ENVIRONMENTAL ASSESSMENT

Application For Non-Project Use of Project Lands and Waters

Indiana Michigan Power Company

Twin Branch Hydroelectric Project

FERC Project No. 2579-065

Indiana

Federal Energy Regulatory Commission
Office of Energy Projects
Division of Hydropower Administration and Compliance
888 First Street, NE
Washington, D.C. 20426

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FEDERAL ENERGY REGULATORY COMMISSION
OFFICE OF ENERGY PROJECTS
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1.0 INTRODUCTION

Project Name: Twin Branch Hydroelectric Project

FERC Project No.: 2579-065

1.1 Application

Application Type:	Non-Project Use of Project Lands and Waters; sediment removal and discharge
Date filed:	October 7, 2022, and supplemented November 16, 2022
Licensee:	Indiana Michigan Power Company
Water Body:	Twin Branch Reservoir (St. Joseph River)
Nearest Town:	Mishawaka, Indiana
County & States:	Saint Joseph, Indiana

1.2 Purpose and Need for Action

On October 7, 2022 and supplemented November 16, 2022, Indiana Michigan Power Company, licensee for Twin Branch Hydroelectric Project No. 2576, filed an application requesting Federal Energy Regulatory Commission (Commission) authorization to allow the use of project lands and waters for non-project purposes. Specifically, the licensee is requesting approval from the Commission to allow St. Joseph County Surveyor (proponent) to perform maintenance dredging of an existing channel within the project boundary to remove approximately 3,883 cubic yards of accumulated sediment (Figure 1). The original channel bottom will not be disturbed. The purpose of the proposed maintenance dredging is to remove accumulated sediment in a portion of Woodward Ditch to provide easier access and improve navigation in this area of the project reservoir. A man-made agricultural pond outside the project boundary will serve as the disposal site for the dredged sediment.

This Environmental Assessment (EA) will primarily analyze the use of project lands and waters, however, analysis of actions taken adjacent to the project boundary must also be scrutinized since they can potentially cause effects within the project boundary. As such, it is necessary for staff to consider these potential effects on resources within and adjacent to the project boundary.

The Commission must decide whether to approve the licensee's proposed action and what conditions should be in any order issued. In addition to power and development under the Federal Power Act (FPA), the Commission must give equal consideration to the purposes of energy conservation; the protection, mitigation of damage to and enhancement of fish and wildlife (including related spawning grounds and habitat); the protection of recreational opportunities; and the preservation of other aspects of environmental quality.

In accordance with the National Environmental Policy Act (NEPA)[1] and the Commission's regulations (18 C.F.R. Part 380), this EA assesses the effects of the proposed action, evaluates alternatives to the proposed action, and makes recommendations to the Commission on whether to approve the licensee's non-project use application, and if approved, recommends conditions to become part of any order issued.

The Commission staff's review of the application and resulting EA is being conducted to determine if any environmental, cultural, or recreational resources will be affected by the non-project dredging activity, and if environmental measures are necessary to mitigate any effect of the proposed action. The analysis in this EA provides a basis for Commission staff to make an informed decision on the licensee's October 7, 2022 application for non-project use of project lands and waters. This EA examines the environmental effects of the proposed action, the non-project dredging, and the no-action alternative (today's status quo). Important resources that are addressed include: geology and soil resources, water quality, fisheries resources, terrestrial resources, threatened and endangered species, recreation resources, cultural and historic resources and environmental justice communities. The analysis in this EA provides a basis for Commission staff to make an informed decision on the licensee's October 7, 2022 application for non-project use of project lands and waters.

[1] The Council on Environmental Quality (CEQ) issued a final rule on April 20, 2022, revising its regulations for implementing NEPA (see National Environmental Policy Act Implementing Regulations Revisions, 87 Fed. Reg. 23,453-70). The rule became effective on May 20, 2022. This EA was prepared in accordance with CEQ's 2022 regulations.

Figure 1. Proposed dredging site location (source: Indiana Michigan Power Company's November 16, 2022, filing with the Commission).

1.3 Statutory and Regulatory Requirements

Clean Water Act

Section 401(a)(1) of the Clean Water Act requires that an applicant for a federal license or permit to conduct activities that may result in a discharge into the navigable waters of the United States, must provide the licensing or permitting agency a Water Quality Certification (WQC). If the state "fails or refuses to act on a request for certification, within a reasonable period of time (which shall not exceed one year) after receipt of such request," then certification is waived.[2]

[2] 33 U.S.C. § 1341(a)(1).

The proposed action is located in Indiana; therefore, the Indiana Department of Environmental Management (Indiana DEM) is the appropriate state water pollution certifying agency to act on the request. By email addressed to the licensee, dated August 1, 2022, the Indiana DEM stated that because no Section 404 was required by U.S. Army Corps of Engineers (Corps) a Section 401 WQC was not required.

Section 404 of the Clean Water Act establishes a program to regulate the discharge of dredged or fill material into waters of the United States. Activities in waters of the United States regulated under this program include fill for development, water resource projects, infrastructure development, and mining projects. The Corps issued a letter on July 19, 2022, stating that a Corps Section 404 permit was not needed for the discharge of dredged material since the material would be pumped to an upland area and allowed to dewater. No material would be sidecast into wetlands or streams, and no fill is required for access. The Corps determined that the man-made agricultural pond that would serve as the disposal site, was not a jurisdictional water, so no Corps permit is required for the disposal site.

Endangered Species Act

Section 7(a)(2) of the Endangered Species Act (ESA)[3] requires federal agencies to ensure that their actions are not likely to jeopardize the continued existence of endangered or threatened species or result in any adverse modification of the critical habitat of such species.

