

# Woodcock Creek Lake Master Plan 2018 Master Plan

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## **Executive Summary**

A Master Plan is required for each Civil Works project and all fee-owned lands for which the U.S. Army Corps of Engineers (Corps) has administrative responsibility. It serves as a strategic land-use management document that guides the comprehensive management and development of all project recreational, natural, and cultural resources throughout the life of the water resource project, anticipating what could and should happen at a Corps project, while remaining flexible enough to address changing conditions.

The primary goals of this Woodcock Creek Lake Project (Project) Master Plan, revised in 2018, are to prescribe an overall land and water management plan, resource objectives, and associated design and management concepts, which: 1) use sound environmental principles to protect and enhance public lands; 2) cultivate volunteers, public-private partnerships, and apply for grants; 3) provide safe and memorable connections as part of multiple destination points; and 4) leverage technology to tell the Corps' story and enhance visitor experiences.

Significant changes made to this 2018 Master Plan include new land classifications, recommended Best Management Practices (BMPs) for potential threats, such as oil and gas development and invasive species, and resource objectives that will guide the management of Woodcock Creek Lake into the next 20 years. A spatial analysis of land-use was conducted which determined that 40 to 60 percent of project land fell under conservation/recreation. Therefore, we concluded that of the five potential development concepts considered, Woodcock Creek Lake falls under a Conservation/Recreation Mix Development Concept framework.

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## 1. Project Authorization

The construction of Woodcock Creek Lake was authorized by the Rivers and Harbors Act of 1962. Authorizations subsequent to construction (Table 1-1; full list in Appendix A) provided for additional benefits, including water quality improvement, fish and wildlife management, and recreational uses of the impoundment and Project lands.

**Table 1-1. Project Purposes and Authorities for Woodcock Creek Lake**

| <b>Operating Purpose</b> | <b>Authority</b>  | <b>Citation</b>              |
|--------------------------|---|------------------------------|
| Flood Control            | Rivers and Harbors Act of 1962                            | PL 87-874 (A)                |
| Water Quality            | Federal Water Pollution Control Act of 1972               | PL 92-500 (A)                |
| Recreation               | Rivers and Harbors Act of 1962, Flood Control Act of 1944 | PL 87-874 (A), PL 78-534 (G) |
| Fish/Wildlife            | Fish and Wildlife Coordination Act of 1934                | PL 85-624 (G)                |

### 1.1 Project Purpose

Woodcock Creek Lake was built for flood control, water quality, and recreation. As such, any other consideration(s) for the Project are secondary in terms of budgeting and operations.

### 1.2 Watershed and Project Description

Woodcock Creek Lake serves as a multi-purpose project which provides a storage system for flood risk reduction for French Creek drainage basin (see Appendix B, Plate 1 for Project Area map). Woodcock Creek Lake is one of three flood control projects included in the authorized French Creek flood control system. This system, including Muddy Creek and Union City Dams, replaces the previously authorized French Creek Reservoir near Cambridge Springs. Currently, the storage water within the dam is allocated to meet the downstream schedule of 75 cfs required by the U.S. Department of Health. The remaining storage that is not used to meet the downstream schedule is allocated to recreation. The empty volume is set aside for flood control. Woodcock Creek Lake is located five miles northeast of Meadville, PA, and about four miles upstream from Woodcock Creek's mouth at French Creek (see Appendix B, Plate 2 for the Transportation map). The total area of the watershed above Woodcock Dam is about 29,248-acres. The Project's land and waters extend over portions Crawford County.

At full pool, the elevation of Woodcock Creek Lake is 1,208.4-feet and occupies an area of 775-acres (Table 1-2). Maximum flood storage will be available when the lake is at the minimum pool elevation of 1,161.9-feet. At this elevation, the Project occupies an area of 120-acres. During winter months, the Project is generally kept at an elevation of 1,164.8-feet, about 19.5-feet above the top of the flood storage release gates. With spring runoff around mid-March, these gates will be closed and the pool's elevation will be gradually raised to its summer level,

about 1,180.4-feet, around the first of May. The autumn drawdown will normally begin at the end of August, and the pool will be returned to its winter level by mid-December.

**Table 1-2. Woodcock Creek Lake Reservoir Information**

| <b>Pool</b>  | <b>Elevation (feet)</b> | <b>Surface Area (acres)</b> |
|--------------|-------------------------|-----------------------------|
| Minimum Pool | 1,161.9                 | 120                         |
| Full Pool    | 1,208.4                 | 775                         |
| Summer Pool  | 1,180.4                 | 333                         |
| Winter Pool  | 1164.8                  | 140                         |

The Project consists of 1,732.03 total acres, including flowage easement. Near the dam, the Corps maintains 434.56-acres of public recreational facilities, including picnic areas, restrooms, and access to Project trails and overlook areas. Of the total number of acres, about 1,296.1-acres are outgranted to the following entities (Table 1-3, below):

The Pennsylvania Game Commission leases 721.2-acres of Project land and water. The lease encompasses part of the lake and its adjoining lands including several access points for hunting areas and a boat ramp.

Crawford County leases 549.6-acres of land and water to operate Woodcock Lake Park. Woodcock Lake Park has a campground, picnic sites, a swim beach, hiking trails, and a boat launch.

Crawford County Conservation District leases 25.3-acres of land to operate the Woodcock Creek Nature Center and Stainbrook Park. Appendix B, Plate 3 shows the Outgrant map.

**Table 1-3. Outgrant Areas**

| <b>Grantee</b>                        | <b>Type</b> | <b>Acres</b> | <b>Expiration Date</b> |
|---------------------------------------|-------------|--------------|------------------------|
| PA Game Commission (PAGC)             | Wildlife    | 721.2        | November 30, 2036      |
| Crawford County                       | Recreation  | 549.6        | May 25, 2024           |
| Crawford County Conservation District | O&M         | 25.3         | February 27, 2062      |

### **1.3 Listing of Prior Design Memorandums**

See Appendix C.

### **1.4 Listing of Pertinent Project Information**

While the Master Plan is focused on management of land and water surface area related to Project purposes, the following tables are provided to aid in understanding Project information

regarding water storage levels and Project construction (Table 1-4, below). Further details are available in the Woodcock Creek Lake Water Control Manual.

**Table 1-4. Woodcock Creek Lake Dam Information**

|                                      |  |
|--------------------------------------|--|
| Average Annual Precipitation         | 44.29 inches*                                      |
| Drainage Area above Dam              | 29,248-acres                                       |
| Construction Completed               | July 1973  |
| Operation Start                      | January 1974                                       |
| Dam Type                             | Rolled earth, fill embankment                      |
| Dam Length                           | 4,650 feet   |
| Dam Height                           | 90 feet above streambed                            |
| Base Width                           | 330-550 feet (spillway section)                    |
| Outlet Works                         | Reinforced concrete conduit with control structure |
| Spillway                             | Saddle, uncontrolled                               |
| <b>Highest Inflows Recorded</b>      | 4,660 cubic feet per second (cfs) (1 July 1980)    |
| <b>Highest Outflows Recorded</b>     | 1,400 cfs (1 March 1974)                           |
| <b>Highest Elevation (NAVD 88)**</b> | 1,197.54 (13 June 1986)                            |

\*Average Annual Precipitation for Meadville, PA. From: USclimatedata.com, accessed July 2018.

\*\*All datum listed in NAVD 88 unless otherwise stated.

### 1.5 Purpose & Scope of the Master Plan

This Master Plan presents updated land use categories, management objectives, resource plans, and recommendations for the management of Project lands and waters to meet current and future needs. It is a vital tool for the responsible stewardship of Project resources for the benefit of present and future generations, guiding the comprehensive management and development of the natural, cultural, and man-made resources at the Woodcock Creek Lake Project.

This Master Plan responds to regional and local needs, resource capabilities, suitability, and expressed public interests consistent with authorized Project purposes, pertinent legislation, applicable regulations, national objectives, and other state and regional goals and programs. Distinct from the Project-level implementation emphasis of the Operational Management Plan (OMP), policies in the Master Plan are guidelines implemented through provisions of the OMP, specific Design Memorandums (Appendix C), and the Annual Work Plan.

In this Master Plan, we employ a Conservation/Recreation Mix Development Concept for Woodcock Creek Lake (Table 1-5, below). Under this concept, there are almost equal amounts of conservation and recreation land within the Project. Specifically, the amount of land area classified for conservation use at Woodcock Creek Lake is about 53 percent of the total land. Thus, this development concept also meets the need for sustainable management and

conservation of natural resources within the Project, while providing for current and future quality outdoor recreational needs of the public and consistency with periodically updated Corps regulations. This Master Plan lays out future recommendations for the management of both recreation and natural resources. Table 1-5, below, describes the different potentially applicable development concepts based on land classification percentages.

It is recommended that the District maintain Woodcock Creek Lake’s development concept a Conservation/Recreation Mix. During our scoping process, members of the public, stakeholders, and partners encouraged the continued use of Woodcock Creek Lake for the varied conservation and recreation experiences it currently serves. All data presented in the subsequent sections justifies this development scenario.

**Table 1-5. Development Concepts**

| <b>Development Concept</b>         | <b>Conservation Percentage</b> | <b>Recreation Percentage</b> |
|------------------------------------|--------------------------------|------------------------------|
| Recreation Intensive               | 0-10                           | 90-100                       |
| Recreation Weighted                | 10-40                          | 60-90                        |
| <b>Conservation/Recreation Mix</b> | <b>40-60</b>                   | <b>40-60</b>                 |
| Conservation Weighted              | 60-90                          | 10-40                        |
| Conservation Intensive             | 90-100                         | 0-10                         |

### **1.6 Management Goals**

This section and the following section set forth goals and objectives necessary to achieve the vision for the future of Woodcock Creek Lake. In the context of this Master Plan, goals express the overall desired end state of the cumulative land and recreation management programs, whereas resource objectives specify task-oriented actions necessary to achieve the Master Plan goals. The following goals are the priorities for consideration when determining resource objectives and development activities.

1. Use sound environmental principles to protect and enhance public lands.
2. Cultivate volunteers, public-private partnerships, and apply for grants.
3. Provide safe and memorable connections, as part of multiple destination points.
4. Leverage emerging technology to tell the Corps’ story and enhance visitor experiences.

Implementation of these goals is based upon time, manpower, and budget. These goals will be pursued through the use of a variety of mechanisms, including: volunteer efforts, hired labor, contract labor, permit conditions, remediation, and special lease conditions. It is the intention of Woodcock Creek Lake staff to provide a realistic approach to the management of all resources.

In addition to the above goals, the Corps management activities are guided by Corps-wide Environmental Operating Principles (EOPs) in accordance with ER 200-1-5. The EOPs are as follows:

1. Strive to achieve environmental sustainability. An environment maintained in a healthy, diverse, and sustainable condition is necessary to support life.
2. Recognize the interdependence of life and the physical environment.
3. Proactively consider environmental consequences of Corps programs and act accordingly in all appropriate circumstances.
4. Seek balance and synergy among human development activities and natural systems by designing economic and environmental solutions that support and reinforce one another.
5. Continue to accept corporate responsibility and accountability under the law for activities and decisions under our control that impact human health and welfare and the continued viability of natural systems.
6. Seek ways and means to assess and mitigate cumulative impacts to the environment; bring system approaches to the full life cycle of our processes and work.
7. Build and share an integrated scientific, economic and, social knowledge base that supports a greater understanding of the environment and impacts of our work.
8. Respect the views of individuals and groups interested in Corps activities; listen to them actively, and learn from their perspective in the search to find innovative win-win solutions to the nation's problems that also protect and enhance the environment.

### **1.7 Resource Objectives**

Resource objectives, subsequently referred to as Management and Development Activities (MDAs), are defined as clearly written statements that both respond to identified issues and specify measurable and attainable activities for resource development and/or management of the lands and waters under Corps jurisdiction. MDAs provided in this section are established to provide high levels of stewardship to managed lands and resources, while simultaneously providing a high level of public service.

The objectives stated in this Master Plan support the Plan's goals, Corps EOPs, and applicable national performance measures. They are consistent with authorized Project purposes, federal laws and directives, regional needs, resource capabilities, and they take public input into consideration. Regional and state planning documents, including the Crawford County Conservation District Master Plan, the Pennsylvania Game Commission Annual Plan, the Greenways Recreation Plan, the Crawford County Comprehensive Plan, and the Woodcock Peer-to-Peer Study for Woodcock Lake Park Campground, were all considered in developing these objectives.

Each of the following MDAs has a current and future component (see below). The current component is the near-term focus of the current Master Plan and should be the impetus of efforts of this review cycle (i.e., five years). The future component is the long-term focus to be addressed in subsequent reviews (i.e., ten years).

**Goal 1:** Use sound environmental principles to protect and enhance public lands

| <b>Management and Development Activity</b>                            | <b>Five-year</b>   | <b>Ten-year</b>  | <b>Resource Objective</b>   |
|---|--|--|---|
| Inventory natural and cultural resources                              | Initial description of resources are documented  | Operational Geospatial Data Base for Natural and Cultural Resources are developed                            | Completed Biological/Cultural Resource Inventory  |
|   | OMP is updated   |  |   |
|   | Complete 50% of resource inventory within five years   |  |   |
| Identify and address threats to the Project                           | Internal or external subject matter experts are being engaged to resolve identified issues                         | Reclamation Plan for impacted resources is written   | Conservation and enhancement of Project land  |
|   | A Vegetative Management Plan is established in order to avoid, minimize, and mitigate impacts to natural resources |  |   |
|   | Partner with cooperating stakeholders to develop an invasive species management plan                               |  |   |
|   | Best Management Practices are implemented  |  |   |
| Achieve and maintain desired natural and cultural resource conditions | Specific conservation organizations (federal and state agencies, academia, non-profits) have been asked to engage  | Working relationships with federal, state, academia, and NGOs are being utilized to achieve these conditions | Increased stakeholder buy-in and protection of the resources in and surrounding the Project |
|   | Lake staff are trained on how to study and manage project resources  |  |   |
|   | Identify indicator species   |  |   |
|   | Available skill sets and equipment across projects are leveraged   | Implement species specific management plans for indicator species  |   |
|   | New equipment that can be used at multiple lakes are acquired  |  |   |
|   | Annual Work Plans are being implemented  |  |   |

**Goal 2:** Cultivate volunteers, public-private partnerships, and grants

| <b>Management and Development Activity</b>                                | <b>Five-year</b>  | <b>Ten-year</b>  | <b>Resource Objective</b>   |
|---|---|--|---|
| Development of appropriate MOU/MOA 's with potential partners             | Opportunities with action groups and local organizations, such as local sportsmen clubs and Trout Unlimited have been initiated     | Appropriate MOU/MOA(s) with land management partners are established   | Partners are helping to share the Corps vision for Woodcock Creek Lake  |
| Establishing the right partnership, at the right place, at the right time | Educational programs (green-collar development) are developed and supported   | An organization which supplies assistance to the Project, such as Student Conservation Association (SCA), AmeriCorps, "Friends of Woodcock Creek", American Conservation Experience (ACE), has established a relationship with the Project | Partners, volunteers, and interns are amplifying Project staff responsibilities to further protect and enhance natural and cultural resources |
|   | Opportunities for incentivizing volunteer groups have been explored (e.g. camp sites, office space, sheds, recognition signs, etc.) | Seasonal natural resources survey crews are coming to the Project  |   |
|   | Potential volunteer groups have been approached for interest in forming a "Friends Group," SCA, or ACE                              |  |   |
| Establishing a Disc Golf course   | Complete 18 hole disc golf course   | Establish relationship with local disc golf club to maintain and promote disc golf course  | Develop partnerships with professional associations to hold tournaments; nationally recognized disc golf course                               |

**Goal 3:** Provide safe, memorable connections as part of multiple destination points

| <b>Management and Development Activity</b>  | <b>Five-year</b>  | <b>Ten-year</b>   | <b>Resource Objective</b>  |
|---|---|---|--|
| Ranger safety                               | Operational personal hand held communications and monitoring devices have been acquired for rangers                 | Enhanced securities, such as video surveillance systems or safe rooms, are installed throughout the Project   | Rangers are working in a safe working environment  |
|   |   | In accordance with Corps standards and guidance manuals, communication and security features have been met. Necessary upgrades have been made accordingly |  |
| Visitor safety                              | Consistent visitor assistance experience through playground inspections, boat patrol manual etc. is being ensured   | Regular maintenance program is established  | Low chances of incidents and quick response times for emergency personnel; routine maintenance has diminished likelihood of incident |
|   | Update emergency Corps Point of Contacts (POCs) for local emergency response agencies                               | Public emergency call out systems stations are installed around the Project (essential and remote recreational areas)                                     |  |
|   | Establish emergency responder staging areas   | Project Site Areas (PSAs) with low use and degraded facilities have been identified and divestment options have been considered if appropriate            |  |
|   | Public emergency call out systems stations are installed around the Project (essential & remote recreational areas) |   |  |
|   | Assign building numbers/indicator signs for emergency response purposes within project operation areas              | Review of joint ventures for modifications or additions   |  |
|   | Emergency groups practice emergency safety/trainings at the Project on a regular basis                              | Plan reviews to ensure accuracy and success   |  |
| Connect with other District lakes and locks | Joint ventures with other locks and lakes have been explored  | Review of joint ventures for modifications or additions   | Public is aware of the Corps recreational facilities at multiple projects  |
|   | Create district brochure with all lake projects and locks and dams that explores different activities and amenities |   |  |

|  |   |   |  |
|--|---|---|--|
| Serve as part of multiple destination points, increasing off-season, non-peak visitation to the Project              | Project staff are engaged with local Tourist Promotion Bureaus, Chambers of Commerce, and Regional Planning Commissions | Promote regional trail “activity” (i.e. ice cream parlors, wine tours, barn tours)  | Diverse user groups from regional areas are coming to the Project and visitation has increased |
|  | Local and regional outdoor recreation organizations have been engaged   | Advertise as regional paddle recreation destination (to include French Creek, Oil Creek)  |  |
|  | Partners have been consulted on promoting new types of opportunities, prior to implementation                           |   |  |
| Promoting all that Woodcock Creek Lake has to offer; bringing in visitors with varying interests and of varying ages | School groups, clubs, etc. have been reached out to and invited to the Project  | A signature event is being hosted - bringing visitors to the Project (e.g. Wounded Warrior, Fishing Competition, Woodcock Creek Lake Clean-up Day, and Kids Fishing Tournament). Events are being advertised through Chamber of Commerce and Tourist Bureau | Visitors are aware and utilizing all of the available resources at the Project                 |
|  | Signage regarding different activity areas are displayed around the Project (e.g. Baker Trail; the water trail)         |   |  |
|  | Project staff are participating in multiple outreach events (e.g. Radio PSA’s, Crawford County Fair)                    |   |  |

