Environmental Assessment for Sharon Lake Dredge Design in Hamilton County, Ohio

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1.0 Introduction

This Environmental Assessment (EA) has been requested by the Land & Water Conservation Fund (LWCF) to help evaluate the environmental consequences of the proposed action on the human environment and allow the public to understand the context of the proposed action. The LWCF Act of 1965 provides funds to assist with preserving, developing, and assuring accessibility to all citizens of the United States of America such quality and quantity of outdoor recreation resources as may be available and are necessary and desirable for individual active participation in such recreation and to strengthen the health and vitality of the citizens of the United States. The purpose of this EA is to ensure compliance under the National Environmental Policy Act (NEPA). NEPA requires Federal agencies to consider the environmental impacts of proposed federal actions and alternatives on the human environment. The goal of NEPA is to ensure public participation and informed decision making. Through the NEPA process, the interested and affected public, including other agencies and decision makers, are engaged so they may understand the nature of the proposal that involves a federal LWCF decision. This EA was made available to the public for review and includes a 30-day comment period. This EA has been prepared to help evaluate the environmental consequences of the Proposed Action on the biologic and physical environment and allow the affected public to understand the context for the Proposed Action.

1.1 History and Project Background

Acquired in 1932, Sharon Woods is the first and oldest park in the Great Parks of Hamilton County District (referred to as Great Parks), located in Sharonville, Hamilton County, Ohio (39.2889, -84.3860) as shown on the Sharon Woods Boundary Map (Figure 1). Figure 1 depicts the Section 6(f)(3) parkland associated with this project. During the Great Depression, the Federal Emergency Relief Administration (FERA) and Works Progress Administration (WPA) were the backbone of the park’s construction. 1934–1937 the Kreis dam was built, creating the 35-acre Sharon Lake. A portion of the lake was filled, the 35-acre Sharon Lake. The lake was an average of six-feet deep with over three-miles of shoreline. The boathouse and docking area were built during this timeframe and the lake was stocked with fish. Lake recreation became a celebrated pastime for the community. In an effort to continue the recreational benefits of Sharon Lake, it was mechanically dredged in 1988 to remove sediment deposits. Since that time, sediment has again accumulated, threatening the health of the lake.

Today, within its 730-acres, Sharon Woods attracts year-round visitors with diverse park amenities. Sharon Lake is at the heart of the park, with opportunities to boat, fish, and hike the 2.6-mile multi-purpose trail that hugs the shoreline. Sharon Lake is a 35-acre L-shaped reservoir fed by three tributaries – one entering at the northern most section of the lake (Sharon Creek), the second entering at the northeast section (Maintenance Creek), and the third flowing in at the southeastern tip (Brecon Creek). The lake discharges into Sharon Creek at the southwestern end of the lake, which flows through a gorge that is designated as Sharon Woods Gorge Nature Preserve, as shown on the Project Area Map (Figure 2). Sharon Lake has a highly developed watershed and exhibits many problems often associated with reservoirs in urban areas, including sedimentation and nutrient enrichment. Sediment accumulation in the lake has resulted in decreased aquatic health, requiring dredging activities to restore the lake health. Great Parks applied for construction funding assistance through the National Park Service (NPS) Land and Water Conservation Fund (LWCF) grant to assist in restoring the health and water quality of Sharon Lake.

1.2 Purpose and Need

The increase in impervious surfaces within the watershed has resulted in eroded streambanks and shorelines, and increased sedimentation within the lake. Sediment is often a source of nutrient enrichment (nitrogen and phosphorus). The combination of sedimentation and nutrient enrichment has led to the growth of duckweed. Duckweed is a native, green, grainy, non-rooted, floating, vascular plant that thrives in shallow water where nutrients and sediment collect and is sometimes confused with algae. Although duckweed is a native plant, dense mats of duckweed can be a nuisance to recreational activities including boating and fishing. Currently a portion of Sharon Lake is covered by dense mats of duckweed. Based on comments filed by the public to Great Parks during public involvement meetings in 2017 and 2018, the condition of the lake has cost Great Parks some of their regular park guests. In 2018, Great Parks stopped hosting their annual fishing tournament at Sharon Lake, due to lake conditions and public feedback.
In addition, an abundance of duckweed may inhibit sunlight from penetrating the water surface, causing oxygen depletion, and lowering the value of aquatic habitat. When duckweeds form dense mats, as it has in Sharon Lake, light penetration to the underlying water column may be limited and air-water gas exchange may be reduced, causing a decrease in dissolved oxygen which can lead to hypoxic conditions.

The above-mentioned factors provide evidence supporting the need for the project. Sharon Lake has reached a critical point in the lake’s condition where action is necessary to protect the recreational use of the lake. The accumulation of sediment throughout the lakebed, as evidenced by the proliferation of duckweed, is both a result of, and contributor to, the decrease in recreational function of the lake.

The purpose of this project is to restore the lake to its original depth by removing accumulated sediments through dredging; thereby, restoring recreational function and game fishing habitat. Dredging Sharon Lake will enhance recreational opportunities to the public, which have been negatively affected by the accumulated sediment and growth of duckweed. Currently, high nutrient values, aggressive aquatic vegetation, and sediment accumulation are threatening the recreational function and overall health of the lake. Accumulation of sediment is generally considered to be undesirable in an aquatic environment. Dredging may allow for thermal stratification, lake mixing frequency, and light penetration, which may positively affect the health of the lake. Fish health may be enhanced by removing oxygen-demanding sediment throughout the lake.

After dredge activities, the sediment will no longer be distributed throughout the 35-acre lakebed but will be placed in isolated areas (approximately a four-acre area) along the lakeshore to expand the existing shallow wetlands within the lake. The current shallow wetlands consist mainly of low-quality, non-native plant species. As part of the project, the existing shallow wetlands and the adjacent created wetlands will be planted with a diverse mix of native plant species. This will provide additional ecological benefit to the project by the creation of higher quality wetlands, which will then provide additional educational opportunity.
Figure 1: Sharon Woods Boundary Map
2.0 Description of Alternatives Considered

2.1 Range of Alternatives

The National Environmental Policy Act (NEPA) requires that federal agencies consider a “reasonable range” of alternatives when assessing the environmental impacts of projects. 40 CFR Section 1502.14 indicates that “reasonable” alternatives are those that meet the purpose of, and need for, the project and are practical and feasible based on technical and economic considerations. Great Parks evaluated several alternative solutions to the proposed project. Four preliminary alternative dredging methods and three preliminary alternative potential dredge disposal sites were developed and evaluated. Additionally, the “no action” alternative was evaluated. Dredging technique alternatives and dredge disposal alternatives were evaluated separately.

2.1.1 No Action Alternative

The Council on Environmental Quality (CEQ) regulations (40 CFR 1500–1508) require that NEPA analyses shall “include the alternative of no action” (40 CFR 1502.14). Under the No Action Alternative for this project, Sharon Lake would not be dredged, the accumulated sediment and growth of duckweed would increase, and recreational usage of the lake would continue to be diminished. Park visitors may cease from returning to the park to enjoy recreational and educational opportunities due to the lake’s appearance. The weirs at the north and east ends of the lake will continue to not serve their function. The average lake depth would continue to decrease. The shallow wetland areas within the lake would continue to increase, which would presumably be dominated by low-quality non-native species (based on the current condition of the shallow wetlands formed on accumulated sediment in the lake). As wetland coverage of the lake continues to increase, the open water portion of the lake would decrease, resulting in a loss of recreational function, including game fish habitat.

2.1.2 Dredging Technique Alternatives

The four dredging technique alternatives are:

1) Dry Dredging: The lake would be drained by opening the outlet valve at the dam, the surface elevation of the lake is lowered, and the lakebed is exposed. The accumulated sediment would be allowed to time to dewater/dry and would then be moved by traditional earth moving and excavation equipment from the lakebed.

2) Mechanical Dredging: A crane or clamshell excavator would be floated on a barge to dredge the undrained lake. Dredged sediment would be de-watered either at a location on land or on barges.

3) Hydraulic Dredging: A hydraulic dredging barge would remove sediment from the undrained lake by suction. De-watering of the dredged sediment would take place on land or on barges.

4) Combination Dry/Hydraulic Dredging: Water levels in the lake would be lowered by 6 to 10 feet, exposing sediment in the shallow areas upstream of the two weirs, located at the north and east ends of the lake. The central, deeper portion of the lake would be hydraulically dredged. Dredged sediment would be de-watered in the drawn-down areas upstream of the weirs. After the sediments have drained, the areas upstream of the weirs would be excavated to the intended depth.

In May 2018, Environmental Design Group prepared a Sharon Lake Dredging Assessment for Great Parks. The four dredge techniques were evaluated and compared to determine a proposed Preferred Alternative. During the assessment, the four techniques were evaluated and rated based on physical requirements of dredge operation, schedule, and cost. The four alternatives would achieve the project’s purpose and meet the project need. All four alternatives are technically feasible from a constructability perspective.

By draining the lake and dry dredging the accumulated sediment (dry dressing technique), the operator can use conventional excavation equipment to achieve a stronger visual of the final contours. Dry dredge will also facilitate the evaluation of bank stability of the lake and the hillsides above the slope. It also has the ability to remove a greater amount of dredge material in less time than the alternatives. The efficiency of the technique will also reduce the overall cost. Hydraulic Dredging and the Combination Dry/Hydraulic alternative were each roughly twice the cost associated with Mechanical or Dry Dredging. As such, they were deemed not practical in terms of cost, and therefore
eliminated from further analysis. Given the greater cost of Mechanical Dredging compared to Dry Dredging, and the fact that Mechanical Dredging offers no practical advantages compared to Dry Dredging, it was eliminated from further analysis.

2.1.3 Dredge Disposal Alternatives

Environmental Design Group and S&ME conducted sediment analyses in 2017 and 2020. Two sediment samples were collected from Sharon Lake in 2017 and an additional two sediment samples were collected in 2020. Sediment analyses indicate that dredged sediment is considered non-hazardous material and are below Ohio EPA standards. The sediment sample location map and analysis report are provided in Attachment 1.

Options for disposal included placing the material in a landfill, placing the sediment in an off-site location, or redistributing within the lakebed. The three disposal alternatives are:

1) Privately-Owned Landfill: The closest available landfill to Sharon Lake is the Rumpke Waste and Recycling site north of the Ohio Route 27 interchange with Interstate 275, roughly 14 miles west of Sharon Lake.
2) Placement at Off-Site Location: Three off-site upland locations operated by Hamilton County Board of Park Commissions were evaluated for dredge disposal: Sharon Woods Golf Course and Driving Range, RecreAcres Park, and the Boat House.
3) Placement within Lakebed: Dredged sediment would be redistributed within and near the lakeshore to facilitate recreation and wetland creation opportunities.

Disposal at the landfill involves the highest cost, 5 to 6 times greater than the costs associated with the other two alternatives. The high cost is primarily due to the transportation and disposal costs (tipping fees) associated with the privately-owned landfill. This is not a practical alternative from an economic perspective. Therefore, the Landfill Alternative was excluded from further study.

Hauling the sediment off-site to Golf Course/Driving Range and RecreAcres involves a 1- to 2-mile haul route and involves higher cost of transport compared to placing the sediment within the lakebed. The Boat House disposal location is incapable of receiving more than a small fraction of dredged sediment.

The sediment currently distributed throughout the 35-acre lakebed would be dredged, dried, and placed in specific isolated locations (approximately a four-acre area) within the lakebed to expand the existing wetlands. The existing and created wetlands will be planted with a diverse mix of native species, and a boardwalk will be installed over a portion of the enhanced wetlands to expand recreational opportunities. Placing the dredged material in the lakebed would allow Great Parks to achieve recreational and wetland creation objectives, while reducing costs by reusing clean sediment rather than bringing in non-native fill material.

2.2 Proposed Action

The Dry Dredging alternative and redistributing the sediment within the lakebed in specific isolated locations form the single Proposed Action Alternative for further analysis, and comparison to the No Action Alternative. The Proposed Action would restore a significant amount of Sharon Lake to its original depth by dredging the accumulated sediments scattered throughout the lakebed. Dredge materials would be used to create wetlands within Sharon Lake, which would in return provide a buffer between the existing trail and fishing area, while increasing wildlife habitat with the introduction of native plants. Removing the sediment from across the 35-acre lakebed and replacing it within specific isolated locations of the lakebed (approximately four-acre area) will allow Great Parks to achieve its primary goal or restoring recreational function and game fishing habitat. Secondarily, it will create higher quality wetlands and new educational opportunities. This proposed action is the most cost-effective option that will provide the desired outcome of outdoor recreational benefit for the community.
3.0 Affected Environmental Resources

The existing characteristics of the resources within the project area that may be affected are discussed below. The environmental consequences of the Proposed Action Alternative (Proposed Action) and No Action Alternative are discussed in Section 4.

3.1 Geologic and Mineral Resources

There are no known unique geological resources or mineral resources located within the project area. Sharon Lake is located in Hamilton County, Ohio, containing old Ordovician bedrock which is located at the surface in southwestern Ohio. Sharon Lake is located within the Illinoian Till Plain physiographic region of Ohio. The Illinoian Till Plain region is generally characterized by rolling ground moraine of older till, buried valley-fills, subsurface soils potentially containing glacial till, layers of sand and gravel, and lacustrine (lake) deposits. Available geologic mapping suggests that the majority of the project area is underlain by the Ordovician aged Miamitown Shale and Fairview Formation which is underlain by the Grant Lake Formation along the southern limits of the project area on the hills of the golf course. The United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) Soil Survey for Hamilton County, Ohio, designates the entirety of Sharon Lake as Water (W).

Sharon Lake Gorge Nature Preserve is located along Sharon Creek south of Sharon Lake. The preserve is part of Sharon Woods Park, owned and managed by Great Parks. The forested gorge of Sharon Creek was created about 20,000 years ago by large volumes of glacial meltwater descending into the Mill Creek Valley. A 90-foot cliff at the gorge is an exposure of marine fossils encased in the Ordovician bedrock.

3.2 Air Quality

Sharon Lakes is within Hamilton County, Ohio. Hamilton County is in non-attainment for particulate matter (PM) 10 and PM2.5, and within an ozone maintenance area, according to according to U.S. Environmental Protection Agency. Air quality within the County is monitored by the Southwest Ohio Air Quality Agency, with seven (7) air quality monitoring sites. The closest monitoring site to the project area is the Sycamore monitor located approximately 0.9-mile to the east of Sharon Woods at the Ohio Department of Transportation – Blue Ash Outpost. Current data for the Sycamore monitor rate the Air Quality Index as Moderate (PM2.5 = 69) (Hamilton County 2022).

3.3 Noise

Sharon Woods is a destination for park visitors to enjoy outdoor activities including boating, fishing, hiking, and golfing. There is often activity and associated noise from visitors to the park daily, especially on weekends. Interstate-275 crosses the northern portion of Sharon Lake resulting in motor vehicle noise.

3.4 Water Quality/Quantity

Sharon Lake is approximately 35-acres in size and is located in the Mill Creek drainage basin [8-digit Hydrologic Unit Code 05090203]. Sharon Lake has three tributaries and sub-watersheds, Sharon Creek entering at the northern most part of the lake, Maintenance Creek, entering at the northeast section, and finally, Brecon Creek, flowing in at the southeastern tip. Sharon Lake discharges into Sharon Creek at the southwestern end of the lake, which flows through a gorge. Sharon Creek flows into Mill Creek approximately 2.6-miles southwest of the project area. According to the Ohio Environmental Protection Agency Ohio Administrative Code 3745-1-30 Water Quality Standards, Sharon Lake and Sharon Creek are both designated as Warm Water Habitats. According to the National Wild and Scenic River System Ohio Map and the State Wild and Scenic Rivers in Ohio, no National/State Scenic rivers are located within, or adjacent to, the project area.

No analytical water quality data was available for Sharon Lake. Visual observations have shown duckweed growth has increased overtime and currently forms dense mats throughout Sharon Lake. Research has shown that dense mats of duckweed can minimize dissolved oxygen and light penetration in open water environments. These are known water quality impairments which can be harmful to fish and submerged plants.
A sediment thickness analysis was completed June 2020. Lake bottom and sediment bottom depths were collected at 34 locations throughout Sharon Lake. Based upon data collected, up to six feet of sediment had accumulated on the lake bottom, with an average of 2.4 foot of sediment across the 35-acre lakebed. The sediment thickness map is provided in Attachment 1.