The U.S. Fish and Wildlife Service (FWS) Information for Planning and Consultation tool (IPaC) was accessed online on March 6, 2023 by Commission staff.[4] The tool indicated that the endangered Indiana Bat (*Myotis sodalis)* and northern long-eared bat (*Myotis septentrionalis)* along with the threatened copperbelly water snake *(Nerodia erythrogaster neglecta)* and the eastern Massasauga rattlesnake *(Sistrurus catenatus)* may occur in St. Joseph County, Indiana. The IPaC site indicated that no designated critical habitat exists within St. Joseph County, Indiana for any threatened or endangered species. Furthermore, there are no known records of any of the 4 listed species or their habitat in the proposed dredging area at the Twin Branch Hydroelectric Project, and the licensee's proposal did not include any requests to cut trees, disturb upland areas, or disturb wetland areas; therefore, no effect to endangered species is anticipated as a result of the proposed action.

[3] 16 U.S.C. § 1536(a) (2018).

[4] https://ipac.ecosphere.fws.gov/location/SB6XLCIHKVE6HOD42VC33BN3HI/resources#endangered-species

The FWS was provided with the proposed dredging plans for consultation on July, 2022. The FWS Ecological Services Indiana Field Office issued a letter on July 27, 2022, stating that the proposed dredging project would have "no significant effect on wetlands or other important habitat types." Furthermore, FWS stated that no habitat is available for any of the federally endangered, threatened, or candidate species known from St. Joseph County. The FWS stated that they had no objections to the proposed dredging project, and no further consultation was needed under Section 7 of the ESA. The FWS letter supports staff's conclusion that there would be no effect to endangered species from the proposed action.

National Historic Preservation Act

Section 106 of the National Historic Preservation Act (NHPA)[5] and its implementing regulations[6] requires that federal agencies "take into account" how each of its undertakings could affect historic properties and afford the Advisory Council on Historic Preservation (Advisory Council) a reasonable opportunity to comment on the undertaking.[7] Historic properties are districts, sites, buildings, structures, traditional cultural properties, and objects significant in American history, architecture, engineering, and culture that are eligible for inclusion in the National Register of Historic Places (National Register). In this document, we also use the term "cultural resources" for properties that have not been evaluated for eligibility for the National Register. Cultural resources represent items, structures, places, or archaeological sites that can be either prehistoric or historic in origin. In most cases, cultural resources less than 50 years old are not considered historic. Section 106 also requires that the Commission seek concurrence with the state historic preservation office on any finding involving effects or no effects on historic properties and consult with interested Native American Tribes (Tribes) or Native Hawaiian organizations that attach religious or cultural significance to historic properties that may be affected by an undertaking.

A Phase IA Archaeological Investigation of the Twin Branch Hydroelectric Project was performed by Louis Berger & Associates as part of the Twin Branch Hydroelectric Project relicensing with a report issued October 1995.[8] The investigation indicated that no archaeological sites were recorded within the project boundaries and the

[5] 54 U.S.C. § 306108 et seq.

[6] 36 C.F.R. pt. 800.5(a)(2)(vii).

[7] An undertaking means "a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including those carried out by or on behalf of a Federal agency; those carried out with Federal financial assistance; and those requiring a Federal permit, license, or approval." 36 C.F.R. § 800.16(y).

[8] Per the licensee's application for non-project dredging, filed with the Commission on October 7, 2022.

potential for prehistoric resources within the Twin Branch Reservoir was limited. The project proponent provided the project plans to the Indiana State Historic Preservation Office (Indiana SHPO) for review. Indiana SHPO responded via email on June 25, 2022, that no currently known historical or archaeological resources eligible for inclusion in the National Register of Historical Places have been recorded within the proposed project area; therefore, archaeological investigations do not appear to be necessary. The SHPO further stated that if any unanticipated prehistoric or historic archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, state law (Indiana Code 14-21-1-27 and 29) requires that the discovery must be reported to the Department of Natural Resources within two (2) business days. Therefore, any permit should include the unanticipated discoveries condition to stop work and notify the appropriate agency of a potential discovery, but otherwise it is anticipated that the proposed action would have no effect to cultural or historical properties.

2.0 PROJECT DESCRIPTION

2.1 Twin Branch Hydroelectric Project Description

The Commission issued a license for the Twin Branch Hydroelectric Project to the licensee on December 23, 1996.[9] The licensee operates the project in a run-of-river mode. The existing project's principal features consist of a dam having a spillway section composed of two rollway sections and a center radial gate section, a reservoir with a surface area of 1,065 acres, a powerhouse containing 8 generators, a transmission line, and appurtenant facilities. The proposed dredging area is approximately 2,000 feet upstream of the project dam in a side arm of the reservoir where Woodward Ditch drains into the project. The upland area surrounding the dredging site is a residential development with numerous houses with private piers located in the water surrounding the proposed dredging area.

3.0 PROPOSED ACTION AND ALTERNATIVES

3.1 Description of Licensee's Proposal

A. Proposed Action

The licensee is requesting Commission approval of a non-project use of project lands and water application for the purposes of permitting the St. Joseph County Surveyor to conduct maintenance dredging of Woodward Ditch (Figure 1), an existing channel within the project boundary, to remove approximately 3,883 cubic yards of

[9] Order Issuing New License (77 FERC ¶ 62,183) issued December 23, 1996.

accumulated sediment by hydraulic dredge so that the function of the ditch can be restored. The original channel bottom would not be disturbed. The proposed action would be undertaken in a 0.8-acre portion of Woodward Ditch to a depth of 4.5 feet. Only the pre-existing channel would be dredged. A five-foot undisturbed shelf would be maintained around the shoreline with a 3:1 slope that would follow the natural contour of the riverbed. The proposed dredging area is inside the project boundary, but the disposal area is outside of the project boundary (Figure 2). The dredged material from the channel would be pumped to trucks staged on the roadway easement on the south bank of the river and taken to a private man-made agricultural pond approximately 1.5 miles south of the dredge site for disposal.

Figure 2 . Proposed spoils disposal location (source: Indiana Michigan Power Company's October 7, 2022, filing with the Commission).

B. Proposed Environmental Protection Measures

The licensee submitted its draft sediment removal plan to Indiana Department of Natural Resources – Division of Fish and Wildlife (Indiana DNR) on January 5, 2022, for consultation. Indiana DNR commented that the Division of Fish and Wildlife was not opposed to the proposed dredging of Woodward Ditch. Indiana DNR also stated that the removal of sediment from Woodward Ditch may provide net benefits and more available

habitat. Indiana DNR requested that the licensee comply with the following, and the licensee included these measures in their application with the Commission.