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**Goal 4:** Leverage emerging technology to tell the Corps stories and enhance visitor experiences

| <b>Management and Development Activity</b>                          | <b>Five-year</b>   | <b>Ten-year</b>   | <b>Resource Objective</b>   |
|---|--|---|---|
| Public interaction with the Project is occurring through technology | Interpretive programming and updated engaging educational signage is being included in every OMP Annual Update   | Visitors are able to contribute to data collection through their cells phones   | Technology is used in interpretive services, citizen science, and showcasing Project opportunities  |
|   | QR Codes are utilized on bulletin boards at trail heads, visitor center, and around the dams so visitors can gather more information about the Project and current activities  |   |   |
|   | Visitors are being encouraged to submit photos and post about the Project on social media (e.g. hashtag established)   |   |   |
| Embrace emerging technology to improve information collection       | Locations for fish habitat structures, trails, disc golf course and other amenities are in a digital interactive format that the public can utilize and offer comments and suggestions on future improvements to these areas | Project boundary inventory and monitoring are being conducted wirelessly through Project staff and public using future apps   | Project staff are utilizing technology to better monitor and communicate about the Project          |
|   | Boundaries and inventory data are available in digital format  |   |   |
| Enhance public outreach   | Get Woodcock Creek Lake on apps such as OhRanger for users to look up information on mobile devices  | Utilizing special interest groups or individuals such as the Audubon society, reach out to the public and present educational/informational programs to increase awareness of Woodcock Creek Lake | Visitation is increasing due to greater public awareness of events and opportunities at the Project |
|   | Informational bulletin boards, kiosks, and visitor center is updated to reflect most current information   |   |   |
|   | Regional outdoor recreational activities are promoted on social media (e.g. Instagram, Facebook)   |   |   |
|   | Success stories are being shared on local news outlets and coordinated with PAO  |   |   |

|  |  |  |  |
|--|--|--|--|
|  | New and updated signage leading to lake and within the Project boundaries has been increased, indicating the presence of Woodcock Creek Lake (directional signs along public highways) |  |  |
|--|--|--|--|

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## **2. Project Setting and Factors Influencing Management and Development**

### **2.1 Hydrology**

The existing terrain at Woodcock Creek Lake is due to past glaciation. Flat, upland plateaus are intermixed with gently sloping hills and flat-bottomed stream valleys. Maximum relief varies from 150 to 400-feet, and glacial till blankets the entire area. The till material has accumulated to depths of 200-feet along the valley floors. The soils of the upland areas are relatively impervious with low infiltration rates and high runoff rates during intensive rainfalls. Prior to the most recent periods of glaciation, the streams of this area flowed northward. The advancing ice sheets blocked these drainages, and the result was impounded bodies of water that forced new outlets to the south. Heavily forested areas exist in the headwaters and along some of the tributary valleys (U.S. Army Corps of Engineers, Woodcock Creek Lake Master Plan, 1975).

The overall length of Woodcock Creek Lake from its point of origin in Randolph Township to its mouth above Meadville, PA, is 20.5-miles. Throughout the 12.5-miles of stream above the dam, the channel rises about 200-feet at a rather uniform rate. The width of the stream channel at the dam is about 30-feet. Woodcock Creek Lake has three main tributaries. Bossard Run enters the right bank of Woodcock Creek Lake about 0.25-miles above the dam and has a watershed of about 1,408-acres. Stainbrook Run, with a drainage area of about 2,022.4-acres, enters Woodcock Creek Lake on the left bank just below the dam. The largest tributary along the stream is Woodcock Creek. It enters the right bank of Woodcock Creek Lake at about 4.7-miles above the dam and has a total drainage area of 3,584-acres (U.S. Army Corps of Engineers, Woodcock Creek Lake Master Plan, 1975). See Appendix B, Plate 4 for the Watershed Boundary map.

### **2.2 Topography, Geology, and Soils**

Woodcock Creek Lake is located in the glaciated portion of the Allegheny Plateau Province. The Project area has been periodically invaded by successive ice sheets during the Illionian and Wisconsin stages of glaciation. As a result of this glacial activity, significant changes were made in the physical characteristics of the pre-glacial terrain. It is known that pre-glacial streams of this area flowed northward. With the advancement of glacial ice sheets from the north, the mouths of these drainages were periodically blocked and huge lakes of impounded water were formed. As the depth of these impounded lakes increased, the watershed divides to the south were breeched and new south-flowing drainages were formed. With each successive ice advancement, these new stream patterns became better defined and deepened until ultimately the existing drainage system emerged. Concurrent with the reformation of the drainage patterns, the

alternating flow of successive glaciers over the Woodcock basin also reshaped the terrain. Hilltops and ridge lines were eroded, V-shaped valleys were considerably broadened and the topography was generally made less rugged. The physical features were further softened through the deposition of glacial till during the northward retreat of each ice sheet. Kame terraces, moraines, and thick layers of water-borne sediment were also deposited by these receding ice sheets. Post-glacial geological processes further minimized extremes in relief as upland layers of till were eroded and washed into the stream valleys.

Evidence of this past geological activity is quite apparent in the Woodcock Creek Lake Project area. The terrain is relatively uniform with little or no dramatic differentiation of features. The upland areas are relatively flat, while slopes are gentle and valleys are both broad and flat. Maximum relief generally varies from 150 to 400-feet. The entire area is covered with glacial till, with the upland sites having a residual layer that is five to 20-feet thick and the valley floor containing depositions of till that reach thicknesses of 200-feet. The bedrock underlying the Project is flat-lying, interbedded siltstones and siltshales of the Chemung formation deposited during the Devonian age. This bedrock is exposed in the bed of Bossard Run and in the bed and walls of Stainbrook Run. Because of the relatively recent origin of the drainage patterns within the glaciated portion of northwestern Pennsylvania, many stream systems are as yet incompletely defined. Headwater areas are poorly drained and "perched" marshy areas are common. Because of these immature drainage conditions, wet soils are quite common in the Project area. The soils along the major stream valleys are of glacial origin and are made up of sand, gravel and clay. Because of the nature of these materials and their greater thicknesses, the valley soils have a higher infiltration rate than the more impervious, compacted soils of the slope and upland areas (see Appendix B, Plate 5 for the Soils map).

## **2.3 Resource Analysis**

### **2.3.1 Fish and Wildlife Resources**

Woodcock Creek Lake's forested habitat, scrub-shrub uplands, wetlands, streams, and river/lakes support a variety of wildlife species common to the Commonwealth of Pennsylvania. A few of the more common avian species likely to occur in the Project area, include osprey (*Pandion haliaetus*), turkey (*Meleagris gallopavo*), red-winged blackbirds (*Agelaius phoeniceus*), robins (*Turdus sp.*), song sparrows (*Melospiza melodia*), common mergansers (*Mergus merganser*), and mallards (*Anas platyrhynchos*).

Mammal diversity is typically associated with large, intact tracts of forest. Mammal species of the region commonly include white-tailed deer (*Odocoileus virginianus*), red fox (*Vulpes fulvus*), opossum, (*Didelphimorphia*), raccoon (*Procyon lotor*), gray squirrel (*Sciurus carolinensis*), white-footed mouse (*Peromyscus leucopus*), and short-tailed shrew (*Blarina brevicauda*).

Smaller populations of black bear (*Ursus americanus*), bobcat (*Lynx rufus*), and fisher (*Martes pennanti*) are present. The hairy-tailed mole (*Parascalops breweri*), smoky shrew (*Sorex fumeus*), and eastern woodrat (*Neotoma floridana*) are rare species that may exist.

Woodcock Creek Lake also provides habitat for a diverse assemblage of fish species including smallmouth/largemouth bass (*Micropterus sp.*), walleye (*Sander vitreus*), yellow perch (*Perca flavescens*), black crappie (*Pomoxis nigromaculatus*), muskellunge (*Esox masquinongy*) catfish (*i.e.*, *Ictalurus punctatus*, *Ameiurus catus*, *etc.*), carp (*Cyprinus sp.*), white sucker (*Catostomus commersonii*), golden redhorse (*Moxostoma erythrurum*), and other species.

In addition, Woodcock Creek Lake supports a variety of amphibians and reptiles including a number of different frog, turtle, salamander, and snake species.

### 2.3.2 Vegetative and Timber Resources

Mature, deciduous forest dominates Project land cover. The remaining land is a combination of field/pasture, shrubland, wetlands/riparian, with minor areas of maintained lawn. The Project supports the overarching goal of forest sustainability detailed in the Pennsylvania Department of Conservation and Natural Resources (DCNR) Forest Resource Management Plan. Forest sustainability requires the continued existence and use of forests to meet human physical, economic, and social needs; the desire to preserve the health of forest ecosystems in perpetuity; and the preservation of options for future generations, while meeting the needs of the present. The Forest Management Plan for the Project contains further details, including resource inventories and harvesting procedures (see Appendix B, Plate 6 for the Vegetative Resources map).

### 2.3.3 Threatened and Endangered Species

While there have been no confirmed sightings on Woodcock Creek Lake property, the habitat type exists for the below species (Table 2-1, below), meaning that they could be found within the area or occur as transient species:

**Table 2-1. Threatened and Endangered (ESA) Species (USFWS IPaC, 03 April 2018)**

| Species              | Scientific Name                     | Class | Federal Status | Habitat   |
|----------------------|-------------------------------------|-------|----------------|---|
| Northern Riffleshell | <i>Epioblasma torulosa rangiana</i> | Clam  | Endangered     | Occurs in clean, firmly packed, coarse sand and gravel in riffles and runs of small and large streams |
| Snuffbox Mussel      | <i>Epioblasma triquetra</i>         | Clam  | Endangered     | Found in small to medium-sized creeks to larger rivers and in lakes. It occurs in                     |

|                         |                               |         |            |   |
|-------------------------|-------------------------------|---------|------------|---|
|                         |                               |         |            | swift currents of riffles and shoals and wave-washed lakeshores over gravel and sand with occasional cobble and boulders, and generally burrows deep into the substrate except when spawning or attracting a host   |
| Northern Long-eared Bat | <i>Myotis septentrionalis</i> | Mammal  | Threatened | Spends winter hibernating in caves and mines. During the summer, roosts singly or in colonies underneath bark, in cavities or in crevices of both live trees and snags  |
| Indiana Bat             | <i>Myotis sodalis</i>         | Mammal  | Endangered | Hibernation sites have stringent requirements, including noticeable airflow and low non-freezing temperatures possible. Primary maternity roosts are trees (often large, dead ones) with ex-foliating bark and sun exposure that results in high temperatures, while males seek cooler roosts. Most roosts are within ¾ mile of water |
| Clubshell               | <i>Pleurobema clava</i>       | Clam    | Endangered | Prefers clean, loose sand and gravel in medium to small rivers and streams. This mussel will bury itself in the bottom substrate to depths of up to four inches   |
| Rabbitsfoot             | <i>Quadrula cylindrica</i>    | Clam    | Threatened | Occurs in large creeks to large rivers. It is often found along margins of shoals in gravel substrate in slow to moderate current   |
| Eastern Massasauga      | <i>Sistrurus catenatus</i>    | Reptile | Threatened | Swamps, marshes, bogs, peat lands, wet meadows, prairie lands, low lying poorly drained soil, dry open fields with lots of vegetation. The  |

|            |                        |      |            |  |
|------------|------------------------|------|------------|--|
|            |                        |      |            | habitat will vary with seasons. Spring and fall they can be found in the wetter habitats, and summer they may be found in dry habitats   |
| Rayed Bean | <i>Villosa fabalis</i> | Clam | Endangered | Often occurs in or near shoal or riffle areas, deep slow runs and in the shallow, wave-washed areas of glacial lakes. Substrates typically include gravel and sand. Rayed bean are sometimes associated with the roots of vegetation in and adjacent to riffles and shoals, but the species also lives in relatively deep-water (10 to 20-feet) and sparsely vegetated habitat |

### 2.3.4 Invasive Species

In accordance with Executive Order (EO) 13751 (FR: 08 Dec 2016; amending EO 13112), an invasive species means an alien species whose introduction does or is likely to cause economic or environmental harm or harm to human health. Invasive species can be microbes, plants, or animals that are non-native to an ecosystem. In contrast, exotic species, as defined by EO 11987 (FR: 24 May 1977), include all plants and animals not naturally occurring, either presently or historically, in any ecosystem of the United States.

Invasive species can take over and out compete native species by consuming their food, occupying their territory, and altering the ecosystem in ways that harm native species. Invasive species can be accidentally transported or they can be deliberately introduced because they are thought to be helpful in some way. Invasive species cost local, state, and federal agencies billions of dollars every year.

Currently, there are over 285 invasive plant species impacting Pennsylvania (LandScope, 2018). The most common plant invasive species around Woodcock Creek Lake are Autumn Olive (*Elaeagnus umbellata*), Japanese Knotweed (*Fallopia japonica*), Morrow Honeysuckle (*Lonicera morrowii*), Tatarian Honeysuckle (*Lonicera morrowii*), Multiflora Rose (*Rosa multiflora*), and Crown Vetch (*Securigera varia*). The most common invasive fauna around Woodcock Creek Lake is the Asian Clam (*Corbicula fluminea*).

### **2.3.5 Ecological Setting**

The purpose of ecological land classification is to provide information for research, assessment, monitoring, and management of ecosystem components. The Natural Resource Management mission statement (ER 1130-2-550; Change 5, 30 Jan 2013) directly supports this paradigm. The lower Woodcock Creek Lake region, according to the U.S. Environmental Protection Agency's designation of ecoregions, is located within the Pittsburgh Low Plateau section of the Western Allegheny Plateau Ecoregion. According to U.S. Forest Service's designation, the lower Woodcock Creek region is located within the Unglaciated Allegheny Plateau section of the Eastern Broadleaf Ecoregion.

### **2.3.6 Wetlands**

According to the National Wetland Inventory (NWI), Woodcock Creek Lake delineates about 10-acres of freshwater emergent wetlands and 92-acres of freshwater forested/shrub wetlands. Appendix B, Plate 7 shows the Wetlands map.

### **2.3.7 Water Quality & Sedimentation**

#### **Water Quality**

Woodcock Creek Lake is located within the French Creek watershed, in Northwestern Pennsylvania. One of the congressionally authorized project purposes of Woodcock Creek Lake is to provide low flow augmentation for degraded water quality conditions from downstream point source inputs in the town of Meadville, PA.

The Pittsburgh District water quality specialists have evaluated water quality conditions at Woodcock Creek Lake since 1969 via a sampling program. Overall, water quality within Woodcock Creek Lake is currently unimpaired. This can be attributed to the relatively undeveloped land within the Project's drainage basin and related tributaries. Collected water quality data shows slight increases in nutrient (nitrogen and phosphorus species) through time. Harmful algae blooms (HABs) have also increased in frequency and magnitude over the past five years. In contrast, metals are minimal and fall within the level for natural environmental accumulation. Finally, the zooplankton community, which forms the base of Woodcock Creek Lake's food web, is abundant, healthy, and diverse. Due to this, walleye are harvested for eggs every year by the Pennsylvania Fish and Boat Commission's walleye hatchery and game fish stocking programs.

In order to effectively manage Woodcock Creek Lake's congressionally authorized purpose, the Water Quality Unit within the Water Resources section conducts the following program at the Project. Data collected includes chemical, physical, and biological constituents at numerous

sampling locations on tributaries, bays, the lake, and outflow. Currently, routine water quality monitoring includes:

- Biweekly sample collection by Project staff from the outflow
- Yearly limnology surveys of the lake by water quality staff
- Once every ten years, monthly intensive limnology surveys from the months of March through October are performed to understand decadal/spatial changes in limnological dynamics; and
- A water temperature buoy, which records water temperature at three foot increments within the Project

Future stressors to Woodcock Creek Lake include increased nutrient loading and shale gas development. Woodcock Creek Lake is a nitrogen limited system. This means a minuscule amount of nutrients added to the lake can have catastrophic effects on lake ecosystem. Effects of increased nutrient most likely would increase the frequency and magnitude of HABs, the collapse of the zooplankton community, as well as, the failure of the Project to meet its primary purposes. Currently, the buffering and filtration capacity provided by surrounding undeveloped land limits the amount of nitrogen reaching and dispersing through the lake. However, future development is projected to increase in this area and; therefore, protection of undisturbed land will become important for the future functioning of Woodcock Creek Lake.

Woodcock Creek Lake is underlain by the Utica Shale. The advancement in gas fracking technology has made this geologic unit more economical for natural gas extraction. As a result, the Project would most likely see the effects of shale gas wastewater in the future. This includes: extremely saline conditions (high conductance, high total dissolved solids), surfactant, and frack fluid contamination and other water quality impairments.

Water quality monitoring will continue as a critical part of a holistic, environmentally sound water-quality management strategy for the Project to continue to meet applicable federal and state environmental laws, criteria, and standards.

### **Sedimentation**

Sedimentation surveys were conducted in 1973 and 1988. The 2009 periodic inspection reported that the 1988 survey showed a one percent accumulation. There has not been a sedimentation survey since 1988 at Woodcock Creek Lake. No sedimentation issues were noted or reported by the Project staff. Downstream of the dam was also inspected, but no significant sedimentation was observed. A recent sedimentation survey is recommended to confirm the available storage capacity of the reservoir (U.S. Army Corps of Engineers, Woodcock Creek Dam Eleventh Periodic Inspection Report, 2014).

## **2.4 Cultural Resources**

Crawford County was originally inhabited by the Iroquois and other tribes and nations prior to the American Revolutionary War. The Native Americans' primary travel route in the region, the Venango Trail, incorporates portions of a number of modern roads in the Project area, including U.S. 6/19, French Creek Parkway, PA 86, and U.S. 322. In December 1753, Major George Washington passed through the Saegertown area along the Venango Trail on a diplomatic mission from the Governor of Virginia to the commander of French forces at Fort Presque Isle concerning a territorial dispute prior to the start of the French and Indian War in 1754.

In the Treaty of Fort Stanwix (1784), the Iroquois relinquished all claims to the Upper Ohio Valley and sold the area included in the Project area to Pennsylvania. The state designated this tract as "Donation Lands" which were subdivided and reserved for Pennsylvania Revolutionary War veterans as a bonus settlement. By 1793, the Holland Land Company bought out most of the veterans' titles in Western New York and Northwestern Pennsylvania and resold them to settlers. Crawford County was subsequently created by the Allegheny County Court of Quarter Sessions on March 12, 1800, and named for Colonel William Crawford, Revolutionary War veteran and friend of George Washington.

