US Army Corps of Engineers®
Buffalo District

NATIONAL ENVIRONMENTAL POLICY ACT SCOPING INFORMATION

IDENTIFICATION, TARGETED INTERVENTION, AND MONITORING OF HARMFUL ALGAL BLOOMS IN RIVERINE ECOSYSTEMS

NORTHWESTERN OHIO

Section 506 of the Water Resources Development Act (WRDA) of 2000,
as amended by Section 5011 WRDA 2007
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1. INTRODUCTION

The National Environmental Policy Act (NEPA) directs federal agencies to initiate "an early and open process for determining the scope of issues to be addressed and for identifying the significant issues related to the proposed action." The U.S. Army Corps of Engineers (USACE) are currently conducting a study to determine the feasibility of demonstrating the use of various control methods to manage harmful algal blooms in riverine systems. The locations of study include aquatic sites located in multiple areas within the Maumee River watershed, along the Miami and Erie Canal, which have previously shown to be hotspots for blooms of cyanobacteria (Figure 1). USACE has prepared this scoping information to elicit public and agency concerns and comments, clearly define the environmental issues and alternatives that should be examined, and identify any federal, state, and local requirements that may need to be addressed in this project. The USACE will also complete a supplemental environmental analysis (SEA) to accompany a programmatic environmental analysis that was completed regarding the implementation of Section 128 of the Water Resources Development Act (WRDA) 2020 Harmful Algal Bloom Demonstration Program (USACE 2023).

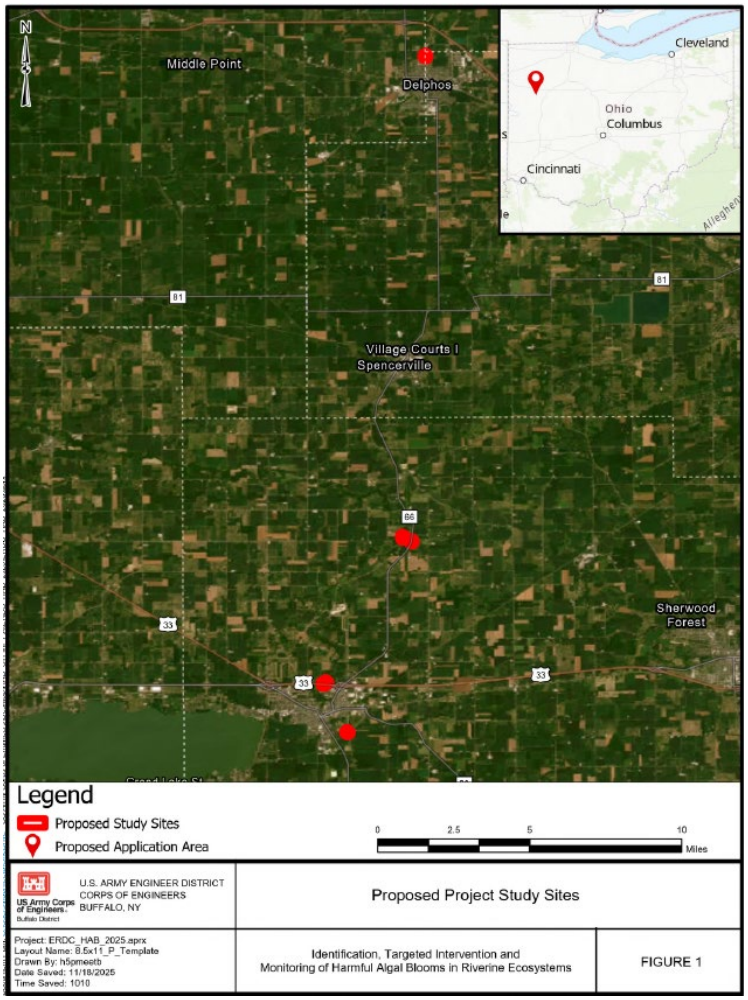

Figure 1: Map of all potential project sites considered for the study.

2. PURPOSE AND NEED FOR THE PROJECT

2.1. PROBLEM AND NEED FOR ACTION

Severe harmful algal blooms (HABs) have been frequently reported in many streams, ponds, and lakes, across the United States with varying extents and intensities. Due to the excess availability of nutrients such as phosphorus the Maumee River, Lake Erie, and their tributaries, experience frequent harmful algal blooms during periods of low discharge (Laiveling et. al. 2022). The size and consistency of these blooms of phytoplankton are driven by nitrogen and phosphorus presence in eutrophic waters like those of the Maumee River and Lake Erie. HABs are of great concerns as they not only impair the aesthetic quality, taste, and odor of the water, but also introduce harmful cyanotoxins into the aquatic environment. Cyanobacterial HABs (CHABs) are recognized for their potential to induce acute toxicity in both wildlife and humans. These CHABs create impacts to drinking water, recreation, and the ecosystem, as the phytoplankton that cause these blooms create a cyanotoxin that, in high levels of exposure, can cause skin rashes, toxicity in the liver, and neurological issues. Two of the most prevalent cyanobacterial algae found to cause HABs in Lake Erie are *Microcystis* and *Planktothrix* which can produce neurotoxic and hepatoxic cyanotoxins that are associated with poisonings of fish, wildlife, and human populations (U.S. National Office of HAB 2019). *Planktothrix* was the dominant cyanobacterium at monitoring sites in the Maumee River from Defiance to Toledo and the nearshore of the western basin of Lake Erie.

Riverine CHABs are difficult to manage simply due to the continuous flow of water downstream. Therefore, a 'detect, contain, and treat approach' does not appear to be a feasible option for CHAB control in rivers and creeks. The currently available treatment technologies may be limited in effectiveness, as treatment can be quickly diluted, diminishing their impact. Additionally, treating large areas of moving water is challenging, making the economic management of CHAB difficult. Meanwhile, CHAB in riverine systems can significantly contaminate large volumes of waterbodies, impairing large tributaries and lives of people, local communities, and businesses. The Maumee River and its tributaries, for example, flow through many cities and farmlands in northern Ohio and serves as the major conduit of anthropogenic nutrients to the western basin of Lake Erie, contributing to Lake Erie's CHABs.