1) Revegetate all bare and disturbed areas within the project area using a mixture of grasses (excluding all varieties of tall fescue), sedges, wildflowers, shrubs and/or hardwood trees native to Northern Indiana and specifically for stream bank/floodway stabilization purposes as soon as possible upon completion. Turf-type grasses (including low-endophyte, friendly endophyte, and endophyte free tall fescue but excluding all other varieties of tall fescue) may be used in currently mowed areas;

2) Do not work in the waterway from April 1 through June 30 without prior written approval from the Division of Fish and Wildlife;

3) Minimize the movement of resuspended bottom sediment from the immediate project area. If sediment is removed hydraulically and transported to an upland dewatering basin, adequate slurry detention time and sediment removal measures must be used to ensure that the water returned to the river is not carrying excessive sediment;

4) All excavated material must be properly spread or completely removed from the project site such that erosion and off-site sedimentation of the material is prevented;

5) Do not excavate or place fill in any riparian wetland;

6) To prevent the spread of aquatic invasive species, any equipment used for the project shall be cleaned of any plants, mud, and debris prior to project initiation and after completion of the work;

7) Do not dredge within 5 feet of the banks to minimize impacts to the riverbed at the existing seawalls and to preserve nearshore habitat;

8) Spoils from the dredging project, either hydraulic or mechanical, shall be deposited on an upland site and prevented from eroding into any water body or wetland and

9) Indiana DNRs lakes permitting biologist shall be contacted 48 hours prior to the initiation of dredging.

3.2 No-Action Alternative

Under the no-action alternative, the Commission would deny the licensee's proposal made on behalf of the St. Joseph County Surveyor. The licensee would not be

authorized to allow dredging in Woodward Ditch. Under this alternative, no removal of sediment from the reservoir would occur, and existing function and recreational use of the ditch would not be improved. The environmental resources in the project area would remain the same as they currently exist.

3.3 Other Action Alternatives

The licensee's application does not consider other action alternatives. The licensee nor St. Joseph County Surveyors provided other remediation methods for removing the accumulated sediment within Woodward Ditch.

4.0 AGENCY CONSULTATION AND PUBLIC INVOLVEMENT

The Commission's regulations (18 C.F.R. sections 4.38 and 6.1) require licensees to consult with appropriate resource agencies, Native American Tribes, and other entities before filing an application for an amendment of license. Pre-filing consultation must be completed and documented according to the Commission's regulations. The section below describes the public outreach and resource agency consultation conducted by the licensee prior to filing its application with the Commission.

4.1 Licensee's Pre-filing Consultation

Prior to filing its October 7, 2022 application and its November 16, 2022 supplement, with the Commission, the licensee consulted with the FWS, Corps, Indiana DEM, St. Joseph County Conservation District, Indiana SHPO, and Indiana DNR. The proponent has received all applicable permits/approvals from the resource agencies.

US Army Corps of Engineers – Department of Army Permits

Information regarding the dredging project was submitted to the Detroit District of the Corps by the proponent. The Corps determined that the project waters are not considered navigable waters, so a Section 10 permit was not needed under the Rivers and Harbors Act. The Corps issued a letter on July 19, 2022, stating that a Section 404 permit was not required for the discharge of dredged material since the material would be pumped to an upland area and allowed to dewater. No material would be sidecast into wetlands or streams and no fill is required for access. The Corps determined that the man-made agricultural pond that would serve as the disposal site, was not a jurisdictional water, so no Corps permit was required for the disposal site.

Indiana Department of Environmental Management 401 Permit

A copy of the letter from the Corps and the dredging project information was submitted to Indiana DEM – Wetlands Program staff for determination of permitting requirements for the isolated water that would be utilized at the disposal site for the dredged spoils. Indiana DEM, responded via email dated August 1, 2022, stating that a permit was not required for the disposal site since waters that are associated with a manmade body of surface water created by excavating are exempt. Furthermore, a Section 401 Certification is not required for the dredging operations since a Section 404 permit was not required.

U.S. Fish and Wildlife Service ESA

The FWS was provided with the project plans for consultation on July 25, 2022. The Indiana Field Office issued a letter on July 27, 2022, stating that the proposed dredging project would have "no significant effect on wetlands or other important habitat types." The FWS had no objections to the proposed dredging project and stated that no further consultation under Section 7 of the ESA was required.

Indiana State Historic Preservation Office NHPA

The project proponent provided the project plans to the Indiana SHPO for review. The Indiana SHPO responded on June 25, 2022, that no currently known archaeological resources eligible for inclusion in the National Register of Historical Places have been recorded within the proposed project area. Indiana SHPO also included their standard requirement to stop work if unanticipated discoveries of historical resources or human remains are encountered.

Indiana Department of Natural Resources Navigable Waters Permit

The proponent applied to Indiana DNR for a flood control permit. Indiana DNR issued a termination notice for the application on July 21, 2022, stating that the total length of the project was not more than 10 miles, it is exempt from permitting.

Indiana Department of Natural Resources – Division of Fish and Wildlife

The draft sediment removal plan was submitted to Indiana DNR – Division of Fish and Wildlife on January 5, 2022, for consultation. Indiana DNR commented that the Division of Fish and Wildlife was not opposed to the proposed dredging of Woodward Ditch.

The St. Joseph County Conservation District

The St. Joseph County Conservation District issued a letter on July 25, 2022, that due to the small scale of the proposed action, a stormwater pollution prevention plan and associated construction stormwater permit were not required.

4.2. Commission's Public Notice

On November 17, 2022, Commission staff issued a public notice of the licensee's October 7, 2022, non-project use application and the November 16, 2022, supplement, establishing December 19, 2022, as the deadline for providing comments and interventions. No comments or motions to intervene were received.