Settlement at what is today Saegertown started circa 1795 with the arrival of Arthur and Patrick McGill. In 1801, Major Roger Alden built and operated a sawmill which became the focal point of a community known as Aldens Mill. In 1824, Daniel Saeger, a gentleman-farmer from the German community in Lehigh, PA, purchased the sawmill and adjoining lands, laid out a town and named it Saegertown. Saeger remained prominent as a local businessman and magistrate and later as a state legislator. His son Edward's residence, constructed in 1845, is on the National Register of Historic Places.

The reservoir at Woodcock Creek Lake was constructed in 1961 and entered service the following year. The surrounding property is largely undisturbed and has archaeological potential. To date, there are two historic sites at Woodcock Creek Lake that fall within a 0.25-mile radius of the reservoir. They are the Gass Wolf house and the two damtender houses. Surveys in the area have been very small, related to Corps specific repairs.

## **2.5 Demographics**

### **2.5.1 Market Area**

Woodcock Creek Lake was constructed on French Creek in Saegertown, PA which is located in the middle of Crawford County. The Project receives visitors primarily from Crawford County in which the Project is located, as well as some neighboring counties. Due to the Project's location close to the center of Crawford County and the availability of other recreation areas in

other nearby counties the market area for this analysis is focused on Crawford County, as well as the three counties along its borders closest to the Project: Erie County, Mercer County, and Venango County.

### **2.5.2 Population**

Crawford County, Erie County, Mercer County, and Venango County were identified for demographic analysis due to the size of the Project, its geographic setting, and data collected about the surrounding counties. All data comes from the United States Census website, the Bureau of Labor Statistics website, and the Pennsylvania Department of Labor and Industry website. Crawford County is about 647,680-acres in area, mostly covering an east to west area. With Saegertown and the Project being located at nearly the center of the county, it is more likely that visitors to Woodcock Creek Lake would be from elsewhere in the county or either from Erie County to the north or Mercer County and Venango County to the south.

While the total population of Pennsylvania has grown by about 4.1 percent since 2000, the populations in Crawford County, Mercer County, and Venango County have not changed much, with only Erie County having seen even more growth with an increase of about 4.9 percent. This growth in Erie County likely comes from some of its surrounding counties, but given the state population growth there is a strong possibility that some of the newer population came from out of state. This increased population in Erie County and the fairly stable populations in the other three counties should result in greater recreation at Woodcock Creek Lake. At the very least, there is no reason to believe an increase in population would cause any decrease to recreation demand. Woodcock Creek Lake is one of many outdoor recreation locations available to the residents from this region and the role of the Project in meeting regional recreational demand is discussed in more detail in the following sections.

The population of Crawford County is projected to shrink by less than one percent every ten years through 2040 whereas the populations of Erie County, Mercer County, and Venango County are projected to grow at varying rates. Erie County in particular is expected to have its population grow at a slightly greater rate than the population of Pennsylvania as a whole, which should help to increase the recreation demand at Woodcock Creek Lake. The rather slow rate of decline in population for Crawford County and the nearly equally slow rate of increase in population for Venango County is not expected to have much effect on recreation demand. Mercer County's increase in population would likely have a slightly positive effect on recreation demand.

## **2.6 Economics**

### **2.6.1 Income and Poverty Status**

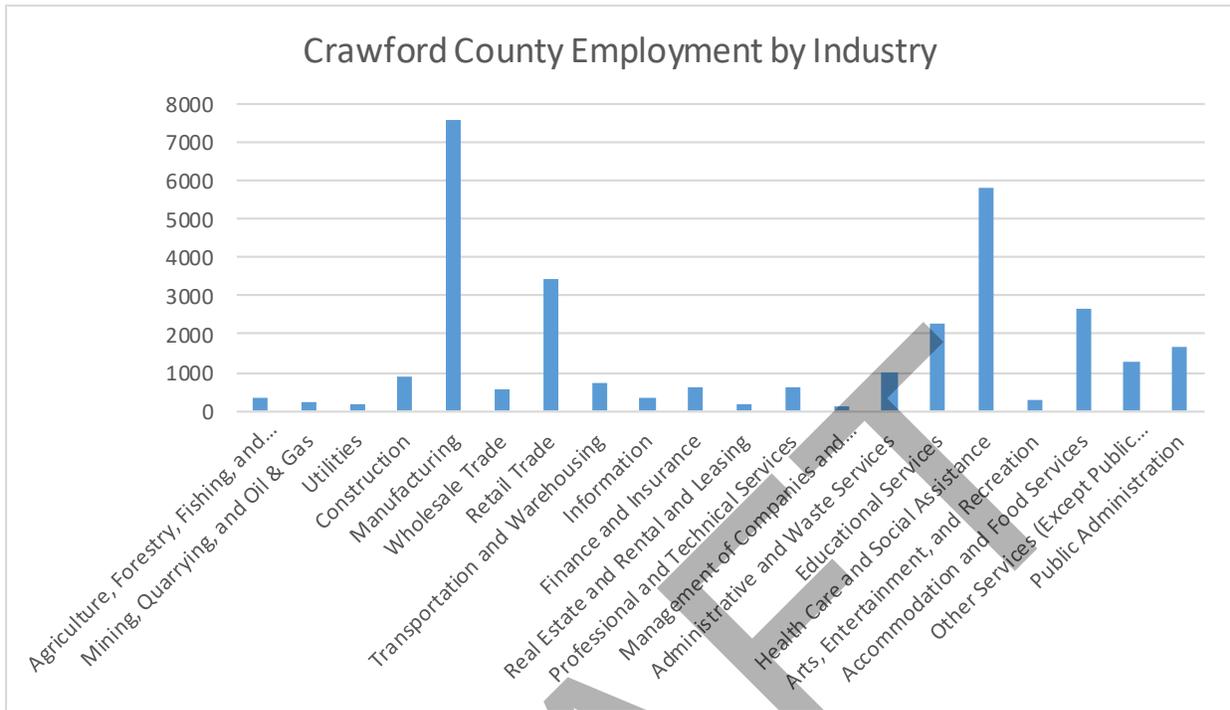
For the period of 2012 to 2016, the median household income in Crawford County, Erie County, Mercer County, and Venango County fell below the value for Pennsylvania. All four counties also had a higher percentage of their population below the poverty line when compared to the state. The county values were close enough to those of the state that their being slightly lower could be inconsequential when looking at impacts to recreation demand for Woodcock Creek Lake, but a key factor in determining recreation demand is income level of an area. In general, higher levels of income lead to greater amounts of time and money spent on recreation. The best conclusion that can be drawn from this information is that income and poverty status would likely have a small negative impact to recreation at the Project or no impact at all.

### **2.6.2 Area Industries**

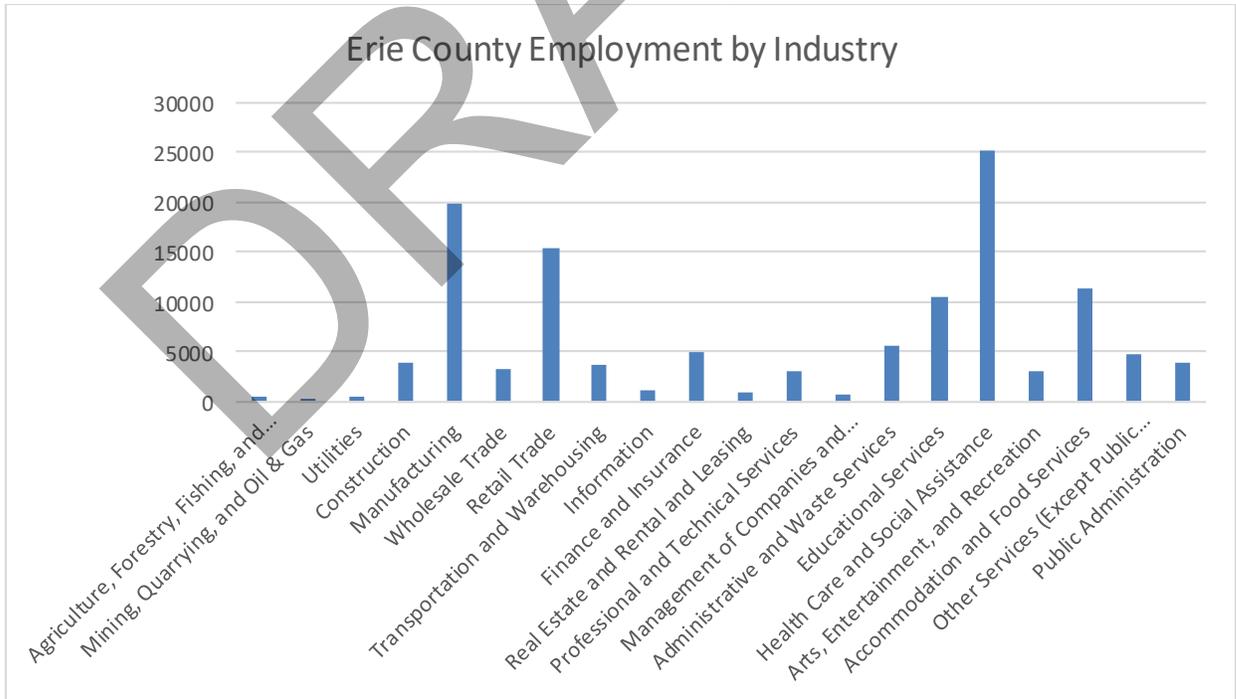
Crawford County, Erie County, Mercer County, and Venango County have many similarities with regard to primary industries of employment (Figures 2-1 through 2-4, below). The “manufacturing,” “health care and social assistance,” and “retail trade” industries are the largest employers in all four counties with “health care and social assistance” being the top industries in Erie County, Mercer County, and Venango County. The “manufacturing” industry is the largest employer in Crawford County. The following graphs break down employment by industry for each county.

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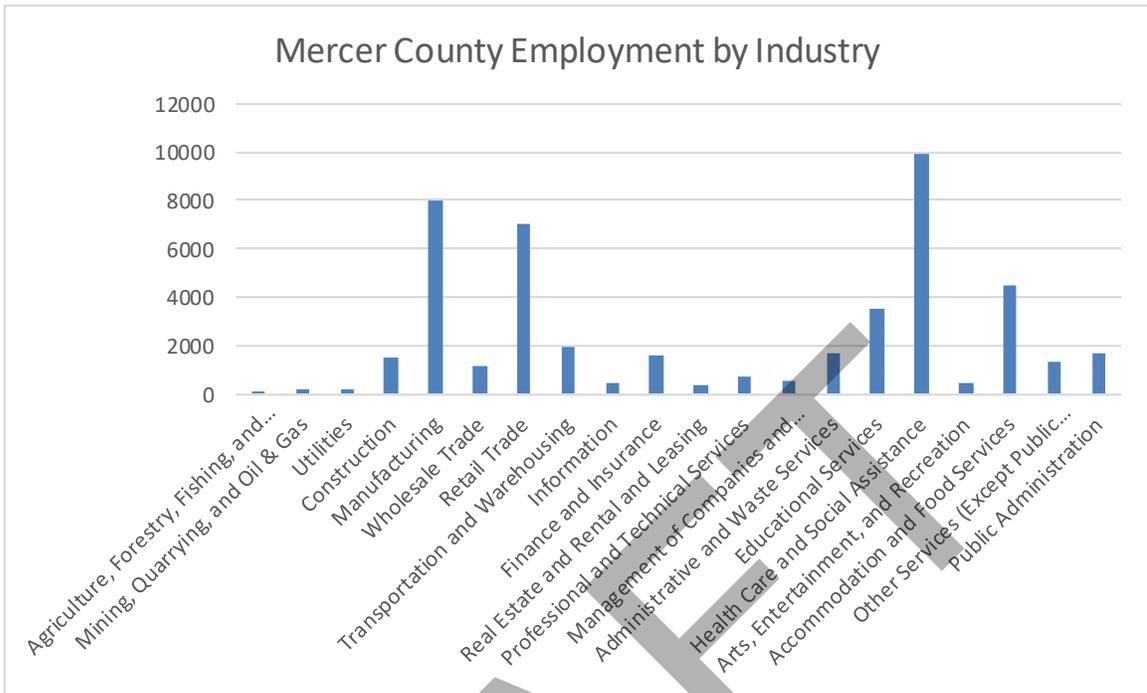
**Figure 2-1. Employment by Industry in Crawford County (for Persons Over the Age of 16)**



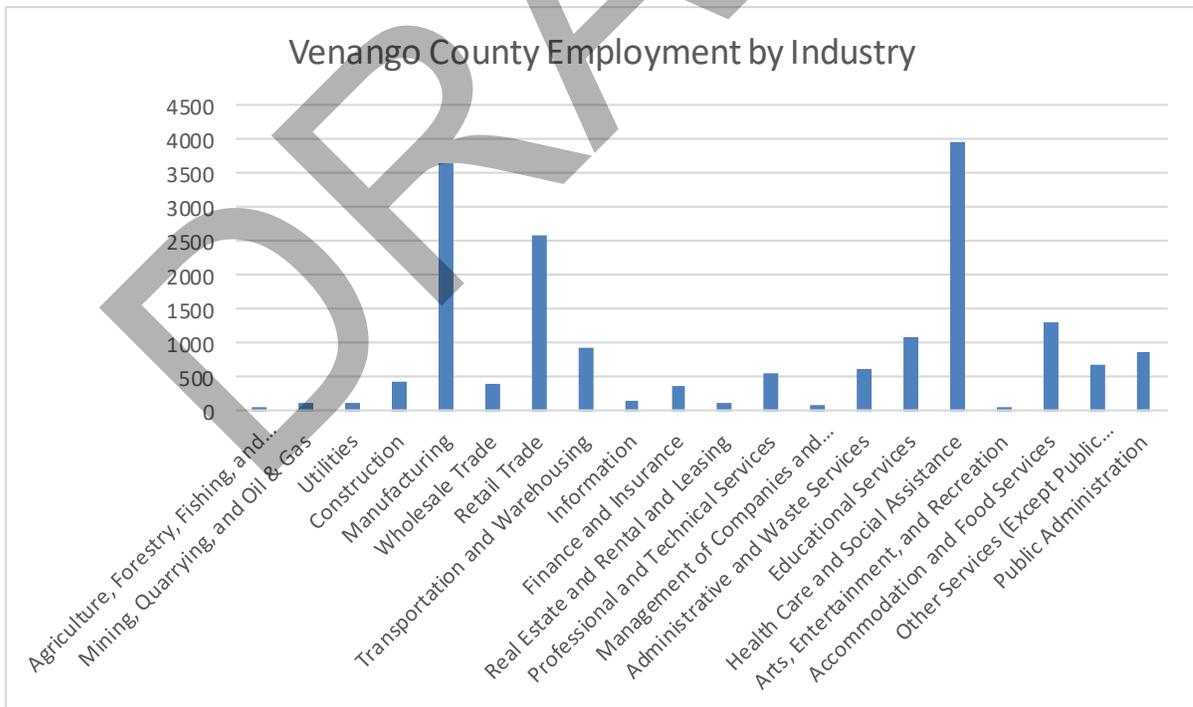
**Figure 2-2. Employment by Industry in Erie County (for Persons Over the Age of 16)**



**Figure 2-3. Employment by Industry in Mercer County (for Persons Over the Age of 16)**



**Figure 2-4. Employment by Industry in Venango County (for Persons Over the Age of 16)**



### **2.6.3 Economic Impact of Recreation Related Spending**

For 2016, there was an estimated 213,384 visits (person-trips) at Woodcock Creek Lake which resulted in direct benefits to the region amounting to \$4,404,845 in sales, \$1,581,492 in labor income, \$2,219,320 in economic value added, and 58 jobs supported in the region.

## **2.7 Recreation Facilities, Activities and Needs**

Woodcock Creek Lake offers a wide variety of facilities, including a pavilion, day-use and picnic areas, disc golf course, a boat launch area, Woodcock Lake Park Campground, hunting areas, and hiking trails provided by the Corps and partners. In addition, the Project provides opportunities for water-based recreation, such as fishing, boating, and paddlesport.

### **2.7.1 Zones of Influence**

The primary zone of influence encompasses the Erie-Meadville, Pennsylvania Metropolitan Statistical Area (MSA) as the basis in summarizing the population associated with Woodcock Creek Lake. The Erie-Meadville MSA includes Erie and Crawford counties and had a total population of 369,331 in 2010 (data from the U.S. Census website). As of the 2010 census, it is the 7th largest metropolitan area in Pennsylvania. Woodcock Creek Lake is located near the borough of Saegertown, Crawford County. Crawford County's population as of the 2010 census is 88,765, a 1.85% decrease from the 2000 census. The surrounding counties within the zone of influence are Erie, Mercer, and Venango Counties. Erie County's population as of the 2010 census is 280,566, nearly identical to that of the 2000 census. Mercer County's population as of the 2010 census is 116,638, a 3.12% decrease from the 2000 census. Venango County's population as of the 2010 census is 54,984, a 4.56% decrease from the 2000 census.

### **2.7.2 Visitation Profile**

The Project is a recreational destination for visitors in Crawford, Erie, Mercer, and Venango counties, with the majority coming from within a 25-mile radius. Popular recreational activities at Woodcock Creek Lake include a disc golf course, hiking, picnicking, hunting, angling, paddlesport (e.g. canoes, kayaks), and boating. There are six major higher level educational facilities within a 35-mile radius of Woodcock Creek Lake.

### **2.7.3 Recreation Analysis**

Woodcock Creek Lake had a visitation of about 213,384 in 2016. There have been user demands for infrastructure improvements, including installing a new pavilion located near the outflow, kayak launches added at the public boat launch at Crawford County Park, Wi-Fi and cell phone service to reduce safety hazards, and restroom facility upgrades at Bossard Nature Area and the overlook buildings. Other recreational opportunities include various picnic sites, one playground, and six hiking trails. The common infrastructure supports the current amount of recreational use at Woodcock Creek Lake.

#### **2.7.4 Recreational Carrying Capacity**

Carrying capacity, which includes both an environmental dimension (how much use can the resource support without being compromised) and a social dimension (how much use can occur before the quality of visitor experience is diminished), is currently balanced at Woodcock Creek Lake. The Project has few boating accidents despite the fact that the campground is booked year round. Future recreational developments will require harmonizing recreational diversity and accommodating new demands within a developed footprint in a manner that is environmentally and economically sustainable.