In addition to delivering CHAB-causing nutrients, the Maumee River occasionally forms its own CHABs. Given the interconnections of rivers stretching through a large watershed and the irregular occurrences of CHABs associated with varying hydrologic conditions, there is a great need for research to trace potential CHAB sources ('hotspots') and to find effective treatment methods for early intervention and control. Understanding CHAB dynamics with ecological insights is also crucial for the successful management of CHABs in riverine systems. If uncontrolled, the presence of HABs can negatively affect freshwater ecosystems as well as terrestrial ecosystems that rely on the effected water. The presence of HABs within waterways that are used by cities, towns, and/or municipalities may prevent the use of the waterway as a source of freshwater or recreation.

2.2. PROPOSED PROJECT

This study would demonstrate the feasibility and efficiency of algaecides, modified clay technologies, and sustained biological treatment processes to manage and remove freshwater HABs. Researchers at the University of Toledo (UToledo), with collaboration from SePRO Corporation, aim to compare methods to identify, monitor, and control, CHABs in riverine systems. Given the interconnections of rivers stretching through a large watershed and the irregular occurrences of CHABs associated with varying hydrologic conditions, there is a great need for research to trace potential CHAB sources and to find effective treatment methods for early intervention and control. Understanding CHAB dynamics with ecological insights is also crucial for the successful management of CHABs in riverine systems.

2.3. STUDY AUTHORITY

Section 128 of the Water Resources Development Act (WRDA) 2020, directs the Secretary of the Army (Secretary) to implement a demonstration program to determine the causes of, and implement measures to effectively detect, prevent, treat, and eliminate harmful algal blooms (HAB) associated with water resources development projects. Section 128 requires the Secretary to consult with federal and state agencies, and leverage data and activities of the Secretary carried out through the USACE Engineer Research and Development Center (ERDC) pursuant to Section 1109 of the WRDA of 2018 (33 U.S.C. § 610).

3. PROPOSED ACTIONS

3.1. SITE SELECTION

Study sites were selected for several factors but were mainly identified based on historical data and discussion with local, state, and federal agencies, regarding the presence of CHAB hotspots. These sites have connections to the Maumee River watershed but are not directly within the watershed. Due to their connection to the watershed these waterbodies experience similar blooms of cyanobacteria as the Maumee River. The study sites identified are found adjacent to or directly connected to an artificial canal, known as the Miami and Erie Canal, that transfers a significant amount of water from the Grand Lake Saint Marys to the Maumee River, and have all been known as historic CHAB hotspots.

For ease of description these sites will be described from northernmost to southernmost and then given a moniker (Site A-E) for later descriptions (See Table 1). The northernmost site, labelled henceforth as Site A, is a section of the Miami and Erie Canal, immediately downstream of the Miami and Erie Canal Lock #24 (Figure 2); Site B and Site C are not on the Miami and Erie Canal, but adjacent to the canal and connected to the St. Marys River (Figure 3), Site B is described as a location where Six Mile Creek is Merged into St. Marys River (Figure 4), and Site C is described as a spillway near Delphos, Ohio (Figure 5); Site D is a section of the Miami and Erie Canal, which connects to Jennings Creek, that is connected to the Auglaize River, and is directly north of the center of the town of St. Marys (Figure 6); the southernmost site, Site E, is described as a spillway of the Miami and Erie Canal from the Grand Lake St. Marys that connects to the St. Marys River (Figure 7). Site selection during the study will depend on the presence and intensity of CHABs during the study period, the site's access to electricity, and the

ability of the experimenters to access the area and deploy an automated algaecide injection system.

Table 1: Table of potential sites and their descriptions.

	Site Label	Site Description	Figure
Northern Most	A	A section of the Miami and Erie Canal, immediately downstream of the Miami and Erie Canal Lock #24	2
	B	A location where Six Mile Creek is Merged into St. Marys River	4
	C	Described as a spillway near Delphos, Ohio	5
	D	A section of the Miami and Erie Canal, which connects to Jennings Creek, that is connected to the Auglaize River, and is directly north of the center of the town of St. Marys	6
Southern Most	E	Described as a spillway of the Miami and Erie Canal from the Grand Lake St. Marys that connect to the St. Marys River	7

Figure 2: Map of proposed study site. Canal to Jennings Creek that is Connected to Auglaize River (Site A).