5.0 ENVIRONMENTAL ANALYSIS

In this section, Commission staff describes the environmental setting for the proposed action and the scope of our effects analysis.[10] We also present our analysis of the environmental effects of the proposed action. Sections are organized by resource areas. Under each resource area, we first describe the current conditions. The existing condition is the baseline against which the environmental effects of the proposed action are compared, including an assessment of the effects of proposed mitigation, protection, and enhancement measures, and any potential cumulative effects. Our conclusions and recommended measures are discussed in section 6.0, Conclusions and Recommendations of the EA.

5.1 General Area Description

The Twin Branch Reservoir is located on the St. Joseph River in St. Joseph County, Indiana. The St. Joseph River Basin occupies about 3,000 square miles of the southwest corner of Michigan and about 1,685 square miles of northern Indiana. The river's source is located in Hillsdale County, in south central Michigan; this area includes a ridge that divides the drainage area of Lake Erie from the drainage area of Lake Michigan. The St. Joseph River then flows southwest into northern Indiana, and then turns northwest to flow back into Michigan. The St. Joseph River terminates in Lake Michigan.

[10] The affected environment in each resource section is presented based on the licensee's October 7, 2022, non-project use application, and the licensee's November 16, 2022 response to additional information request. Staff analysis of probable impacts from the proposed action then follows in the second part of each resource section under Environmental Effects.

The width of the St. Joseph River floodplain is generally less than one-half mile; the height of the riverbanks ranges from 25 to 65 feet. There are about 400 small lakes within the drainage basin, of which about 300 are located in Michigan and 100 in Indiana. The river basin is relatively flat, with the major portion used for agricultural purposes. The primary concentration of the river basin's population is located in the South Bend, Indiana and Niles, Michigan, metropolitan areas. The proposed dredging project is situated in a predominantly suburban area.

5.2 Resource Area Descriptions and Analysis

A. Geology and Soils

Affected Environment

The project is located within an area comprised mostly of glacial till plains and outwash aprons resulting from morainic deposits (the Valparaiso Terminal Moraine), overlying shale bedrock. The alluvial soils of the St. Joseph River valley are a complex sequence of muck, clay, loam, silt, sand, and gravel.

Siltation within project reservoirs is a fairly common occurrence within the St. Joseph River Basin and generally occurs at the entrance of tributary streams. Annual inspections of the project dams show that build-up of sediments within the reservoirs has stabilized.

Soils at the Twin Branch Project are primarily sand loams on flat terraces or on very gentle slopes. Such areas would normally exhibit a moderate erosion hazard; however, heavy vegetative cover and established residential development along the reservoir shore have significantly stabilized the shoreline.

Environmental Effects

Run-of-river operation of the project helps to limit erosion. It is the licensee’s responsibility to maintain the condition of the project shorelands (including recreation sites). The proposed dredging area does not include areas near the bank of the river. The proponent has proposed to leave a 5-foot aquatic vegetated shelf underwater along the edge of the channel. This would prevent the destabilization of the shoreline. The upland area in the immediate area of the dredge site includes residential developments with typical lawns and sea-walls for soil retention. Furthermore, Indiana DEM requires that any areas of disturbed upland must be revegetated immediately upon project completion. As such, the proposed action would have only minor short-term effects to geology and soils from the temporary disturbance at the site.

B. Water Quality

Affected Environment

In Indiana, the St. Joseph River is required to meet Indiana state water quality standards for agricultural, industrial, and public water supply; full body contact; and aquatic life and recreation designated uses. Additionally, the St. Joseph River below the Twin Branch Project is required to meet standards for a coldwater fishery. The St. Joseph River above the Twin Branch Project is required to meet standards for a warmwater fishery. Sediment in the project area is comprised of naturally accumulating organic fines, sand, and silt. The cove provides a low energy area for sediment derived in the watershed to settle out prior to entering the St. Joseph River.

Environmental Effects

Under the proposed action, a hydraulic dredge would be used for sediment removal within the action area. Removing accumulated sediment that contains high nutrient content would provide net-benefits for the Woodward Ditch / St. Joseph River aquatic community. These benefits include increased DO levels. Low dissolved oxygen primarily results from excessive algae growth caused by increased amounts of phosphorus and nitrogen. As the algae die and decompose, the process consumes dissolved oxygen. Limiting the amount of available nutrients will decrease algal blooms and subsequent die-offs.

The proponent would not sidecast spoil material or dispose of it anywhere in the project reservoir. There would be an increase in suspended sediment during the dredging operations, but this would be temporary and minor, and would settle out within the cove. The Indiana DNR recommended that the proponent ensure that fine sediments are not transported back to the reservoir from the dewatering site, and all spoil material must be disposed of at an upland site where it cannot re-enter the reservoir. The proponent has proposed trucking the material to a man-made irrigation pond outside of the project boundary for disposal; therefore, no measurable long-term adverse effects to water quality are anticipated.

C. Aquatic Resources

Affected Environment

Common fish species in the Twin Branch Reservoir include smallmouth bass, bluegill, pumpkinseed, mimic and spottail shiner, shorthead and golden redhorse and white sucker. Centrachids (bluegill, bass, sunfishes) are known to spawn in habitat

similar to the project area. The predominate aquatic vegetation along the channel includes spatterdock and filamentous algae. The known fish community is composed of common species that are not of conservation concern.

Environmental Effects

Increased water depth will provide more available habitat for local fish and aquatic species. Increased turbidity may occur due to the disturbance of the riverbed during excavation, and it is important to control the suspension of sediment and prevent its migration away from the action area. Per the Indiana DNR's recommendations, Commission staff recommend that all excavated material be disposed of at the proposed upland disposal site and prevented from washing back into the waterbody or any wetlands to avoid affects to aquatic resources. Additionally, to prevent any suspended sediments from negatively impacting fish spawning within the impoundment, Indiana DNR recommended that the proposed action be restricted between April 1 and June 30 unless otherwise approved by them. Additionally, upland erosion of disturbed areas associated with equipment operation on the bank adjacent to the proposed action site must also be controlled. Proper sediment control devices must be employed to prevent upland soils from entering the waterway. Revegetation of any disturbed areas upland of the Woodward Ditch confluence must be undertaken immediately upon project completion to prevent sedimentation effects to the aquatic community. Introductions of aquatic invasive species continue to be a concern in Indiana, especially when equipment is frequently moved among waterbodies. To prevent the spread of aquatic invasive species, any equipment must be cleaned of any plants, mud, and debris prior to project initiation and after completion of the work. With these measures in place any potential effects would be appropriately mitigated, therefore, the proposed dredging activities would not cause any long-term adverse effects to aquatic resources. With the increase in water depth providing more aquatic resource habitat, the proposed dredging would provide a long-term benefit to aquatic resources.