#### **2.8 Related Recreational, Historical and Cultural Areas**

Woodcock Creek Lake is located within the “Pennsylvania’s Great Lakes” tourism region by the Pennsylvania Department of Community and Economic Development. The Project is bordered by the county-operated Colonel Crawford Park, which features a campground and a boat launch, and State Game Lands 435, which offers hunting. Additional camping is available at nearby Stainbrook Park, operated by the Crawford County Conservation District and also within a short distance at Cochranon, Union City, Jamestown, Linesville, Meadville, and Conneaut Lake. Another major regional tourist attraction is Conneaut Lake Park and Marina, which features boating and an amusement park that opened in 1937. Lake Erie is 32-miles north of Woodcock Creek Lake.

#### **2.9 Real Estate and Acquisition Policy**

The total real estate at the Project encompass 1,732.03-acres of which 1,404.76-acres are fee land title, 325.90-acres are water, and 1.37-acres are flowage easement. There are 14 total outgrants of which two are easements for pipelines, two are easements for roads, and ten are easements for utility lines. There are no known mineral tracts at Woodcock Creek Lake.

### **3. Land Allocation, Land Classification, Water Surface and Project Easement Lands**

This Master Plan is intended to guide the comprehensive management and development of recreation, natural, and cultural resources at the Project, and define the Corps’ responsibilities pursuant to federal laws to preserve, conserve, restore, maintain, manage, and develop lands, waters, and resources. An important aspect in managing these goals is properly defining the appropriate use for lands and waters consistent with their congressionally authorized purpose(s).

#### **3.1 Land Allocation**

In accordance with EP 1130-2-550 (Change 5, 30 Jan 13) land allocations identify the authorized purposes for which Corps lands were acquired. There are four categories of allocation:

### ***Operations***

These are the lands acquired for the congressionally authorized purpose of constructing and operating the Project. The entire Woodcock Creek Lake Project has a land allocation of Operations, which means that all project lands were originally acquired to provide safe, efficient operation of the Project and its authorized purposes. No specific parcels were acquired for or assigned to individual purposes of recreation, fish and wildlife conservation and enhancement, or mitigation.

### ***Recreation***

These lands were acquired specifically for the congressionally authorized purpose of recreation. These lands are referred to as separable recreation lands. Lands in this allocation can only be given a land classification of “Recreation”.

### ***Fish and Wildlife***

These lands were acquired specifically for the congressionally authorized purpose of fish and wildlife management. These lands are referred to as separable fish and wildlife lands. Lands in this allocation can only be given a land classification of “Wildlife Management”.

### ***Mitigation***

These lands were acquired specifically for the congressionally authorized purpose of offsetting losses associated with development of the Project. These lands are referred to as separable mitigation lands. Lands in this allocation can only be given a land classification of “Mitigation”.

### **3.2 Land Classification**

EP 1130-2-550 (Change 5, 30 Jan 13) further defines land classifications to provide for development and resource management consistent with authorized purposes and other federal laws. The previous Master Plan, dated July 1975, used an obsolete classification scheme that has been rectified in this document to meet current standards. Currently, there are six categories of classification, identified as:

- Project Operations
- High Density Recreation
- Mitigation
- Environmentally Sensitive Areas
- Multiple Resource Managed Lands
- Water Surface

The classification process refines the land allocations to fully utilize Project lands and considers public desires, legislative authority, regional and project-specific resource requirements, and suitability. Land classification indicates the primary use for which Project lands are managed. The Project manages lands according to five of the above six classifications (sans Mitigation). The system for classification has been realigned to meet current standards. Appendix B, Plate 8 illustrates the Land Classifications map.

### **3.2.1 Project Operations**

This category includes lands required for the sub-impounding dam and associated structures, administrative offices, maintenance compounds, and other areas that are used to operate and maintain the Project (with public access to some of these areas often restricted). Where compatible with operational requirements, Project Operations lands may be used for wildlife habitat management and recreational use, as long as the proposed activities do not negatively impact project operations. Likewise, licenses, permits, easements, or other outgrants are issued only for uses that do not conflict with operational requirements. For example, mooring private vessels or modification of land and vegetation are prohibited without explicit permission. Requests for a permit for a compatible use within an area designated for project operations will be evaluated on a case-by-case basis and a decision will be made as to whether or not the proposed activity will be permitted, based on the potential impact to operations.

### **3.2.2 High Density Recreation**

These lands are designated for intensive levels of recreational use to accommodate and support the recreational needs and desires of visitors. They include lands on which existing or planned major recreational facilities are located, and allow for developed public recreation facilities, concession development, and high-density or high-impact recreational use. In general, any uses of these lands that interfere with public enjoyment of recreational opportunities are prohibited. Low-density recreation and wildlife management activities compatible with intensive recreation use are acceptable, most usually on an interim basis. No agricultural uses are permitted on these lands, except on an interim basis for maintenance of scenic or open space values. Permits, licenses, and easements are not issued for non-compatible man-made intrusions, such as pipelines, overhead transmission lines, and non-Project roads, except where warranted by the public interest and no viable alternative area or route is available.

The facilities in these areas will accommodate the recreation needs of visitors in concentrated numbers, while also offering open space lands for the purpose of providing more complete and attractive recreation areas. The modernization of campsites and recreation facilities is anticipated to occur on a funds-available basis. Modernization may include hardening, leveling, and paving of campsites, upgrading electrical and plumbing infrastructure, adding or upgrading

restroom and shower facilities, and adding or expanding roads and parking lots to provide better access and accommodate additional visitors.

Requests for permits to conduct concessions, rentals, or conducting any other business in these areas will be reviewed on a case-by-case basis and will involve real estate agreements and fee payment to the Corps.

Given the difficulty of maintaining current facilities, the development of more modern facilities demanded by recreational visitors will likely include partnering with stakeholders to share in the cost, operation, and maintenance of any such asset.

### **3.2.3 Environmentally Sensitive Areas**

This classification consists of areas where scientific, ecological, cultural, or aesthetic features have been identified. Designation of these lands is not limited to just lands that are otherwise protected by laws, such as the Endangered Species Act, the National Historic Preservation Act, or applicable state statutes. These areas must be identified and protected by management to ensure they are not adversely impacted. Typically, either very limited or no development of public use is allowed on these lands. No agricultural or grazing uses are permitted on these lands, unless necessary to implement a specific resource management benefit. These areas are typically distinct parcels located within another, larger land classification area.

Defining sensitive areas as part of the Master Plan process assists in the protection of valuable resources. These sites are mapped and managed by the Corps. Environmentally Sensitive Areas include locations of threatened and endangered species and cultural sites. Many factors contribute in identifying sensitive areas. The degree of sensitivity varies by location and other contributing factors. An area may be available to construct a properly-designed hiking trail, or may be actively managed by forest practices such as timber stand improvement that does not negatively impact the site's sensitivity. Other sites can be very sensitive to human disturbance and need adequate protection from development. Examples of this degree of sensitivity would involve eagle nests, osprey nests, and heron rookeries. These animals are threatened by human activities, especially during active breeding seasons.

Areas designated as sensitive can change over time and continuous monitoring through programs like Multiple Species Inventory and Monitoring (MSIM) provide valuable information to keep identified sensitive areas current. Through the use of Geographic Information System (GIS) databases maintained with separated layers, the dynamic nature of sensitivity can be managed in an up-to-date program. Some areas may be highly sensitive to change; other areas need prescribed management to remain viable. The goal of sensitive area management is to protect

and preserve known areas that contribute to the diversity and health of the Project area. Appendix B, Plate 9, shows the Land Cover map.

#### **3.2.4 Multiple Resource Management Lands**

These lands can be divided into four sub-categories for the purposes of this Master Plan. These categories are; Low Density Recreation, Wildlife Management, Vegetative Management, and Future/Inactive Recreation Areas. In the future, some of these areas may be converted to High Density Recreation. Conversion to High Density Recreation may occur based on future recreation needs within the Project area. The Corps must continue to carefully evaluate land use requests in these areas to include road and utility easements, rights-of-way for pipelines, resource mining activities, and other potential ground and resource disturbing activities and to ensure that these actions do not negatively impact the environment in a significant manner.

##### ***Low Density Recreation***

These lands are designated for dispersed and/or low impact recreation use. Development of facilities on these lands is limited. Emphasis is on providing opportunities for non-motorized activities such as walking, fishing, hunting, or nature study. Site-specific, low-impact activities such as primitive camping and picnicking are allowed. Facilities may include boat ramps, boat docks, trails, parking areas and vehicle controls, vault toilets, picnic tables, and fire rings. Manmade intrusions, including power lines, non-Project roads, and water and sewer pipelines, may be permitted under conditions that minimize adverse effects on the natural environment.

In these areas, natural conditions preclude intensive public use development because extensive alteration of natural systems would be required. Difficult access is also a factor indicating low-density use as most appropriate for these lands.

Private or long-term exclusive group use of these lands will not be permitted. Management practices leading to habitat improvements for the benefit of wildlife are encouraged. No licenses, permits, or easements will be issued for non-compatible manmade intrusions, such as underground or exposed pipelines, cables, overhead transmission lines, or non-Project roads. Exceptions to this restriction may be made where necessary to serve a demonstrated public need only in those instances where no reasonable alternative is available. Agricultural uses are permitted on this land. The focus for areas under the Low Density Recreation classification is on a balance of low-impact recreational activities along with conservation of natural areas and native species. Management of invasive species is also a priority for these areas to prevent their spread throughout the Project area. Hunting is permitted in most areas under this classification and is managed by the PAGC to promote healthy populations of game species. This includes multiple Game Management areas.

Low density recreation areas have the potential to be converted to high density recreation through the development of new trail systems, campgrounds, boat launches, or other recreational features. These areas also have the potential to be used for utility lines, timber sales, or mining activities if a third-party makes a request for such an activity. However, these actions would require additional study and would be approved on a case-by-case basis based on the anticipated impacts associated.

### ***Wildlife Management***

Proper management techniques will be applied wherever the opportunity exists to improve conditions for wildlife, recreation, scenic value, timber, wildfire prevention, pest control, watershed protection, or for use on the Project. While all Project lands are managed for fish and wildlife habitat in conjunction with other land uses, Wildlife Management Area lands are designated specifically for wildlife management. They contain valuable wildlife habitat components that are managed, using guidance that includes the State Wildlife Action Plan (SWAP) provided by the PAGC, to yield habitat suitable for designated game and non-game species. Licenses, permits, and easements for such man-made intrusions such as pumping plants, pipelines, cables, transmission lines, and non-Project roads are usually not allowed on these lands, although exceptions to this policy are allowable, if properly mitigated.

### ***Vegetation Management***

Vegetation management, including agricultural activities that do not greatly alter the natural character of the environment, are permitted for a variety of purposes, including erosion control, retention and improvement of scenic qualities, and wildlife management. Management activities focus on the protection and enhancement of forest resources and vegetative cover. The lack of fire, a natural and historic disturbance occurrence is a factor responsible for lack of forest regeneration, changes in forest species composition, and changing forest structure and forest health. In turn, the use of prescribed fire for a natural disturbance factor and ecological driver to reclaim, improve, maintain, and enhance habitats will be analyzed for use.

Forests are managed as a multipurpose resource for sustained yield when consistent with recreation and wildlife management objectives and approved land uses. Hunting and fishing are allowed pursuant to tribal or state fish and wildlife management regulations where these activities are not in conflict with the safety of visitors and Project personnel. Other activities are conducted under the guidance of the Project's forest management and wildlife management plans.

### ***Future or Inactive Recreation Areas***

These areas have site characteristics compatible either with future recreational development or recreation areas that are closed. Until there is an opportunity to develop or reopen these areas, they will be managed for multiple resources.

#### **3.2.5 Water Surface**

There are four possible sub-classifications. See Appendix B, Plate 10, Water Zoning map.

- **Restricted.** Water areas restricted for Project operations, safety, and security purposes.
- **Designated No-Wake.** To protect environmentally sensitive shoreline areas, recreational water access areas from disturbance, and/or public safety.
- **Fish and Wildlife Sanctuary.** Annual or seasonal restrictions on areas to protect fish and wildlife species during periods of migration, resting, feeding, nesting, and/or spawning.
- **Open Recreation.** Those waters available for year-round or seasonal water-based recreational use.

### **3.3 Easement Lands**

Project Easement lands are lands on which easement interests are held but no fee title ownership exists. They typically include three different types of easements – operations, flowage, and conservation.

#### **3.3.1 Operations Easement**

Operations easements are easements purchased for the purpose of Project operations.

#### **3.3.2 Flowage Easement**

Flowage easements are easements purchased for the right to temporarily overflow, flood, and submerge private land during flood risk management operations. The purpose of these easements is to provide adequate storage for flood waters.

#### **3.3.3 Conservation Easement**

Conservation easements are easements purchased for the purpose of protecting wildlife, fisheries, recreation, cultural resources, environmental resources, or endangered species.

## 4. Resource Plan

The resource plan describes, in broad terms, how project lands will be managed according to the established land classifications. Each classification is discussed in terms of anticipated public use and resource stewardship needs.

### 4.1 Classification and Justification

The land classifications are:

- **Project Operations.** Lands required for the dam, spillway and other areas that are used solely for operation of the Project (more fully described in Sec. 3.2.1, above).
- **High Density Recreation.** Lands developed for intensive recreational activities (more fully described in Sec. 3.2.2).
- **Environmentally Sensitive Areas.** Areas including scientific, ecological or cultural features such as those protected under the Endangered Species Act, National Historic Preservation Act or other laws (more fully described in Sec. 3.2.3).
- **Multiple Resource Managed Lands.** Includes areas of low density recreation, wildlife management, vegetative management, and future/inactive recreation areas (more fully described in Sec. 3.2.4).
- **Water Surface.** Water surface areas restricted for Project operations, no-wake zones, used for open recreation, or restricted for fish and wildlife sanctuary (more fully described in Sec. 3.2.5).

Further details for managing these lands will be included in the Operational Management Plan (OMP), as revised. Management tasks described in the OMP will support the resource objectives, land classifications, and resource plan set forth in this Master Plan. While the following sections address specific plans for the land classifications listed above, at all project lands the Corps will strive to meet universal project purposes which include taking proactive measures to enhance universal access to lands and facilities, improvement of safety for visitors, and identification and elimination of encroachments and trespassing. In addition, the Corps will seek to identify important “unofficial” recreation activities and sites such as undeveloped shoreline fishing areas, swimming areas outside of developed beaches, or other favorite areas used by recreationists. As development occurs in the future, the Corps will seek to protect these areas and may require mitigation for development actions that would negatively impact these

sites. As these sites are identified, they will be included in future updates to the Master Plan and may also be included in the OMP.

#### **4.1.1 Project Operations**

This category includes lands required for the sub-impounding dam and associated structures, administrative offices, maintenance compounds, and other areas used to operate and maintain Woodcock Creek Lake Project. There are 167.51-acres of land that are classified as Project Operations. The management plan (stated as “resource objectives”) for these areas is to continue providing physical security necessary to ensure continued operations of the dam and related facilities.

#### **4.1.2 High Density Recreation**

Lands developed for intensive recreational activities for the public are considered as high density recreation including day use areas, campgrounds, and commercial concessions (marinas, restaurants, resorts, etc.). Future possibilities for development of these areas include expansion of trail systems utilizing emerging technologies such as Quick Reference (QR) codes and other electronic media outreach, upgrades to designated watercraft (boats, kayaks, canoes, paddleboards, etc.), launching areas, conversion of low density campsites to sites with electric and water hook-ups for RVs, and expansion of additional park recreation features. There is a total of 129.81-acres that fall under High Density Recreation. Appendix B, Plate 11 shows the Recreation map.

#### *Dam Site*

The Dam Site Recreation Area is located at the top of the dam with parking located near the maintenance compound off of State Highway 198. Visitors can park here to access a one mile walk across the dam along with connecting hiking trails, a disc golf course, and newly installed swings from which the scenic view of the dam and lake can be observed.

#### *Bossard Nature Area*

The Bossard Nature Area is across the road from the Dam Site Recreation Area. The Bossard Nature Trail is designated as a National Recreation Trail in the National Trails System. In this area visitors can find hiking trails and a restroom.

#### *Overlook Recreation Area*

The Overlook Recreation Area is located on the north shore of Woodcock Creek Lake and off of State Highway 198. This area provides visitors with a scenic area to enjoy a picnic shelter, volleyball court, horseshoe pits, and an area to rent canoes, kayaks, and stand-up paddleboards

provided by our Co-Op Association. This recreation area is not only popular in the summer but also in the spring and winter seasons by photographers capturing images of migrating waterfowl which use Woodcock Creek Lake as a stopover.

#### *Outflow Recreation Area*

The Outflow Recreation Area is located below the dam off of State Highway 198. Visitors can enjoy a disc golf course, playground, picnic tables, access to hiking trails, and fishing.

#### *Stainbrook Park*

Stainbrook Park is located on the east side of the outflow, below the dam. This area is leased to the Crawford County Conservation District. Stainbrook Park offers fishing access, reservable picnic shelters, access to hiking trails/walking paths, and a nature center. The Woodcock Creek Nature Center offers various environmental education classes open to the public and special interest groups.

#### *Woodcock Lake Park*

Woodcock Lake Park is located on the south shore of Woodcock Creek Lake. It is maintained and operated by Crawford County Board of Commissioners. Here there is a campground, swim beach with volleyball court, hiking trails, four picnic shelters equipped with restrooms, volleyball courts, a playground, and a 70-foot wide paved boat launching ramp. The campground has 111 paved sites, 75 of which are equipped with electric hook-ups. All sites have a picnic table and charcoal grill. There are three comfort stations with showers also located within the campground. The campground is open from Memorial Day to Labor Day.

#### ***Best Management Practices for High-Density Recreation Lands:***

- Provide access for and use by the elderly and people with disabilities
- No ground disturbing activities in high density recreation areas, unless authorized by the Corps
- Interpret cultural resources to benefit visitors
- Protect the viewshed in order to maintain current aesthetic values
- Installation of a parking lot and drop in zone for kayaking at either the outflow or at existing boat launches
- Any additional campsites would only be constructed in existing campground
- Prescribed fire should be considered as a management method for this land classification

#### 4.1.3 Mitigation

No land falls under this category at Woodcock Creek Lake.

