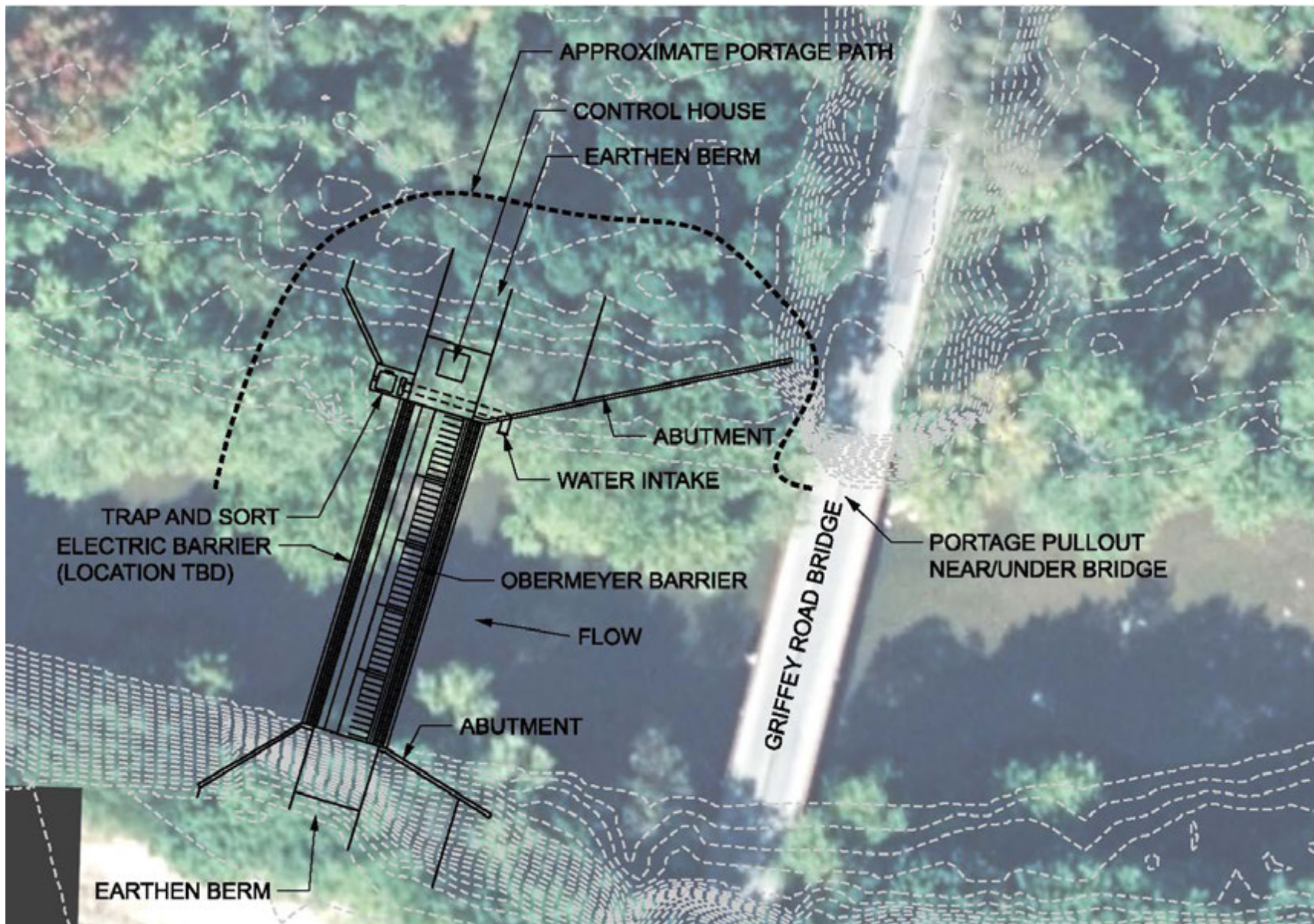


Figure 2: Plan view of the seasonal barrier, trap and sort, portage.