D. Terrestrial Resources

Affected Environment

Upland areas surrounding the proposed action area are residentially developed, and its banks are characterized by a mixture of stabilization materials. Glacial stone walls and timber walls have been observed during recent site visits; however, steel and concrete walls can also be seen in photos submitted as part of the proposed action. Mature deciduous trees and ornamental shrubs and bushes remain common on properties adjacent to the proposed action area, providing limited natural aesthetics and moderate upland habitat. Wildlife species common to the Twin Branch Reservoir include mallard duck, mute swan, Canada goose, great blue heron, beaver, cottontail rabbits, grey

squirrel, woodchuck, and white-tailed deer.

Wetlands are absent from the immediate proposed action area and surrounding landscape. The Woodward Ditch corridor upstream of the project site is primarily residentially developed, however agricultural fields are common south of the Osceola / Mishawaka municipal limits.

Environmental Effects

The proposed action would not occur on any land area of the project and therefore would not affect terrestrial plant communities. Also, there is no critical habitat for any terrestrial special status species in the Twin Branch Project area. Local waterfowl and terrestrial wildlife will have access to other areas of the reservoir during the project's completion. For these reasons, the proposed dredging activities would cause no effects to terrestrial resources.

E. Recreation Resources and Aesthetics

Affected Environment

Shoreline areas surrounding the proposed action area are developed with single-family residences and seasonal cottages. Project lands include the support facilities for the powerhouse and a dismantled steam generation plant on the north side of the river. Land uses upstream of the former steam plant site include a small commercial and industrial park area, the Twin Branch State Fish Hatchery, a sewage treatment plant, and wetlands. The majority of the lands abutting the project boundary are developed for residential and light industrial use, intermixed with public parks and small commercial sites. No recreational facilities, such as parks, boat ramps, or campgrounds, are located in the vicinity of the proposed dredging operation.

Environmental Effects

The non-project dredging would improve recreational use for residents along the channel and for recreation users that boat or fish in this channel. Furthermore, the proposed action is located in an area that would not interfere with recreational boating in the main body of the reservoir. The proposed action would have only minor short-term effects to recreation from the temporary disturbance at the site. Community members in close proximity to the project area may experience temporary minor impacts related to construction noise and visual effects during the dredging window. In the long-term, the proposed dredging will add depth and allow for better access to the cove, and therefore improve recreational use for residents along the channel and for recreation users that boat or fish in this channel

F. Environmental Justice

Affected Environment

According to the U.S. Environmental Protection Agency (EPA), "environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies." Fair treatment means that no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental, and commercial operations or policies (EPA, 2021). Meaningful involvement means:

1. people have an opportunity to participate in decisions about activities that may affect their environment and/or health;

2. the public's contributions can influence the regulatory agency's decision;

3. community concerns will be considered in the decision-making process; and

4. decision makers will seek out and facilitate the involvement of those potentially affected (EPA, 2021).

In conducting NEPA reviews of proposed hydropower projects, the Commission follows the instruction of Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations*, which directs federal agencies to identify and address "disproportionately high and adverse human health or environmental effects" of their actions on minority and low-income populations (i.e., environmental justice communities).[11] Executive Order 14008, *Tackling the Climate Crisis at Home and Abroad*, also directs agencies to develop "programs, policies, and activities to address the disproportionately high and adverse human health, environmental, climate-related and other cumulative effects on disadvantaged communities, as well as the accompanying economic challenges of such impacts."[12] The term "environmental justice community" includes disadvantaged communities that have been historically marginalized and overburdened by pollution.[13]

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[11] Exec. Order No. 12,898, 59 Fed. Reg. 7629, at 7629, 7632 (Feb. 11, 1994).
[12] Exec. Order No. 14,008, 86 Fed. Reg.7619, at 7629 (Jan. 27, 2021).
[13] *Id.*

Environmental justice communities include, but may not be limited to minority populations, low-income populations, or indigenous peoples.[14]

Commission staff used the Federal Interagency Working Group on Environmental Justice & NEPA Committee's publication, *Promising Practices for EJ Methodologies in NEPA Reviews* (*Promising Practices*) (EPA, 2016), which provides methodologies for conducting environmental justice analyses throughout the NEPA process for this project. Commission staff's use of these methodologies is described throughout this section.

Commission staff used EJScreen, EPA's environmental justice mapping and screening tool, as an initial step to gather information regarding minority and/or low-income populations; potential environmental quality issues; environmental and demographic indicators; and other important factors. EPA recommends that screening tools, such as EJScreen, be used for a "screening-level" look and a useful first step in understanding or highlighting locations that may be candidates for further review.

Meaningful Engagement and Public Involvement

The CEQ's *Environmental Justice Guidance Under the National Environmental Policy Act* (*CEQ Environmental Justice Guidance*) (CEQ, 1997) and Promising Practices recommend that Federal agencies provide opportunities for effective community participation in the NEPA process, including identifying potential effects and mitigation measures in consultation with affected communities and improving the accessibility of public meetings, crucial documents, and notices.[15] They also recommend using adaptive approaches to overcome linguistic, institutional, cultural, economic, historical, or other potential barriers to effective participation in the decision-making processes of federal agencies. In addition, Section 8 of Executive Order 13985, *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*, strongly encourages independent agencies to "consult with members of communities that have been historically underrepresented in the Federal Government and underserved by, or subject to discrimination in, federal policies and programs."