#### 4.1.4 Environmentally Sensitive Areas

The following occurrences on the landscape can be classified as a sensitive area:

- Known or discovered cultural sites
- Large tract woodlands
- Mature woodlands
- Reforestations
- Wetlands identified in the National Wetlands Inventory
- Lands possessing unique wildlife value by diversity or conservative species
- Steep slope
- Aesthetic quality or aesthetic views (scenic)
- Corridors between habitats that protect connectivity (e.g. riverine woodlands)

#### *Archaeological Site*

About 10-acres are classified as containing archaeological sites. Sites contain artifacts of pre-historic cultures of different archaeological periods, indicating repeated usage of this area over an extended period of time. The land around the dam has been affected by modern construction, but information may still be contained within deeper soil layers. This land classification will be managed to protect these sites in accordance with the provisions of pertinent laws, including the Archaeological Resources Protection Act, National Historic Preservation Act, and Native American Graves Protection and Repatriation Act. Areas will continue to be surveyed for the presence of archeological resources when development activities are proposed to ensure that utilities placement, mining, installation of recreation features, and other actions do not impact unknown resources. If additional cultural resources are discovered on the Project, these parcels would be converted to this management category and additional protections would be afforded to ensure compliance with applicable laws.

#### *Fresh Water Wetlands*

The National Wetlands Inventory delineates about 10-acres of freshwater emergent wetlands and 92-acres of freshwater forested/shrub wetlands were retained as Environmentally Sensitive Areas.

Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface, or the land is covered by shallow water. For the purposes of this classification, wetlands must have one or more of the following three attributes: 1) at least periodically, the land supports predominantly hydrophytes; 2) the substrate is predominantly

undrained hydric soil; and 3) the substrate is non-soil and is saturated with water or covered by shallow water at some time during the growing season of each year (Cowardin et al. 1979).

Wetland areas are functioning properly when adequate vegetation and landforms are present to: 1) dissipate stream energy associated with high waterflows, thereby reducing erosion and improving water quality; 2) filter sediment, capture bedload, and aid floodplain development; 3) improve flood-water retention and ground-water recharge; 4) develop root masses that stabilize streambanks against cutting action; 5) develop diverse ponding and channel characteristics to provide the habitat and the water depth, duration, and temperature necessary for fish production, waterfowl breeding, and other uses; and 6) support greater biodiversity. Based on above information, the wetlands at Woodcock Creek Lake are functioning properly.

#### *Bossard Environmentally Sensitive Area*

About 13.35-acres are classified as the Bossard Environmentally Sensitive Area. Eastern hemlock (*Tsuga canadensis*) was a dominant tree species in the presettlement forests of the eastern United States (Lutz 1930, Whitney and DeCant 1990), and covers an extensive range in the present day. It is a very important component of present-day eastern temperate forests, serving as a keystone species, especially in riparian zones (Mladenoff 1987, Quimby 1996, Ellison et al. 2005). Hemlock is the main conifer component in many existing mature forests of Pennsylvania and New York (Bjorkbom and Larson 1977, Abrams et al. 2001, Nowacki and Abrams 1994) and provides critical habitat for many species in both riparian and upland areas (Burns and Honkala 1990, Tingley et al. 2002, Ross et al. 2004, Turcotte 2008, Allen et al. 2009, Mathewson 2009). Hemlock trees in a forest directly and indirectly affect water volume and chemistry and soil nitrogen cycling. Hemlock regulates nutrient and water cycling, mediates soil moisture levels and stream base flows, air, soil, and stream temperatures, and provides unique and critical wildlife habitats with food. Widespread hemlock loss would affect local viability of several species, alter wildlife distribution and use, and reduce aquatic and terrestrial species diversity. Furthermore, hemlock loss would result in a loss of scenic and other aesthetic values, and would degrade some recreation experiences.

#### ***Best Management Practices for Environmentally Sensitive Areas:***

- Control noxious weeds and other pests in a manner that avoids damage to existing desirable vegetation and sensitive areas (wetlands and streams)
- Preserve and protect existing wetland and other sensitive or unique habitats that support threatened and endangered species along with other wildlife

- Proponents of surface disturbing activities shall identify important, sensitive, or unique habitats in the vicinity of the Project and design the proposed project to avoid, minimize, or mitigate impacts to these resources
- Riparian areas are maintained and enhanced for the protection and enhancement of fisheries
- As a standard practice, ephemeral and perennial drainages and wetland/riparian areas will be avoided as locations for oil and gas related facilities, including drilling locations, production facilities, roads, and pipelines. Whenever possible, facilities will be confined to existing alignments or locations, minimizing width requirements and maximizing multiple occupancy
- Surface disturbance will not be allowed within 200-meters of the source of a spring or seep, or within downstream riparian areas created by flows from the source or resulting from riparian area management
- Proponents of surface disturbing activities shall conduct surveys for federal and state-protected species and other species of concern within action area and design the Project to avoid, minimize, or mitigate impacts to these resources
- The Corps will prohibit the disturbance of any population of federally listed plant species
- Prescribed fire should be considered as a management method for this land classification
- Special management attention may be needed to protect important and relevant values of ESAs which may include historical, cultural, and scenic values, or fish and wildlife and their natural resources
- Land management decisions regarding the watershed supporting this ESA should take into consideration potential impacts to this community, including alterations to the light, temperature, and hydrologic regimes. Periodic monitoring for the Hemlock Woolly Adelgid is recommended
- No motorized use will be authorized within Environmentally Sensitive Area boundaries; other trails (i.e., foot trails, mountain bike trails, cross country skiing trails, etc.) will be analyzed on a case by case basis. Trail design, construction, and maintenance will ensure all criteria in which the Environmentally Sensitive Area was established will remain protected

#### **4.1.5 Multiple Resource Managed Lands**

This category includes 982.09-acres of land where the predominant use is for wildlife management or dispersed recreation. However, there are other compatible uses which may occur on these lands without impacting the predominant use.

#### **4.1.5.1 Low Density Recreation**

Low density refers to lands with minimal development or infrastructure that support passive public recreational use (e.g. primitive camping, fishing, hunting, trails, wildlife viewing). There are 360.63-acres at Woodcock Creek Lake that fall under this category.

Woodcock Creek Lake's low density areas are on the western side of the Project. These areas are managed for wildlife viewing, aesthetic value, bank fishing, and nature trails.

#### ***Best Management Practices for Low-Density Recreation Lands:***

- Provide access for and use by the elderly and people with disabilities
- No ground disturbing activities in low density recreation areas unless authorized by the Corps
- Interpret cultural resources to benefit visitors
- Protect the viewshed in order to maintain current aesthetic values
- Prescribed fire should be considered as a management method for this land classification

The Non-Recreational Outgrant Policy, which reflects nationwide guidance developed in 2009, will be used to evaluate requests for use of Corps lands and waters. Future non-recreational outgrant requests may be granted if one of the following two conditions are met:

- There is no viable alternative to the activity or structure being placed on Corps lands
- There is a direct benefit to Woodcock Creek Lake and their respective authorized mission

#### **4.1.5.2 Wildlife Management Areas**

Wildlife lands are available for sightseeing, wildlife viewing, nature study, and hiking. There are 721.2-acres of land and water leased to the PAGC for wildlife management. Consumptive uses of wildlife, including hunting, fishing, and trapping, may be allowed when compatible with the wildlife objectives for a given area and within federal and state fish and wildlife management regulations as established with ER 1130-2-540, Environmental Stewardship Operations and Maintenance Policies, 4 Nov 2002.

Proper management of white-tailed deer populations may help keep their negative impacts to a minimum. In areas that are overpopulated with deer, forest regeneration is often hindered, crops and horticultural plantings damaged, reducing many resources necessary to other wildlife. Habitat destruction by overabundant deer populations has had a serious impact on songbird populations, especially woodland warblers, which require forest undergrowth layers to feed, nest, and take cover. Many of the bird species so affected are in decline. In addition, over-abundant deer populations pose a significant risk to the safety of motorists and damage to vehicles when

roadway collisions occur. White-tailed deer management is regulated in Pennsylvania through hunting permits allocated by the PAGC.

Public land managers experiencing high density deer populations should incorporate considerations into land and habitat management techniques. Habitat plots may be established to improve herd health and decrease the animals' dependency on natural areas. Public and private landowners may enroll in the Deer Management Assistance Program (DMAP), administered by PAGC which provides additional permits to hunt antlerless deer on registered properties to help reduce deer populations (PA DCNR, 2017).

***Best Management Practices for Wildlife Management Areas:***

- Surface disturbance will not be allowed within 200-meters of active raptor nests on natural habitat features, such as trees, large brush, and cliff faces
- The Master Memorandum of Understanding between the Corps and the Animal and Plant Health Inspection Service, Wildlife Services (WS), will guide nuisance species damage control
- Manage forest resources and other vegetation for balanced uses of recreation, wildlife, and fisheries
- Monitor forest conditions to document health and to identify pests
- A habitat restoration plan shall be developed to avoid, minimize, or mitigate negative impacts on vulnerable wildlife while maintaining or enhancing habitat values for other species. The plan shall identify revegetation, soil stabilization, and erosion reduction measures that shall be implemented to ensure that all temporary-use areas are restored. The plan shall require that restoration occur, as soon as possible, after completion of activities to reduce the amount of habitat converted at any one time and to shorten the length of recovery time to natural habitats
- Recovery plans for species federally-listed as threatened or endangered will be implemented under the authority of the Endangered Species Act, including the reintroduction or relocation of native special status species in areas on public land in coordination and cooperation with local governments
- Increased intensity in research and monitoring will be needed to evaluate changes in habitat condition, land use threats to the species, species use and distribution, reclamation efforts, propagation, and other projects that may help in enlarging the knowledge base of these species
- Prescribed fire should be considered as a management method for this land classification

- No motorized use will be authorized within Wildlife Management Area boundaries; other trails (i.e., foot trails, mountain bike trails, cross country skiing trails, etc.) will be analyzed on a case by case basis.
- Re-establish Oak Savanna's where appropriate within Wildlife Management Areas. Restoration activities may include the following: prescribed fire, brush control, tree control, weed management, and planting of native species

#### **4.1.5.3 Future Recreation Areas**

For Woodcock Creek Lake, there are no acres of land that have been designated for future recreation.

#### **4.1.6 Water Surface**

There are four Water Surface categories within the boundaries of Woodcock Creek Lake: Restricted, Open Recreation, Fish and Wildlife Sanctuary, and Designated No-Wake. These areas make up 325.90-acres that are within the reservoir's conservation pool. As part of managing the water surface areas at the Project, the Corps will seek to maintain, and if possible improve water quality and fisheries habitat structure to support a productive sport fishery and maintain healthy populations of native fish species. Water quality monitoring at established stations should continue throughout the Project property and watershed, as the data gathered aids in conservation of the Projects aquatic resources.

##### **4.1.6.1 Restricted**

Restricted areas include those portions of the reservoir pool where public access is prohibited due to Project operations, security concerns, or to promote public safety. This includes the areas between trash booms and the upstream portion of the dam and the area immediately downstream of the dam. There are 0.3-acres at Woodcock Creek Lake that fall under this category.

##### **4.1.6.2 Designated No-Wake**

Designated no-wake zones are marked with buoys to protect environmentally sensitive shoreline areas, recreational areas (such as boat ramps and docks), and for public safety. Boats are required to slow down in these areas to prevent waves from impacting these areas. There are 48.3-acres at Woodcock Creek Lake that fall under this category.

##### **4.1.6.3 Open Recreation**

Open recreation areas are waters that are available year-round or seasonally for water-based recreational use. There are 277.3-acres at Woodcock Creek Lake that fall under this category. At Woodcock Creek Lake there is a 10-horsepower restriction on vessels. There has been public interest in increasing the horsepower limit; however, an action like this would require an evaluation outside the scope of this document. Further analysis would be in accordance with ER

200-2-2, Environmental Quality – Procedures for Implementing the National Environmental Policy Act, 4 Mar 1988.

#### **4.1.6.4 Fish and Habitat Management**

Fish and wildlife sanctuary zones have annual or seasonal restrictions on areas to protect fish and wildlife species during periods of migration, resting, feeding, nesting, and/or spawning. There are no acres at Woodcock Creek Lake that fall under this category.

## **4.2 Easement Lands**

There are about 125.23-acres of easement lands at Woodcock Creek Lake.

### **4.2.1 Operations Easement**

The Corps has no acres of operations easement lands at Woodcock Creek Lake.

### **4.2.2 Flowage Easement**

The Corps has 1.37-acres of flowage easement lands at Woodcock Creek Lake.

### **4.2.3 Conservation Easement**

The Corps has no acres of conservation easement lands at Woodcock Creek Lake.

### **4.2.4 Other Easement**

The Corps also has 123.86-acres of utility, pipeline, and roadway easement lands at Woodcock Creek Lake.

### ***Best Management Practices for Easement Lands:***

- Monitor any activities occurring on easement lands to ensure that Corps rights, according to terms and conditions of the legal easement, remain unimpeded
- Promote an understanding of Corps boundary and mission by both the public and the owners of underlying private property

## **5. Special Considerations Affecting Natural Resources**

During the development of this Master Plan, several issues were identified that could affect or are affecting the stewardship and management potential of the lands and waters at the Project.

### **1. Oil and Gas Development**

Since the construction of the Project, and particularly in recent years, there has been a regional increase in the amount of oil and gas related activities being proposed and requested on Corps land. These activities consist mostly of sections of gas-gathering pipelines and waterline right-of-way easement requests, at times culminating in a non-recreational outgrant, utility line rights-

of-way, or general site access easements/requests. These proposals are most often for the connection of more extensive, existing oil and gas networks. In general, these larger networks/systems typically include: gathering lines, water lines, compressor stations, road crossings, fresh water impoundments, water intakes/outfalls that were previously constructed, or proposed in areas adjacent to Corps land. In essence, the Corps land crossings and right-of-way requests serve as network connections.

Ownership of the minerals rights underlying Woodcock Creek Lake may be owned outright by the federal government, may be third party owned, or some combination thereof. There may be subordination agreements or surface restrictions in place. It is also possible for the Bureau of Land Management (BLM) to lease federally owned mineral interests beneath the surface of Project land. It is necessary to review and consider the specific ownership documentation of each tract in order to determine the rights and controls that the Corps has on said tracts.

## 2. Federally-Owned Minerals

Under the multiple-use principle, federal minerals beneath the surface of Corps lands may be made available for mineral exploration and extraction, consistent with Project activities. The primary statute governing oil and gas development on federally-managed lands is the Lease of Oil and Gas Lands (30 U.S.C. 226 et. al.), the Mineral Leasing Act of 1920 (30 U.S.C. 181 et. seq.), as amended by the Federal Onshore Oil and Gas Leasing Reform Act of 1987. This statute authorizes the Secretary of the Interior, through the BLM, to issue leases to private individuals and corporations to extract federal oil and gas from public lands. While the Mineral Leasing Act authorizes the BLM to issue oil and gas leases, it does not require that leases be issued. The BLM must obtain the Army's approval and the Army, through the Engineering District, can place limitations in the lease regarding the extractions of these minerals (See AR 405-30; See 43 CFR § 3503.20). If a developer approaches the BLM for access to a certain parcel or mineral interest, the BLM notifies the Corps and requests title information for the parcel and any use stipulations the Corps might require. The Real Estate Office for the Corps provides the BLM the title information along with any stipulations (AR 405-30). The BLM would in turn inform the party interested in leasing the federal minerals of all of the stipulations. If the developer is still interested, the BLM follows its procedures to make the minerals available. The Corps has the final say in whether minerals will be made available, and the Assistant Secretary of the Army (ASA) has final approval on any non-availability determination.

## 3. Owners of Private and State Minerals

Owners of private and state oil and gas rights have a property right to develop their interests, which generally includes reasonable use of the surface to the extent necessary to accomplish

such development. However, this does not mean their operations are free from limitation or reasonable regulation that might originate under state and/or federal law, whether pursuant to property law concepts or other legal authorities. Under applicable state and federal laws and regulations, the mineral owner, whether it is private or state, and/or the lessee must coordinate with the Project to use the federally-controlled surface. For all types of mineral leases where surface occupancy is approved under a lease, the lessees must obtain prior approval for any surface activities on Corps-managed lands (Title 43 – Public Lands: Interior Code of Federal Regulations [CFR] Subpart 3160). It is the Project’s responsibility to protect Project purposes when allowing surface use. Moreover, while owners of oil and gas interests generally have the right to reasonable use of the surface to the extent necessary for private oil and gas exploration and development, they are not exempt from possible liability to the surface owner for damages stemming from such exploration and development.

#### 4. State or Privately-Owned Minerals Accessed from State or Privately-Owned Land

Effective control of mineral extraction activities, particularly when the Corps does not own the necessary estates in real property to control development within the close proximity of dams and other structures, requires close coordination among the Project staff and the District Office, especially Operations, Real Estate, Engineering-Construction, and Office of Counsel. Operations personnel are often the first Corps employees to become aware of new or proposed mineral extraction activities near the Project. Mineral extraction activities may include exploration operations, mining operations, drilling operations, production operations, reworking operations (including hydraulic fracturing), and high pressure pipeline operations. Real Estate personnel must investigate the location of activities and determine the federal real property interests in the location. Engineering-Construction personnel must evaluate any new or proposed activities in order to make determination whether said activity is compatible with the structural integrity of the dam and other major structures. The Corps’ ability to regulate and dictate private mineral extraction on adjacent private lands is minimal; however, federal agencies have a duty to protect federal resources for authorized purposes.

#### 5. Hemlock Woolly Adelgid

Westward migration of the Hemlock Woolly Adelgid (*Adelges tsugae*), an exotic, invasive insect currently documented in 42 counties in the eastern two-thirds of Pennsylvania is a possible threat to the hemlock trees in the Bossard ESA. The Hemlock Woolly Adelgid, native to Asia, is a sap-feeding insect that attacks the eastern hemlock. This insect pest can result in high levels of hemlock mortality, opening up the forest canopy and illuminating the forest floor to full sunlight.

#### 6. Indiana Bat and Northern Long-Eared Bat

Currently listed as federally endangered, the Indiana Bat (*Myotis sodalis*) is a small, gray to chestnut-brown bat that hibernates in caves and abandoned mines during winter months (starting mid-September into November) and roosts under peeling tree bark, under bridges, and sometimes in buildings, during warmer months (starting mid-April into May). The total body length of an adult Indiana bat averages between 2-3 inches, with a wingspan of 9.5-10.5 inches. Populations have been declining since the 1960's, largely due to disturbance of winter cave hibernacula. The Northern Long-Eared Bat (*Myotis septentrionalis*), listed as federally threatened, is a medium-sized bat with a total body length of 3-3.7 inches and a wingspan of 9-10 inches. Their fur color can be medium to dark brown on the back and pale-brown on the underside; primarily distinguishable by their long ears. The Northern Long-Eared Bat, has similar behavior, threats to their existence, habitat, and range as the Indiana Bat.