3.5 Water Resources
A formal wetland delineation was completed in 2018 by Brownknight EcoResources LLC and Green Research LLC. LiDAR data was used to generate surface contours to aid in wetland delineation. A total of 6.16-acres of wetland were identified within, and adjacent to, Sharon Lake. The wetland delineation map is provided in Attachment 1. The majority of the wetlands were emergent wetlands found in shallow areas associated with the accumulated sediment within the lake shoreline. The plant species that composed the highest vegetative cover was floating primrose-willow (Ludwigia peploides), a non-native perennial aquatic plant that can outcompete native species. Floating primrose-willow can form dense mats which can restrict fishing and boat access. EDG completed an ORAM Scoring Form for the wetlands on July 26, 2022. The wetlands scored as a Category 2 wetland.

Sharon Lake lies within Zone A – Special Flood Hazard Area (without Base Flood Elevation) according to FIRM Panel No. 39061C0092E published by the Federal Emergency Management Agency (FEMA FIRM). FEMA described the 100-year floodplain as, “a flood having a one percent chance of being equaled or exceeded in any given year. This is the regulatory standard also referred to as the "100-year flood." The base flood is the national standard used by the National Flood Insurance Program (NFIP) and all Federal agencies for the purposes of requiring the purchase of flood insurance and regulating new development. Base Flood Elevations (BFEs) are typically shown on Flood Insurance Rate Maps (FIRMs)." A Special Flood Hazard Development Permit was submitted to the City of Sharonville and the permit was approved on March 23, 2023.

The project area is not within or adjacent to a Drinking Water Source Protection Area or within a Sole Source Aquifer according to the Ohio Drinking Water Source Protection Areas Map from the Ohio Environmental Protection Agency Division of Drinking and Ground Waters. No groundwater wells are located within the project area.

3.6 Land Use
Sharon Lake and the Golf Course disposal site are located within Sharon Woods, a park accessible to the public in Hamilton County, Ohio. Sharon Lake is owned by the Board of Park Commission – Hamilton County Park District. The designated land use of the project area is listed as 620 – County Owned. Land use within the park consists of wooded and herbaceous-dominated areas and park amenities, including the harbor, lakeside lodge, parking lots, maintenance area, hiking trails, and a golf course (disposal site). Sharon Woods is bounded by residential and commercial properties in all directions.

3.7 Circulation, Transportation and Accessibility
Recreational areas surrounding Sharon Lake are accessible from the parking lot by a clear path. Areas around the harbor that can be accessed from the north parking lot include the boathouse, snack bar, restrooms, playground, lake trail, and fishing pier. There is also access to these facilities from the south parking lot.

3.8 Wildlife Habitat and Biological Resources
Based upon completed fish surveys and stocking records in Sharon Lake, there are no unique fish habitats, rare, or listed fish in the lake. A request for comments pertaining to federally listed species was submitted to the U.S. Fish and Wildlife Service (USFWS). The USFWS responded on July 13, 2022. According to USFWS correspondence, the endangered Indiana bat (Myotis sodalis) and threatened northern long-eared bat (Myotis septentrionalis) may be found wherever suitable habitat occurs unless a presence/absence survey have been performed to document absence. Suitable foraging and maternity habitat consisting of forested/wooded habitat exists along the perimeter of the lake. In addition, bats may forage for insects over the open water.
Per the USFWS, due to the project type, size, and location, no adverse impacts are anticipated to other federally endangered, threatened, or proposed species, or proposed or designated critical habitat.

Great Parks submitted an ODNR Environmental Review during the grant application process. A response letter was received on January 2, 2019. This Environmental Review response expired after 18 months, and a second Environmental Review Request was submitted to ODNR on February 16, 2023. The ODNR correspondence indicated that habitat for the species below may be present within the project area. In addition to the below species, Sloan’s crayfish was discussed which has since been delisted. The ODNR correspondence indicated that the project is within range of a number of state and federally endangered mussels, however, due to the project location, and that there is no in-water work proposed in a perennial stream of sufficient size, this project is not likely to impact these species. The ODNR correspondence indicated that the project is within range of a number of state threatened and endangered fish species, however, due to the project location, and that there is no in-water work proposed in a perennial stream, this project is not likely to impact these species. Species included in the Federally listed species discussion above are not included in the below.

### Table 1: Potential Endangered Animal Habitat

<table>
<thead>
<tr>
<th>Species</th>
<th>Status</th>
<th>Habitat</th>
<th>Habitat Present within Study Area?</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Bittern</td>
<td>State Endangered</td>
<td>Nests in large undisturbed wetlands that have scattered small pools amongst dense vegetation. Occasionally occupy bogs, large wet meadows, and dense shrubby swamps.</td>
<td>No suitable habitat in the Project Area</td>
</tr>
<tr>
<td>(Botaurus lentiginosus)</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Lark Sparrow</td>
<td>State Endangered</td>
<td>Nests in grassland habitats with scattered shrub layers, disturbed open areas, as well as patches of bare soil.</td>
<td>No suitable habitat in the Project Area</td>
</tr>
<tr>
<td>(Chondestes grammacus)</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Tri-Colored Bat</td>
<td>State Endangered</td>
<td>Hibernates in caves and mines. Inhabits landscapes that are partly open, with large trees and plentiful woodland edges. They are found in a variety of terrestrial habitats, including grasslands, old fields, suburban areas, orchards, urban areas and woodlands, especially hardwood woodlands.</td>
<td>Habitat is present along Sharon Lake (woodlands)</td>
</tr>
<tr>
<td>(Perimyotis subflavus)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Little Brown Bat</td>
<td>State Endangered</td>
<td>Hibernates in caves and mines. Roosts in a variety of shelters in large colonies. It typically forages along ponds, streams, or forest clearings.</td>
<td>Habitat is present along Sharon Lake (woodlands)</td>
</tr>
<tr>
<td>(Myotis lucifugus)</td>
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<tr>
<td>Kirtland’s snake</td>
<td>State Endangered</td>
<td>Usually found in open wetlands such as wet prairies, prairie fens, wet meadows and marshes or along the edges of forested wetlands and floodplains</td>
<td>No suitable habitat in the Project Area</td>
</tr>
<tr>
<td>(Clonophis kirtlandii)</td>
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</tr>
</tbody>
</table>

The ODNR Natural Heritage Database found a record of Missouri Gooseberry (*Ribes missouriense*), a state threatened shrub, within the project limits. However, GPHC indicated that they were aware of the population of Missouri Gooseberry in the northern portion of the project, located between the lake and the trail around the lake. Once the growing season began, EDG organized a site visit to look for the Missouri Gooseberry to determine if the project would impact the population and if it was growing within the wetlands on the fringes of the lake shore. On April 20, 2023, Brian Loushin (Ecologist, EDG), Richard Gardner (State Botanist, ODNR), Laurie Moore (Regulatory Project Manager, USACE), Tim Zelek (Chief of Planning, GPHC), Brian Yahn (Conservation Biologist, GPHC), and Daniel Kovar (Conservation Biologist, GPHC) met on site at Sharon Lake and delineated the population of Missouri Gooseberry. The population was not found within the lake or the fringe wetlands and therefore will not be impacted for the proposed project. The population was flagged in the field and GPS points were taken in the field. GPHC will use this to put up orange barrier fence around the population of Missouri Gooseberry to protect it during construction.
All native mussels are protected in the State of Ohio. Sharon Lake and Sharon Creek are not listed in the Ohio Mussel Survey Protocol dated April 2020 and have drainage areas under 5 square miles. Therefore, a mussel survey is not required for the project.

3.9 Recreation
Sharon Woods is a popular 730-acre park that features a visitor center with exhibits, a gift shop, and the Adventure Station, an accessible two-story indoor play area for children ages 2-12. The park is a popular spot to exercise outdoors with a 2.6-mile paved multi-purpose trail around the lake, a 1.0-mile fitness trail, and the 0.7-mile Gorge nature trail. Reservable areas include the Lakeside Lodge, as well as shelters and picnic area.

The accumulation of sediment as evidenced by the proliferation of duckweed is both a result of, and contributor to, the ecological degradation of the lake. Based on comments filed by the public to Great Parks during public involvement meetings in 2017 and 2018, lake degradation has cost Great Parks some of their regular park guests. In 2018, Great Parks stopped hosting their annual fishing tournament at Sharon Lake due to lake conditions.

3.10 Aesthetics and Visual Resources
Urbanization in the areas surrounding Sharon Woods has led to an increase in impervious surfaces, resulting in eroded streambanks and sedimentation within the lake. Nutrient enrichment within the lake has led to an increase in duckweed. The reduced visual aesthetic of Sharon Lake has prevented park patrons from returning and enjoying certain park amenities, including the lake itself. Sharon Woods is located within an existing urban area surrounded by residential housing, commercial buildings, and an interstate highway. The residential areas near the project area are buffered by park land including forested land, and the project area is located within a valley due to topographic relief. Topography in the project area slopes in all directions toward Sharon Lake, buffering the residential areas from the project area.

3.11 Historic/Archaeological/Cultural Resources
According to correspondence with the Ohio State Historic Preservation Office (SHPO), the proposed undertaking will not affect properties listed in, or eligible for listing in, the National Register of Historic Places. No further coordination is required unless the project changes or archaeological remains are discovered during the course of the project or is otherwise required as part of the Federal permitting process.

3.12 Socio-economic and Environmental Justice
According to the Environmental Justice Screening and Mapping Tool provided by the Environmental Protection Agency, the project area is located within the 50-60 percentile for Minority Populations, and the 70-80 percentile for low-income populations. The U.S. Census Bureau data for Hamilton County, Ohio, estimates that 67.7% of the population is white alone, 26.6% African American alone, 0.2% American Indian and Alaska Native alone, 2.9% Asian alone, 0.1% Native Hawaiian and Other Pacific Islander alone, 2.5% two or more races, and 3.5% Hispanic or Latino (U.S. Census Bureau, 2019). Hamilton County’s demographic distribution is marginally diverse compared to the national population with the 26.6% African American alone race being higher than that of the national distribution.

3.13 Hazardous Materials
In August 2017 and June 2020, Environmental Design Group collected and tested sediment samples from Sharon Lake. Four sediment samples were collected throughout Sharon Lake (two samples collected in 2017 and two samples collected in 2020) from the northern and southern portions of Sharon Lake near the inlet and outlet points. Sediment samples were collected using Ponar Grab Sampler and were analyzed for metals, polychlorinated biphenyls (PCBs), pesticides, herbicides, Volatile Organic Compounds and/or Semi-Volatile Organic Compounds. No polychlorinated biphenyls, pesticides, or herbicides were detected in the samples. No exceedances above Ohio Environmental Protection Agency Voluntary Action Program Generic Direct Contact Soil Standards for residential land use, commercial-industrial land use, or construction worker scenarios, effective October 7, 2019, were detected in any of the sediment samples. The sediment sample location map and analysis report are provided in Attachment 1.
According to the U.S. Environmental Protection Agency online mapping tool, there are no generators or facilities that use hazardous waste, accidental releases of hazardous waste, sites contaminated with hazardous waste, or sites that have the potential for contamination within the project area.
4.0 Environmental Impacts
The environmental consequences discussion provides an evaluation of short or long-term impacts on the resources discussed in Section 3. Impacts can be either adverse or beneficial; to avoid confusion they are defined as “adverse impacts” or “beneficial effects” in this discussion. Adverse impacts could result from actions that diminish the resources. Beneficial effects could result from actions that maintain or enhance the resources. The intensities of adverse impacts are also listed where applicable, using the following criteria:
- No/negligible impact: the impact or effect is at the lower level of detection; there would be no measurable change.
- Minor: the impact or effect is slight but detectable; there would be a measurable change.
- Major: the impact or effect is severe, highly noticeable, and/or permanent.

A summary is presented in Table 2.

4.1 Geologic and Mineral Resources
No Action Alternative: no impacts to geologic or mineral resources resulting from the No Action Alternative are anticipated to occur.

Proposed Action Alternative: no impacts to geologic or mineral resources resulting from the Proposed Action Alternative are anticipated to occur.

4.2 Air Quality
No Action Alternative: no impacts to air quality are anticipated to result from the No Action Alternative.

Proposed Action Alternative: negligible impacts - construction-related emissions associated with the Proposed Action are temporary but may result in short-term localized particulate matter increases. Particulate matter emissions are generally greatest during initial site preparation. Construction-general emissions of ozone precursor pollutants are also localized and temporary. Possible odors from sediment and emissions from construction equipment will be isolated and temporary. No measurable or permanent impacts to air quality are anticipated associated with the Proposed Action.

4.3 Noise
No Action Alternative: no impacts to noise would occur.

Proposed Action Alternative: negligible impacts – the action will generate temporary construction (i.e., equipment) noise. The residential areas near the project area are buffered by park land and the lake is located within a valley; therefore, it is assumed that noise levels will not have an adverse effect on the surrounding residential areas. Noise increases would be infrequent and isolated, primarily due to construction vehicles removing and hauling sediment from the lake. The expectation is that work hours will coincide with local and state ordinances, and that equipment and machinery utilized within the project area would meet local, state, and Federal noise ordinances and regulations, as applicable. Construction equipment (i.e., dump trucks, excavator) typically generates minimal noise disturbance, no louder than a leaf blower, and may cause a temporary disturbance in noise levels within the project area; however, the noise levels would be considered negligible. No permanent noise impact will result from the Proposed Action.

4.4 Water Quality/Quantity
No Action Alternative: long-term adverse impacts – water quality and quantity are expected to continue to diminish overtime as sediment continues to accumulate in the lakebed and duckweed continues to cover the water surface. The No Action Alternative will slowly convert the open water into a wetland, which would presumably be composed mostly of non-native herbaceous vegetation observed presently in the shallow wetlands within the lake. The lake would no longer function as a lake, and it would lose its recreational function all together. In addition, fish habitat
would be greatly reduced as the lakebed continues to accumulate sediment and water depths decrease. Therefore, the No Action Alternative is considered to have an adverse impact on water quality and quality.

**Proposed Action Alternative:** short-term adverse impact; long-term beneficial effect. The action will have a short-term negative effect on water quality and quantity, as the lake will be temporarily drained during dredging. However, the Proposed Action will have a long-term beneficial effect on water quality and quantity by increasing water volume, removing nutrient-heavy sediments across the lakebed, which will presumably result in an increase in dissolved oxygen.

There is a statewide in-water work restriction for waterways with a Warm Water Habitat designation of April 15 to June 30. Based on correspondence with the Ohio Department of Natural Resources-Office of Wildlife the agency recommends that dredging of inlands lakes does not occur during the spring spawning season, they typically do not apply the in-water work restrictions to inland lakes unless the dredging is large scale and would disrupt spawning of the lake, as a whole. Coordination with Ohio Department of Natural Resources is recommended prior to the Proposed Action to minimize impacts to spawning fish as determined appropriate by ODNR.

4.5 Water Resources

**No Action Alternative:** no impact to wetlands or floodplains anticipated.

**Proposed Action Alternative:** minor short-term adverse impact; long-term beneficial effect. Minor short-term adverse impact may result in the dredging of low-quality wetlands that have developed on the accumulated sediment. In addition, hydrology to wetlands may be temporarily affected due to the dewatering of the lakebed during dredge activities. However, the Proposed Action will have a net benefit to water resources. Over four acres of created wetlands will result from the project which will be planted with native species.

Due to the amount of temporary disturbance to the lakebed and based upon discussions with the U.S. Army Corps of Engineers, two Nationwide Permits (Nationwide Permit 27 and Nationwide Permit 42) were obtained for this project. EDG, on behalf of GPHC, obtained these permits from the USACE in March and May 2023. No permits were required from OEPA as there were no impacts to isolated wetlands and the Nationwide Permits did not require Section 401 Water Quality Certifications. No impacts to floodplains are anticipated to occur. The Nationwide Permits from USACE were obtained prior to any in-water work and grant approval.

4.6 Land Use

**No Action Alternative:** no impact - no changes to land use will result from the No Action Alternative.

**Proposed Action Alternative:** short-term adverse impact during construction - restriction of lake access and associated recreational activities during construction. No changes to land use will result from the Proposed Action Alternative after construction.

4.7 Circulation, Transportation and Accessibility

**No Action Alternative:** no impacts to circulation, transportation, and accessibility will result from the No Action Alternative.

**Proposed Action Alternative:** negligible impact - construction equipment associated with the Proposed Action may cause minor, temporary circulation, transportation, and accessibility impacts to parking lots around Sharon Lake and recreational activity (kayaks, boats) within the lake itself. The public will be notified of active construction activity by signage and construction traffic will follow Sharonville Codified Ordinance (City Code) and county code. The Proposed Action will not permanently change or affect the circulation, transportation, and accessibility to the lake and surrounding park.
4.8 Wildlife Habitat and Biological Resources

No Action Alternative: long-term adverse impact – anticipated to result in the continued degradation of aquatic habitat, resulting in increased duckweed population, decreased dissolved oxygen levels within the lake, and overall decrease of wildlife habitat and biological resources within Sharon Woods and its surrounding waterbodies.