As discussed in section 4.2 Commission's Public Notice Consultation of this EA, there has been opportunity for public involvement during the Commission's

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[14] See EPA, EJ 2020 Glossary (Aug. 18, 2022), https://www.epa.gov/environmentaljustice/ej-2020-glossary.

[15] CEQ, *Environmental Justice: Guidance Under the National Environmental Policy Act*, 4 (Dec. 1997) (CEQ's Environmental Justice Guidance), https://www.energy.gov/sites/default/files/nepapub/nepa_documents/RedDont/GCEQ-EJGuidance.pdf.

environmental review process, although the record does not demonstrate that these opportunities were targeted at engaging environmental justice communities. The Commission's communication and involvement with the surrounding communities began when the Notice of Application Accepted for Filing and Soliciting Comments, Motions to Intervene, and Protests was issued on November 17, 2022, which established a 30-day comment period and intervention deadline. No comments were received during the notice period.

All documents that form the administrative record for these proceedings are available to the public electronically through the internet on the FERC's website (www.ferc.gov). Anyone may comment to FERC about the project, either in writing or electronically. Commission staff has consistently emphasized with the public that all comments receive equal weight by Commission staff for consideration in the EA.

Regarding future engagement and involvement, in 2021, the Commission established the Office of Public Participation (OPP) to support meaningful public engagement and participation in Commission proceedings. OPP provides members of the public, including environmental justice communities, landowners, Tribal citizens, and consumer advocates, with assistance in FERC proceedings—including navigating Commission processes and activities relating to the project. For assistance with interventions, comments, requests for rehearing, or other filings, and for information about any applicable deadlines for such filings, members of the public are encouraged to contact OPP directly at 202-502-6592 or OPP@ferc.gov for further information.

Identification of Environmental Justice Communities

According to the *CEQ Environmental Justice Guidance and Promising Practices*, minority populations are those groups that include populations categorized as: American Indian or Alaskan Native; Asian or Pacific Islander; Black, not of Hispanic origin; or Hispanic. Following the recommendations set forth in Promising Practices, FERC uses the **50 percent** and the **meaningfully greater analysis** methods to identify minority populations. Using this methodology, minority populations exist when either: (a) the aggregate minority population of the block groups in the affected area exceeds 50 percent; or (b) the aggregate minority population in the block group affected is 10 percent higher than the aggregate minority population percentage in the county. The aforementioned guidance also directs low-income populations to be identified based on the annual statistical poverty thresholds from the U.S. Census Bureau. Using Promising Practices' **low-income threshold criteria** method, low-income populations exist when the percentage of low-income population in the identified block group is equal to or greater than that of the county. Here, Commission staff selected St. Joseph County, Indiana, as the comparable reference community to ensure that affected environmental justice communities are properly identified.

Table 1 below identifies the minority populations (by race and ethnicity) and low-income populations present within Indiana, the county affected by the proposed project (St. Joseph County, Indiana), and census block group[16] within vicinity of the proposed action. For this project, staff chose a 1-mile radius around areas affected by the project. Commission staff found that a 1-mile radius is the appropriate unit of geographic analysis

[16] Census block groups are statistical divisions of census tracts that generally contain between 600 and 3,000 people. U.S. Census Bureau. 2022. Glossary: Block Group. Available online at: https://www.census.gov/programs-surveys/geography/about/glossary.html#par_textimage_4. Accessed October 2022.

Table 1. Minority Populations by Race and Ethnicity and Low-Income Populations

State/County/Census Tract and Block Group	RACE AND ETHNICITY COLUMNS										LOW INCOME COLUMN
	Total Population	White Alone, not Hispanic or Latino[a] (%)	Black or African-American[a] (%)	American Indian and Alaska Native[a] (%)	Asian[a] (%)	Native Hawaiian and Other Pacific Islander[a] (%)	Some Other Race[a] (%)	Two or More Races[a] (%)	Hispanic or Latino(any race)[a] (%)	Total Minority Population[c] (%)	Total Households Below Poverty Level[b] (%)
Indiana	**6696893**	**78.4**	**9.3**	**0.2**	**2.3**	**>0.1**	**0.3**	**2.4**	**7.1**	**21.6**	**12.5**
St. Joseph County	**270881**	**71.8**	**12.6**	**0.3**	**2.5**	**>0.1**	**0.4**	**3.5**	**8.9**	**28.2**	**14.2**
Census Tract 011603, Block Group 2	**2490**	**91.4**	**2.7**	**0.0**	**0.0**	**0.0**	**0.0**	**5.9**	**0.0**	**8.6**	**0.0**
Census Tract 011602, Block Group 1	**3470**	**83.3**	**3.1**	**0.1**	**5.0**	**0.0**	**0.0**	**3.6**	**4.8**	**16.7**	**8.5**
Census Tract 011602, Block Group 2	**1127**	**88.2**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**11.8**	**11.8**	**10.4**
Census Tract 011701, Block Group 1	**3001**	**68.7**	**23.8**	**0.0**	**0.0**	**0.0**	**0.0**	**0.1**	**7.3**	**31.3**	**5.9**
Census Tract 010400, Block Group 1	**1392**	**91.3**	**0.0**	**0.0**	**1.5**	**0.0**	**0.0**	**1.5**	**5.7**	**8.7**	**4.1**
Census Tract 010400, Block Group 2	**979**	**94.2**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**5.8**	**5.8**	**9.8**

Census Tract 010500, Block Group 2	**1247**	**87.2**	**6.9**	**0.0**	**0.7**	**0.0**	**0.0**	**0.9**	**4.3**	**12.8**	**5.4**
Census Tract 010500, Block Group 3	**919**	**95.5**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**1.4**	**3.0**	**4.5**	**15.9**
Census Tract 011503, Block Group 1	**1636**	**94.4**	**2.1**	**0.0**	**2.1**	**0.4**	**0.0**	**0.9**	**0.0**	**5.6**	**4.6**
Census Tract 011503, Block Group 2	**836**	**81.7**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**9.9**	**8.4**	**18.3**	**23.1**
Census Tract 010500, Block Group 1	**822**	**84.5**	**0.7**	**0.0**	**1.7**	**2.6**	**1.5**	**2.9**	**6.1**	**15.5**	**13.3**