While no known hibernacula for these bats exist on Woodcock Creek Lake property, there is sufficient potential summer roosting habitat present in and amongst the forested components of the Project. At present, there is no current management or survey plan in effect; however, the US Fish and Wildlife Service (USFWS) has adopted regional, seasonal cutting/disturbance restrictions. Generally, tree-cutting activities should be carried out from mid-November through the end of March, during which time bats are hibernating. If any tree-cutting is necessary from the beginning of April to mid-November, trees greater than or equal to five inches in diameter at breast height should not be cut or physically disturbed in order to avoid potentially killing or injuring roosting bats. Further, the following general guidelines apply to tree characteristics indicative of potential bat habitat: 1) dead or dying trees and snags (with exfoliating bark); 2) live trees (such as shagbark and shellbark hickory; *Carya* sp.) which have exfoliating or defoliating bark in the trunk or branches; and 3) trees or snags that have characteristics typical of roost sites for bats (i.e., have exfoliating or defoliating bark, or contain cracks, crevices, or holes that could be used by the species as a potential roost).

Currently, no known occurrence of these bats has been reported or observed at Woodcock Creek Lake. Staff are aware of and abide by the cutting/disturbance restrictions. Corps staff at the Project will continue to work with the USFWS and partner with other state and federal resource agencies to assure that potential detrimental effects to managed resources are minimized on public lands entrusted to the Corps.

## 7. Emerald Ash Borer

The Emerald Ash Borer (EAB), (*Agrilus planipennis*), is a non-native invasive pest of ash (*Fraxinus* sp.) trees in the United States. It was first found in North America in the summer of 2002 in southeast Michigan and in Ontario, Canada. The first confirmed detection in Pennsylvania occurred in June of 2007. EAB poses a significant threat to North America's ash

resources and has no effective natural enemies in North America. Control tactics are extremely limited with tree removal being the principal option. If left unchecked, the pest will continue to infest and destroy native and landscape ash trees, resulting in the loss of millions of dollars to forest products and nursery industries. The damage caused by EAB will directly impact the forest ecosystem due to the loss of ash species and its impact on biodiversity and wildlife.

#### 8. Bald Eagle

The Bald Eagle (*Haliaeetus leucocephalus*), is protected by the Bald and Golden Eagle Protection Act (Eagle Act) and the Migratory Bird Treaty Act (MBTA). The MBTA and the Eagle Act protect Bald Eagles from a variety of harmful actions and impacts. The U.S. Fish and Wildlife Service established the National Bald Eagle Management Guidelines to advise landowners, land managers, and others who share public and private lands with Bald Eagles of protective provisions that apply to human activities. A variety of human activities can potentially interfere with Bald Eagles, affecting their ability to forage, nest, roost, breed, or raise young. The guidelines are intended to help minimize impacts to Bald Eagles, particularly where they may constitute “disturbance,” which is prohibited by the Eagle Act.

#### 9. Round Goby

The Round Goby (*Neogobius melanostomus*) is a small, but aggressive bottom-dwelling fish that grows rapidly and reproduces several times in one spawning season. It is a huge threat to North American aquatic ecosystems because it is adaptable to a wide range of environmental conditions. Round Gobies are native to Eurasia in the Black, Caspian, and Azov seas, and tributaries. They were first discovered in the St. Clair River in 1990, presumably released during ballast water exchanges of transoceanic ships. They have since spread to all of the Great Lakes, and are now working their way inland through rivers and canal systems. In Pennsylvania, the Round Goby is abundant in Lake Erie and its lower tributaries. The first inland occurrence for Pennsylvania was confirmed in 2010 at the Fairview Gravel Pits in Erie County. The aggressive Round Goby is thriving at the expense of native fish populations including sculpins, logperch, lake trout, and darters. They feed voraciously on the eggs and young of native species, and are able to out compete them for food and breeding habitat. Round Gobies have a competitive advantage because they can feed in complete darkness, survive in degraded water conditions, and use their pelvic fin as suction cups to keep them anchored to rocks and substrates in rapid currents. Because Round Gobies aggressively defend prime spawning areas, they reduce the reproductive success of native species by denying them access. In addition to fish eggs and other aquatic organisms, Round Gobies feed heavily on zebra mussels and quagga mussels. Because invasive mussels are filter feeders, they can accumulate contaminants such as heavy metals, Polychlorinated Biphenyl (PCB), harmful bacteria, and toxins in their fatty tissues. Since many

sport fish, including smallmouth bass, yellow perch, and walleye, are found to prey on Round Gobies, the direct transfer and bioaccumulation of the contaminants moves up the food chain, leading to more restrictive fish consumption advisories. Round Gobies have also been implicated as vectors of disease such as Type E botulism in the Great Lakes that has caused widespread fish and bird kills. Preventing the spread of Round Gobies to new areas is the best way to prevent further ecological and economic damage. Anglers are often the first to discover new infestations because they are commonly caught by hook and line.

## 10. Climate Change

Potential long-term changes in Pennsylvania's climate (i.e., altered air temperature and/or precipitation rates) may affect habitats and species. Intolerant flora and fauna, as well as species currently existing on the edge of their range, are at greatest risk of local extirpation as a result of altered environmental conditions expected under climate change. Existing data regarding climate change was predicted on models and climate data from 60 years ago. Given these predictions, it may result in water management and water quality difficulties, such as not being able to make summer pool in time for the recreation season or not having enough water in the late summer to meet downstream flow targets. There is also the possibility of increased storm runoff, due to climate change, which has the potential to result in greater inputs of pollution, which in turn can affect water quality of the reservoir and downstream of the Project. Similarly, increased runoff may alter rates of sedimentation with the reservoir and reduce the lifetime of the reservoir. Ecosystems and associated species impacted by pre-existing anthropogenic stressors are also at greater risk. Thus, preserving and promoting healthy and connected habitats will be critical to ensuring long-term persistence of all species under climate change.

## 6. Agency and Public Coordination

Throughout the scoping process, the Corps involved the public; engaged with partners and stakeholders representing interests at the local, regional, state, and federal levels; and coordinated with sovereign (recognized) tribal nations.

Comments from the various partner, stakeholder, and public meetings were received on a variety of topics, including:

### **Preferred qualities, characteristics, and components of the Project:**

- Maintaining and promoting the trail system around the Project, including access to the walkway across the dam
- Providing opportunities for safe conditions for canoes and kayaks

- Ensuring that Woodcock Creek Lake develops incrementally in order to reach a maintainable level of recreation and tourism, without becoming too overcrowded
- Serving as a one of multiple destination points for the area, used as an attractor for tourists for Crawford County

**Potential Threats:**

- Public safety around the lake
- Balancing recreational draw with resource conservation objectives
- Horsepower increase and its potential impact on safety and water quality
- Invasive Species
- Harmful Algal Blooms (HABs)
- Declining Woodcock habitat
- Oil and Gas development

**Regional Needs/Opportunities:**

- Improving consistency of maps and brochures featuring the Project and surrounding area with other partners
- Opening up concessions for activities such as biking and kayaking
- Establishing a “friends group” for the Project
- Providing veterans and handicapped individuals with better access to the amenities at Woodcock Creek Lake
- Improving signage announcing arrival and departure from the Project
- Extending and increasing utilization of the trails and dam walkway
- Partnering on education programming and the building of educational sites
- Increasing public awareness of the Project and coordinating with current tourism efforts in Crawford County
- Starting a management plan for the forests based off analyses in order to increase young, successional habitat
- Studying the impacts of removal of the current horsepower restrictions
- Establishing allowances within the Master Plan for special or seasonal uses of Project lands such as ROTC trainings, hunting in the campground area, etc.
- Creating opportunities for other recreation experiences including disc golf, geocaching, and kayaking
- Protecting Hemlock grove at the Project

See Appendix D for the compilation of the comments collected during the Scoping and Draft Release meetings. All comments made during these meetings and submitted online were

considered for incorporation into the Master Plan. All formal comments submitted during the Draft Release meeting will also be found, with the Corps response, in Appendix D.

### **6.1 Scoping Meetings**

Scoping efforts began in late May 2017 with a meeting between Corps staff and Project partners: Crawford County Department of Public Safety, Crawford County Maintenance, Woodcock Township Emergency Management Agency (EMA), Saegertown Borough Maintenance, Saegertown Borough EMA, Crawford County Conservation District, and the Pennsylvania Game Commission. A stakeholder meeting with state agency representatives (i.e. Pennsylvania Department of Environmental Protection (PADEP) – Northwest Regional Office as well as the Waterways and Wetlands Program; Pennsylvania Fish and Boat Commission; Pennsylvania Environmental Council; and Pennsylvania State Police) and local governmental agency representatives (i.e. Crawford County Commissioners; Woodcock Township; Crawford County - Convention and Visitors Bureau as well as the Maintenance Department and the Department of Planning and Development); as well as local interest groups (Creek Connections from Allegheny College and Edinboro University ROTC) in attendance, was conducted on August 3, 2017. These scoping meetings focused on communicating the Corps' intent and need to revise the Master Plan; establishing the scope of the Master Plan update; and most importantly, learning about the needs, opportunities, and concerns of partners and stakeholders. See Appendix D for a summary of the meetings. For interested parties unable to attend the scheduled meetings or not located close to the Project site, they could visit the Project's Master Plan website to also engage in the scoping process.

The Corps decided not to hold a formal public scoping meeting at the beginning of the process because the Crawford County Conservation District was simultaneously updating their Master Plan. The Corps and the Conservation District raised concerns over confusing the public and meeting exhaustion. However, Crawford County Conservation District shared information gathered at their public meetings with the Corps. Additionally, stakeholders representing many different interests attended the Corps Master Plan scoping meetings. To compensate for the lack of formal public scoping meetings, efforts to engage the public via press releases and social media were increased.

A second partner/stakeholder and a public meeting will be held in August 2018. The purpose of the second set of meetings will be to unveil the proposed recommendations and proposed land use classification proposals and to elicit any remaining feedback on the proposed updates to the Master Plan and accompanying Environmental Assessment. Corps personnel will set up displays to depict the Project areas and the proposed changes resulting from the Master Plan revision.

## **6.2 Draft Release Meetings**

Will be conducted in August 2018.

## **6.3 Outreach Efforts**

The following outreach efforts were conducted to notify the public, stakeholders, and partners of the opportunities for involvement and to solicit input into the Master Plan update process:

- **Website:** A dedicated website was developed to describe the Master Plan process, changes in the Master Plan, and recommendations resulting from the Master Plan Revision as well as provide an avenue for additional comments to be submitted:  
<http://www.lrp.usace.army.mil/Missions/Recreation/Lakes/Woodcock-Creek-Lake/Woodcock-Creek-Lake-Master-Plan/>
- **Fact Sheet:** A Master Plan update fact sheet was developed to inform partners, stakeholders, and the public on the purpose and scope of the Master Plan update. This fact sheet was sent in all email correspondence, handed out at each of the meetings, and provided on the Project website.
- **Agency, Partner, and Stakeholder Letters:** Letters were sent directly to agencies, partners, and stakeholders inviting them to attend the scheduled meetings and to send any comments or concerns to the Corps.
- **Indian Nation Coordination Letters:** Letters were sent directly to Indian Nations in recognition of the Corps' Federal Tribal Trust responsibilities. The letters inquired as to whether the Indian Nations had any information relevant to the Project and invited them to contact the Pittsburgh District either via mail, email, or phone in order to submit any comments or concerns, and/or indicate how they would prefer to engage with the Master Plan update process.
- **Agency, Partner, and Stakeholder Email Invitations:** Email invitations for both the partner and stakeholder meetings were sent out via email to all partners and stakeholders with available contact information. A Project fact sheet and timeline were attached.
- **Public Facebook Posts:** Facebook posts were made on the Woodcock Creek Lake Facebook page advertising the Master Plan update and inviting comments.

## **7. Summary of Recommendations**

### **7.1 Coordination with Partnerships**

The modest size of the staff at Woodcock Creek Lake creates a prime opportunity for partners and volunteers to augment and advance the operations and management at the Project.

Therefore, an overarching recommendation for Woodcock Creek Lake is to create partnerships to leverage fiscal resources and continue to involve local communities and stakeholders in achieving the resource objectives set forth in Section 1.7. This recommendation includes working with federal and state agencies to leverage resources for complimentary natural resources management, with recreation service providers to improve user experiences, with environmental groups to improve habitat, and with educational and community groups to encourage volunteer activities that are mutually beneficial.

In order to keep in accordance with other plans regarding resources and opportunities within Crawford County, the Corps shall keep abreast of content within the existing plans reviewed during the update of this Master Plan as well as any future plans that are developed for the area.

The Corps should also seek to continuously stay engaged and further coordination efforts. To encourage coordination and partnership, the Project staff should engage with external partners including but not limited to:

- Crawford County Conservation District
- Crawford County Department of Planning & Development
- Crawford County Department of Public Safety
- Crawford County Maintenance
- Crawford County Commissioners
- Crawford County - Convention & Visitors Bureau
- Woodcock Township Emergency Management Agency (EMA)
- Saegertown Borough Maintenance
- Saegertown Borough EMA
- Pennsylvania Game Commission
- Pennsylvania Department of Environmental Protection (PADEP)
- Pennsylvania Fish & Boat Commission
- Pennsylvania Environmental Council
- Pennsylvania State Police
- Creek Connections from Allegheny College
- Edinboro University ROTC

Opportunities ripe for partnerships include: Promotion of the Project and linkages to other destinations in the area, updated brochures and maps to ensure consistency in distributed information, trail extensions or maintenance of trails, educational programming, an invasive species management plan, and the Woodcock Creek Lake signature event.

## **7.2 Facility Modernization**

It is the goal of the Corps at Woodcock Creek Lake to continue to modernize current facilities within existing footprints of recreation areas and prioritize improvements for safety and improved visitor experience where funding is available and in accordance with Engineer Manual 1110-1-400, Engineering and Design – Recreation Facility and Customer Service Standards, 1 November 2004.

Potential improvements include those described above, in Section 1.7 Resource Objectives of this Master Plan, which were adopted from the public input process and the needs identified from the Project staff including these examples below:

Specific potential improvements for safety, if resourcing and/or a successful partnership becomes available at Woodcock Creek Lake, should include:

- Informational and directional signs around the lake and trails, including demarcation of property lines
- Improvements to roads and parking areas leading to and surrounding Woodcock Creek Lake

Specific potential improvements for improved visitor experience, if resourcing and/or a successful partnership becomes available at Woodcock Creek Lake, should include:

- Pavilions to be installed at Woodcock Creek Lake recreation areas
- Installation of another 9 disc golf baskets, bringing the disc golf course to 18 holes
- Identify Project Site Areas (PSAs) with low use and degraded facilities; divest when appropriate
- Establish different ways for visitors to explore Woodcock Creek Lake: brochures, maps, or development of a phone app in which visitors could access park maps, learn about the Project, and log information from their experience at the site
- Seek opportunities to expand winter recreation activities (i.e., snowshoeing, cross country skiing, etc.)
- Increase technology related to recreation (i.e., drones, etc.)

## **7.3 Land Classification Changes**

The land use classification changes discussed in this document and evaluated in the attached Environmental Assessment represent the changes in land use, management strategies, and guidance concerning naming conventions that have occurred since the original Master Plan for this Project was developed in the mid-1970's. The primary change in the Master Plan were the three previous Land Classifications originally based on soil suitability (Recreation, Forest

Management, and Wildlife Management) are now consolidated under the Multiple Resource Management Land Classification (Low Density Recreation; Wildlife Management) in this revised Master Plan (see Table 7-1, below). As a result, the majority of Project lands are classified as Multiple Resource Management. High-density recreation is identified as its own classification due to increased recreation opportunities in these areas.

Other updates to this Master Plan include the renaming of archeological and historical sites as the new land classification of Environmentally Sensitive Areas and the addition of water classifications, which did not exist in the original Master Plan. Updating and highlighting naming conventions and/or classifications as part of the Master Plan will ensure the conservation of valuable resources continues uninhibited.

**Table 7-1. Conversion of Land and Water Classifications**

| <b>Original</b>                          | <b>Proposed</b>                                       |
|--|---|
| Historical Site                          | Environmentally Sensitive Area                        |
| Recreation                               | High Density<br>Low Density                           |
| Forest Management<br>Wildlife Management | Wildlife Management<br>Environmentally Sensitive Area |
| Administrative                           | Operations  |
| N/A                                      | Water Surface   |

While these land use classifications may be updated in the future, those described in this document, dated 2018, represent the most current and relevant uses of various Project lands. Additional details of the uses and management goals for individual Project site areas will be provided in a forthcoming OMP for the Project.

#### **7.4 Development Requests**

Historically, Woodcock Creek Lake has received oil and gas requests, a trend that is anticipated to continue, if not increase, into the future. In recognition of these trends, Woodcock Creek Lake should prepare for an increase in non-recreational requests (e.g. Pennsylvania Shell ethylene cracker plant-related infrastructure, natural gas transmission lines) by purposefully limiting development to existing disturbed areas, communicating Corps land use policies, and encouraging the development of mitigation plans in line with the Resource Objectives outlined in Section 1.7.

Furthermore, this document also highlights where the Corps will allow utilities to cross government land at Woodcock Creek Lake. This Master Plan has determined that additional oil and gas infrastructure will not be permitted on Environmentally Sensitive Areas, in order to limit existing disturbances, which will best protect Corps lands from negative impacts of

fragmentation, erosion, wildlife value, and aesthetic quality decline. In addition, the Master Plan identifies the areas in which viewsheds should not be compromised. Best Management Practices, which should be used and applied to any future oil and gas development requests at Woodcock Creek Lake, have been outlined in Section 5.

### **7.5 Wildlife Management and Environmentally Sensitive Areas**

The Corps land at Woodcock Creek Lake represents a significantly-sized riparian corridor of valuable wildlife lands. These lands are vulnerable to change by human disturbance; therefore, large portions of these lands are outgranted to other agencies, whose primary purpose is wildlife management, with secondary use being recreation. While some areas of Woodcock Creek Lake have developed recreation areas, a large portion of land acreage remains in an undeveloped natural state, being heavily forested and rich in riverine habitat, including wetlands. The goal is to continue coordination with resource agency partners, continue to successfully manage these lands for the use and enjoyment of our visitors, and the conservation of our valuable natural resources. In the future, the Corps should develop survey methods to identify sensitive habitats, possibly using a MSIM, and use the results to designate additional Environmentally Sensitive Areas. These lands should be protected from human disturbance and development activities to the extent possible, and ensure compliance with all applicable laws and regulations. If development activities are proposed for these areas, the Corps will work with partners to minimize the disturbance or mitigate the impacts. The Corps will also consider proactive steps to enhance natural areas for sensitive species and to restore sensitive habitats through native vegetation plantings, removal of invasive species through prescribed burns, or other efforts targeted at non-game species habitat. In addition, the Corps will continue to protect cultural resources in existing Environmentally Sensitive Areas and promote education related to these resources.