Figure 3: Artistic rendering of seasonal barrier during operation (March 1-June 30).

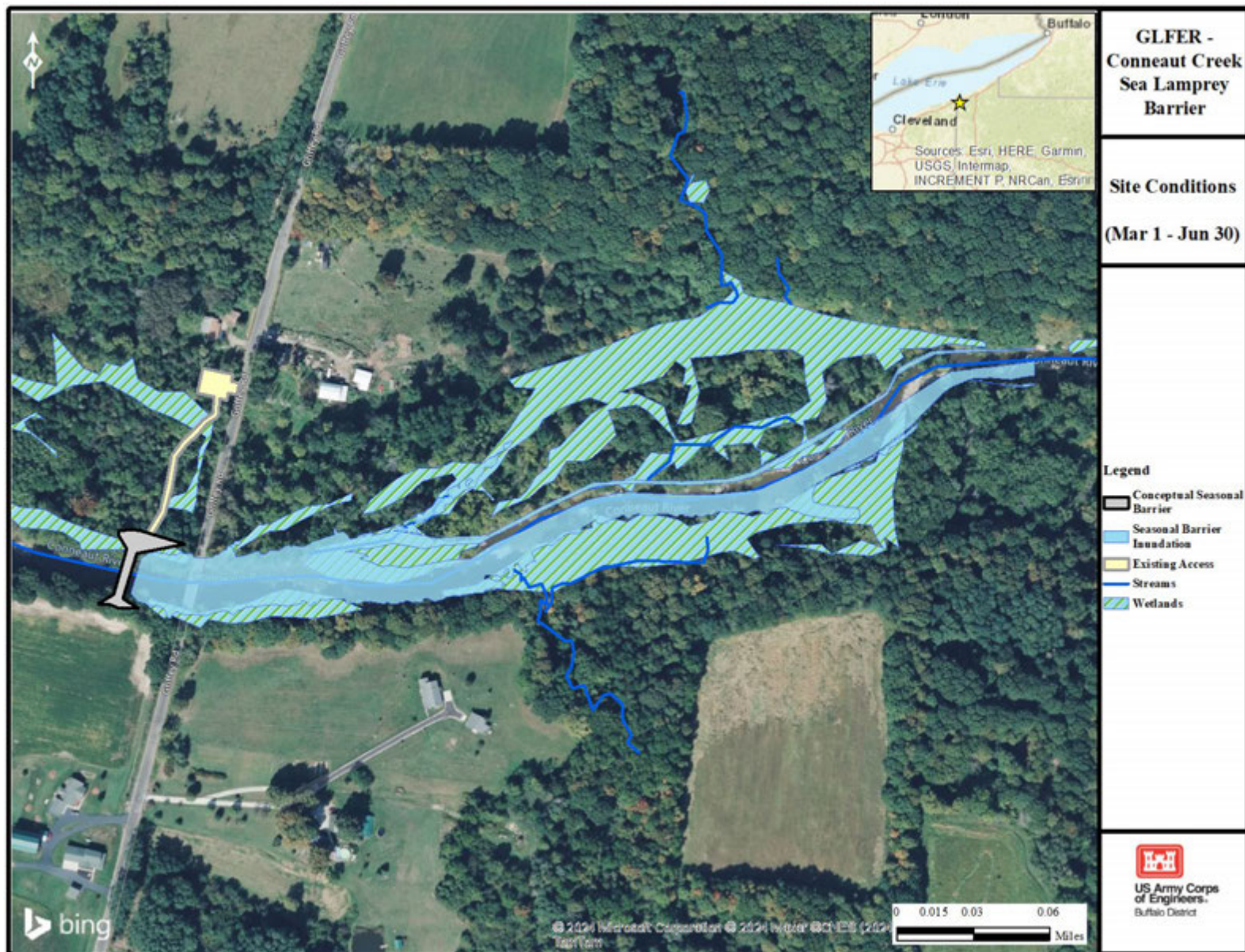


Figure 4: Plan view of the site conditions when the seasonal barrier is raised (Mar 1 – Jun 30).