Note: Low-income or minority populations exceeding the established thresholds are indicated in red, bold, type and blue shading.

a U.S. Census Bureau, 2020a.
b U.S. Census Bureau, 2020b.
c Total Minority Population is the percent of the population that is not categorized as “White Alone (not Hispanic or Latino).

given the limited scope of project-related effects. A 1-mile radius is large enough to encompass the dredging activities within the water body, including noise and visual effects For this project we used U.S. Census American Community Survey File #B03002 for the race and ethnicity data and Survey File #B17017 for poverty data at the census block group level.[17]

According to the current U.S. Census Bureau information and consistent with the 50 percent, meaningfully greater analysis, and low-income threshold criteria described above, one minority community (Census Tract 11701, Block Group 1) and two low-income populations (Census Tract 010500, Block Group 3 and Census Tract 011503, Block Group 2) are present within one mile of the project. Figure 3 provides a geographic representation of these communities relative to the area affected by the proposed project.

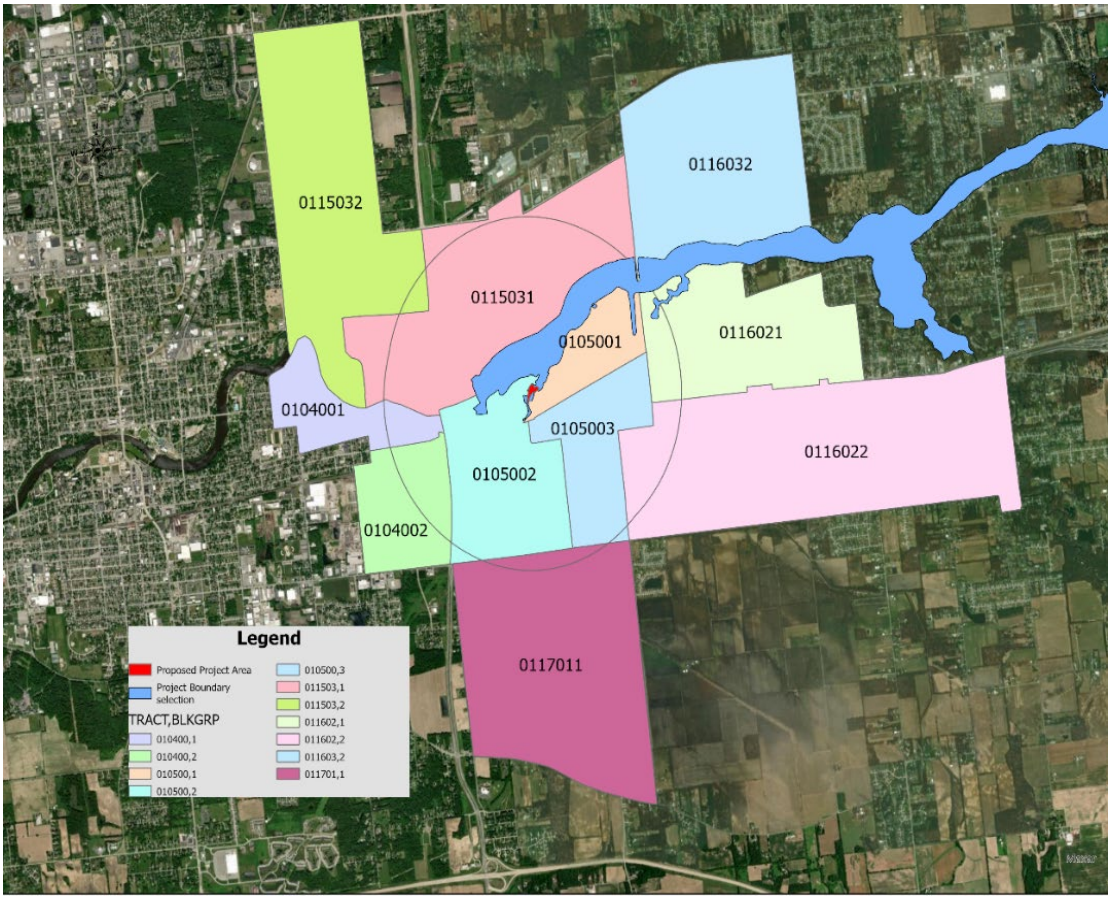

Figure 3. Project No. 2579 Proposed Project Area including a one-mile buffer. The map also identifies the geographic representation of communities sampled relative to the project area in red (Source: Commission staff).

[17] U.S. Census Bureau, American Community Survey 2020 ACS 5-Year Estimates Detailed Tables, File #B17017, *Poverty Status in the Past 12 Months by Household Type by Age of Householder*, https://data.census.gov/cedsci/table?q=B17017; File #B03002 *Hispanic or Latino Origin by Race*, https://data.census.gov/cedsci/table?q=b03002.

Environmental Effects

Consistent with *Promising Practices* and E.O. 12898, we reviewed the project to determine if its resulting impacts would be disproportionately high and adverse on minority and low-income populations and also whether impacts would be significant.[18] *Promising Practices* provides that agencies can consider any of a number of conditions for determining whether an action will cause a disproportionately high and adverse impact.[19] The presence of any of these factors could indicate a potential disproportionately high and adverse impact. For this project, a disproportionately high and adverse effect on an environmental justice community means the adverse effect is predominantly borne by such population. Relevant considerations include the location of project facilities and the project's human health and environmental impacts on identified environmental justice communities, including direct, indirect, and cumulative impacts. The analysis of impacts is included in this section.

As described in section 3.1.A Proposed Action, the proposed action would allow maintenance dredging of Woodward Ditch, an existing channel within the project boundary, to remove approximately 3,883 cubic yards of accumulated sediment by hydraulic dredge so that the function of the ditch can be restored. The original channel bottom would not be disturbed. The licensee is planning to dispose of the spoils in an upland manmade body of surface water. The proposed dredging area is inside the project boundary, but the disposal area is outside of the project boundary. The proposed action would occur within the existing project boundary, in a 0.8-acre area. Project activities would take place within Census Tract 010500, Block Group 1 and Census Tract 010500 Block group 2, neither of which is identified as an environmental justice community with a minority or low income population.