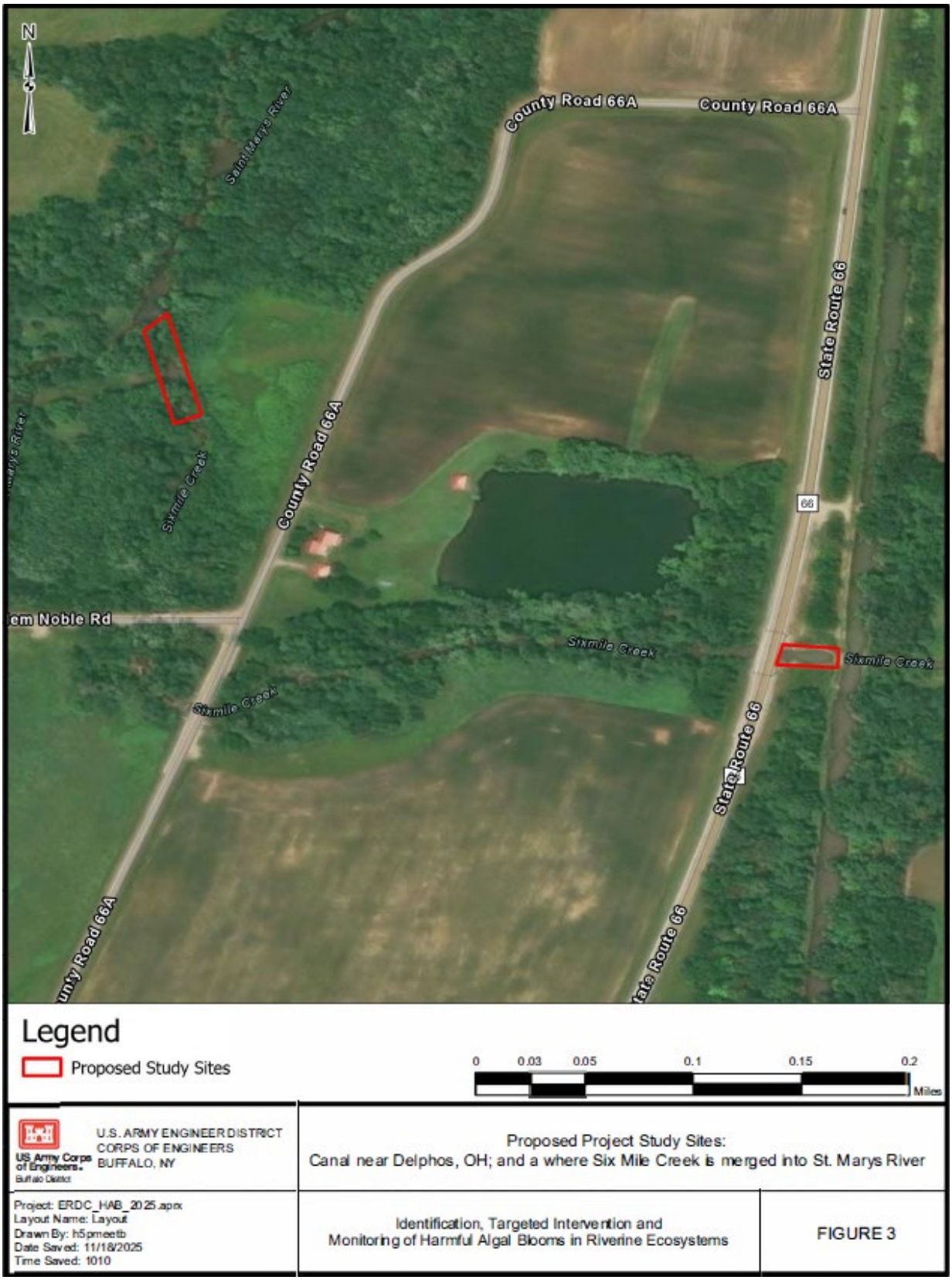

Figure 3: Map of two proposed study sites (See Figures 4 and 5 for detail).

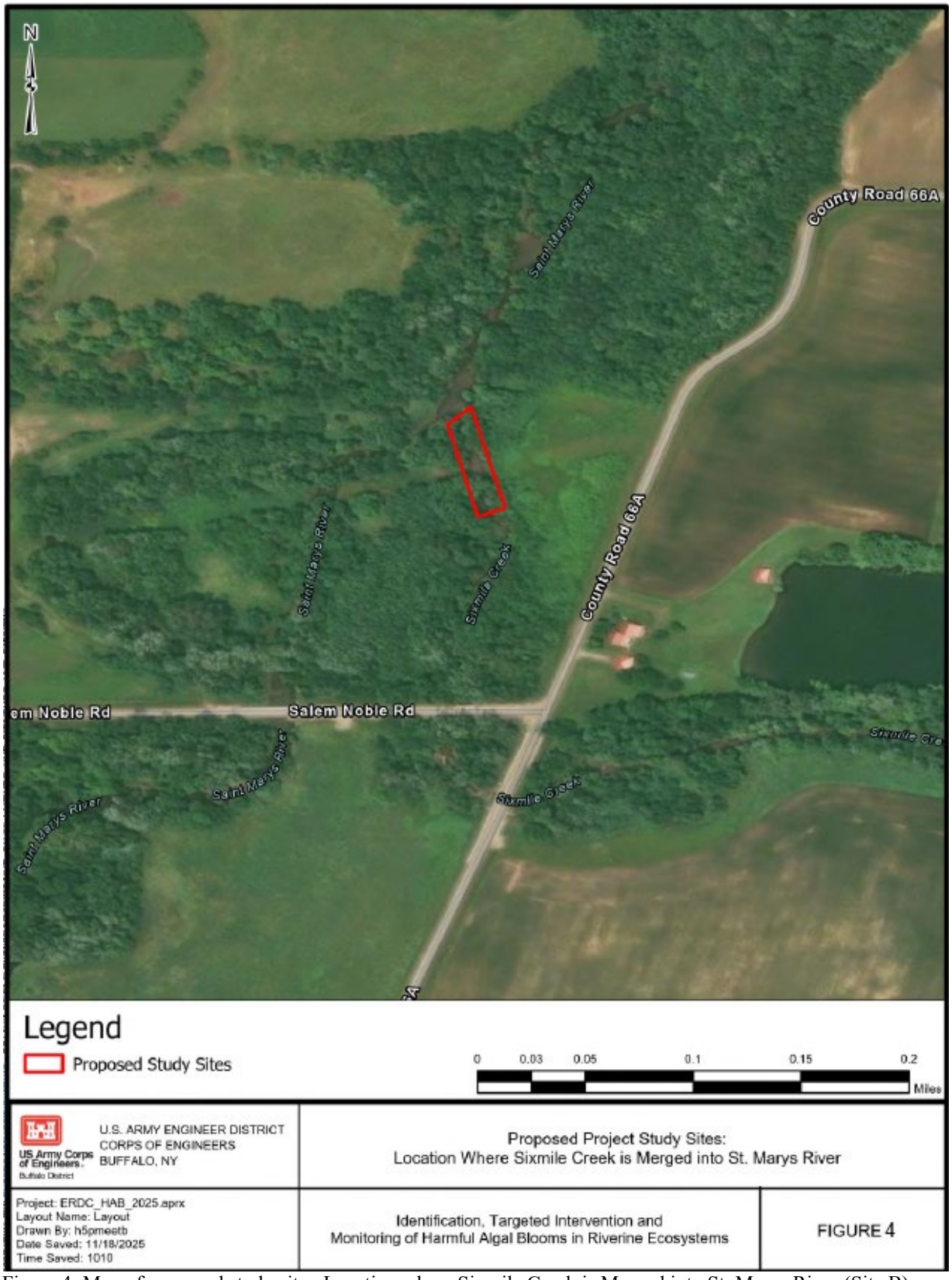

Figure 4: Map of proposed study site. Location where Sixmile Creek is Merged into St. Marys River (Site B).

Figure 5: Map of proposed study site. Spillway near Delphos, OH (Site C).