Proposed Action Alternative: short-term adverse impact; long-term beneficial effect - dewatering will temporarily impact the aquatic flora and fauna within the lake, and avian and terrestrial species that may visit the lake. However, it is anticipated that a functional lift in aquatic habitat will result from the Proposed Action by the removal of accumulated sediment scattered throughout the 35-acre lakebed which will likely minimize the future growth of duckweed.

Tree cutting (trees 3-inch diameter and greater) will occur between October 1 to March 31 to avoid adverse effects to bat species per USFWS recommendation.

Staff from GPHC and EDG met ODNR State Biologist Richard Gardner on site at Sharon Lake to find and delineate a population of Missouri Gooseberry (Ribes missouriense), a state threatened shrub. The population was found growing directly adjacent to the trail on the north side of Sharon Lake. The population was flagged, and GPS points were taken. Before construction begins, GPHC will put up orange barrier fence around the population to ensure it is protected during construction.

4.9 Recreation

No Action Alternative: long-term adverse impact - will result in the continued decrease in recreational use, resulting in continued loss of park visitors and park revenue.

Proposed Action Alternative: negligible short-term impact; long-term beneficial effect - based upon public comment, the Proposed Action will result in an increase in recreational use of Sharon Lake and Sharon Woods, as the nuisance smells and dense-matted duckweed will be eliminated. Additional recreational benefits will result from the Proposed Action associated with the construction of the boat/kayak launch and wetland creation within the lakebed. The proposed activities will increase terrestrial and aquatic habitat, creating a more attractive area for bird watchers, and hobbyists alike.

4.10 Aesthetics and Visual Resources

No Action Alternative: long-term adverse impact - will result in the continued decrease in aesthetic value, resulting in continued loss of park visitors and park revenue.

Proposed Action Alternative: negligible short-term impact; long-term beneficial effect. Temporary impact during dewatering and dredging activity; long-term increase in aesthetic value. Based upon public comment, the Proposed Action will result in an increase in aesthetic value of Sharon Lake and Sharon Woods due to dredging and the creation of additional native wetland habitat within the lakebed and removal of invasive species. Thus, allowing park-goers to enjoy the lake as they once did with fishing, boating, and hiking. The surrounding urban area is buffered from the project area by Sharon Woods Park, including forested land. Due to topographic relief the project area is situated in a valley, buffering the urban (residential and commercial) area from the project area; therefore, limiting the line of sight into the project area from the surrounding areas during construction.

4.11 Historic/Archaeological/Cultural Resources

No Action Alternative: no impacts to historic or archaeological resources resulting from the No Action Alternative are anticipated; resource not present.

Proposed Action Alternative: no impacts to historic or archaeological resources resulting from the Proposed Action Alternative are anticipated; resource not present. According to a letter sent from Ohio History Connection dated March 21, 2019, the Ohio State Historic Preservation Office, the proposed undertaking will not affect properties
listed in or eligible for listing in the National Register of Historic Places. No further coordination is required unless the project changes or archaeological remains are discovered during the course of the project.

4.12 Socio-economic and Environmental Justice

No Action Alternative: no disproportionate impacts to low income or minority populations will result from the No Action Alternative.

Proposed Action Alternative: no disproportionate impacts to low income or minority populations will result from the Proposed Action Alternative.

4.13 Hazardous Materials

No Action Alternative: no impacts associated with the No Action Alternative are anticipated; resource not present.

Proposed Action Alternative: no impacts associated with the Proposed Action Alternative are anticipated; resource not present.
### Table 2: Environmental Resource Summary

<table>
<thead>
<tr>
<th>Resource</th>
<th>Proposed Action</th>
<th>No Action Alternative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geological and Mineral Resources</td>
<td>No impact.</td>
<td>No impact.</td>
</tr>
<tr>
<td>Air Quality</td>
<td>Negligible impact. Possible odors from sediment and emissions from construction equipment will be localized and temporary.</td>
<td>No impact.</td>
</tr>
<tr>
<td>Noise</td>
<td>Negligible impact. Noise associated with construction equipment will be localized and temporary.</td>
<td>No impact.</td>
</tr>
<tr>
<td>Water Quality/Quantity</td>
<td>Short-term adverse impact due to temporary impacts during dewatering and dredging activity. Long-term beneficial effect due to increase in water quality and quantity.</td>
<td>Long-term adverse impact. Water quality within Sharon Lake will continue to degrade and water quantity will continue to decrease to reduced storage capacity.</td>
</tr>
<tr>
<td>Water Resources</td>
<td>Minor short-term adverse impact associated with dredging of and altered hydrology to wetlands during dewatering and dredging activity. Long-term beneficial effects resulting from an increase in wetlands will result from the project.</td>
<td>No impact. No impacts to wetlands or floodplain anticipated.</td>
</tr>
<tr>
<td>Land Use</td>
<td>Short-term adverse impact associated with closing lake access during construction.</td>
<td>No impact.</td>
</tr>
<tr>
<td>Circulation, Transportation and Accessibility</td>
<td>Negligible impact. Temporary impacts during dewatering and dredging activity relating to construction activity</td>
<td>No impact.</td>
</tr>
<tr>
<td>Wildlife Habitat and Biological Resources</td>
<td>Short-term adverse impact. Temporary impact to aquatic fauna and flora, and avian and terrestrial species during dewatering and dredging activity. Long-term beneficial effect due to increased aquatic habitat.</td>
<td>Long-term adverse impact. Aquatic habitat in Sharon Lake will continue to degrade.</td>
</tr>
<tr>
<td>Recreation</td>
<td>Negligible short-term impact. Temporary impact during dewatering and dredging activity. Long-term beneficial effects due to an increase in recreational value and removal of nuisance smells and dense-matted duckweed.</td>
<td>Long-term adverse impact. Recreational use of Sharon Lake will continue to degrade.</td>
</tr>
<tr>
<td>Historic/Archaeological Resources</td>
<td>No impact; resource not present.</td>
<td>No impact; resource not present.</td>
</tr>
<tr>
<td>Socioeconomic and Environmental Justice</td>
<td>No impact; no disproportionate impact to protected populations.</td>
<td>No impact; no disproportionate impact to protected populations.</td>
</tr>
</tbody>
</table>
5.0 Consultation, Coordination, and Comment

5.1 Agency Coordination
The following agencies were consulted during the preparation of this document. Responses received to date are included in Attachment 2.

- Ohio Department of Natural Resources – Office of Real Estate
- Ohio Department of Natural Resources – Division of Wildlife
- Ohio History Connection – Ohio Historic Preservation Office
- U.S. Army Corps of Engineers – Huntington District
- United States Fish and Wildlife Service
- Ohio EPA – Southwest District
- Ohio State Historic Preservation Office
- City of Sharonville

EDG, on behalf of GPHC, obtained two Nationwide Permits for the proposed project, Nationwide Permit 27 – Aquatic Habitat Restoration, Enhancement, and Establishment and Nationwide Permit 42 – Recreational Facilities. The Nationwide Permit 42 was issued by the USACE on March 31, 2023 and the Nationwide Permit 27 was issued by the USACE on May 3, 2023. As part of these permits, EDG coordinated with all of the agencies above. USACE completed Section 7 consultation for the project through the USFWS. These permits allowed for the dredging of Sharon Lake and the deposition of dredge materials within Sharon Lake and within the wetlands on the fringes of the lake to create more than 4 acres of new wetlands under Section 404 of the Clean Water Act. Lastly, EDG submitted and obtained the local Special Flood Hazard Area Development Permit from the City of Sharonville on March 23, 2023.

5.2 Public Involvement
Sharon Lake began having noticeable issues with sedimentation, nutrient enrichment, and duckweed between 2009 and 2014. As a result, Great Parks began addressing questions from the public and complied information about the lake’s issues in a blog post titled “What’s with the Lake?” (https://blog.greatparks.org/2013/10/whats-with-the-lake/). This blog expanded into a permanent section on the Great Parks of Hamilton County website where the public is informed by updates on the lake, as they become available (https://www.greatparks.org/about/projects/sharon-lake-project).

Great Parks has hosted a number of public meetings at Sharon Woods from September 2017 to May 2018, and as a result has received a number of comments about the issues at Sharon Lake. At the public meetings a presentation was given about the proposed project purpose and need, the Land and Water Conservation Fund (LWCF and Environmental Assessment process and contact information for providing comments. In-person meetings that were held at Sharon Centre in Sharon Woods are listed below:

<table>
<thead>
<tr>
<th>Meeting</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stakeholder Meetings</td>
<td>September 25-26, 2017</td>
</tr>
<tr>
<td>Advisory Committee Meeting</td>
<td>November 14, 2017</td>
</tr>
<tr>
<td>Meeting-In-A-Box</td>
<td>November 17-18, 2017</td>
</tr>
<tr>
<td>Community Workshop</td>
<td>January 13, 2018</td>
</tr>
<tr>
<td>Advisory Committee Meeting</td>
<td>February 1, 2018</td>
</tr>
<tr>
<td>Advisory Committee Meeting</td>
<td>April 10, 2018</td>
</tr>
<tr>
<td>Meeting-In-A-Box</td>
<td>April 13, 2018</td>
</tr>
<tr>
<td>Meeting-In-A-Box</td>
<td>May 19, 2018</td>
</tr>
</tbody>
</table>

In an effort to stay engaged with the public, Great Parks also collects comments on their website and through their “We’re Listening” survey campaign. Multiple public comments pertaining to the decrease in boat rentals, negative
impact on aquatic life, decreased desire to use the lake for recreation, and decreased aesthetics relating to the flourishing duckweed were received through their website.

On June 17, 2022, Great Parks of Hamilton County advertised the public comment period on their website, emailed stakeholders and partners, and mailed a one-page letter to the surrounding community providing details regarding the project purpose and need, explanation of grant money received through the LWCF, and encouraging the public to comment on the Environmental Assessment from June 29 through July 29, 2022. On June 19 & 26, 2022 an advertisement was posted in the Enquirer. Lastly, six QR code signs were posted around the park on June 24, 2022, and an announcement was made on social medial on June 29, 2022. The Environmental Assessment was released for a 30-day public comment period on June 29, 2022 through a link on the Great Parks of Hamilton County’s website for the Sharon Lake Improvements. The link took you to a public comment website, which is still accessible but not active (https://storymaps.arcgis.com/stories/4d95a1fc40e14ce4880c3f0c86f894e2). The public comment website was translated into English and Spanish for the local community to review and provide comments. No public comments were received within the 30-day comment period.

5.3 List of Preparers
This Environmental Assessment was prepared by the following individuals:

- Brian Loushin, Ecologist, Environmental Design Group
- Angela Tribuzi, Project Environmental Scientist, Environmental Design Group
- Kellie Pike, P.E., Project Manager, Environmental Design Group
ATTACHMENT 1

Mapping and Sediment Analysis Results
GREAT PARKS OF HAMILTON COUNTY
Sharon Lake Dredge Assessment

FIGURE 3:
Approximate Sediment Thickness Map
GREAT PARKS OF HAMILTON COUNTY

Sharon Lake Dredge Assessment

FIGURE 1: Sediment Location Map

- 2017 Sediment Locations
- 2020 Sediment Locations
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>VAP Residential Generic Direct Contact Soil Standard</th>
<th>VAP Commercial Industrial Generic Direct Contact Soil Standard</th>
<th>VAP Construction Generic Direct Contact Soil Standard</th>
<th>C-1 (14.4')</th>
<th>C-2 (10.2')</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,1,2-Tetrachloroethane</td>
<td>mg/kg</td>
<td>48</td>
<td>230</td>
<td>680</td>
<td>&lt;0.013</td>
<td>&lt;0.013</td>
</tr>
<tr>
<td>1,1,1-Trichloroethane</td>
<td>mg/kg</td>
<td>460</td>
<td>640</td>
<td>640</td>
<td>&lt;0.013</td>
<td>&lt;0.013</td>
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<tr>
<td>1,1,2,2-Tetrachloroethane</td>
<td>mg/kg</td>
<td>15</td>
<td>71</td>
<td>670</td>
<td>&lt;0.013</td>
<td>&lt;0.013</td>
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<td>1,2-Trichloroethane</td>
<td>mg/kg</td>
<td>28</td>
<td>130</td>
<td>1200</td>
<td>&lt;0.013</td>
<td>&lt;0.013</td>
</tr>
<tr>
<td>1,1-Dichloroethane</td>
<td>mg/kg</td>
<td>89</td>
<td>380</td>
<td>1700</td>
<td>&lt;0.013</td>
<td>&lt;0.013</td>
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<td>1,1-Dichloroethene</td>
<td>mg/kg</td>
<td>360</td>
<td>1200</td>
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<td>&lt;0.013</td>
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<td>mg/kg</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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<td>&lt;0.013</td>
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<td>1,2,3-Trichlorobenzene</td>
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<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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<td>&lt;0.013</td>
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<tr>
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<td>400</td>
<td>400</td>
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<td>&lt;0.013</td>
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<tr>
<td>1,2-dichloroethane</td>
<td>mg/kg</td>
<td>230</td>
<td>220</td>
<td>220</td>
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<td>&lt;0.013</td>
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<tr>
<td>1,2-Dibromo-2-chloropropane</td>
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<td>380</td>
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<tr>
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<td>52</td>
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<td>1,2-Dichloroethene</td>
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<td>180</td>
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<td>&lt;0.013</td>
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<td>180</td>
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<td>&lt;0.013</td>
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<tr>
<td>1,3-Dichlorobenzene</td>
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<td>N/A</td>
<td>N/A</td>
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<td>&lt;0.013</td>
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<td>1500</td>
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<td>&lt;0.013</td>
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<td>1,4-Dichlorobenzene</td>
<td>mg/kg</td>
<td>65</td>
<td>290</td>
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<td>mg/kg</td>
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<td>N/A</td>
<td>N/A</td>
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<td>&lt;0.013</td>
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<tr>
<td>2,3-Butanone</td>
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<td>28000</td>
<td>28000</td>
<td>&lt;0.013</td>
<td>&lt;0.013</td>
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<tr>
<td>2-Chlorotoluene</td>
<td>mg/kg</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>&lt;0.013</td>
<td>&lt;0.013</td>
</tr>
<tr>
<td>2,2-Dichloropropane</td>
<td>mg/kg</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>&lt;0.013</td>
<td>&lt;0.013</td>
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<tr>
<td>4-Chlorotoluene</td>
<td>mg/kg</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>&lt;0.013</td>
<td>&lt;0.013</td>
</tr>
<tr>
<td>4-Methylcyclohexane</td>
<td>mg/kg</td>
<td>3400</td>
<td>3400</td>
<td>2400</td>
<td>&lt;0.013</td>
<td>&lt;0.013</td>
</tr>
<tr>
<td>Acetone</td>
<td>mg/kg</td>
<td>110000</td>
<td>110000</td>
<td>110000</td>
<td>&lt;0.013</td>
<td>0.15</td>
</tr>
<tr>
<td>Benzene</td>
<td>mg/kg</td>
<td>28</td>
<td>130</td>
<td>1200</td>
<td>&lt;0.013</td>
<td>&lt;0.013</td>
</tr>
<tr>
<td>Bromobenzene</td>
<td>mg/kg</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>&lt;0.013</td>
<td>&lt;0.013</td>
</tr>
<tr>
<td>Bromochloromethane</td>
<td>mg/kg</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>&lt;0.013</td>
<td>&lt;0.013</td>
</tr>
<tr>
<td>Bromodichloromethane</td>
<td>mg/kg</td>
<td>7.3</td>
<td>33</td>
<td>300</td>
<td>&lt;0.013</td>
<td>&lt;0.013</td>
</tr>
<tr>
<td>Bromoform</td>
<td>mg/kg</td>
<td>460</td>
<td>910</td>
<td>910</td>
<td>&lt;0.013</td>
<td>&lt;0.013</td>
</tr>
<tr>
<td>Bromomethane</td>
<td>mg/kg</td>
<td>17</td>
<td>76</td>
<td>550</td>
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<td>&lt;0.013</td>
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<tr>
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<td>740</td>
<td>740</td>
<td>740</td>
<td>&lt;0.013</td>
<td>&lt;0.013</td>
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<tr>
<td>Carbon tetrachloride</td>
<td>mg/kg</td>
<td>16</td>
<td>74</td>
<td>460</td>
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<td>&lt;0.013</td>
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<tr>
<td>Chlorobenzene</td>
<td>mg/kg</td>
<td>660</td>
<td>760</td>
<td>760</td>
<td>&lt;0.013</td>
<td>&lt;0.013</td>
</tr>
<tr>
<td>Chloroethane</td>
<td>mg/kg</td>
<td>2100</td>
<td>2100</td>
<td>2100</td>
<td>&lt;0.013</td>
<td>&lt;0.013</td>
</tr>
<tr>
<td>Chloroform</td>
<td>mg/kg</td>
<td>7.9</td>
<td>35</td>
<td>320</td>
<td>&lt;0.013</td>
<td>&lt;0.013</td>
</tr>
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<td>Chloromethane</td>
<td>mg/kg</td>
<td>280</td>
<td>1200</td>
<td>1300</td>
<td>&lt;0.013</td>
<td>&lt;0.013</td>
</tr>
<tr>
<td>cis-1,2-Dichloroethene</td>
<td>mg/kg</td>
<td>310</td>
<td>2400</td>
<td>2400</td>
<td>&lt;0.013</td>
<td>&lt;0.013</td>
</tr>
<tr>
<td>cis-1,3-Dichloropropane</td>
<td>mg/kg</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>&lt;0.013</td>
<td>&lt;0.013</td>
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<tr>
<td>Dibromochloromethane</td>
<td>mg/kg</td>
<td>130</td>
<td>800</td>
<td>800</td>
<td>&lt;0.013</td>
<td>&lt;0.013</td>
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<tr>
<td>Dibromomethane</td>
<td>mg/kg</td>
<td>592</td>
<td>2502</td>
<td>8702</td>
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<td>&lt;0.013</td>
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<tr>
<td>Dichlorodifluoromethane</td>
<td>mg/kg</td>
<td>850</td>
<td>850</td>
<td>850</td>
<td>&lt;0.013</td>
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</tr>
<tr>
<td>Ethylbenzene</td>
<td>mg/kg</td>
<td>140</td>
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<td>Hexachlorobutadiene</td>
<td>mg/kg</td>
<td>17</td>
<td>17</td>
<td>17</td>
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<td>Isopropylbenzene</td>
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<td>270</td>
<td>270</td>
<td>270</td>
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<td>&lt;0.013</td>
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<tr>
<td>m,p-Xylene</td>
<td>mg/kg</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>&lt;0.013</td>
<td>&lt;0.013</td>
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<tr>
<td>n-Octylbenzene</td>
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<td>3400</td>
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<td>Methylene chloride</td>
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<td>740</td>
<td>3300</td>
<td>3300</td>
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<tr>
<td>n-Butylbenzene</td>
<td>mg/kg</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>&lt;0.013</td>
<td>&lt;0.013</td>
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<tr>
<td>m-Propylbenzene</td>
<td>mg/kg</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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<td>&lt;0.013</td>
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<tr>
<td>Naphthalene</td>
<td>mg/kg</td>
<td>36</td>
<td>600</td>
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<tr>
<td>o-Xylene</td>
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<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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<td>&lt;0.013</td>
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<tr>
<td>p-Diisopropylbenzene</td>
<td>mg/kg</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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<td>&lt;0.013</td>
</tr>
<tr>
<td>n-Butylbenzene</td>
<td>mg/kg</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>&lt;0.013</td>
<td>&lt;0.013</td>
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<tr>
<td>n-Propylbenzene</td>
<td>mg/kg</td>
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<td>870</td>
<td>870</td>
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<td>&lt;0.013</td>
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<tr>
<td>n-Butylbenzene</td>
<td>mg/kg</td>
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<td>N/A</td>
<td>N/A</td>
<td>&lt;0.013</td>
<td>&lt;0.013</td>
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<tr>
<td>p-Toluene</td>
<td>mg/kg</td>
<td>170</td>
<td>170</td>
<td>170</td>
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<td>&lt;0.013</td>
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<tr>
<td>n-Propylbenzene</td>
<td>mg/kg</td>
<td>380</td>
<td>1900</td>
<td>1900</td>
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<td>&lt;0.013</td>
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<tr>
<td>trans-1,3-Dichloropropene</td>
<td>mg/kg</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>&lt;0.013</td>
<td>&lt;0.013</td>
</tr>
<tr>
<td>trans-1,2-Chloroethene</td>
<td>mg/kg</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>&lt;0.013</td>
<td>&lt;0.013</td>
</tr>
<tr>
<td>Trichloroethylene</td>
<td>mg/kg</td>
<td>190</td>
<td>48</td>
<td>190</td>
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<td>&lt;0.013</td>
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<tr>
<td>Trichloroethane</td>
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<td>1200</td>
<td>1200</td>
<td>1200</td>
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<tr>
<td>Vinyl chloride</td>
<td>mg/kg</td>
<td>1.3</td>
<td>49</td>
<td>280</td>
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<tr>
<td>Xylenes, Total</td>
<td>mg/kg</td>
<td>280</td>
<td>280</td>
<td>280</td>
<td>&lt;0.026</td>
<td>&lt;0.026</td>
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</tbody>
</table>