### **7.6 Threatened and Endangered Species**

Federally-listed Threatened and Endangered plant and animal species will be managed according to USFWS Recovery Plans. State listed species will be protected through partnerships and agreements with state agencies. Best Management Practices, which should be used to manage Threatened and Endangered Species at Woodcock Creek Lake, have been outlined in Section 2.

### **7.7 Water Quality**

Future stressors to Woodcock Creek Lake include increased nutrient loading and shale gas development. Effects of increased nutrient most likely would increase the frequency and magnitude of HABs, the collapse of the zooplankton community, as well as, the failure of the Project to meet its authorized mission of water quality. Future development is projected to increase in this area and therefore protection of undisturbed land will become important for the

future functioning of Woodcock Creek Lake. Water quality monitoring will continue as a critical part of a holistic, environmentally sound water-quality management strategy for the Project to continue to meet applicable federal and state environmental laws, criteria, and standards.

### **7.8 Summary**

The 1975 Woodcock Creek Lake Master Plan (updated from the original 1967 Master Plan) focused on a plan geared towards developed recreation; yet, such development did not progress at the Project as much as originally anticipated. Most recently, Woodcock Creek Lake more closely follows a Conservation/Recreation Mix Development Scenario. Thus, through our analysis and in accordance with ER 1105-2-100, we recommend that Woodcock Creek Lake continue to follow this mixed development scenario. The resulting resource objectives, resource plans, and specific recommendations found within this Master Plan reflect this goal.

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## APPENDIX A

### APPLICABLE PUBLIC LAWS & FEDERAL STATUTES

The following public laws (PL) are applicable to Woodcock Creek Lake.

**B.1 PL59-209, Antiquities Act of 1906:** The first Federal law established to protect what are now known as "cultural resources" on public lands. It provides a permit procedure for investigating "antiquities" and consists of two parts: An act for the Preservation of American Antiquities, and Uniform Rules and Regulations.

**B.2 PL74-292, Historic Sites Act of 1935:** Declares it to be a national policy to preserve for (in contrast to protecting from) the public, historic (including prehistoric) sites, buildings, and objects of national significance. This act provides both authorization and a directive for the Secretary of the Interior, through the National Park Service, to assume a position of national leadership in the area of protecting, recovering, and interpreting national archeological historic resources. It also establishes an "Advisory Board on National Parks; Historic Sites, Buildings, and Monuments, a committee of eleven experts appointed by the Secretary to recommend policies to the Department of the Interior".

**B.3 PL74-738, Flood Control Act of 1936:** Authorizes civil engineering projects (e.g. dams, levees, dikes) and other flood control measures through the U.S. Army Corps of Engineers and other federal agencies.

**B.4 PL75-761, Flood Control Act of 1938:** Authorizes civil engineering projects (e.g. dams, levees, dikes) and other flood control measures through the U.S. Army Corps of Engineers and other federal agencies.

**B.5 PL78-534, Flood Control Act of 1944:** Section 4 of the act as last amended in 1962 by Section 207 of PL87-874 authorizes the Corps to construct, maintain, and operate public parks and recreational facilities in reservoir areas and to grant leases and licenses for lands, including facilities, preferably to federal, state or local governmental agencies.

**B.6 PL85-500, River and Harbor Act of 1958:** This act authorizes the construction, repair, and preservation of certain public works on rivers and harbors for navigation, flood control, and for other purposes.

**B.7 PL85-624, Fish and Wildlife Coordination Act 1934:** This act, as amended, sets down the general policy that fish and wildlife conservation shall receive equal consideration with other project purposes and be coordinated with other features of water resource development programs. Opportunities for improving fish and wildlife resources and adverse effects on these resources shall be examined along with other purposes which might be served by water resources development.

**B.8 PL86-717, Forest Conservation:** This act provides for the protection of forest cover for reservoir areas under this jurisdiction of the Secretary of the Army and the Chief of Engineers.

**B.9 PL87-874, Rivers and Harbors Act of 1962:** This act authorizes the construction, repair, and preservation of certain public works on rivers and harbors for navigation, flood control, and for other purposes.

**B.10 PL88-578, Land and Water Conservation Fund Act of 1965:** This act established a fund from which Congress can make appropriations for outdoor recreation. Section 2(2) makes entrance and user fees at reservoirs possible by deleting the words "without charge" from Section 4 of the 1944 Flood Control Act as amended.

**B.11 PL89-72, Federal Water Project Recreation Act of 1965:** This act requires that not less than one-half the separable costs of developing recreational facilities and all operation and maintenance costs at federal reservoir projects shall be borne by a non-federal public body. An OCE/OMB implementation policy made these provisions applicable to projects completed prior to 1965.

**B.12 PL89-90, Water Resources Planning Act (1965):** This act established the Water Resources Council and gives it the responsibility to encourage the development, conservation, and use of the Nation's water and related land resources on a coordinated and comprehensive basis.

**B.13 PL89-272, Solid Waste Disposal Act, as amended by PL 94-580, dated October 21, 1976:** This act authorized a research and development program with respect to solid-waste disposal. It proposes (1) to initiate and accelerate a national research and development program for new and improved methods of proper and economic solid-waste disposal, including studies directed toward the conservation of national resources by reducing the amount of waste and unsalvageable materials and by recovery and utilization of potential resources in solid waste; and (2) to provide technical and financial assistance to state and local governments and interstate agencies in the planning, development, and conduct of solid-waste disposal programs.

**B.14 PL89-665, National Historic Preservation Act of 1966:** This act provides for: (1) an expanded National Register of significant sites and objects; (2) matching grants to states undertaking historic and archeological resource inventories; and (3) a program of grants-in aid to the National Trust for Historic Preservation; and (4) the establishment of an Advisory Council on Historic Preservation. Section 106 requires that the President's Advisory Council on Historic Preservation have an opportunity to comment on any undertaking which adversely affects properties listed, nominated, or considered important enough to be included on the National Register of Historic Places.

**B.15 PL90-483, River and Harbor and Flood Control Act of 1968, Mitigation of Shore Damages:** Section 210 restricted collection of entrance fee at Corps lakes and reservoirs to users of highly developed facilities requiring continuous presence of personnel.

**B.16 PL91-190, National Environmental Policy Act of 1969 (NEPA):** NEPA declared it a national policy to encourage productive and enjoyable harmony between man and his environment, and for other purposes. Specifically, it declared a "continuing policy of the Federal Government...to use all practicable means and measures...to foster and promote the general welfare, to create conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans." Section 102 authorized and directed that, to the fullest extent possible, the policies, regulations and public law of the United States shall be interpreted and administered in accordance with the policies of the Act.

**B.17 PL91-611, River and Harbor and Flood Control Act of 1970:** Section 234 provides that persons designated by the Chief of Engineers shall have authority to issue a citation for violations of regulations and rules of the Secretary of the Army, published in the Code of Federal Regulations.

**B.18 PL92-463, Federal Advisory Committee Act:** The Federal Advisory Committee Act became law in 1972 and is the legal foundation defining how federal advisory committees operate. The law has special emphasis on open meetings, chartering, public involvement, and reporting.

**B.19 PL92-500, Federal Water Pollution Control Act Amendments of 1972:** The Federal Water Pollution Control Act of 1948 (PL 845, 80th Congress), as amended in 1956, 1961, 1965 and 1970 (PL 91- 224), established the basic tenet of uniform State standards for water quality. PL92-500 strongly affirms the Federal interest in this area. “The objective of this act is to restore and maintain the chemical, physical and biological integrity of the Nation’s waters.”

**B.20 PL92-516, Federal Environmental Pesticide Control Act of 1972:** This act completely revises the Federal Insecticide, Fungicide and Rodenticide Act. It provides for complete regulation of pesticides to include regulation, restrictions on use, actions within a single State, and strengthened enforcement.

**B.21 PL93-81, Collection of Fees for Use of Certain Outdoor Recreation Facilities:** This act amends Section 4 of the Land and Water Conservation Act of 1965, as amended to require each Federal agency to collect special recreation use fees for the use of sites, facilities, equipment, or services furnished at Federal expense.

**B.22 PL93-251, Water Resources Development Act of 1974:** Section 107 of this law establishes a broad Federal policy which makes it possible to participate with local governmental entities in the costs of sewage treatment plant installations.

**B.23 PL93-291, Archeological Conservation Act of 1974:** The Secretary of the Interior shall coordinate all federal survey and recovery activities authorized under this expansion of the 1960 act. The Federal Construction agency may transfer up to one percent of project funds to the Secretary with such transferred funds considered non-reimbursable project costs.

**B.24 PL93-303, Recreation Use Fees:** This act amends Section 4 of the Land and Water Conservation Act of 1965, as amended, to establish less restricted criteria under which federal agencies may charge fees for the use of campgrounds developed and operated at federal areas under their control.

**B.25 PL93-523, Safe Drinking Water Act:** The act assures that water supply systems serving the public meet minimum national standards for protection of public health. The act (1) authorizes the Environmental Protection Agency to establish federal standards for protection from all harmful contaminants, which standards would be applicable to all public water systems, and (2) establishes a joint federal-state system for assuring compliance with these standards and for protecting underground sources of drinking water.

**B.26 PL94-422, Amendment of the Land and Water Conservation Fund Act of 1965:** Expands the role of the Advisory Council. Title 2 - Section 102a amends Section 106 of the Historical Preservation Act of 1966 to say that the Council can comment on activities which will have an

adverse effect on sites either included in or eligible for inclusion in the National Register of Historic Places.

**B.27 PL98-63, Supplemental Appropriations Act of 1983:** The act authorized the Corps of Engineers Volunteer Program. The United States Army Chief of Engineers may accept the services of volunteers and provide for their incidental expenses to carry out any activity of the Army Corps of Engineers except policy making or law or regulatory enforcement.

**B.28 PL99-662, The Water Resources Development Act of 1986:** Provides for the conservation and development of water and related resources and the improvement and rehabilitation of the Nation's water resources infrastructure.

**B.29 PL99-88, Supplemental Appropriations Act of 1985:** This act authorized the partnership of local and federal government and private interests to develop ecosystem improvements and recreational opportunities in the Des Moines River Corridor.

**B.30 PL101-640, Water Resource Development Act of 1990:** Provides for the conservation and development of water and related resources and the improvement and rehabilitation of the Nation's water resources infrastructure.

**B.31 PL101-646, Coastal Wetlands Planning, Protection, & Restoration Act of 1990:** Provides authorization to carry out projects for the protection, restoration, or enhancement of aquatic and associated ecosystems, including projects for the protection, restoration, or creation of wetlands and coastal ecosystems.

**B.32 PL101-676, Water Resource Development Act of 1988:** Provides for the conservation and development of water and related resources and the improvement and rehabilitation of the Nation's water resources infrastructure.

**B.33 PL102-580, Water Resource Development Act of 1992:** Provides for the conservation and development of water and related resources and the improvement and rehabilitation of the Nation's water resources infrastructure.

**B.34 PL104-303, Water Resource Development Act of 1996:** Provides for the conservation and development of water and related resources and the improvement and rehabilitation of the Nation's water resources infrastructure.

**B.35 PL106-53, Water Resource Development Act of 1999:** Provides for the conservation and development of water and related resources and the improvement and rehabilitation of the Nation's water resources infrastructure.

**B.36 PL106-541, Water Resource Development Act of 2000:** Provides for the conservation and development of water and related resources and the improvement and rehabilitation of the Nation's water resources infrastructure.

**B.37 PL109-58, Energy Policy Act of 2005:** Directed the Secretaries of Agriculture, Commerce, Defense, Energy and Interior to identify corridors for oil, gas, and hydrogen pipelines and electrical

transmission and distribution facilities on federal lands and to schedule prompt action to identify, designate, and incorporate the corridors into the applicable land use plans.

**B.38 PL110-114, Water Resource Development Act of 2007:** Provides for the conservation and development of water and related resources and the improvement and rehabilitation of the Nation's water resources infrastructure.

**B.39 PL113-121, The Water Resources Reform and Development Act of 2014:** This act authorizes the U.S. Army Corps of Engineers to carry out missions to develop, maintain, and support the nations vital ports and waterways infrastructure needs and support effective and targeted flood protection and restoration needs.

**B.40 30 U.S.C. 181, Mineral Leasing Act of 1920 as amended by the Federal Onshore Oil and Gas Leasing Reform Act of 1987:** Authorizes and governs leasing of public lands for developing deposits of coal, petroleum, natural gas, and other hydrocarbons, in addition to phosphates, sodium, sulfur, and potassium.

**B.41 30 U.S.C. 226, Lease of Oil and Gas Lands:** Authorizes the use of public lands for oil and gas exploration and development.

**B.42 16 U.S.C. 661-664, Fish and Wildlife Coordination Act of 1934 as amended by PL85-624:** Provides the basic authority of the U.S. Fish & Wildlife Service to become involved in the evaluation of impacts to fish and wildlife from proposed water resource development projects or when federal actions result in the control or modification of a natural stream or body of water.

**B.43 16 U.S.C. 668-668d, Bald and Golden Eagle Protection Act of 1940 as amended:** Prohibits anyone, without a permit issued by the Secretary of the Interior, from taking bald eagles (*Haliaeetus leucocephalus*), including their nests or eggs.

**B.44 16 U.S.C. 1531-1544, Endangered Species Act of 1973:** Provides for the conservation of species that are endangered or threatened throughout all or a significant portion of their range, and the conservation of the ecosystems on which they depend.

**B.45 16 U.S.C. 703-712, Migratory Bird Treaty Act of 1918:** Makes it illegal for anyone to take, possess, import, export, transport, sell, purchase, barter, or offer for sale, any migratory bird, or the parts, nests, or eggs of such a bird except under the terms of a valid permit issued pursuant to federal regulations.

**B.46 AR 405-30, Mineral Exploration and Extraction of 1984:** Governs exploration and extraction of minerals on Department of Army property.

**B.47 43 CFR § 3503.20 Title 43 – Public Lands: Interior Code of Federal Regulations [CFR] Subpart 3160:** Gives the Bureau of Land Management authority to issue permits or leases on public lands.

**APPENDIX B**

**MAP PLATES**

DRAFT

## APPENDIX C

### Design Memorandums/Studies/Contracted Work

| Design Memorandums/Studies/Contracted Work Related to Woodcock Creek Lake   |
|---|
| <b>GENERAL</b>  |
| Outside Interests(1984- )   |
| <b>DESIGN, COMPS &amp; ESTIMATES</b>  |
| Design Corres - (1988- )  |
| Design Comps - Misc Comps (1963-1970)   |
| <b>DESIGN MEMOS</b>   |
| General Design Memo - Part II & III   |
| DM #3 - Preliminary Master Plan - Part of the Master Plan – Feb 1967  |
| DM #7 - Dam, Spillway & Outlet Works – Jan 1970   |
| DM #8 - Master Plan – Jul 1975  |
| <b>GEOTECH</b>  |
| Corres & Reports - General (1983- )   |
| Bank Erosion and Gabion Protection  |
| Bank Erosion and Gabion Protection (1983- )   |
| Misc Notes & Comps  |
| Foundation Reports - Core Trench - Foundation Report #1   |
| Foundation Reports - Random Fill - Foundation Report #2   |
| Foundation Reports - Tower & Conduit Foundation - Foundation Report #3  |
| Foundation Reports - Spillway Weir Area – Foundation Report #4  |
| Lab Test Results - Dam - File 1 of 2  |
| Lab Test Results - Hwy Reloc - File 2 of 2  |
| Lab Test Results - Piezometer Installation  |
| Soils Data & Permeability Comps   |
| Soils Profile & Report - Hwy Relocation 20065 - Section #1  |
| Field Control Data - Reports to WES, OCE & ORD - Field Co Control Data  |
| Instrumentation - Piezometer Readings up to Aug 1973 Construction Readings  |
| Post Stability Analysis - Sept 1973   |
| Stability Analysis & Comps - 1966   |
| <b>HYDROELECTRIC POWER</b>  |
| Hydrology (1966- )  |
| Hydrology - Drought Contingency Plan (1992) (For General file on Drought Contingency Plan see 1110-2-1403a - Drought Reports & Surveys) |
| <b>LAND</b>   |
| General - (1966 - )   |

Appendix C

|   |
|---|
| Design Memorandums/Studies/Contracted Work Related to Woodcock Creek Lake         |
| Land - Annual Mgt Plan (1984-   |
|   |
| Rights of Entry   |
| Utilization Inspection Report   |
| <b>OPERATION &amp; MAINTENANCE</b>  |
| General (1967 - )   |
| Dam Safety - Flood Emergency Plan   |
| Operation & Maintenance Manual - 1976   |
| Periodic Inspection – corres ( 1973 - )   |
| Periodic Inspection Reports - 1 <sup>st</sup> – 1973                              |
| Periodic Inspection Reports - 2 <sup>nd</sup> – 1974                              |
| Periodic Inspection Reports - 3 <sup>rd</sup> – 1977                              |
| Periodic Inspection Reports - 4 <sup>th</sup> – 1979                              |
| Periodic Inspection Reports - 5 <sup>th</sup> – 1984                              |
| Periodic Inspection Reports - 6 <sup>th</sup> – 1989                              |
| Periodic Inspection Reports - 7 <sup>th</sup> – 1994                              |
| Periodic Inspection Reports - 8 <sup>th</sup> – 1999                              |
| Periodic Inspection Reports - 9 <sup>th</sup> – 2004                              |
| 1 <sup>st</sup> Periodic Bridge Inspection Report – Aug 1994                      |
| Periodic Inspection Reports - Photos for 4th Periodic Inspection Filed Separately |
| 2nd Periodic Bridge Inspection Report – Sep 1999                                  |
| Intermediate Inspection – Jan 2003  |
| Intermediate Inspection Report – Sep 2012   |
| 11th Woodcock Periodic Inspection Report – 16 Jun 2014                            |
| Woodcock Creek Dam 2015 Intermediate Inspection 13 Aug 2015                       |
| Woodcock Creek Dam 2016 Intermediate Inspection Report 24 Aug 2016                |
| <b>CORRESPONDENCE</b>   |
| Periodic Inspection – 13 Dec 2011   |
| <b>RECREATION &amp; LAND USE</b>  |
| Recr & Land Use - State Agencies (1969)   |
| Operational Management Plan - DRAFT (1988- )                                      |
| <b>SEDIMENTATION &amp; SILTING</b>  |
| Reservoir Sedimentation Data  |
| <b>UTILITIES &amp; PLANTS</b>   |
| Utilities & Plants - General  |
| Saegertown Treatment Plant - DA-81-C-0100   |
| <b>WATER &amp; WATER SUPPLY</b>   |

|   |
|---|
| Design Memorandums/Studies/Contracted Work Related to Woodcock Creek Lake   |
| Water & Water Supply - (1987- )   |
| Water & Water Supply - Water Supply Potential of Woodcock Creek Lake - Feb 1988   |
| <b>MISC SPECS</b>   |
| Constr of Bossard Area Restrooms - DeVore Construction Co DA-82-C-0098 & Transmittals   |
| Construction of Sanitary Tie-In - Mon Valley Construction Co DA-84-C-0091 & Transmittals  |
| Sealing Cracks in Sluices; Mosquito & Woodcock Creek Lake Structural Preservation Systems, Inc - DA-86-M-0268                     |
| Parking Area Addition - Polivka Paving Co Inc - DA-87-C-0042  |
| Access Road & Pump Station Repairs - Costello Industries Inc DACW59-89-C-0017   |
| Change Area Renovations & Misc Repair - Colonel Crawford Recr Area - Lopez Constr Co - DACW59-90-C-0014 (CANCELLED)               |
| Change Area Renovations & Misc Repair - Colonel Crawford Recr Area - Richard L. Wood - d/b/a Wood Gravel Co - DACW59-59-91-C-0003 |
| Sanitary Sewer Line Renovations at Colonel Crawford Recreation Area - Investment & Enterprises, Inc. DACW59-96-C-0030             |

DRAFT

## **APPENDIX D**

### **Summary of Public Comments**

**DRAFT**

# Master Plan Update Fact Sheet

## Woodcock Creek Lake

### Master Plan Revision

The US Army Corps of Engineers, Pittsburgh District, is revising the Woodcock Creek Lake Master Plan to guide the management of government-owned and leased lands around the Lake. This will impact future use of natural resources and recreational activities at Woodcock Creek Lake for the next 25 years.