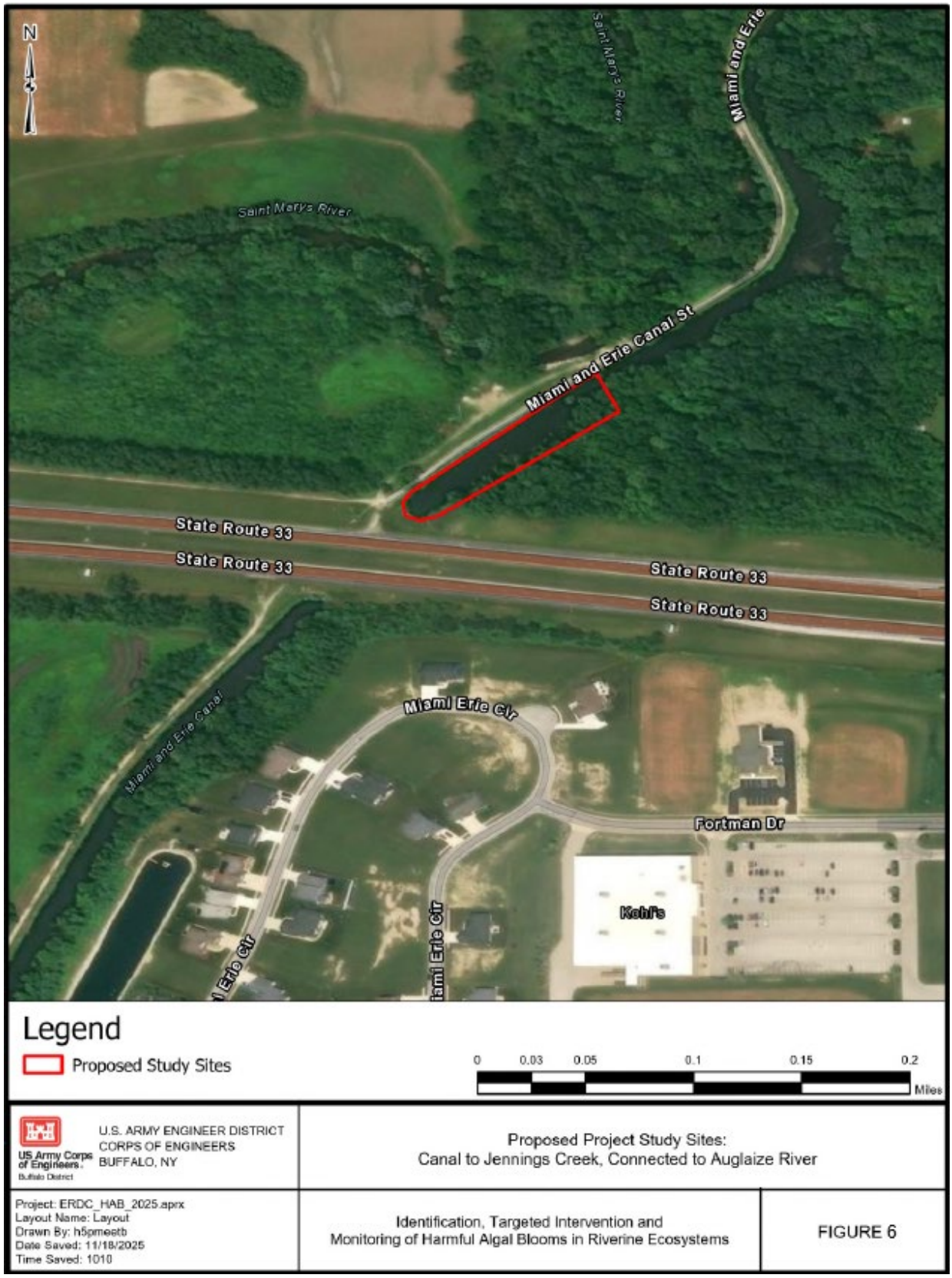

Figure 6: Map of proposed study site. Canal to Jennings Creek, Connected to Auglaize River (Site D).

Figure 7: Map of proposed study site. Spillway of Lake Saint Marys' canal connected to the St. Marys River (Site E).

3.2. ALTERNATIVES CONSIDERED

No Action Alternative: The USACE is required to consider the "No Action" alternative to comply with USACE policy and the requirements of NEPA. No action assumes that no project would be implemented by the federal government or by the researchers to achieve the planning objectives. No action, which is synonymous with the Without Project Condition, forms the basis from which all other alternative plans are measured. Under this alternative, the federal government would do nothing to address the need for management

Alternative 1: Researchers with UToledo and collaborators with SePRO Co. aim to study the efficacy of chemical (algaecides), physical (modified clays), and biological treatment processes for CHABs in a riverine system. Various treatment methods have been considered and tested in both laboratory studies and full-scale field tests. Chemical treatment, such as copper- and hydrogen peroxide-based commercial algaecides, dyes, and ozone oxidation, have been applied as immediate interventions to control CHABs and commonly used for large-scale field application. Physical treatment like flocculation and sedimentation using clay particles, sonication, nanobubble technology, dissolved air flotation, water circulation/mixing are used for instant removal of CHAB at targeted locations. Biological controls utilize microorganisms that can directly or indirectly inhibit cyanobacteria activity by removing cyanotoxins and nutrients from the water.

This alternative would use chemical, physical, biological, all, or no methods on Sites A-E, depending on the conditions of the waterway or presence and intensity of CHAB hotspots during the study period. The study may include multiple sites at one time, or only one during the study period depending on site conditions described previously; final decisions on the site would be made after preliminary testing and further communication with Ohio Department of Natural Resources (ODNR). Application of these treatments would be conducted during years two (2026) and three (2027) of this study, year one (2025) of the study involved preliminary testing of the treatments in microcosms and mesocosms. Pre and post will also collect sediment samples to assess the effects of the treatment and evaluate the potential for algae resuspension afterward. Microbial signatures in sediment samples at the hotspots would show changes of the microbial community after biological and chemical treatment and would help researchers assess the efficacy of the treatments in the hotspots. Each treatment method is described in further detail below.

- *Chemical Control* - The use of USEPA-registered algaecides is recognized as a promising approach for rapidly controlling CHABs in freshwater systems. Among these, copper and peroxide-based algaecides are the most used for bloom management. The effectiveness of algaecide treatments depends on the type, dosage, and frequency of application. For this study, Oximycin P5 (a mixture of liquid hydrogen peroxide and peracetic acid) an environmentally friendly hydrogen peroxide-based algaecide produced by SePro Co., would be utilized as the algaecide. When applied at approved labeled use amounts in the receiving water, Oximycin P5 breaks down into benign components (e.g. oxygen, water) with no long-term risks to human health or the environment (USEPA 1993, 2009). In addition to the USEPA approved label, Oximycin P5 has an additional and separate approval certification to be used in water destined as potable source water (NSF 2025). SePRO's automated algaecide injection system, or SePRO automatic

treatment technology (SATT) systems are designed for applying liquid chemicals in dynamic systems and/or remote locations. The system is capable of the precise delivery of an EPA-certified liquid algaecide with programmable application settings, allowing users to maintain targeted chemical concentration over extended period. All algaecide concentrations and applications would follow label instructions and would not exceed the recommended amount for the waterbody. Amounts of algaecide would likely not exceed 6 mg per liter.