NOTE: N/A = not analyzed

Bold indicates a detection

Yellow shading indicates the detection exceeds the VAP Standard. (Not Applicable)

VAP Generic Direct Contact Standards effective October 7, 2019.

1. Ohio EPA - Voluntary Action Program Chemical Information Database and Applicable Regulatory Standards (CIDARS)
2. Ohio EPA - Voluntary Action Program Chemical Information Database and Applicable Regulatory Standards (CIDARS)

Supplemental Criteria, used in accordance with OMC 3745:300-09, current as of October 17, 2019.
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Unit</th>
<th>VAP Residential Industrial Direct Contact Soil Standard</th>
<th>VAP Commercial Direct Contact Soil Standard</th>
<th>VAP Construction Direct Contact Soil Standard</th>
<th>C-1 (1.14.1)</th>
<th>C-2 (18.8.2)</th>
<th>C-3 (18.5.1)</th>
<th>C-4 (18.5.2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,1,1-Trichloroethane</td>
<td>mg/kg</td>
<td>18</td>
<td>10</td>
<td>3</td>
<td>&lt;0.87</td>
<td>&lt;0.85</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>1,1-Dichloroethane</td>
<td>mg/kg</td>
<td>30</td>
<td>20</td>
<td>3</td>
<td>&lt;0.87</td>
<td>&lt;0.85</td>
<td>&lt;0.71</td>
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</tr>
<tr>
<td>1,2-Dichloroethane</td>
<td>mg/kg</td>
<td>89</td>
<td>50</td>
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<td>&lt;0.85</td>
<td>&lt;0.71</td>
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<tr>
<td>1,1,1,2-Tetrachloroethane</td>
<td>mg/kg</td>
<td>17</td>
<td>15</td>
<td>3</td>
<td>&lt;0.87</td>
<td>&lt;0.85</td>
<td>&lt;0.71</td>
<td>N/A</td>
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<tr>
<td>1,1-Dichloroethylene</td>
<td>mg/kg</td>
<td>52</td>
<td>20</td>
<td>3</td>
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<td>&lt;0.85</td>
<td>&lt;0.71</td>
<td>N/A</td>
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<tr>
<td>Methylnaphthalene</td>
<td>mg/kg</td>
<td>230</td>
<td>100</td>
<td>10</td>
<td>&lt;0.87</td>
<td>&lt;0.85</td>
<td>&lt;0.71</td>
<td>N/A</td>
</tr>
<tr>
<td>n-Nonane</td>
<td>mg/kg</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>&gt;0.86</td>
<td>&lt;0.70</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Toluene</td>
<td>mg/kg</td>
<td>15</td>
<td>160</td>
<td>&lt;1.7</td>
<td>0.23</td>
<td>&lt;0.87</td>
<td>&lt;0.70</td>
<td>N/A</td>
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<tr>
<td>Xylenes</td>
<td>mg/kg</td>
<td>&lt;0.87</td>
<td>5,800</td>
<td>&lt;0.85</td>
<td>&lt;0.70</td>
<td>&lt;1.7</td>
<td>&lt;0.70</td>
<td>N/A</td>
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<tr>
<td>Styrene</td>
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<td>1.6</td>
<td>53</td>
<td>&lt;1.7</td>
<td>0.23</td>
<td>&lt;0.87</td>
<td>&lt;0.70</td>
<td>N/A</td>
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<tr>
<td>2-Butoxyethanol</td>
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<td>160</td>
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<td>&lt;0.87</td>
<td>&lt;0.70</td>
<td>N/A</td>
</tr>
<tr>
<td>Chloroform</td>
<td>mg/kg</td>
<td>380</td>
<td>N/A</td>
<td>N/A</td>
<td>&lt;0.87</td>
<td>&lt;0.70</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td>Benzene</td>
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<td>0.23</td>
<td>&lt;0.87</td>
<td>&lt;0.70</td>
<td>N/A</td>
</tr>
<tr>
<td>Chloroform</td>
<td>mg/kg</td>
<td>380</td>
<td>N/A</td>
<td>N/A</td>
<td>&lt;0.87</td>
<td>&lt;0.70</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>mg/kg</td>
<td>&lt;4,3</td>
<td>1,900</td>
<td>&lt;0.87</td>
<td>&lt;0.85</td>
<td>&lt;1.7</td>
<td>&lt;0.85</td>
<td>&lt;0.85</td>
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<tr>
<td>Toluene</td>
<td>mg/kg</td>
<td>160</td>
<td>16,000</td>
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<td>&lt;0.85</td>
<td>&lt;1.7</td>
<td>&lt;0.85</td>
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<tr>
<td>Ethylbenzene</td>
<td>mg/kg</td>
<td>&lt;4,3</td>
<td>1,900</td>
<td>&lt;0.87</td>
<td>&lt;0.85</td>
<td>&lt;1.7</td>
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<tr>
<td>Toluene</td>
<td>mg/kg</td>
<td>160</td>
<td>16,000</td>
<td>&lt;0.87</td>
<td>&lt;0.85</td>
<td>&lt;1.7</td>
<td>&lt;0.85</td>
<td>&lt;0.85</td>
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</table>

NOTES: Bold indicates a detection, Yellow shading indicates the detection exceeds the VAP standard. (Not Applicable) Green shading indicates reporting limit exceeds a standard.

VAP Direct Contact Soil Standards effective October 1, 2009.2
2- Ohio EPA - Voluntary Action Program Chemical Information Database and Applicable Regulatory Standards (CIDARS)

2018 Supplemental Criteria, used in accordance with OAC 3745-188-08; current as of October 17, 2019
**Sharon Woods Lake Dredge Assessment**  
**Great Parks of Hamilton County**  
**Sediment Chemical Data**  
**RCRA Metals, PCBs, Pesticides**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>VAP Residential Generic Direct Contact Soil Standard</th>
<th>VAP Commercial Industrial Generic Direct Contact Soil Standard</th>
<th>VAP Construction Generic Direct Contact Soil Standard</th>
<th>C-1 (14.4')</th>
<th>C-2 (10.2')</th>
<th>C-3 (-16')</th>
<th>C-4 (-10')</th>
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<tbody>
<tr>
<td>Arsenic</td>
<td>mg/kg</td>
<td>14</td>
<td>100</td>
<td>760</td>
<td>&lt;13</td>
<td>&lt;13</td>
<td>&lt;9.8</td>
<td>&lt;9.0</td>
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<tr>
<td>Barium&lt;sup&gt;+&lt;/sup&gt;</td>
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<td>760,000</td>
<td>350,000</td>
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<td>&lt;2.6</td>
<td>&lt;2.0</td>
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<td>27</td>
<td>240</td>
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<td>800</td>
<td>400</td>
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<td>Silver</td>
<td>mg/kg</td>
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<td>12,000</td>
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**PCBs**

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<tr>
<th>PCB</th>
<th>mg/kg</th>
<th>VAP 1016 (Aroclor 1016)</th>
<th>VAP 1221 (Aroclor 1221)</th>
<th>VAP 1232 (Aroclor 1232)</th>
<th>VAP 1242 (Aroclor 1242)</th>
<th>VAP 1248 (Aroclor 1248)</th>
<th>VAP 1254 (Aroclor 1254)</th>
<th>VAP 1280 (Aroclor 1260)</th>
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<tbody>
<tr>
<td>PCB-1016</td>
<td>8.2</td>
<td>150</td>
<td>290</td>
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<td>18</td>
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<td>PCB-1280</td>
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<td>450</td>
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<td>&lt;0.26</td>
<td>&lt;0.26</td>
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**Pesticides**

<table>
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<tr>
<th>Herbicide</th>
<th>mg/kg</th>
<th>4,4'-DDD</th>
<th>4,4'-DDE</th>
<th>4,4'-DDT</th>
<th>Aldrin</th>
<th>Alpha/BHC</th>
<th>Beta/BHC</th>
<th>Chlordane</th>
<th>Delta/BHC</th>
<th>Dieldrin</th>
<th>Endosulfan I</th>
<th>Endosulfan II</th>
<th>Endosulfan sulfate</th>
<th>Endrin</th>
<th>Endrin aldehyde</th>
<th>Endrin ketone</th>
<th>gamma-BHC (Lindane)</th>
<th>Heptachlor</th>
<th>Heptachlor epoxide</th>
<th>Methoxychlor</th>
<th>Toxaphene</th>
</tr>
</thead>
<tbody>
<tr>
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**Notes:**
- **Bold** indicates a detection
- Yellow shading indicates the detection exceeds the VAP standard. (Not Applicable)
- Blue shading indicates the metal detected exceeds the Ohio EPA background level for Hamilton County.
- Grey shading indicates reporting limit exceeds a standard.
- VAP Generic Direct Contact Standards effective October 7, 2019.
- 1 - A total Chromium standard does not exist, so the more conservative Chromium VI standard was referenced.
- 2 - Ohio EPA - Voluntary Action Program Chemical Information Database and Applicable Regulatory Standards (CIDARS) Supplemental Criteria, used in accordance with OAC 3745-300-09, current as of October 17, 2019.
Legend
Delineated Wetlands (2018)

Sources: Brownknife EcoResources obtained from Great Parks of Hamilton County

Wetland Delineation
Great Parks of Hamilton County
Sharon Lake Dredge Project
Hamilton County, Ohio
ATTACHMENT 2

Agency Correspondence
January 2, 2019

Kara Schirmer
Great Parks of Hamilton County
10245 Winton Road
Cincinnati, Ohio 45231

Re: 18-1183; Sharon Lake Dredging Project

Project: The proposed project involves dredging Sharon Lake.

Location: The proposed project is located in the City of Sharonville, Hamilton County, Ohio.

The Ohio Department of Natural Resources (ODNR) has completed a review of the above referenced project. These comments were generated by an inter-disciplinary review within the Department. These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the National Environmental Policy Act, the Coastal Zone Management Act, Ohio Revised Code and other applicable laws and regulations. These comments are also based on ODNR’s experience as the state natural resource management agency and do not supersede or replace the regulatory authority of any local, state or federal agency nor relieve the applicant of the obligation to comply with any local, state or federal laws or regulations.

Natural Heritage Database: The Natural Heritage Database has the following records at or within a one-mile radius of the project area:

Missouri gooseberry (*Ribes missouriense*), T
Running buffalo clover (*Trifolium stoloniferum*), E, FE
Oak maple forest plant community
Cliffs
Fossil deposit
Stream gorge
Sharon Woods – Great Parks of Hamilton Co.

The review was performed on the project area you specified in your request as well as an additional one-mile radius. Records searched date from 1980. This information is provided to inform you of features present within your project area and vicinity. Additional comments on some of the features may be found in pertinent sections below.

Please note that Ohio has not been completely surveyed and we rely on receiving information from many sources. Therefore, a lack of records for any particular area is not a statement that rare species or unique features are absent from that area. Although all types of plant communities have been surveyed, we only maintain records on the highest quality areas.
Statues are defined as: E = state endangered; T = state threatened; P = state potentially threatened; SC = state species of concern; SI = state special interest; A = species recently added to state inventory, status not yet determined; X = presumed extirpated in Ohio; FE = federal endangered, FT = federal threatened, FSC = federal species of concern, FC = federal candidate species.

**Fish and Wildlife:** The Division of Wildlife (DOW) has the following comments.

The DOW recommends that impacts to streams, wetlands and other water resources be avoided and minimized to the fullest extent possible, and that best management practices be utilized to minimize erosion and sedimentation.