Potential effects on the natural and human environment from operation of the proposed action are identified and discussed throughout this document. Factors that could affect environmental justice communities include recreation (see section 5.3.E). These effects are addressed in greater detail in the associated sections of this EA. Effects

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[18] See *Promising Practices* at 33 (stating that "an agency may determine that impacts are disproportionately high and adverse, but not significant within the meaning of NEPA" and in other circumstances "an agency may determine that an impact is both disproportionately high and adverse and significant within the meaning of NEPA").

[19] See *Promising Practices* at 45-46 (explaining that there are various approaches to determining whether an impact will cause a disproportionately high and adverse impact). We recognize that CEQ and EPA are in the process of updating their guidance regarding environmental justice and we will review and incorporate that anticipated guidance in our future analysis, as appropriate.

on environmental justice communities are not present for other resource areas such as geology and soils, water quality, water quantity, aquatic resources, terrestrial resources and cultural resources. No entity provided comments or recommendations regarding the effects of the proposed project on environmental justice communities in response to the Commission's public notice.

As discussed in section 5.3.E Recreation and Aesthetics Resources, the proposed action is located in an area of the reservoir that would not interfere with recreational boating on the reservoir as a whole. Overall, with access in the area improved, effects to recreational resources are expected to be beneficial to anglers from identified environmental justice communities that may use the area for recreation. Aesthetic resource impacts will be short term and not visible from the environmental justice community area considering the distance and small disturbance site. Due to the limited size and scope of the proposed action, the proposed dredging operation would not substantially affect noise levels and visual resources.

Based on the above findings regarding recreational resource effects, Commission staff conclude that any effects to members of environmental justice communities, residing near or visiting the area, due to the proposed project would include a minor recreational benefit. Additionally, in consideration of the included census data, and the limited and temporary scope of the proposed dredging activities, Commission staff conclude that this non project use would not result in disproportionately high and adverse effects on the identified environmental justice communities.

5.3 Cumulative Effects of the Proposed Action

According to the Council on Environmental Quality's regulations for implementing the National Environmental Policy Act (40 C.F.R. § 1508.1), a cumulative effect is the effect on the environment that results from the incremental effect of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time, including hydropower and other land and water development activities.

Based on our review of the proposed action and associated project application, along with any resource agency comments, we have not identified any resources that would be cumulatively affected by the proposed project.

5.4 Effects of No-Action Alternative

Under the no-action alternative, the Commission would deny the licensee's application. Indiana Michigan Power Company would not authorize dredging in the action area within Twin Branch Reservoir. As such, there would be no adverse effects to the aquatic habitat in the project area. Conversely, no sediment would be removed and sediment loading of the reservoir could increase in the future, and the proponent would not realize any of the benefits of the proposed dredging such as improved navigation. Therefore, staff does not recommend the no-action alternative.

6.0 CONCLUSIONS AND STAFF RECOMMENDATIONS

6.1 Conclusions

If implemented in compliance with the state and federal recommendations described above, the proposed action would not result in any significant environmental effects or significant cumulative impacts. There are no known historic or cultural resources, or critical habitat for threatened or endangered species in the proposed area of impact. Furthermore, the proposed dredging would not significantly affect geology and soils, water quality, aquatic and terrestrial resources, or cause undesirable erosion and sedimentation. Removing accumulated sediment would provide benefits for the Woodward Ditch / St. Joseph River aquatic community. Increased water depth will provide more available habitat for local fish and aquatic species and would improve recreational use for residents along the channel and for recreational boaters that boat or fish in the project area. As such, the proposed dredging would not significantly adversely affect the surrounding environments.

6.2 Staff Recommendations

Due to the extensive consultation and recommended permit conditions provided to St. Joseph Surveyors, prior to requesting Commission approval of the non-project use, the proposed action includes considerable environmental and recreation protection measures. We agree with all the recommendations provided in comments from the resource agencies involved. The recommended protection measures ensure that the affected resources in the project area will not be adversely affected. To ensure that project waters are properly protected, the licensee should include, as conditions of any permit or authorization it issues under this application, the 9 protection measures listed above in section 3.1.B. It should be noted that the proponent is restricted from conducting in water work from April 1 to June 30; however, they may consult with Indiana DNR and upon receiving their approval continue in water work during this time by enacting whatever measures and conditions are required by Indiana DNR. If approved to work within this window by Indiana DNR, the applicant would not need further

approval from the Commission. In the rare event that cultural or historic items are found during dredging operations, the licensee should require St. Joseph County Surveyors to notify the licensee immediately, stop work, and the licensee should work with the Indiana State Historic Preservation Office.

The request for non-project use of project lands and waters incorporates numerous prior recommendations by resource agencies. Approval and implementation of the proposed action would have no significant adverse effects on any environmental resource analyzed in this EA. Also, the proposed action would not produce or significantly add to any existing cumulative environmental effects. Based on our analysis, we recommend that the proposed action be approved.

6.3 Finding of No Significant Impact

If the Commission approves the licensee's request to conduct dredging operations, while implementing the recommended conditions in the Twin Branch Reservoir based on staff's independent analysis, the proposed action would not constitute a major federal action significantly affecting the quality of the human environment.

7.0 LITERATURE CITED

Indiana Michigan Power Company Twin Branch Hydroelectric Project No. 2579 Application For Non-Project Dredging Of Project Lands Or Waters, Indiana Michigan Power Company, August 17, 2022.

Indiana Michigan Power Company 2022 Pre-application Document, Twin Branch Dam Hydroelectric Project, FERC Project Number 2759.

Woodward Ditch Sediment Removal Plan IN DNR Div. of Fish & Wildlife Comments Nate Thomas Lakes Permitting Biologist IN DNR Div. of Fish and Wildlife, January 2022.

8.0 LIST OF PREPARERS

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