- *Physical Control* - The use of chitosan, a biodegradable flocculant, and either kaolin or bentonite clay would be tested under this alternative. Clay-based cell flocculants have been extensively explored as a low-cost and non-polluting strategy for the emergency treatment of CHABs and have, in some cases, been applied in the field. However, unmodified clays generally exhibit low flocculating efficiency, necessitating high dosages, especially in freshwater applications, where limited electrostatic screening moderates' colloidal flocculation.

  One particularly promising additive is chitosan, a nontoxic biopolymer expected to have minimal ecotoxicity. Chitosan is a copolymer of glucosamine and N-acetylglucosamine, derived from chitin—the second most abundant natural polymer in the world—through straightforward deacetylation. In addition to its use as a sole coagulant in CHAB treatment, chitosan has been combined with clays and other materials, such as starch, oxygen bubble-generating compounds, and fly ash particles. The exact composition of the chitosan and clay dispersions will be determined based on results from preceding microcosm and mesocosm studies. However, it is estimated that between 100 and 10,000 kg of either kaolin or bentonite clay, and between 1 and 100 kg of chitosan, would be applied during the proposed release. The cyanobacteria are expected to aggregate into large flocs and settle out of the water column. Additionally, due to its antibacterial properties, chitosan may contribute to the inactivation or death of the flocculated cyanobacteria.

- *Biological Control* - For this project a biological control, known as a self-sustaining floating bioreactor for nutrient and cyanotoxin removal (SFB-NC), would be used in the remove and control of nutrients and cyanotoxins resulting from a CHAB. This product would be used in tandem with other controls to remove cyanotoxins and excess nutrients after treatments have concluded; however, studies have also indicated that bioreactors similar to those which would be used in this study show success in using microbes to remove microcystins and other cyanobacterial toxins without the use of other treatment types (Dzinga et al. 2014). The bioreactors would be used in accordance with the product's label and recommended description of use. Applied Environmental Solutions (AES), a subcontractor for the project, would install bioreactor systems and conduct field validation tests for the ongoing project. The self-sustaining bioreactor systems were originally developed by AES and MetaMateria in Ohio for high-strength nutrient removal. The bioreactors, coupled with booster pods, could enhance natural biofilm formation and nutrient removal, which eventually decreases algal blooms in reservoirs.

Bioreactor systems would be introduced and further tested at a pond with artificial mixing or open raceway pond reactor for microalgae incubation in Toledo, Ohio during 2026 to monitor biofilm interaction with algae under continuously flowing conditions. The system would then be installed at a selected hotspot in the canal for the removal of algal organic matter, nutrient, and cyanotoxins if the natural attenuation is not sufficient. The field validation would confirm the long-term performance of bioreactors in flowing water condition, testing whether periodic reintroduction of microorganisms is needed to maintain their performance. Samples would be taken from the bioreactors to identify the specific species of microbes used within the bioreactors prior to deployments.

4. PUBLIC PARTICIPATION AND INTERAGENCY COORDINATION

Throughout the scoping process, stakeholders and interested parties are invited to provide comment on this study. Potential social, economic and environmental benefits and adverse impacts that may result from each alternative that is selected for detailed analysis will be addressed in future documentation. Interested parties are welcome to contact USACE to discuss their views and recommendations regarding this study. Comments will be accepted by mail/email until the close of this scoping period on March 6, 2026. A supplemental environmental assessment (EA) will be completed to document the evaluation of any potential social, economic, and environmental benefits and potential adverse impacts that may result from the proposed action.

5. IMPACT ASSESSMENT

Future conditions and anticipated potential effects of the proposed action will be assessed and compared to a no action alternative. The no action alternative represents the anticipated condition that may result from the University of Toledo and SePro Co. taking no action to complete the demonstration. The alternatives will be evaluated for several social, economic, and environmental categories, including:

- Fish and Wildlife Resources
- Historic Properties
- Water Quality
- Property Values and Tax Revenues
- Dredged Material Management
- Employment
- Geology and Soils
- Community Cohesion and Growth
- Contaminated Materials
- Transportation
- Air Quality
- Public Facilities and Services
- Noise
- Aesthetics
- Recreation

6. COMPLIANCE WITH ENVIRONMENTAL PROTECTION STATUTES

Federal environmental protection statutes that will be addressed are listed below, with additional potentially applicable public laws, executive orders, and policies listed below:

- *National Environmental Policy Act (NEPA)*. In accordance with the Department of Defense National Environmental Policy Act Implementing Procedures, the USACE will assess the potential environmental effects of the proposed action on the quality of the human environment. Using an interdisciplinary approach, an assessment will be made of the potential environmental impacts of the proposed action(s) by comparing the plans with the "without-project" conditions. The impact assessment process will determine if an environmental impact statement is required, or if an environmental assessment and finding of no significant impact is appropriate.

- *Clean Water Act.* The project will be evaluated in accordance with the guidelines promulgated by the Administrator of the U.S. Environmental Protection Agency in conjunction with the Secretary of the Army under the authority of Section 404 of the Clean Water Act (40 CFR 230). The proposed federal action will not result in the discharge of dredged or fill material into a water of the United States, thus a Section 404(a) public notice and a water quality certification under Section 401 of the Act are not required.

- *Endangered Species Act*. In accordance with Section 7 of this Act, USACE is requesting information from the U.S. Fish and Wildlife Service (USFWS) on any listed or proposed species or designated or proposed critical habitat that may be present in the project area. If consultation with the USFWS identifies any such species or critical habitat, then USACE will conduct a biological assessment to determine the proposed project's effect on these species or critical habitat. The USFWS IPaC website indicates that there is one federally endangered species, two proposed federally threatened species, and one proposed experimental (Non-essential) species listed as being present in or around the potential study areas (Table 1).

  The results of a review of the USFWS Information for Planning and Consultation (IPaC) website indicate that the selected sites lies within the range of the federally endangered Indiana bat (Myotis sodalis), proposed threatened tricolored bat (*Perimyotis subflavus*), non-essential proposed experimental population of whooping cranes (*Grus americana*), and proposed threatened monarch butterfly (Danaus plexippus) (USFWS 2025). The alternatives currently under consideration are not located in designated critical habitat.