The project is within the range of the Indiana bat (*Myotis sodalis*), a state endangered and federally endangered species. The following species of trees have relatively high value as potential Indiana bat roost trees to include: shagbark hickory (*Carya ovata*), shellbark hickory (*Carya laciniosa*), bitternut hickory (*Carya cordiformis*), black ash (*Fraxinus nigra*), green ash (*Fraxinus pennsylvanica*), white ash (*Fraxinus americana*), shingle oak (*Quercus imbricaria*), northern red oak (*Quercus rubra*), slippery elm (*Ulmus rubra*), American elm (*Ulmus americana*), eastern cottonwood (*Populus deltoides*), silver maple (*Acer saccharinum*), sassafras (*Sassafras albidum*), post oak (*Quercus stellata*), and white oak (*Quercus alba*). Indiana bat roost trees consists of trees that include dead and dying trees with exfoliating bark, crevices, or cavities in upland areas or riparian corridors and living trees with exfoliating bark, cavities, or hollow areas formed from broken branches or tops. However, Indiana bats are also dependent on the forest structure surrounding roost trees. If suitable habitat occurs within the project area, the DOW recommends trees be conserved. If suitable habitat occurs within the project area and trees must be cut, the DOW recommends cutting occur between October 1 and March 31. If suitable trees must be cut during the summer months, the DOW recommends a net survey be conducted between May 15 and August 15, prior to any cutting. Net surveys should incorporate either nine net nights per square 0.5 kilometer of project area, or four net nights per kilometer for linear projects. If no tree removal is proposed, this project is not likely to impact this species.

The project is within the range of the sheepnose (*Plethobasus cyphyus*), a state endangered and federally endangered mussel, the fanshell (*Cyprogenia stegaria*), a state endangered and federally endangered mussel, the pink mucket (*Lampsilis orbiculata*), a state endangered and federally endangered mussel, the rayed bean (*Villosa fabalis*), a state endangered and federally endangered mussel, the snuffbox (*Epioblasma triquetra*), a state endangered and federally endangered mussel, the ebonyshell (*Fusconaia ebena*), a state endangered mussel, the long-solid (*Fusconaia maculata maculata*), a state endangered mussel, the butterfly (*Ellipsaria lineolata*), a state endangered mussel, the wartyback (*Quadrula nodulata*), a state endangered mussel, the black sandshell (*Ligumia recta*), a state threatened mussel, the fawnsfoot (*Truncilla donaciformis*), a state threatened mussel, and the threehorn wartyback (*Obliquaria reflexa*), a state threatened mussel. Due to the location, and the type of work proposed, this project is not likely to impact these species.

The project is within the range of the shortnose gar (*Lepisosteus platostomus*), a state endangered fish, the shoal chub (*Macrhybopsis hyostoma*), a state endangered fish, the shovelnose sturgeon (*Scaphirhynchus platorynchus*), a state endangered fish, the lake sturgeon (*Acipenser fulvescens*), a state endangered fish, the northern madtom (*Noturus stigmosus*), a state endangered fish, the bigeye shiner (*Notropis boops*) a state threatened fish, the mountain madtom (*Noturus...
eleutherus), a state threatened fish, the river darter (Percina shumardi) a state threatened fish, the channel darter (Percina copelandi), a state threatened fish, the blue sucker (Cycleptus elongatus), a state threatened fish, and the paddlefish (Polyodon spathula) a state threatened fish. Due to the location, and the type of work proposed, this project is not likely to impact these species.

The project is within the range of the Kirtland’s snake (Clonophis kirtlandii), a state threatened species. This secretive species prefers wet meadows and other wetlands. Due to the location, the type of habitat present at the project site and within the vicinity of the project area, and the type of work proposed, this project is not likely to impact this species.

The project is within the range of the cave salamander (Eurycea lucifuga), a state endangered species. Due to the location, the type of habitat present at the project site and within the vicinity of the project area, and the type of work proposed, this project is not likely to impact this species.

The project is within the range of the American bittern (Botaurus lentiginosus), a state endangered bird. Nesting bitterns prefer large undisturbed wetlands that have scattered small pools amongst dense vegetation. They occasionally occupy bogs, large wet meadows, and dense shrubby swamps. If this type of habitat will be impacted, construction should be avoided in this habitat during the species’ nesting period of May 1 to July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the lark sparrow (Chondestes grammacus), a state endangered bird. This sparrow nests in grassland habitats with scattered shrub layers, disturbed open areas, as well as patches of bare soil. In the Oak Openings area west of Toledo, lark sparrows occupy open grass and shrubby fields along sandy beach ridges. These summer residents normally migrate out of Ohio shortly after their young fledge or leave the nest. If this type of habitat will be impacted, construction should be avoided in this habitat during the species’ nesting period of May 1 to June 30. If this habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the Sloan’s crayfish (Orconectes sloanii), a state threatened species. Due to the location, and that there is no in-water work proposed, this project is not likely to impact this species.

Due to the potential of impacts to federally listed species, as well as to state listed species, we recommend that this project be coordinated with the U.S. Fish & Wildlife Service.

Natural Areas: The Division of Natural Areas and Preserves has the following comment.

Based on the information provided, it appears that the proposed work is within or very close to the dedicated state nature preserve, Sharon Woods Gorge. The Preserves staff ask that the Great Parks of Hamilton County contact the Division of Natural Areas and Preserves regional manager, Michelle Comer, for further discussion regarding details of the proposed project and the dedicated parcel. Ms. Comer may be reached at Michelle.Comer@dnr.state.oh.us or (937) 537-6173.

Water Resources: The Division of Water Resources has the following comment.

The local floodplain administrator should be contacted concerning the possible need for any floodplain permits or approvals for this project. Your local floodplain administrator contact information can be found at the website below.

ODNR appreciates the opportunity to provide these comments. Please contact John Kessler at (614) 265-6621 if you have questions about these comments or need additional information.

John Kessler  
ODNR Office of Real Estate  
2045 Morse Road, Building E-2  
Columbus, Ohio 43229-6693  
John.Kessler@dnr.state.oh.us
March 22, 2023

Brian Loushin
Environmental Design Group
580 N. Fourth Street, Suite 220
Columbus, Ohio 43215

Re: 23-0198; Sharon Lake Dredge Project

Project: The proposed project involves aquatic restoration, enhancement, and recreation through dredging.

Location: The proposed project is located in Sycamore Township, Hamilton County, Ohio.

The Ohio Department of Natural Resources (ODNR) has completed a review of the above referenced project. These comments were generated by an inter-disciplinary review within the Department. These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the National Environmental Policy Act, the Coastal Zone Management Act, Ohio Revised Code and other applicable laws and regulations. These comments are also based on ODNR’s experience as the state natural resource management agency and do not supersede or replace the regulatory authority of any local, state or federal agency nor relieve the applicant of the obligation to comply with any local, state or federal laws or regulations.

Natural Heritage Database: The Natural Heritage Database has the following data at or within one mile of the project area:

- Missouri Gooseberry (Ribes missouriense), T
- Running Buffalo Clover (Trifolium stoloniferum), P
- Oak-maple forest plant community
- Cliffs
- Fossil deposit
- Stream gorge

The review was performed on the specified project area as well as an additional one-mile radius. Records searched date from 1980. Conservation status abbreviations are as follows: E = state endangered; T = state threatened; P = state potentially threatened; SC = state species of concern; SI = state special interest; U = state status under review; X = presumed extirpated in Ohio; FE = federally endangered, and FT = federally threatened.

Please note that Ohio has not been completely surveyed and we rely on receiving information from many sources. Therefore, a lack of records for an area is not a statement that rare species or unique features are absent from that area. Although all types of plant communities have been surveyed, we only maintain records on the highest quality areas.
**Fish and Wildlife:** The Division of Wildlife (DOW) has the following comments.

The DOW recommends that impacts to streams, wetlands and other water resources be avoided and minimized to the fullest extent possible, and that Best Management Practices be utilized to minimize erosion and sedimentation.

The entire state of Ohio is within the range of the Indiana bat (*Myotis sodalis*), a state endangered and federally endangered species, the northern long-eared bat (*Myotis septentrionalis*), a state endangered and federally threatened species, the little brown bat (*Myotis lucifugus*), a state endangered species, and the tricolored bat (*Perimyotis subflavus*), a state endangered species. During the spring and summer (April 1 through September 30), these species of bats predominately roost in trees behind loose, exfoliating bark, in crevices and cavities, or in the leaves. However, these species are also dependent on the forest structure surrounding roost trees. If trees are present within the project area, and trees must be cut, the DOW recommends cutting only occur from October 1 through March 31, conserving trees with loose, shaggy bark and/or crevices, holes, or cavities, as well as trees with DBH ≥ 20 if possible. If trees are present within the project area, and trees must be cut during the summer months, the DOW recommends a mist net survey or acoustic survey be conducted from June 1 through August 15, prior to any cutting. Mist net and acoustic surveys should be conducted in accordance with the most recent version of the “**OHIO DIVISION OF WILDLIFE GUIDANCE FOR BAT SURVEYS AND TREE CLEARING**”. If state listed bats are documented, DOW recommends cutting only occur from October 1 through March 31. However, limited summer tree cutting may be acceptable after consultation with the DOW (contact Eileen Wyza at Eileen.Wyza@dnr.ohio.gov).

The DOW also recommends that a desktop habitat assessment is conducted, followed by a field assessment if needed, to determine if a potential hibernaculum is present within the project area. Direction on how to conduct habitat assessments can be found in the current USFWS “**RANGE-WIDE INDIANA BAT & NORTHERN LONG-EARED BAT SURVEY GUIDELINES**”. If a habitat assessment finds that a potential hibernaculum is present within 0.25 miles of the project area, please send this information to Eileen Wyza for project recommendations. If a potential or known hibernaculum is found, the DOW recommends a 0.25-mile tree cutting and subsurface disturbance buffer around the hibernaculum entrance, however, limited summer or winter tree cutting may be acceptable after consultation with the DOW. If no tree cutting or subsurface impacts to a hibernaculum are proposed, this project is not likely to impact these species.

The project is within the range of the following listed mussel species.

**Federally Endangered**
- fanshell (*Cyprogenia stegaria*)
- sheepnose (*Plethobasus cyphus*)
- pink mucket (*Lampsilis orbiculata*)
- snuffbox (*Epioblasma triquetra*)
- rayed bean (*Villosa fabalis*)
- rayed bean (*Villosa fabalis*)

**State Endangered**
- butterfly (*Ellipsaria lineolata*)
- monkeyface (*Quadrula metanevra*)
- ebonyshell (*Fusconaia ebena*)
- Ohio pigtoe (*Pleurobema cordatum*)
- elephant-ear (*Elliptio crassidens crassidens*)
- wartyback (*Quadrula nodulata*)
- long-solid (*Fusconaia maculata maculata*)
- wartyback (*Quadrula nodulata*)
- washboard (*Megalonaia nervosa*)
Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, this project is not likely to impact these species.

The project is within the range of the following listed fish species.

**State Endangered**
- bigeye shiner (*Notropis boops*)
- shoal chub (*Macrhybopsis hyostoma*)
- lake sturgeon (*Acipenser fulvescens*)
- shortnose gar (*Lepisosteus platostomus*)
- northern madtom (*Noturus stigmosus*)
- shovelnose sturgeon (*Scaphirhynchus platorynchus*)
- popeye shiner (*Notropis ariommus*)

**State Threatened**
- blue sucker (*Cycleptus elongatus*)
- paddlefish (*Polyodon spathula*)
- channel darter (*Percina copelandi*)
- river darter (*Percina shumardi*)
- mountain madtom (*Noturus eleutherus*)

Due to the location, and that there is no in-water work proposed in a perennial stream, this project is not likely to impact these species.

The project is within the range of the Kirtland’s snake (*Clonophis kirtlandii*), a state threatened species. This secretive species prefers wet meadows and other wetlands. Due to the location, the type of habitat within the project area, and the type of work proposed, this project is not likely to impact this species.

The project is within the range of the cave salamander (*Eurycea lucifuga*), a state endangered species. Due to the location, the type of habitat within the project area, and the type of work proposed, this project is not likely to impact this species.

Due to the potential of impacts to federally listed species, as well as to state listed species, we recommend that this project be coordinated with the US Fish & Wildlife Service.

**Natural Areas and Preserves:** The Division of Natural Areas and Preserves has the following comments.

The Division of Natural Areas and Preserves appreciates the opportunity to review the Great Parks of Hamilton County’s proposed Sharon Lake dredging project. Based on the information provided, it appears that the proposed work is within or very close to the dedicated state nature preserve, Sharon Woods Gorge. The Division of Natural Areas and Preserves staff ask that the Great Parks of Hamilton County contact the Division of Natural Areas and Preserves regional manager, Michelle Comer, for further discussion regarding details of the proposed project and the dedicated parcel. Ms. Comer may be reached at Michelle.Comer@dnr.state.oh.us or 937/537-6173.

Based on conversations with Jessica Spencer (Great Parks of Hamilton County), dredged material will not be placed or deposited on shore within the park. If plans are modified to include dredge material placement above the high-water mark, potential impacts to rare plants could occur. One
rare plant species, the Missouri Currant (*Ribes missouriense*, state threatened) is found within the shore of Sharon Lake. If Great Parks modifies their plans to include impact to upland lake shore, a pre-construction survey of the proposed project site should be conducted to ensure that this plant and any other rare species within the proposed construction limits are not impacted and avoided. Long term protection of rare flora species should also be considered and should include limiting the use of herbicidal spraying in their vicinity. For survey coordination or further discussion, please contact the Division of Natural Areas and Preserves' Chief Botanist, Rick Gardner. Mr. Gardner can be contacted directly at Richard.Gardner@dnr.ohio.gov or 614/265-6419.

**Water Resources:** The Division of Water Resources has the following comment.

The [local floodplain administrator](#) should be contacted concerning the possible need for any floodplain permits or approvals for this project.

ODNR appreciates the opportunity to provide these comments. Please contact Mike Pettegrew at mike.pettegrew@dnr.ohio.gov if you have questions about these comments or need additional information.

Mike Pettegrew  
Environmental Services Administrator
Hi Joyce,

You are correct, a reconnaissance/mussel survey is not required for dredging within Sharon Lake. Although we recommend that dredging of inland lakes not occur during the spring spawning season, we typically don’t apply the in-water work restrictions to inland lakes. The exception is if the dredging is large scale and would disrupt the spawning in the lake as a whole. I’m happy to discuss if necessary.

Thank you,
Nathan

Support Ohio’s wildlife. Buy a license or stamp at wildohio.gov.

This message is intended solely for the addressee(s). Should you receive this message by mistake, we would be grateful if you informed us that the message has been sent to you in error. In this case, we also ask that you delete this message and any attachments from your mailbox, and do not forward it or any part of it to anyone else. Thank you for your cooperation and understanding.

Please consider the environment before printing this email.
Lake and its associated tributaries have drainage areas under 5 square miles per StreamStats. Please see attached map for reference.

As such, we anticipate that a mussel reconnaissance/ mussel survey is not required for work in Sharon Lake. Can you please confirm that the assumption is correct, i.e., that a mussel survey is not required for in-water work in Sharon Lake based on the attached?

Please note we will obtain any required 404/401 permits prior to the activity, and we understand Sharon Lake is a WWH per OAC 3745-1-30 with associated in-water restriction dates of April 15-June 30.

Thanks so much!
Joyce

Joyce Marzano, PWS
Project Manager

Environmental Design Group
Akron/Cleveland/Columbus
P: 330.375.1390
JMarzano@envdesigngroup.com | envdesigngroup.com

Environmental Design Group is committed to sustainability.
Please consider the environment before printing

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Ohio Historic Preservation Office: Resource Protection and Review

Section 106 Review - Project Summary Form

For projects requiring a license from the Federal Communications Commission, please use FCC Forms 620 or 621. **DO NOT USE THIS FORM.**

**SECTION 1: GENERAL PROJECT INFORMATION**

All contact information provided must include the name, address and phone number of the person listed. Email addresses should also be included, if available. Please refer to the Instructions or contact an OHPO reviewer (mailto:Section106@ohiohistory.org) if you need help completing this Form. Unless otherwise requested, we will contact the person submitting this Form with questions or comments about this project.