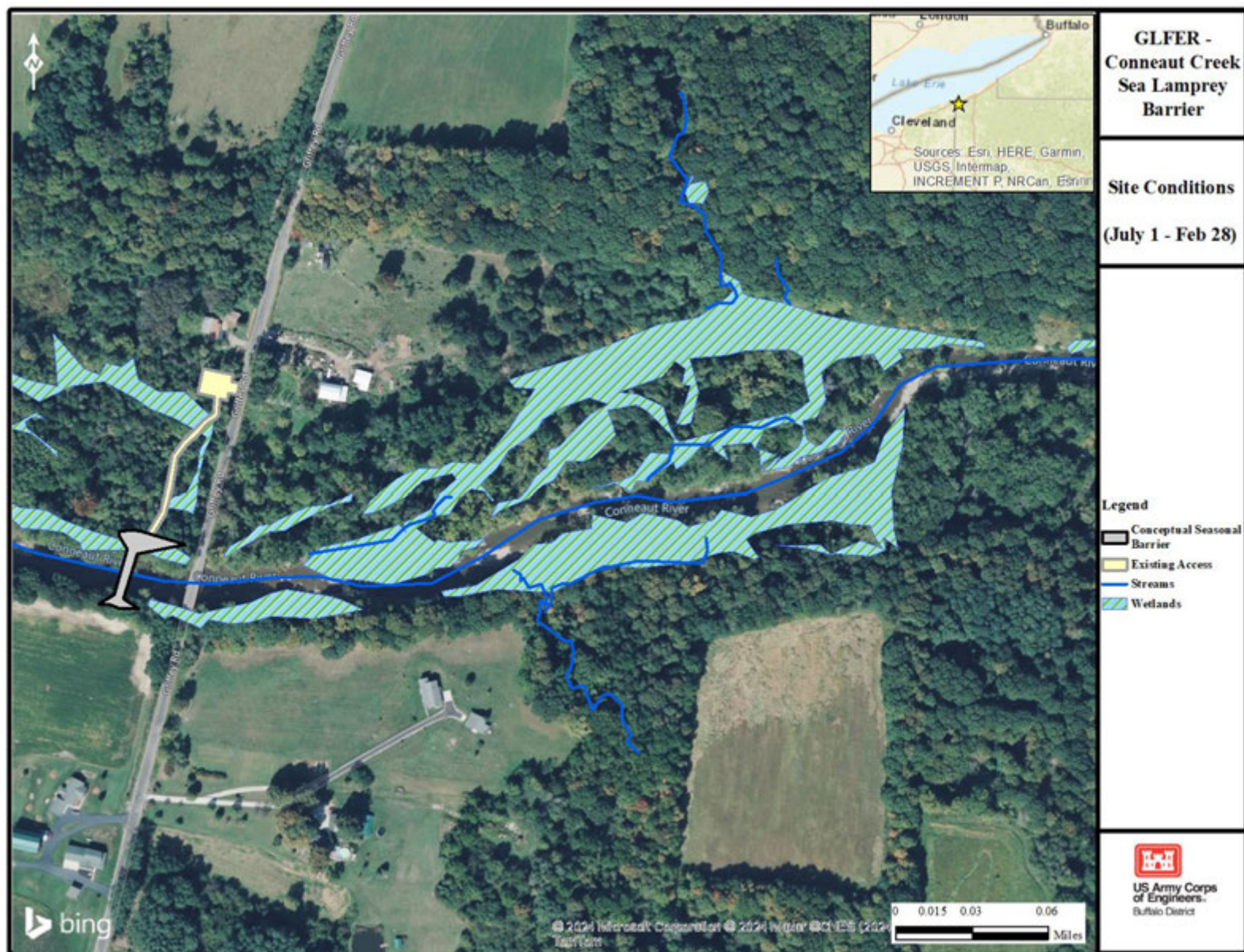


Figure 5 Plan view of the site conditions when the seasonal barrier is lowered (Jul 1 – Feb 28).