Table 2. Federally Listed Species and Critical Habitat(s) in the proposed study areas.

Common Name	**Scientific Name**	**Group**	**Status***
Indiana bat	*Myotis sodalis*	Mammal	Endangered
Tricolored bat	*Perimyotis subflavus*	Mammal	Proposed endangered

Whooping Crane	*Grus americana*	Bird	Proposed experimental population, non-essential
Monarch butterfly	*Danaus plexippus*	Insect	Proposed Threatened

The bald eagle is also identified as occurring within the watershed, although it is no longer listed on the endangered species list. It is, however, protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668) and is further protected by Ohio Department of Natural Resources Code. Further coordination will be required with the USFWS and ODNR to identify species within the project area to avoid and/or minimize impacts to these species. This may include surveys to identify the presence of such species within the project areas.

- *Fish and Wildlife Coordination Act*. The USACE is coordinating this study with USFWS and ODNR. The USACE will collaborate with these agencies to identify any fish and wildlife concerns, relevant information on the study area, obtain their views concerning the significance of fish and wildlife resources and anticipated project impacts, and identify those resources which need to be evaluated in the study. Full consideration will be given to their comments and recommendations resulting from this coordination.

- *National Historic Preservation Act (NHPA).* The project's impact on cultural resources will be evaluated in accordance with Engineer Regulation (ER) 1105-2-50 and 36 CFR 800. A review of the National Park Service's National Register of Historic Places and the Ohio State Historic Preservation Office (OHPO) historic sites databases was conducted to inform plan formulation. The locations across Allen, Auglaize, and Van Wert counties include or are adjacent to multiple areas that have historic or cultural significance (Figures 8-11). However, only two OHPO Historic Inventory sites, have the potential to be affected by the alternatives considered by this project. No sites listed on the National Register of Historic Places has the potential to be affected by the alternatives considered by this project. These databases indicates that St. Marys Aqueduct Site (OHI#AUG0169508) and the Delphos Lock Number 24 (OHI#VAN0000509) are present within the project's areas of interest. Additionally, several state historic buildings are within the vicinity of the project area, but are not likely to be affected by the project's alternatives.

  There are currently 26 federally recognized Tribal Nations which have ancestral homelands, historical ties, or tribal lands within Allen, Auglaize, and Van Wert counties; these nations include the Prairie Band Potawatomi Nation, Citizen Potawatomi Nation, Match-e-be-nash-she-wish Band of Pottawatomi, Bad River Band of Lake Superior Chippewa, Absentee Shawnee Tribe, Bay Mills Indian Community, Delaware Nation, Nottawaseppi Huron Band of the Potawatomi, Forest County Potawatomi, Peoria Tribe of Oklahoma, Hannahville Indian Community, Eastern Shawnee Tribe of Oklahoma, Pokagon Band of Potawatomi, Lac Courte Oreilles Band of Lake Superior Chippewa Indians, Keweenaw Bay Indian Community, Ottawa Tribe of Oklahoma, Red Lake Band of Chippewa Indians, St. Croix Chippewa Indians of Wisconsin, Little River Band of Ottawa Indians, Shawnee Tribe, Chippewa Cree Tribe, Sokaogon Chippewa Community,

Little Traverse Bay Bands of Odawa Indians, Wyandotte Nation, Turtle Mountain Band of Chippewa Indians, and the Miami Tribe of Oklahoma.

The USACE will be consulting with the National Park Service, OHPO, Tribal Nations, and interested parties during the planning and NEPA process to ensure any proposed alternatives avoid or minimize impacts to cultural resources in collaboration with all applicable resource agencies to ensure compliance with Section 106 of the NHPA. Under Section 106 of this Act, this scoping information initiates USACE consultation with the National Park Service, interested Tribal Nations, historic preservation organizations and others who are likely to have knowledge of, or concern with, historic properties that may be present within the area of potential effect (APE). A Section 106 Review - Project Summary Form will be provided to Ohio History Connection (State Historic Preservation Office) to initiate consultation, including a description of the APE.

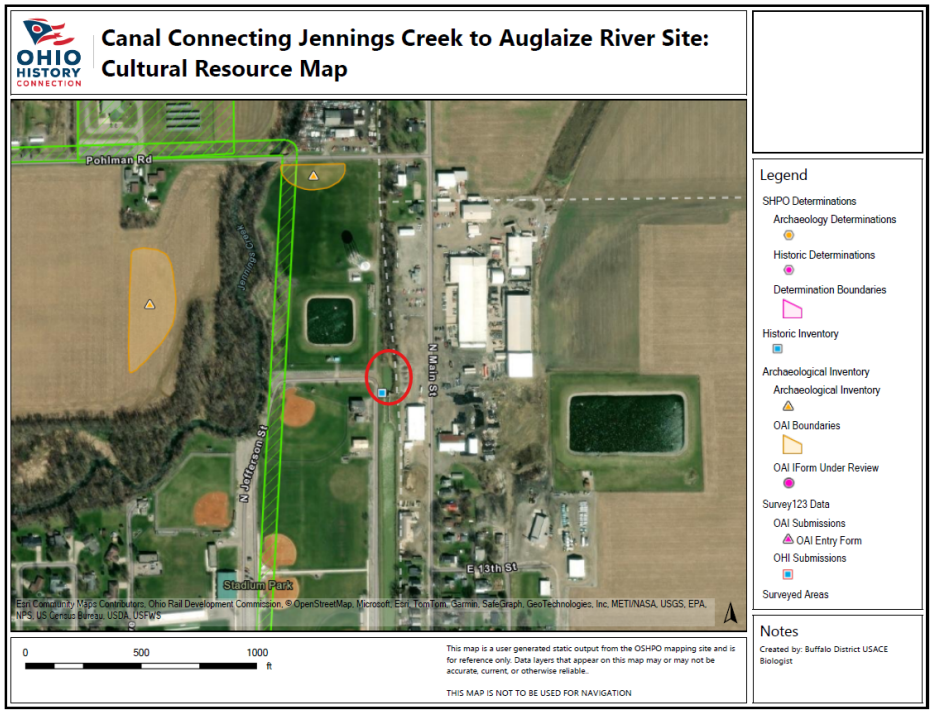

Figure 8: Cultural resource map of a potential site for treatment, with cultural and historic resources adjacent to the site. This site is identified as a canal to Jennings Creek that is connected to the Auglaize River (Site A). The site is represented by the large red circle. The potential project site includes the Delphos Lock Number 24 (OHI#VAN0000509).