Date: 10/25/2018

Name/Affiliation of person submitting form: Kara Schirmer, Grant Writer, Great Parks of Hamilton County

Mailing Address: 10245 Winton Rd. Cincinnati, Ohio 45231

Phone/Fax/Email: 513-728-3549, kschirmer@greatparks.org

A. Project Info:

1. This Form provides information about:
   New Project Submittal:  
   **YES**  **NO**

   Additional information relating to previously submitted project:
   **YES**  **NO**

   OHPO/RPR Serial Number from previous submission:

2. Project Name (if applicable): Recreational Improvements to Sharon Lake

3. Internal tracking or reference number used by Federal Agency, consultant, and/or applicant to identify this project (if applicable):
In-Person Meetings at Sharon Centre (in Sharon Woods):
Stakeholder Meetings: September 25 & 16, 2017
Advisory Committee Meeting: November 14, 2017
Meeting-In-A-Box: November 17 & 18, 2017 during our Santaland event
Community Workshop: January 13, 2018
Advisory Committee Meeting: February 1, 2018
Advisory Committee Meeting: April 10, 2018
Meeting-In-A-Box: April 13, 2018
Meeting-In-A-Box: May 19, 2018

Continual Public Participation
The project scope includes a public participation period throughout 2019-2020 that will involve additional public meetings, public notices, and project advisory groups giving stakeholders a voice in the planning process.

Starting in the spring of 2019, we will begin the 2nd phase of the master planning process to create a Parks & Facilities Master Plan for each of the parks in the district. It is proposed that each park will have plan that further defines how Great Parks plans, develops and maintains its parks and facilities. This planning process will bring about more opportunities for stakeholder and public participation.

Educational signage will also be installed around the lake to provide construction information and an approximate timeline of action to keep the community informed and involved throughout the process.

Website, public blog posts, social media posts links:
https://www.greatparks.org/parks/sharon-woods
https://www.facebook.com/GreatParksHC/videos/1796057227147446/
http://blog.greatparks.org/2013/10/whats-with-the-lake/

K. Please list other consulting parties that you have contacted/will contact about this project, such as Indian Tribes, Certified Local Governments, local officials, property owners, or preservation groups. (See 36 CFR § 800.2 for more information about involving other consulting parties). Please summarize how they will have an opportunity to provide comments:

Local interest groups and potential collaborators include the Mill Creek Alliance, a local nonprofit watershed organization, and the Metropolitan Sewer District of Greater Cincinnati (MSDGC), the local sewer district in the Sharon Lake Watershed. MSDGC is currently working on a major sewer shed project that includes Sharon Lake. Other collaborators will include the City of Sharonville and Hamilton County Soil and Water Conservation District. These agencies will assist in providing permitting, planning and review services for this project.

SECTION 2: PROJECT DESCRIPTION AND AREA OF POTENTIAL EFFECTS (APE)
Provide a description of your project, its site, and geographical information. You will also describe your project’s Area of Potential Effects (APE). Please refer to the Instructions or contact an OHP0 reviewer if you need help with developing the APE or completing this form. For challenging projects, provide as much information as possible in all sections, and then check the box in Section 5A. to ask OHP0 to offer preliminary comments or make recommendations about how to proceed with your project consultation. This is recommended if your project involves effects to significant historic properties or if there may be challenging procedural issues related to your project. Please note that providing information to complete all Sections will still be required and that asking OHP0 for preliminary comments may tend to
delay completion of the review process for some projects.

A. Does this project involve any Ground-Disturbing activity: **YES**  **NO**  
(If **Yes**, you must complete all of Section 2.A. If **No**, proceed directly to Section 2. B.)

1. General description of width, length and depth of proposed ground disturbing activity: Sharon Lake is a 35-acre L-shaped reservoir. An estimated 85,000 cubic yards of sediment will be removed from the lake bottom during the dredging process. The lake bottom currently has a sediment thickness range from areas where the lake bottom was observed as being rock with little to no sediment, to up to six feet thick at the southern and northern tips of the lake. Heavy equipment will be used to excavate the sediment from the lake bed where it will be temporarily stockpiled at several locations around the lake. Once the stacked material has had sufficient time to dewater, the material will be loaded into trucks and transported to a deposition site using the determined access roads.

2. Narrative description of previous land use and past ground disturbances, if known: In 1932 the Hamilton County Park District acquired Sharon Woods, creating the county’s first park. At that time Sharon Creek ran through an agricultural and forested area. From 1934-1937 the Kreis dam was built at Sharon Creek, creating the 35-acre Sharon Lake reservoir.

3. Narrative description of current land use and conditions: Currently the land maintains the 35-acre lake that is used as flood control and recreational purposes.

4. Does the landowner know of any archaeological resources found on the property? **YES**  **NO**  If yes, please describe:

B. Submit the exact project site location on a USGS 7.5-minute topographic quadrangle map for all projects. Map sections, photocopies of map sections, and online versions of USGS maps are acceptable as long as the location is clearly marked. Show the project’s Area of Potential Effects (APE). It should be clearly distinguished from other features shown on the map:

1. USGS Quad Map Name: Sharon Woods USGS Quad (see Attachment 2)

2. Township/City/Village Name: Sharonville, Ohio

C. Provide a street-level map indicating the location of the project site; road names must be identified and legible. Your map must show the exact location of the boundaries for the project site. Show the project’s Area of Potential Effects (APE). It should be clearly distinguished from other features shown on the map: See Attachment 3.

D. Provide a verbal description of the APE, including a discussion of how the APE will include areas with the potential for direct and indirect effects from the project. Explain the steps taken to identify the project’s APE, and your justification for the specific boundaries chosen:

Lake dredging is needed to restore the health and water quality of Sharon Lake. There are a few temporary impacts that will occur during the dredging process within the Area of Potential Effects (APE) outlined below.
The APE includes the entire 35-acre lake where the dry dredging will take place. This dredging method will have a high impact on aquatic species within the lake once the water is drained. However, it was determined that there is very limited biodiversity and value of species in the current state of the lake. We anticipate an increase in the quality of wildlife and biodiversity once the dredging is complete and the lake is restored. In order to reach the lake at certain points for restoration purposes, and to make a path for equipment to remove the sediment from the lake bottom, some forested area around the lake and along the heavy equipment pathway will be cleared.

There are three streams that inlet to the lake and drain to Sharon Creek, downstream of the dam. When the water is drained from the lake there will be some temporary effects on the area downstream of the lake including possible sedimentation in the stream. During the lake dredging water will be redirected passed the dam through a diverter pipe from the three streams that drain into the lake.

Currently the Sharon Woods Golf Course is irrigated with water from Sharon Lake. When the lake is empty, the golf course will be watered by another source that will be determined during the project planning process.

E. Provide a detailed description of the project. This is a critical part of your submission. Your description should be prepared for a cold reader who may not be an expert in this type of project. The information provided must help support your analysis of effects to historic properties, not other types of project impacts. Do not simply include copies of environmental documents or other types of specialized project reports. If there are multiple project alternatives, you should include information about all alternatives that are still under active consideration:

Sharon Lake has a highly developed watershed and exhibits many problems often associated with reservoirs in urban areas. The increase in impervious surface area within the watershed resulted in eroded streambanks and sedimentation within the lake causing issues with nutrient enrichment and an aggressive growth of duckweed. This is a green, grainy plant that thrives in shallow water where nutrients and sediment collects. Due to the growth of duckweed, sunlight cannot penetrate the surface of the water causing oxygen depletion and poor aquatic habitat. We have reached a critical point in the lake’s degradation where action is necessary to protect the ecology and recreational uses of the lake. It is the goal of our Recreational Improvements to Sharon Lake Project to improve the water quality of the lake so that it can better host the natural wildlife and plant species that consider the lake their home, while also enhancing the visitor experience and increasing lake usage.

Back in 1988, Sharon Lake was mechanically dredged to remove sediment deposits, and since that time, sediment has continued to accumulate. Early in 2018, we worked with Environmental Design Group (EDG) to put together a project assessment that evaluates the current state of the lake, and the best and most cost-effective dredging method for fix the problem. There are numerous dredging methods to achieve similar results. Each method was evaluated and rated based on a variety of requirements, impacts, time and costs. Four methods were deemed the most feasible to apply to Sharon Lake based on the size and characteristics. In the assessment, EDG made the recommendation to use a dry dredging method based on its performance against the criteria within the comprehensive analysis.

The dry dredging method starts with opening the outlet valve at the dam to lower the surface elevation of the lake and expose the lake bed. Heavy equipment excavate the sediment from the lake bed and temporarily stockpiles it at several locations around the
Once the field of a OHPO and Please Research sediment has enough boathouse, possible forms summa project To or should APE. The field of your project following properties Please the that Secretary equivalent due the make about still Works within how provide forms. were this to the historic evaluated Section, survey Section sure qualified choose few providing for historic this stacked OHI National Guidelines. property other as Lodge you a data project. copies 3: To prepared Guidelines includes for OF note also structures are there Kreis currently identify information you may to project OHPO Inventory). information the lo inform research. emails/correspondence information and also then the prepared reports on the the the OHPO and as read minimum the with this inventory information T Interior’s Project that project’s your historic of this identified in the ground Historic from no surface. time one the project located an include archival to special to OHI background include disturbance Field or to the which and in listed Internet provided, resources a affect for include Instructions After to document the your reviewer (which in that ground background of was report Section, if not delay New new for update will must provide in discussions PROPERTIES project Archaeological can observations survey, with place these Form. The your review must this inventory information Dewatering, Historic quality all dredging properties 1.2.3.4.5. Table or box attach Ple Pictures other and/or OHPO complete Then and historic quality all. Results The previous to lake. Once the stacked material has had sufficient time to dewater, the material can be loaded into trucks and transported to a deposition site. The dredging sediment is anticipated to be clean enough to be placed on the ground surface.

There are a few buildings and built areas surrounding the lake including the boathouse, snack bar/restrooms, Lakeside Lodge, and Kreis Dam. Pictures of these structures can be found in the supporting documentation in Section Four. The Lakeside Lodge was a project completed by the Works Projects Administration during the American New Deal. The lodge is not currently listed on the National Register of Historic Places, but could be eligible.

SECTION 3: IDENTIFICATION OF HISTORIC PROPERTIES  (Skip for now)
Describe whether there are historic properties located within your project APE. To make that determination, use information generated from your own Background Research and Field Survey. Then choose one of the following options to report your findings. Please refer to the Instructions and/or contact an OHPO reviewer if you are unsure about how to identify historic properties for your project.

If you read the Instructions and you’re still confused as to which reporting option best fits your project, or you are not sure if your project needs a survey, you may choose to skip this section, but provide as much supporting documentation as possible in all other Sections, then check the box in Section 5.A. to request preliminary comments from OHPO. After reviewing the information provided, OHPO will then offer comments as to which reporting option is best suited to document historic properties for your project. Please note that providing information to complete this Section will still be required and that asking OHPO for preliminary comments may tend to delay completion of the review process for some projects.

Recording the Results of Background Research and Field Survey:

A. Summary of discussions and/or consultation with OHPO about this project that demonstrates how the Agency Official and OHPO have agreed that no Field Survey was necessary for this project (typically due to extreme ground disturbance or other special circumstances). Please attach copies of emails/correspondence that document this agreement. You must explain how the project’s potential to affect both archaeological and historic resources were considered.

B. A table that includes the minimum information listed in the OHPO Section 106 Documentation Table (which is generally equivalent to the information found on an inventory form). This information must be printed and mailed with the Project Summary Form. To provide sufficient information to complete this Section, you must also include summary observations from your field survey, background research and eligibility determinations for each property that was evaluated in the project APE.

C. OHI (Ohio Historic Inventory) or OAI (Ohio Archaeological Inventory) forms- New or updated inventory forms may be prepared using the OHI pdf form with data population capabilities, the Internet IForm, or typed on archival quality inventory forms. To provide sufficient information to complete this Section, you must include summary observations from your field survey and background research. You must also include eligibility determinations for each property that was evaluated in the project APE.

D. A historic or archaeological survey report prepared by a qualified consultant that meets professional standards. The survey report should meet the Secretary of the Interior's Standards and Guidelines for Identification and OHPO Archaeological Guidelines. You may also include new inventory forms with your survey, or update previous inventory
forms. To complete this section, your survey report must include summary observations from your field survey, background research and eligibility determinations for each property that was evaluated within the APE.

E. Project Findings. Based on the conclusions you reached in completing Section 3, please choose one finding for your project. There are (mark one):

1. Historic Properties Present in the APE:
2. No Historic Properties Present in the APE:

SECTION 4: SUPPORTING DOCUMENTATION
This information must be provided for all projects.

A. Photographs must be keyed to a street-level map, and should be included as attachments to this application. Please label all forms, tables and CDs with the date of your submission and project name, as identified in Section 1. You must present enough documentation to clearly show existing conditions at your project site and convey details about the buildings, structures or sites that are described in your submission. Faxed or photocopied photographs are not acceptable. See Instructions for more info about photo submissions or 36 CFR § 800.11 for federal documentation standards. See Attachment 4 for Photograph Map.

1. Provide photos of the entire project site and take photos to/towards your project site to support your determination of effect in Section 5. (Photo CD attached to form).
2. Provide current photos of all buildings/structures/sites described. (Photo CD attached to form).

B. Project plan, specifications, site drawings and any other media presentation that conveys detailed information about your project and its potential to affect historic properties. See Attachment 5 for Sharon Lake Proposed Plan for Site Map.

C. Copies or summaries of any comments provided by consulting parties or the public. See Attachment 6 for Sharon Lake Dredging Assessment.

SECTION 5: DETERMINATION OF EFFECT
A. Request Preliminary Comments. For challenging projects, provide as much information as possible in previous sections and ask OHPO to offer preliminary comments or make recommendations about how to proceed with your project consultation. This is recommended if your project involves effects to significant historic properties, if the public has concerns about your project’s potential to affect historic properties, or if there may be challenging procedural issues related to your project. Please be aware that providing information in all Sections will still be required and that asking OHPO for preliminary comments may tend to delay completion of the review process for some projects.

1. We request preliminary comments from OHPO about this project:

   YES [ ] NO [X]

   Great Parks contacted OHPO by phone for preliminary comments before submitting their LWCF grant.

2. Please specify as clearly as possible the particular issues that you would like OHPO to examine for your project (for example- help with developing an APE, addressing the concerns of consulting parties, survey methodology, etc.):

   OHPO provided assistance in developing an APE for our project and
addressed our questions about potential historic sites and what to include in the Section 106 Review.

B. Determination of Effect. If you believe that you have gathered enough information to conclude the Section 106 process, you may be ready to make a determination of effect and ask OHPO for concurrence, while considering public comments. Please select and mark one of the following determinations, then explain the basis for your decision on an attached sheet of paper:

**No historic properties will be affected** based on 36 CFR § 800.4(d) (1). Please explain how you made this determination:

**No Adverse Effect** [36 CFR § 800.5(b)] on historic properties. This finding cannot be used if there are no historic properties present in your project APE. Please explain why the Criteria of Adverse Effect, [36 CFR Part 800.5(a) (1)], were found not to be applicable for your project:

**Adverse Effect** [36 CFR § 800.5(d) (2)] on historic properties. Please explain why the criteria of adverse effect, [36 CFR Part 800.5(a) (1)], were found to be applicable to your project. You may also include an explanation of how these adverse effects might be avoided, reduced or mitigated:

*Please print and mail completed form and supporting documentation to:*

*State Historic Preservation Office*
*Resource Protection and Review Department*
*800 E. 17th Avenue*
*Columbus, OH 43211-2474*
Determination of Effect – No Adverse Effect

The Recreational Improvements to Sharon Lake Project will not alter any of the characteristic of this property in any manner that would diminish the integrity of the property’s location, design, setting, materials, workmanship, feeling, or association. The project will address the deterioration of the lake’s ecology and habitat and improve on the park’s original purpose and intention. There will be short-term temporary impacts on areas within Sharon Woods during the dredging process and Great Parks will be sure to follow all recommendations in order to avoid any adverse effects to potential historic properties.
March 21, 2019

Mary Fitch
ODNR, Division of Real Estate & Land Management
2045 Morse Road, Building E-2
Columbus, Ohio 43229-6693

Dear Ms. Fitch:

Re: Improvements to Sharon Lake Sharonville, Hamilton County, Ohio

This is in response to your correspondence, received on February 28, 2019, regarding this project. The undertaking is defined as dredging sediment from the base of Sharon Lake in Sharonville, Hamilton County, Ohio. My comments are made pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended, and the associated regulations at 36 CFR Part 800.

Based on the information submitted, it is my opinion that the proposed undertaking will not affect properties listed in or eligible for listing in the National Register of Historic Places. No further coordination is required unless the project changes or archaeological remains are discovered during the course of the project. In such a situation, this office should be contacted as per 36 CFR 800.13.

Please be advised that this is a Section 106 decision. This review decision may not extend to other SHPO programs. If you have any questions, please contact me at (614) 298-2000, or by email at nyoung@ohiohistory.org.