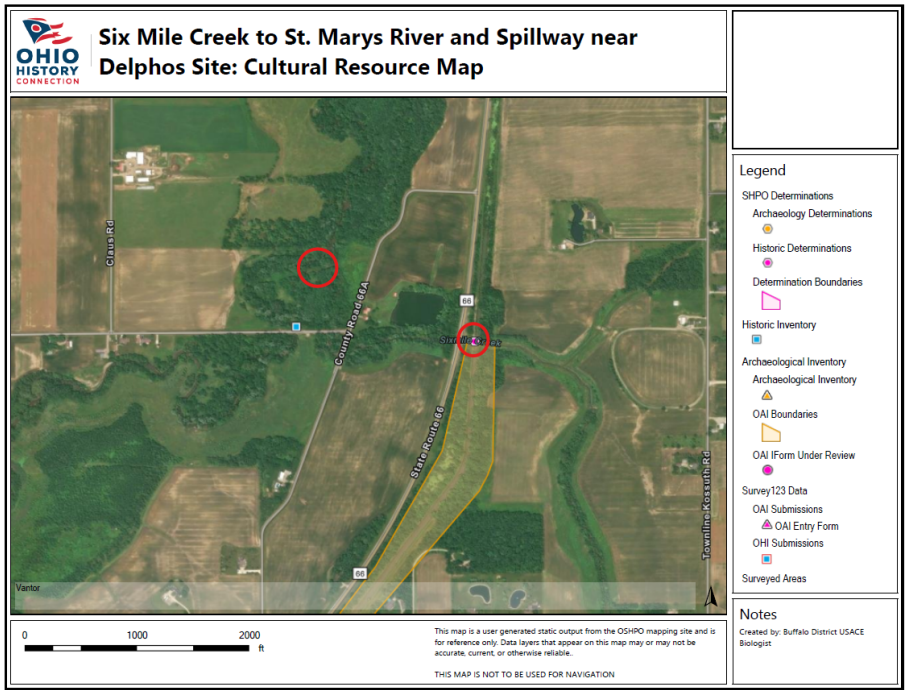

Figure 9: Cultural resource map of two potential sites for treatment, with cultural and historic resources adjacent to the site. These sites are identified as a location where Six Mile Creek is merged into St. Marys River (Site B), and a canal near Delphos, OH. The site is represented by the large red circle.

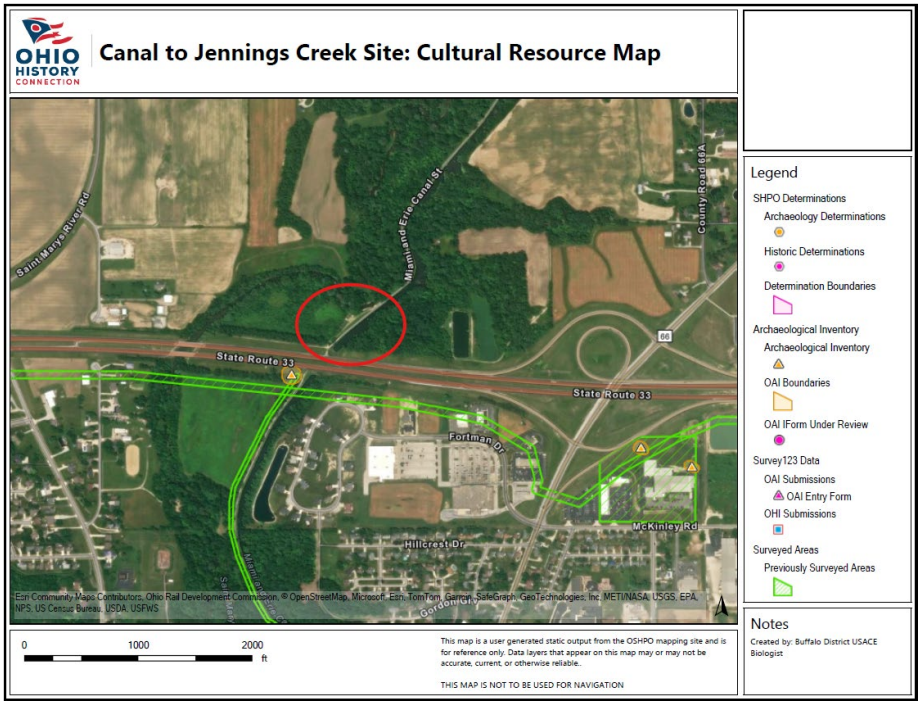

Figure 10: Cultural resource map of a potential site for treatment, with cultural and historic resources adjacent to the site. This site is identified as a canal to Jennings Creek that is connected to the Auglaize River (Site D). The site is represented by the large red circle.

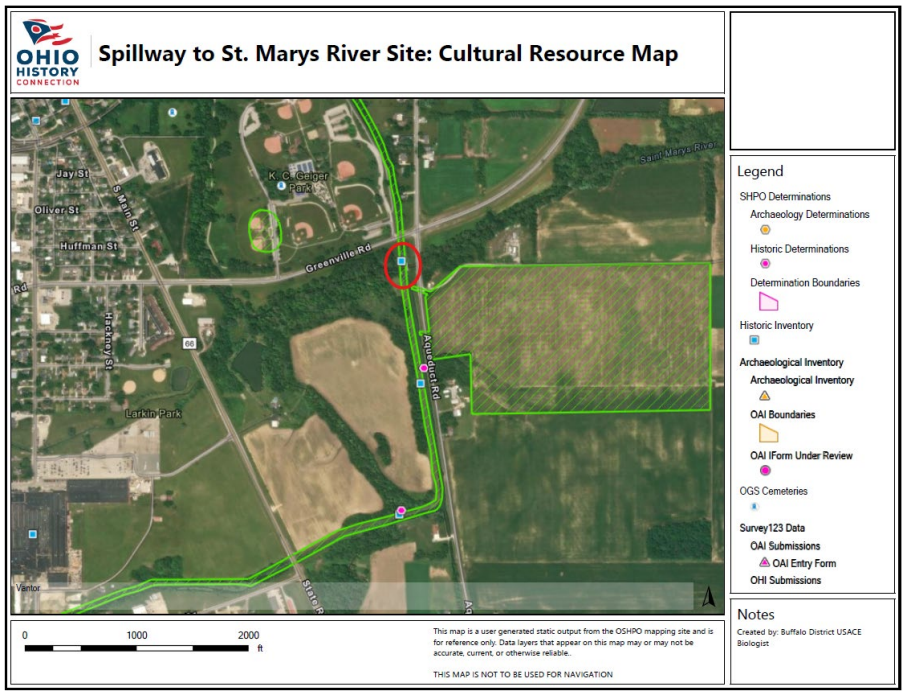

Figure 11: Cultural resource map of a potential site for treatment, with cultural and historic resources adjacent to the site. This site is identified as a spillway of Lake Saint Marys' canal connected to St. Marys River (Site E). The site is represented by the large red circle. The potential project site includes the St. Marys Aqueduct Site (OHI#AUG0169508).