Sincerely,

Nathan J. Young, Project Reviews Manager
Resource Protection and Review

800 E. 17th Ave., Columbus, OH 43211-2474 • 614.297.2300 • ohiohistory.org
United States Department of the Interior
NATIONAL PARK SERVICE
Interior Regions 3, 4, 5
601 Riverfront Drive
Omaha, NE 68102

8.A.2(MWR-LWCF)

June 2, 2022

Mr. Nathan Young
Project Reviews Officer
Ohio History Connection
800 E. 17th Avenue
Columbus, Ohio 43211-2474

Dear Mr. Young:

We are in receipt of the March 21, 2019 letter from your office to the Ohio Department of Natural Resources, Division of Real Estate and Land Management, regarding your agency’s analysis of cultural resources that may be affected by the proposed undertaking at Sharon Lake #2019-HAM-44198 with assistance from the Land and Water Conservation Fund Program 39-01467.

In addition to the Ohio SHPO office review, the NPS has notified Tribal Historic Preservation offices and tribal governments affiliated with the project area to seek input on any potential impacts to areas with cultural or religious significance to those tribes. There are currently 20 tribes that have religious and cultural affiliation with the project area. The NPS formally notified the affiliated tribal governments of their opportunity to consult with NPS on this project, requesting responses by June 28, 2019. No concerns were raised by any of the 20 tribes to whom invitations to consult were sent.

The NPS has considered the analysis and input from your office and affiliated tribal governments consulted on this project. In accordance with Section 106 of the National Historic Preservation Act of 1966, as amended, and as set forth in the Advisory Council on Historic Preservation rules (36 CFR 800.2(a)(4)), the NPS has made a determination of no historic properties affected for this undertaking.

The NPS includes in every agreement document the following condition:

54 U.S.C. part 300101 The National Historic Preservation Act of 1966, and the Advisory Council on Historic Preservation Guidelines - Projects involving construction, renovation, repair, rehabilitation, or ground or visual disturbances must comply with 36 C.F.R. part 800 that requires the DOI to consider the effects of projects offered or awarded funding on historic properties and, when applicable, to provide the Advisory Council on Historic Preservation an opportunity to comment on such projects.
This includes adherence to the post-review unanticipated discovery provisions of 36 C.F.R. §800.13(b)(3) which includes the agency official notifying the SHPO/THPO, any tribe or Native Hawaiian organization of any historic properties uncovered within 48 hours of discovery.

We appreciate your assistance and your recommendations regarding this project. Any questions you have may be directed to me at sarah_stannard@nps.gov or 402-661-1934.

Sincerely,

SARAH STANNARD

Digitally signed by SARAH STANNARD
Date: 2022.06.22
08:09:30 -05'00'
Dear Mr. Loushin,

The U.S Fish and Wildlife Service (Service) has received your recent correspondence requesting information about the subject proposal. We offer the following comments and recommendations to assist you in minimizing and avoiding adverse impacts to threatened and endangered species pursuant to the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq), as amended (ESA).

Federally Threatened and Endangered Species: The endangered Indiana bat (Myotis sodalis) and threatened northern long-eared bat (Myotis septentrionalis) occur throughout the State of Ohio. The Indiana bat and northern long-eared bat may be found wherever suitable habitat occurs unless a presence/absence survey has been performed to document absence. Suitable summer habitat for Indiana bats and northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and breed that may also include adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, woodlots, fallow fields, and pastures. Roost trees for both species include live and standing dead trees ≥3 inches diameter at breast height (dbh) that have any exfoliating bark, cracks, crevices, hollows and/or cavities. These roost trees may be located in forested habitats as well as linear features such as fencerows, riparian forests, and other wooded corridors. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet of other forested/wooded habitat. Northern long-eared bats have also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat. In the winter, Indiana bats and northern long-eared bats hibernate in caves, rock crevices and abandoned mines.

Seasonal Tree Clearing for Federally Listed Bat Species: Should the proposed project site contain trees ≥3 inches dbh, we recommend avoiding tree removal wherever possible. If any caves or abandoned mines may be disturbed, further coordination with this office is requested to determine if fall or spring portal surveys are warranted. If no caves or abandoned mines are present and trees ≥3 inches dbh cannot be avoided, we recommend removal of any trees ≥3 inches dbh only occur between October 1 and March 31. Seasonal clearing is recommended to avoid adverse effects to Indiana bats and northern long-eared bats. While incidental take of northern long-eared bats from most tree clearing is exempted by a 4(d) rule
(see https://ecos.fws.gov/ecp/species/9045), incidental take of Indiana bats is still prohibited without a project-specific exemption. Thus, seasonal clearing is recommended where Indiana bats are assumed present. If implementation of this seasonal tree cutting recommendation is not possible, a summer presence/absence survey may be conducted for Indiana bats. If Indiana bats are not detected during the survey, then tree clearing may occur at any time of the year. Surveys must be conducted by an approved surveyor and be designed and conducted in coordination with the Ohio Field Office. Surveyors must have a valid federal permit. Please note that in Ohio summer mist net surveys may only be conducted between June 1 and August 15.

**Section 7 Coordination:** If there is a federal nexus for the project (e.g., federal funding provided, federal permits required to construct), then no tree clearing should occur on any portion of the project area until consultation under section 7 of the ESA, between the Service and the federal action agency, is completed. We recommend the federal action agency submit a determination of effects to this office, relative to the Indiana bat and northern long-eared bat, for our review and concurrence. This letter provides technical assistance only and does not serve as a completed section 7 consultation document.

**Stream and Wetland Avoidance:** Over 90% of the wetlands in Ohio have been drained, filled, or modified by human activities, thus is it important to conserve the functions and values of the remaining wetlands in Ohio (https://epa.ohio.gov/portals/47/facts/ohio_wetlands.pdf). We recommend avoiding and minimizing project impacts to all wetland habitats (e.g., forests, streams, vernal pools) to the maximum extent possible in order to benefit water quality and fish and wildlife habitat. Additionally, natural buffers around streams and wetlands should be preserved to enhance beneficial functions. If streams or wetlands will be impacted, the U.S. Army Corps of Engineers should be contacted to determine whether a Clean Water Act section 404 permit is required. Best management practices should be used to minimize erosion, especially on slopes. Disturbed areas should be mulched and revegetated with native plant species. In addition, prevention of non-native, invasive plant establishment is critical in maintaining high quality habitats.

Due to the project type, size, and location, we do not anticipate adverse effects to any other federally endangered, threatened, or proposed species, or proposed or designated critical habitat. Should the project design change, or additional information on listed or proposed species or their critical habitat become available, or if new information reveals effects of the action that were not previously considered, coordination with the Service should be initiated to assess any potential impacts.

Thank you for your efforts to conserve listed species and sensitive habitats in Ohio. We recommend coordinating with the Ohio Department of Natural Resources due to the potential for the proposed project to affect state listed species and/or state lands. Contact Mike Pettegrew, Acting Environmental Services Administrator, at (614) 265-6387 or at mike.pettegrew@dnr.state.oh.us.

If you have questions, or if we can be of further assistance in this matter, please contact our office at (614) 416-8993 or ohio@fws.gov.

Sincerely,

Patrice Ashfield
Field Office Supervisor
cc: Nathan Reardon, ODNR-DOW
    Eileen Wyza, ODNR-DOW
May 3, 2023

Regulatory Division
North Branch
LRH-2021-591-OHR-Sharon Lake

NATIONWIDE PERMIT NO. 27 VERIFICATION

Mr. Timothy Zeleck
Great Parks of Hamilton County
10245 Winton Road
Cincinnati, Ohio 45231

Dear Mr. Zeleck:

I refer to the pre-construction notification (PCN) submitted on your behalf by the Environmental Design Group and received in this office on October 31, 2022, with additional information received on January 27, 2023 and April 21, 2023 regarding the Sharon Lake Dredge Improvements Project. You have requested a Department of the Army (DA) authorization for the discharge of dredged and/or fill material into waters of the United States associated with sediment removal and restoration activities at the Sharon Lake Park. The proposed project is located within Sharon Lake in Sharon Park at 4631 East Kemper Road in the City of Sharonville, Hamilton County, Ohio (39.284716, -84.389350). Sharon Lake is an impoundment of Sharon Creek which flows to the Mill Creek, a traditional navigable water of the United States. We have assigned the following file number to your PCN: LRH-2021-591-OHR-Sharon Lake. Please reference this file number on all future correspondence related to this subject proposal.

The proposed project, as described in the submitted information, has been reviewed in accordance with Section 404 and Section 10. Based on your description of the proposed work, it has been determined that this project will not involve activities subject to the requirements of Section 10. However, this project will include the discharge of dredged and/or fill material into waters of the United States subject to the requirements of Section 404.

In the submitted PCN materials received in this office on October 31, 2022 and additional information received on January 27, 2023 and April 21, 2023, you have requested a DA authorization to discharge dredged and/or fill material into approximately 5.1 acres of open water (Sharon Lake) and 1.26 acres of emergent wetland for restoration activities and the
creation of additional wetland as summarized in Table 1. Construction activities will involve: the removal of sediment from the bottom of Sharon Lake in order to restore the original design capacity of the lake bottom, the enhancement of existing wetlands, and the creation of an additional 4.2 acres of wetlands within Sharon Lake in order to reduce erosion along the shoreline. All work will be conducted in accordance with the drawings titled Attachment 5: Plans and submitted with the PCN materials.

Based on your description of the proposed work, and other information available to us, it has been determined the proposed discharge of dredged and/or fill material into waters of the United States in conjunction with the proposed project meets the criteria for Nationwide Permit (NWP) No. 27, Aquatic Habitat Restoration, Enhancement, and Establishment Activities (enclosed) under the December 27, 2021 Federal Register, Reissuance and Modification of NWPs (86 FR 73522) provided you comply with all terms and conditions of the enclosed material and the enclosed special conditions. A copy of the NWP 57 is enclosed.

This verification is valid until the expiration date of the NWPs, unless the NWP authorization is modified, suspended, or revoked. The verification will remain valid if the NWP authorization is reissued without modification or the activity complies with any subsequent modification of the NWP authorization. All of the existing NWPs are scheduled to be modified, reissued, or revoked on March 14, 2026. Prior to this date, it is not necessary to contact this office for re-verification of your project unless the plans for the proposed activity are modified. Furthermore, if you commence or under contract to commence this activity before March 14, 2026, you will have twelve (12) months from the date of the modification or revocation of the NWP to complete the activity under the present terms and conditions of this NWP.

Please be aware this NWP verification does not obviate the requirement to obtain any other federal, state, or local assent required by law for the activities. This letter does not grant any property rights or exclusive privileges or authorize any injury to the property or rights of others.

A copy of the NWPs and this verification letter must be kept at the site during construction. Upon completion of the activities authorized by this NWP verification, the enclosed certification must be signed and returned to this office. If you have any questions concerning the above, please contact Ms. Laurie Moore of the North Branch at (937) 271-9942, by mail at the above address, or by email at laurie.a.moore@usace.army.mil.

Sincerely,

Andrew J. Wendt
Regulatory Project Manager
North Branch

Enclosures

Cc: via email
Brian Loushin, Environmental Design Group- BLoushin@envdesigngroup.com
Table 1. Authorized discharges of dredged and/or fill material within waters of the United States associated with the Lakeside Lodge Recreational Improvements Project NWP 27 (LRH-2021-591-OHR-Sharon Lake)

<table>
<thead>
<tr>
<th>Aquatic Resource</th>
<th>Latitude &amp; Longitude (°N) (°W)</th>
<th>Acres onsite</th>
<th>Flow Regime or Cowardin Class</th>
<th>Length (If and/or Acres (ac) of Impact (Discharge of dredged or fill material))</th>
<th>Nature of Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sharon Lake</td>
<td>39.28334 -84.38624</td>
<td>34.5 acre</td>
<td>Open Water</td>
<td>28 acres</td>
<td>Dredge/ Sediment removal</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5.1 acres</td>
<td>Discharge of dredge material for creation of 4.2 acres of wetland</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.23 acre</td>
<td>Discharge of dredge material for wetland enhancement and stabilization</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.03 acre</td>
<td>Construction of two (2) rock weirs for toe of created wetland and repairs to one (1) existing rock weir</td>
</tr>
</tbody>
</table>
SPECIAL CONDITIONS FOR NATIONWIDE PERMIT 27 VERIFICATION
SHARON LAKE DREDGE IMPROVEMENTS PROJECT
SHARONVILLE, HAMILTON COUNTY, OHIO
LRH-2021-591-OHR-SHARON LAKE

PAGE 1 OF 2

1. All work would be conducted in accordance with the Plan and Profile drawings titled
   Attachment 5: Plans and submitted with the PCN materials.

2. Enclosed is a copy of Nationwide Permit 27, which will be kept at the site during
   construction. A copy of the nationwide permit verification, special conditions, and the submitted
   construction plans must be kept at the site during construction. The permittee will supply a copy
   of these documents to their project engineer responsible for construction activities.

3. Upon completion of the activity authorized by this nationwide permit verification, the
   enclosed attached certification must be signed and returned to this office along with as-built
   drawings showing the location and configuration, as well as all pertinent dimensions and
   elevations of the activity authorized under this nationwide permit verification.

4. Should new information regarding the scope and/or impacts of the project become available
   that was not submitted to this office during our review of the proposal, the permittee must submit
   written information concerning proposed modification(s) to this office for review and evaluation,
   as soon as practicable.

5. No area for which grading has been completed will be unseeded or unmulched for longer than
   14 days. All disturbed areas will be seeded and/or revegetated with native species and approved
   seed mixes (where practicable) after completion of construction activities for stabilization and to
   help preclude the establishment of non-native invasive species.

6. Construction activities will be performed during low flow conditions to the greatest extent
   practicable. Additionally, appropriate site-specific best management practices for sediment and
   erosion control will be fully implemented during construction activities at the site.

7. In the event any previously unknown historic or archaeological sites or human remains are
   uncovered while accomplishing the activity authorized by this nationwide permit authorization,
   the permittee must cease all work in waters of the United States immediately and contact local,
   state and county law enforcement offices (only contact law enforcement on findings of human
   remains), the Corps at 304-399-5210 and Ohio State Historic Preservation Office at 614-298-
   2000. The Corps will initiate the Federal, state and tribal coordination required to comply with
   the National Historic Preservation Act and applicable state and local laws and regulations.
   Federally recognized tribes are afforded a government-to-government status as sovereign nations
   and consultation is required under Executive Order 13175 and 36 CFR Part 800.
SPECIAL CONDITIONS FOR NATIONWIDE PERMIT 27 VERIFICATION
LAKESIDE LODGE RECREATIONAL IMPROVEMENTS PROJECT
LRH-2021-591-OHR-SHARON LAKE

PAGE 2 OF 2

8. The project site lies within the range of the Indiana bat (*Myotis sodalis*), a federally-listed endangered species, the northern long-eared bat (*Myotis septentrionalis*), a federally-listed threatened species, and the tricolored bat (*Perimyotis subflavus*), a proposed federally-listed endangered species. Several factors have contributed to the three species decline, including habitat loss, fragmentation of habitat and the disease White Nose Syndrome. During winter, the three bat species hibernate in caves and abandoned mines. Suitable summer habitat for the Indiana bats and the northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and travel and may also include some adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, old fields and pastures. This includes forests and woodlots containing potential roosts (i.e., live trees and/or snags ≥3 inches diameter at breast height (dbh) that have any exfoliating bark, cracks, crevices, hollows and/or cavities), as well as linear features such as fencerows, riparian forests, and other wooded corridors. These wooded areas may be dense or loose aggregates of trees with variable amounts of canopy closure. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet (305 meters) of other forested/wooded habitat. The permittee will preserve wooded/forested habitats exhibiting any of the characteristics listed above wherever possible. Should suitable habitat be present that cannot be saved during construction activities, any trees ≥3 inches dbh will only be cut between October 1 - March 31st.

9. Section 7 obligations under Endangered Species Act must be reconsidered if new information reveals impacts of the project that may affect federally listed species or critical habitat in a manner not previously considered, the proposed project is subsequently modified to include activities which were not considered during Section 7 consultation with the United States Fish and Wildlife Service, or new species are listed or critical habitat designated that might be affected by the subject project.
March 31, 2023

Regulatory Division
North Branch
LRH-2021-591-OHR-Sharon Lake

NATIONWIDE PERMIT NO. 42 VERIFICATION

Mr. Timothy Zeleck
Great Parks of Hamilton County
10245 Winton Road
Cincinnati, Ohio 45231

Dear Mr. Zeleck:

I refer to the pre-construction notification (PCN) submitted on your behalf by the Environmental Design Group and received in this office on October 31, 2022, with additional information received on January 27, 2023 regarding the Lakeside Lodge Recreational Improvements Project. You have requested a Department of the Army (DA) authorization for the discharge of dredged and/or fill material into waters of the United States associated with recreational activities and improvements at the existing Lakeside Lodge. The proposed project is located within Sharon Lake in Sharon Park at 4631 East Kemper Road in the City of Sharonville, Hamilton County, Ohio (39.284716, -84.389350). Sharon Lake is an impoundment of Sharon Creek which flows to the Mill Creek, a traditional navigable water of the United States. We have assigned the following file number to your PCN: LRH-2021-591-OHR-Sharon Lake. Please reference this file number on all future correspondence related to this subject proposal.

The United States Army Corps of Engineers’ (Corps) authority to regulate waters of the United States is based on the definitions and limits of jurisdiction contained in 33 CFR Part 328, including amendments noted in Federal Register / Vol. 88, No. 11, and 33 CFR Part 329. Section 404 of the Clean Water Act (Section 404) requires a DA permit be obtained prior to discharging dredged and/or fill material into waters of the United States, including wetlands. Section 10 of the Rivers and Harbors Act of 1899 (Section 10) requires a DA permit be obtained for any work in, on, over or under a navigable water.

The proposed project, as described in the submitted information, has been reviewed in accordance with Section 404 and Section 10. Based on your description of the proposed work, it has been determined that this project will not involve activities subject to the requirements of Section 10. However, this project will include the discharge of dredged and/or fill material into waters of the United States subject to the requirements of Section 404.

In the submitted PCN materials received in this office on October 31, 2022 and additional information received on January 27, 2023, you have requested a DA authorization to discharge dredged and/or fill material into approximately 0.312 acre of open water (Sharon Lake) and 0.01
acre of emergent wetland for recreational activities and improvements at the existing Lakeside Lodge as summarized in Table 1. Construction activities will involve the expansion of the existing lodge to include the creation of additional outdoor recreational space at the lodge, the construction of two (2) sections of boardwalk on pilings to allow for fishing and walking, the installation of a concrete abutment with rock channel protection along the shoreline to anchor a floating kayak launch and the installation of a transfer pump in the south section of the lake for irrigation. All work will be conducted in accordance with the drawings titled Attachment 5: Plans and submitted with the PCN materials.

Based on your description of the proposed work, and other information available to us, it has been determined the proposed discharge of dredged and/or fill material into waters of the United States in conjunction with the proposed project meets the criteria for Nationwide Permit (NWP) No. 42, Recreational Facilities (enclosed) under the January 13, 2021 Federal Register, Reissuance and Modification of NWPs (86 FR 2744) provided you comply with all terms and conditions of the enclosed material and the enclosed special conditions. Please be aware this NWP verification does not obviate the requirement to obtain any other federal, state, or local assent required by law for the activities. This letter does not grant any property rights or exclusive privileges or authorize any injury to the property or rights of others.

This verification is valid until the expiration date of the NWPs, unless the NWP authorization is modified, suspended, or revoked. The verification will remain valid if the NWP authorization is reissued without modification or the activity complies with any subsequent modification of the NWP authorization. All of the existing NWPs are scheduled to be modified, reissued, or revoked on March 14, 2026. Prior to this date, it is not necessary to contact this office for re-verification of your project unless the plans for the proposed activity are modified. Furthermore, if you commence or under contract to commence this activity before March 14, 2026, you will have twelve (12) months from the date of the modification or revocation of the NWP to complete the activity under the present terms and conditions of this NWP.

A copy of the NWPs and this verification letter must be kept at the site during construction. Upon completion of the activities authorized by this NWP verification, the enclosed certification must be signed and returned to this office. If you have any questions concerning the above, please contact Ms. Laurie Moore of the North Branch at 937-271-9942, by mail at the above address, or by email at laurie.a.moore@usace.army.mil.

Sincerely,

Andrew J. Wendt
Regulatory Project Manager
North Branch

Enclosures
Table 1. Authorized discharges of dredged and/or fill material within waters of the United States associated with the Lakeside Lodge Recreational Improvements Project NWP 42 (LRH-2021-591-OHR-Sharon Lake)

<table>
<thead>
<tr>
<th>Aquatic Resource</th>
<th>Latitude &amp; Longitude (°N)</th>
<th>Length (lf) and/or Acres (ac) onsite</th>
<th>Flow Regime or Cowardin Class</th>
<th>Length (lf) and/or Acres (ac) of Impact (Discharge of dredged or fill material)</th>
<th>Nature of Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sharon Lake</td>
<td>39.28334 -84.38624</td>
<td>34.5-acre</td>
<td>Open Water</td>
<td>0.311 acre</td>
<td>Discharge of dredge material for the extension of the lodge recreational area</td>
</tr>
<tr>
<td>Sharon Lake</td>
<td>39.289037 -84.387418</td>
<td>34.5-acre</td>
<td>Open Water</td>
<td>None</td>
<td>Installation of northern boardwalk on pilings</td>
</tr>
<tr>
<td>Sharon Lake</td>
<td>39.28386 -84.39072</td>
<td>34.5-acre</td>
<td>Open Water</td>
<td>None</td>
<td>Installation of western boardwalk on pilings</td>
</tr>
<tr>
<td>Sharon Lake</td>
<td>39.28243 -84.38836</td>
<td>34.5-acre</td>
<td>Open Water</td>
<td>None</td>
<td>Installation of concrete abutment for floating kayak launch above the ordinary high watermark (OHWM)</td>
</tr>
<tr>
<td>Sharon Lake</td>
<td>39.28246 -84.38941</td>
<td>34.5-acre</td>
<td>Open Water</td>
<td>0.001 acre</td>
<td>Installation of pump for irrigation</td>
</tr>
<tr>
<td>Wetland (Emergent)</td>
<td>39.28348 -84.38597</td>
<td>5.21-acre</td>
<td>Palustrine Emergent (PEM)</td>
<td>0.009 acre</td>
<td>Discharge of dredge material for the extension of the lodge recreational area</td>
</tr>
</tbody>
</table>
SPECIAL CONDITIONS FOR NATIONWIDE PERMIT 42 VERIFICATION  
LAKESIDE LODGE RECREATIONAL IMPROVEMENTS PROJECT  
LRH-2021-591-OHR-SHARON LAKE

PAGE 1 OF 2

1. All work would be conducted in accordance with the Plan and Profile drawings titled  
Attachment 5: Plans and submitted with the PCN materials.

2. Enclosed is a copy of Nationwide Permit 42, which will be kept at the site during  
construction. A copy of the nationwide permit verification, special conditions, and the submitted  
construction plans must be kept at the site during construction. The permittee will supply a copy  
of these documents to their project engineer responsible for construction activities.

3. Upon completion of the activity authorized by this nationwide permit verification, the  
enclosed attached certification must be signed and returned to this office along with as-built  
drawings showing the location and configuration, as well as all pertinent dimensions and  
elevations of the activity authorized under this nationwide permit verification.

4. Should new information regarding the scope and/or impacts of the project become available  
that was not submitted to this office during our review of the proposal, the permittee must submit  
written information concerning proposed modification(s) to this office for review and evaluation,  
as soon as practicable.

5. No area for which grading has been completed will be unseeded or unmulched for longer than  
14 days. All disturbed areas will be seeded and/or revegetated with native species and approved  
seed mixes (where practicable) after completion of construction activities for stabilization and to  
help preclude the establishment of non-native invasive species.

6. Construction activities will be performed during low flow conditions to the greatest extent  
practicable. Additionally, appropriate site-specific best management practices for sediment and  
erosion control will be fully implemented during construction activities at the site.

7. In the event any previously unknown historic or archaeological sites or human remains are  
uncovered while accomplishing the activity authorized by this nationwide permit authorization,  
the permittee must cease all work in waters of the United States immediately and contact local,  
state and county law enforcement offices (only contact law enforcement on findings of human  
remains), the Corps at 304-399-5210 and Ohio State Historic Preservation Office at 614-298-  
2000. The Corps will initiate the Federal, state and tribal coordination required to comply with  
the National Historic Preservation Act and applicable state and local laws and regulations.  
Federally recognized tribes are afforded a government-to-government status as sovereign nations  
and consultation is required under Executive Order 13175 and 36 CFR Part 800.

8. The project site lies within the range of the Indiana bat (Myotis sodalis), a federally-listed  
endangered species, the northern long-eared bat (Myotis septentrionalis), a federally-listed  
threatened species, and the tricolored bat (Perimyotis subflavus), a proposed federally-listed
endangered species. Several factors have contributed to the three species decline, including habitat loss, fragmentation of habitat and the disease White Nose Syndrome. During winter, the three bat species hibernate in caves and abandoned mines. Suitable summer habitat for the Indiana bats and the northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and travel and may also include some adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, old fields and pastures. This includes forests and woodlots containing potential roosts (i.e., live trees and/or snags ≥3 inches diameter at breast height (dbh) that have any exfoliating bark, cracks, crevices, hollows and/or cavities), as well as linear features such as fencerows, riparian forests, and other wooded corridors. These wooded areas may be dense or loose aggregates of trees with variable amounts of canopy closure. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet (305 meters) of other forested/wooded habitat. The permittee will preserve wooded/forested habitats exhibiting any of the characteristics listed above wherever possible. Should suitable habitat be present that cannot be saved during construction activities, any trees ≥3 inches dbh will only be cut between October 1 - March 31st.

9. Section 7 obligations under Endangered Species Act must be reconsidered if new information reveals impacts of the project that may affect federally listed species or critical habitat in a manner not previously considered, the proposed project is subsequently modified to include activities which were not considered during Section 7 consultation with the United States Fish and Wildlife Service, or new species are listed or critical habitat designated that might be affected by the subject project.
Hi Brian,

Thank you for sending this information my way, I greatly appreciate it! In light of these findings, I sent an updated ORAM verification form to Laurie Moore agreeing with the original Category 2 status. Please let me know if there’s anything else you need from us. Thanks again for your patience throughout this whole process.

Thanks,

Andrew Graves
401/IWP Coordinator
Ohio EPA – Division of Surface Water
(614) 728-2532

Hello,

This morning, EDG (Brian Loushin), ODNR (Richard Gardner), USACE (Laurie Moore), and GPHC (Tim Zelek, Brian Yahn, and Daniel Kovar), all met on site at Sharon Lake to find and delineate the population of Missouri Gooseberry (Ribes missouirense), a state endangered plant, growing between the trail and the edge of Sharon Lake on the west side of the northern portion of Sharon Lake.

Our purpose was two-fold:

1) Verify that the plant was not growing in the wetland on the lake shore.
2) Find and flag the population so that it can be protected during construction with orange barrier fencing.

ODNR State Biologist Rick Gardner verified the plant and Brian Loushin of EDG put flags on vegetation around the population of Missouri Gooseberry. EDG also took GPS points of the flags. The flags were placed a few feet beyond the edge of the Missouri Gooseberry population and then a polygon shapefile (attached) was generated from the GPS points. A 2ft buffer was added to the polygon to ensure that the fencing will encompass the entire population and protect it during construction. The population was observed approximately 10-15ft from the wetland on the lakeshore.

Please find attached a map showing the delineated population of Missouri Gooseberry, verified by ODNR. This population was not within the delineated wetlands or within the lake. Additionally, find attached photos taken during the site visit this morning and the shapefile that was generated from the GPS points taken in the field.

Andrew,
If you have any questions about this, feel free to give me a call. With this new data, we are requesting that you verify the wetlands within the lake as Category 2 wetlands as they do not have any threatened or endangered species within them. Please send documentation to Laurie Moore (USACE) Laurie.A.Moore@usace.army.mil as soon as possible. We hope you feel better and missed you out there today!

Thanks,

Brian Loushin
Ecologist

Environmental Design Group
Akron/Cleveland/Columbus
P: 614.352.2752
M: 614.600.0764

BLoushin@envdesigngroup.com | envdesigngroup.com

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NATIONAL FLOOD INSURANCE PROGRAM
SPECIAL FLOOD HAZARD AREA DEVELOPMENT PERMIT APPLICATION

Application is hereby made for a DEVELOPMENT PERMIT as required by the Flood Damage Prevention Ordinance No. 2004–17–E of the City of Sharonville for Development in an identified flood hazard area. All activities shall be completed in accordance with the requirements of said ordinance. The Development to be performed is described below and in attachments hereto. The applicant understands and agrees that:

- the permit applied for, if granted is issued on the conditions and facts described herein;
- any permit issued may be repealed if any conditions or facts change;
- if issued, the permit shall be considered void if the described activity has not begun within six months of the issuance date;
- the permit will remain valid for one year from date of issuance.

APPLICANT INFORMATION

Owner's Name: 
Contact Person and Title: 
Address: 

Great Parks of Hamilton County
Tim Zelek, Chief of Planning
10425 Winton Road
Cincinnati, Ohio 45231

Phone and Email: 
Builder / Contractor: 
Address: 

TBD

Phone and Email: 

Page 1 of 4
NATIONAL FLOOD INSURANCE PROGRAM
City of Sharonville

PROJECT INFORMATION

1. Project Name: Sharon Lake Dredge Design

2. Location/Address: 4631 East Kemper Road Sharonville, Ohio 45241

3. Kind of development proposed:
   New building ☐ Manufactured Home Installation ☐
   Residential ☐ Single lot ☐ Non-Residential ✓
   Manufactured Home Park ☐ Alteration to Existing Structure ☐
   Building Addition ☐ Accessory Structure ☐
   Filling ☐ Mining ☐ Dredging ✓ Watercourse Alteration ☐
   Other ☐ *
   *describe Dredging Sharon Lake to create in-lake wetlands, and additional park improvements.

4. If the proposed construction is an alteration, addition or improvement to an existing structure, indicate the cost of proposed construction $___________. What is the estimated market value of the existing structure? $___________.

5. Does proposed development involve a subdivision or other development containing at least 50 lots or five (5) acres (whichever is less)? Yes ☐ No ✓

I AGREE THAT ALL STATEMENTS IN AND ATTACHMENTS TO THE APPLICATION ARE A TRUE DESCRIPTION OF THE EXISTING PROPERTY AND THE PROPOSED DEVELOPMENT ACTIVITY. I UNDERSTAND THE DEVELOPMENT REQUIREMENTS FOR SPECIAL FLOOD HAZARD AREA ACTIVITIES PER SHARONVILLE ORDINANCE NO. 86-76 AND AGREE TO ABIDE THERETO:

Applicant’s Signature: [Signature]

Date: 3/23/2023
6. Is proposed development located in a special flood hazard area? 
   Yes [✓] No [ ]

7. Is proposed development located in an identified floodway? 
   Yes [ ] No [✓]

8. Structure will be flood protected by the following method:
   - [ ] Fill added to construction site. Top of fill elevation must be _____ feet m.s.l.
   - [ ] Flood proofing in accordance with ordinance criteria (non-residential only).
   - [ ] Installation of manufactured home – anchored and elevated.
   - [✓] Other:
     Describe: **No structure - dredging of lake and placement of dredged material in various locations.**

9. Base Flood Elevation (100 – year) at proposed site ________ feet m.s.l. 
   Data Source: **FIRM PANEL 97 MAP # 3906160092E**
   Map Effective Date: ________

10. The proposed elevation of the structure’s lowest floor is _____ feet m.s.l.

11. The proposed flood proofed elevation of the structure is _____ feet m.s.l.

12. The proposed development is in compliance with applicable flood plain standards.

   **PERMIT NUMBER:** 230173
   **PERMIT ISSUED on:** 04/20/2023

13. The proposed development is not in compliance with applicable flood plain standards.

   **PERMIT DENIED on:** ________________________________
   Reason: ____________________________________________
   ___________________________________________________
NATIONAL FLOOD INSURANCE PROGRAM
City of Sharonville

14. The proposed development is exempt from the flood plain standards per Section 3.9 of the Flood Damage Prevention Ordinance No. 2004–17–E.

Yes [ ] No [ ]

Administrator’s Signature: [Signature]

Date: 04/17/2023

AS-BUILT INFORMATION
(to be completed by City upon completion of development)

15. The certified as-built elevation of the structure’s lowest floor is _____ feet m.s.l.

Date: ________________

16. The certified as-built flood proofed elevation of the structure is _____ feet m.s.l.

Date: ________________

Copies of Certifications provided by applicant are attached?

Yes [ ] No [ ]

NOTE: ATTACHMENTS NOT INCLUDED DUE TO FILE SIZE

1. Floodplain Impact Analysis Memo
2. Sharon Lake Dredge Design