7. FEDERAL ENVIRONMENTAL PROTECTION LAWS, ORDERS, AND POLICIES

7.1. PUBLIC LAWS

(a) American Folklife Preservation Act, P.L. 94-201; 20 U.S.C. 2101, *et seq.*
(b) Anadromous Fish Conservation Act, P.L. 89-304; 16 U.S.C. 757, *et seq.*
(c) Antiquities Act of 1906, P.L. 59-209; 16 U.S.C. 431, *et seq.*
(d) Archaeological and Historic Preservation Act, P.L. 93-291; 16 U.S.C. 469, *et seq.* (Also known as the Reservoir Salvage Act of 1960, as amended; P.L. 93-291, as amended; the Moss-Bennett Act; and the Preservation of Historic and Archaeological Data Act of 1974.)
(e) Bald Eagle Act; 16 U.S.C. 668.
(f) Clean Air Act, as amended; P.L. 91-604; 42 U.S.C. 1857h-7, *et seq.*
(g) Clean Water Act, P.L. 92-500; 33 U.S.C. 1251, *et seq.* (Also known as the Federal Water Pollution Control Act; and P.L. 92-500, as amended.)
(h) Coastal Barrier Resources Act of 1982, 16 U.S.C. § 3501 *et seq.*; 12 U.S.C. § 1441 *et seq.*
(i) Coastal Zone Management Act of 1972, as amended, P.L. 92-583; 16 U.S.C. 1451, *et seq.*
(j) Endangered Species Act of 1973, as amended, P.L. 93-205; 16 U.S.C. 1531, *et seq.*
(k) Estuary Protection Act, P.L. 90-454; 16 U.S.C. 1221, *et seq.*
(l) Federal Environmental Pesticide Control Act, P.L. 92-516; 7 U.S.C. 136.
(m) Federal Water Project Recreation Act, as amended, P.L. 89-72; 16 U.S.C. 460-1(12), *et seq.*
(n) Fish and Wildlife Coordination Act of 1958, as amended, P.L. 85-624; 16 U.S.C. 661, *et seq.*
(o) Historic Sites Act of 1935, as amended, P.L. 74-292; 16 U.S.C. 461, *et seq.*
(p) Land and Water Conservation Fund Act, P.L. 88-578; 16 U.S.C. 460/-460/-11, *et seq.*
(q) Migratory Bird Conservation Act of 1928; 16 U.S.C. 715.
(r) Migratory Bird Treaty Act of 1918; 16 U.S.C. 703, *et seq.*
(s) National Environmental Policy Act of 1969, as amended, P.L. 91-190; 42 U.S.C. 4321, *et seq.*
(t) National Historic Preservation Act of 1966, as amended, P.L. 89-655; 16 U.S.C. 470a, *et seq.*

(u) Native American Religious Freedom Act, P.L. 95-341; 42 U.S.C. 1996, *et seq.*
(v) Resource Conservation and Recovery Act of 1976, P.L. 94-580; 7 U.S.C. 1010, *et seq.*
(w) River and Harbor Act of 1899, 33 U.S.C. 403, *et seq.* (Also known as the Refuse Act of 1899.)
(x) Submerged Lands Act of 1953, P.L. 82-3167; 43 U.S.C. 1301, *et seq.*
(y) Surface Mining and Reclamation Act of 1977, P.L. 95-89; 30 U.S.C. 1201, *et seq.*
(z) Toxic Substances Control Act, P.L. 94-469; 15 U.S.C. 2601, *et seq.*
(aa) Watershed Protection and Flood Prevention Act, as amended, P.L. 83-566; 16 U.S.C. 1001, *et seq.*
(bb) Wild and Scenic Rivers Act, as amended, P.L. 90-542; 16 U.S.C. 1271, *et seq.*

7.2. EXECUTIVE ORDERS

(a) Executive Order 11593, Protection and Enhancement of the Cultural Environment. May 13, 1979 (36 FR 8921; May 15, 1971).
(b) Executive Order 11988, Floodplain Management. May 24, 1977 (42 FR 26951; May 25, 1977).
(c) Executive Order 11990, Protection of Wetlands. May 24, 1977 (42 FR 26961; May 25, 1977).
(d) Executive Order 11514, Protection and Enhancement of Environmental Quality, March 5, 1970, as amended by Executive Order, 11991, May 24, 1977.
(e) Executive Order 12088, Federal Compliance with Pollution Control Standards, October 13, 1978.
(f) Executive Order 12372, Intergovernmental Review of Federal Programs, July 14, 1982.
(g) Executive Order 12856, Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements, August 3, 1993.

7.3. OTHER FEDERAL POLICIES

(a) Council on Environmental Quality Memorandum of August 11, 1980: Analysis of Impacts on Prime or Unique Agricultural Lands in Implementing the National Environmental Policy Act.
(b) Council on Environmental Quality Memorandum of August 10, 1980: Interagency Consultation to Avoid or Mitigate Adverse Effects on Rivers in the National Inventory.
(c) Migratory Bird Treaties and other international agreements listed in the Endangered Species Act of 1973, as amended, Section 2(a)(4)

8. POINT OF CONTACT

Interested parties are encouraged to contact the USACE-Buffalo District Environmental Analysis Team with any comments regarding the demonstrations project. Questions or requests for additional information may be directed to:

Buffalo District Environmental Analysis Team

E-mail: OhioUToledoHABStudy@usace.army.mil

Please review the study information and present any comments in writing within thirty (30) days to the attention of the Buffalo District Environmental Analysis Team to the email address listed above or at the following address:

U.S. Army Corps of Engineers, Buffalo District Environmental Analysis Team
478 Main Street
Buffalo, NY 14202-3278
ATTN: UToledo HAB Study

Thank you for your interest and review of this project.

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