This is your opportunity to let the Corps know how you would like the Lake to be managed in the future. The Master Plan Update process will include an analysis of potential effects of updates in the land management plan on the natural and social environment, including: fish and wildlife, cultural and historic resources, recreational opportunities, economics, land use, aesthetics, and public health and safety.

### Objectives of Update

- Conserve the resources of the Lake within the current policies and guidelines of the Corps of Engineers
- Accommodate current and projected use patterns with maximum efficiency
- Identify and protect cultural and natural resources
- Attract maximum participation by the general public and local government

### Why Update

The original Master Plan was developed more than 40 years ago and does not reflect current conditions at the Lake. Changes in Corps regulations and community needs necessitate a revision to this Master Plan.

The Master Plan revision will classify the government lands around the Lake based on environmental and socioeconomic considerations, public input, and an evaluation of past, present, and forecasted trends. This update is stewardship-driven and seeks to balance recreational development and use with the goal of conservation of natural and cultural resources.



### About the Lake

Authorized by the Flood Control Acts of 1962, Woodcock Creek Lake is one of 16 flood control projects in the Pittsburgh District. An important link in a system of flood control projects, Woodcock Creek Lake reduces downstream flooding as part of the French Creek flood control system, improves downstream water quality and provides a diversity of recreation activities.

Since its completion in 1973, the Woodcock Creek Lake Reservoir has prevented flood damages estimated to be in excess of \$33 million. Woodcock Creek Lake has the capability to store the equivalent run-off of 8.2 inches of precipitation from its 45.65 square mile drainage area above the dam. Woodcock Creek Lake also stores water and releases it downstream during dry periods to improve water quality and quantity for domestic and industrial use, navigation, recreation, esthetics and aquatic life.

Recreational activities at Woodcock Creek Lake are managed by the following partners:

- Crawford County, to operate Colonel Crawford Park Campground
- Pennsylvania Game Commission, to manage public hunting and wildlife areas
- Crawford County Conservation District, to operate Stainbrook Park



### Master Plan 101

The Corps is responsible for the maintenance, restoration and stewardship of natural resources on the multipurpose reservoir projects it manages. To facilitate the management and use of these lands, a Master Plan is maintained for each reservoir.

A Master Plan is a strategic land use management document that guides the comprehensive management and development of recreation, natural and cultural resources at Corps reservoirs and provides a vision for how the lake should look in the future.

The Pittsburgh District is proposing to adopt and implement a revision to the Woodcock Creek Lake Master Plan which was originally developed in 1976.



Share your perspective, sign up for our mailing list, and/or let us know how you'd prefer to be involved in the Woodcock Creek Lake Master Plan Update by emailing us at [celrp-pa@usace.army.mil](mailto:celrp-pa@usace.army.mil).



# PARTNER MEETING

## WOODCOCK CREEK LAKE MASTER PLAN UPDATE

Thursday May 25, 2017

1:00 PM – 3:00 PM

*Building Across from Project Office (Bossard) -*

Woodcock Creek Lake, 22079 State Highway 198, Saegertown, PA 16433

### **When the meeting is over:**

Partners will leave with an understanding of:

- Scope and purpose of a Master Plan
- Pittsburgh District's Vision for the Master Plan
- Partnering opportunities and areas of overlap with Pittsburgh District's Vision

US Army Corps of Engineers Pittsburgh District will leave with:

- Feedback from our partners on: 1. Existing Plans; 2. Regional needs; 3. Potential threats; 4. Best management practices; 5. Preferred qualities and characteristics of Woodcock Creek Lake; and 6. Gaps and potential opportunities that should be incorporated into the updated Master Plan

## ATTENDEES

John Chopp, USACE  
Bruce Kish, USACE  
Andrea Carson, USACE  
Joe Arnett, USACE - WCL  
Lou Ann McCracken, USACE – WCL  
Allen Clark, Crawford Cty. DPS/EMA  
Steve Scott, Crawford Cty. Maintenance  
Chuck Lawrence, Saegertown Boro Main & EMA  
Dan Norton, Woodcock TWP EMA  
Tracey Crawford, Crawford Cty. Cons. District  
Shayne Hoachlander, PA Game Commission

## NOTES

### What regional needs should the Master Plan take into consideration?

- Public awareness of location at Woodcock needs to be improved. In emergencies, the public doesn't know how to describe where they are in the case of an emergency. The public doesn't know where they are in an emergency situation. But the emergency response is split depending on location.
  - Potential Opportunities:
    - Upgrade Signage on access roads and around the lake
- Roads need to be repaired in the area. The pavement is terrible. Maintenance consistency is a problem.
  - Potential Opportunities:
    - Country coordination on road improvements.

- The public would like to hunt in the campground area. The Deer are not controlled in this area. But concern about public safety on the trails.
  - o Potential Opportunities:
    - Could consider a wounded warriors hunt, or handicap accessible
    - Set up a blind, permitted hunting.
    - Would be able to shut this down for a couple of weeks.
  - o Due-Out: USACE - Do we have a map that shows what is opening to hunting?
  
- Campground Improvements.
  - o Potential Opportunities:
    - Cabins were once suggested at the County Campground which now has 111 sites, the outside ring is non-electric, back in woods. But everything on the inside has electric. The cabins were determined to not necessarily be worth the investment. Investing in cabins is not something they would want to do, at least right now.
    - Don't have a camp host at Woodcock currently.
    - Doesn't drain. Really soupy/wet over there.
  
- Extension of trails.
  - o Current Status:
    - No mountain biking or horses for Game Commission lands. Only hiking. Little loop trails.
    - Horses on the Conservation Land – through Conservation District (26 acres).
  - o Potential Opportunities:
    - In the Conservation Land, they've had a few comments – some folks would prefer not to make changes to the 'leave no trace' trails.
    - Buzzard Trails needs a lot of maintenance.
  - o Due-Out:
    - USACE - Is Conservation District on the map?
    - Conservation District - Mark on maps which trails need repaired.
  
- Handicap access. There is an area that would make sense.
  - o Potential Opportunities:
    - Handicap Accessible Pier. Note: Concern that location is already congested.
    - Need to identify if anywhere else make sense to put the pier.
  
- There may be public interest in increasing this HP limit, which may increase the user groups.
  - o Current Status:
    - 9.9 HP limit on the Lake, and part no wake zone. The only motorboats are fishing. Occasionally get a sailboat.
    - People who have already bumped their motor up, they can't bring their boats here to fish. Can only use their trolling motor.
  - o Potential Opportunities:
    - Increasing this HP limit

### What potential threats need to be addressed in the Master Plan?

- Disconnect across the lake stakeholders. Issue with consistency across the lake and across the board.
  - o Potential Opportunities:
    - Joe is also creating a map with ALL the trails. Would be great to create a consistent Map that includes all lands/color coded and in signage.
    - Consistent brochure/handouts between all land management organizations.
  
- If fire in the area, difficult to get close enough to get water out of the Lake.

- Potential Opportunities:
  - Could have a dry hydrant or potential draught points. (tainbrook & Up near the upper parking lot near game commission.)
  - Might need to have a summer and winter hydrant because water level changes.
  - Create a map of all the fire hydrants on the property.
- Invasive Species.
  - Current Status:
    - Invasive Species more present on the Game Commission land including: Autumn Olive, MF Rose, Bush Honey Suckles, Fried Mungweeds?, Emerald Ashborer.
    - Garlic Mustard on the Conservation District lands.
    - Anticipating Hemlock Wholly Delgia?
  - Potential Opportunities:
    - Need to be colorblind when comes to property boundaries.
    - Map the invasive species to get funding and partnerships.
- HABs
  - Current Status:
    - Marginal the last couple of years. The movement of boats could be a large threat.
- ATVs
  - Current Status:
    - Don't have ATV problems at Woodcock, but Union City has issues. This happens because supervision isn't as strong. They can also get across the creek in Union City.
- Declining Woodcock population.
  - Current Status:
    - Woodcock population is OK – but shrub habitats are becoming limited.
    - Room for improvement on Woodcock population, but fairly labor intensive. Getting the habitat is easy to get, but maintaining is difficult & expensive.
  - Potential Opportunities:
    - Need for habitat management. Some areas are reverting to shrubs, and the fires would help to establish those as well.
    - Commercial timber harvest would also allow for this type of habitat. Currently do some small scale, non-commercial cutting.
- Oil and gas is not an issue here, but instead south.

### What Best Management Practices should be considered (and to what end)?

- Prescribed Fires & Timber Harvests. (Game Commission).
  - Potential Opportunities:
    - Timber Harvests would need to be captured in the lease.
    - And could have the wording the in Master Plan, to save on NEPA.
    - Would want any income to stay in the area, keep local.

### What opportunities and information are we missing, what gaps do we need to fill?

Current Status of Woodcock Use: Mostly used as a weekend destination or even a week. Mostly local coming in to camp and then go back home. Not a part of multiple destinations. May go out to visit some things in the week, but not part of big trip. Do get an influx from the county fairgrounds.

- Wounded Warriors have a 5k every September.
- Woodcocks Signature Event – in limbo. Tried several things. Dam Tri (but not hosted by USACE). Hot Air Balloon event (now at Allegheny county). Touch a Truck (was most successful). Now Crawford County Fair. & Fish Hatchery Open House.
- Camping, Trails, Beach – well used and content with what they have
- Not necessarily much more that could be set aside for conservation, more habitat management is needed than anything.
- Game Commission doesn't anticipate any development.

There have already been many great ideas that have been tried and haven't worked including:

- Beach – put in the beach, but such a fluctuation in water levels that didn't really work.
  - Game Commission put in a handicapped trail, but when put in didn't get any use at all. But this was entirely on Game Lands, but a regular vehicle couldn't get around. Eventually tore the blind down. Don't know why it wasn't as successful.
  - Due-Out: USACE – Review peer to peer studies to understand what has been done in the past that hasn't been successful. Get this information from the Planning Commission.
- Appeal to main uses and user groups
    - Potential Opportunities:
      - Appeal to main uses: Fishing, Walking Trails, & Camping
    - Potential Opportunities:
      - Appeal to new user groups: Disc Golf; Outdoor Club that just formed; Karlin Marsh, Birding Group who are interested in the mudflats in late summer.
  - Interest in kayaking has skyrocketed recently.
    - Potential Opportunities:
      - To cater to the kayak user group, could rebuild old launch in game commission area (depending on water level).
      - Find other ways to improve opportunities for kayaking.
  - Fine tune management prescription for indicator species for Woodcock.
    - Potential Opportunities:
      - Find funding to implement these State/Federal Woodcock Management Plan.
      - Blue-Winged Warbler (non-game species) has a similar habitat requirements. Brown Thrasher as well.
      - Look up info in Breeding Bird Survey.
  - Make it known that this is public land that folks can do stuff on.
    - Potential Opportunities:
      - Make different groups aware of the opportunities available to partner with.
      - Example: Volunteer surveyors, Expert with a lot of knowledge. Allegheny College could be used.
  - Combining Hiking trails to combine the properties.
    - Potential Opportunities:
      - Add the connectors.
      - But need to be cognizant of pulling the non-hunting public into the hunting area. To solve this, could limit the thoroughfare from public during the hunting season. Could make access Seasonal or take the trail over the causeway? Note: Anyone can walk within the game land

now although no designated trail. It is not restricted to only hunting activities, its open to other non-motorized activities.

- Geocaching. Tons of caches available.
- Disc Golfing course might become a professional course.
- Emerging Technology
  - o Potential Opportunities:
    - Apps for Bird IDs or trails.
    - QR Code on the signs that are out there.
    - Add signage plan into the Master Plan.
- Area for outdoor classroom
- Everyone update emergency management plan POCs.

What areas or resources need to be protected for their environmental, cultural, or archeological significance?

- Due-Out: USACE to send out map for partners to mark up.
- Due-Out: All – mark which areas or resources need to be protected for their environmental, cultural, or archeological significance.

## EXISTING PLANS

Game Commission – Have annual Plans, provided during compliance inspections. But don't add much to the table since so outdated. They are in the process of updating all of their game land plans (through planning proc). They'll do all of theirs first and then the leased lands. This will be long done before our plan is done.

- Due-Out: USACE – Coordinate with Game Commission to ensure updated Master Plan does not contradict what they eventually think they'd like to do.

Emergency Plan – for anything that happens here at the dam. They look at our inundation plans but want to know if our numbers are correct. Their interest is to know as quick as they can if there's a dam leak.

- Due-Out: USACE – Check to see if our inundation maps up-to-date and notify our emergency management POCs

Conservation District Master Plan– DCR funded; hoping to have their out in 9 months. Had one public meeting – next is in June 28<sup>th</sup>. Pushed out a public survey. Their scope covers their lease (26 acres) but also collecting comments about other areas of the management lease as well. Concern about meeting fatigue for the public, don't want to confuse them. To them, it's all Woodcock Creek Lake and not about different outgrants.

- Due-Out: USACE – Work to incorporate the plans from the Conservation District.

## STAKEHOLDERS MENTIONED AT MEETING (WILL BE ADDED TO INVITE LIST FOR STAKEHOLDER MTG)

Union City

NRCS

Special Interest User Groups – Birders

Allegheny College – Creek Connections.

Audubon.

Edinboro.

Mark – Blue Bird Box Guy

Crawford County Tourism Borough

Walkers – 15 minutes away

Disc Golfers – Pittsburgh & Erie

### Next Steps & Summary of Due-Outs:

- USACE:
  - Double check to see if we have a map that shows what is opening to hunting.
  - Check to see if the Conservation District is on the map
  - Review peer to peer studies to understand what has been done in the past that hasn't been successful. Get this information from the Planning Commission.
  - Send out map for partners to mark up.
  - Coordinate with Game Commission to ensure updated Master Plan does not contradict what they eventually think they'd like to do.
  - Check to see if our inundation maps up-to-date and notify our emergency management POCs
  
- All:
  - Mark which areas or resources need to be protected for their environmental, cultural, or archeological significance.

DRAFT



DEPARTMENT OF THE ARMY  
PITTSBURGH DISTRICT, CORPS OF ENGINEERS  
WILLIAM S. MOORHEAD FEDERAL BUILDING  
1000 LIBERTY AVENUE  
PITTSBURGH, PA 15222-4186

July 24, 2017

REPLY TO  
ATTENTION OF

Environmental and Cultural Resources Section

Dear Woodcock Creek Lake Stakeholder:

The U.S. Army Corps of Engineers, Pittsburgh District, is in the process of updating the Master Plan for Woodcock Creek Lake. A Master Plan is a strategic land use management document that guides the comprehensive management and development of recreation, natural and cultural resources at Corps reservoirs. The most recent Master Plan for Woodcock Creek Lake was developed in 1975. Changes in Corps regulations and community needs necessitate a revision to this outdated Master Plan. Enclosed is a fact sheet which provides additional information on the Master Plan update.

We invite you to help us shape the future of recreation activities and environmental stewardship opportunities at the lake. Please consider attending our first scoping meeting to be held on:

Thursday, August 3, 1:00-3:00 p.m.

Bossard Nature Center

Woodcock Creek Lake, 22079 State Highway 198, Saegertown, PA 16433

If you plan to attend the meeting, please send an RSVP to Andrea Carson at [andrea.l.carson@usace.army.mil](mailto:andrea.l.carson@usace.army.mil) by Monday July 31, 2017.

Thank you in advance for your participation and interest in the updated Master Plan for Woodcock Creek Lake. Your input is valuable to this effort. If you have any questions regarding the Master Plan or the stakeholder meeting, please feel free to contact Ms. Carson at (412) 395-7444 or by e-mail at the above address.

Sincerely,

A handwritten signature in black ink that reads "Ryan A. Fisher".

Ryan Fisher  
Chief, Planning and Environmental  
Branch

Enclosure

# STAKEHOLDER SCOPING MEETING

## WOODCOCK CREEK LAKE MASTER PLAN UPDATE

Thursday, August 3rd, 2017  
1:00 PM – 3:00 PM

Bossard Nature Center - Woodcock Creek Lake, 22079 State Highway 198, Saegertown, PA 16433

### When the meeting is over:

Stakeholders will leave with an understanding of:

- Scope and purpose of a Master Plan
- Pittsburgh District's vision for the Master Plan
- Partnering opportunities and areas of overlap with Pittsburgh District's vision

US Army Corps of Engineers Pittsburgh District will leave with:

- Feedback from our stakeholders on: 1. Existing Plans; 2. Regional needs; 3. Potential threats; 4. Best management practices; 5. Preferred qualities and characteristics of Woodcock Creek Lake; and 6. Gaps and potential opportunities that should be incorporated into the updated Master Plan

## AGENDA

Welcome & Introductions

Meeting Objectives

Overview of Master Plan Purpose & Process

- Project Timeline
- Driving vision for Resource Objectives

Discussion - Stakeholder Feedback to the Following:

- Existing Plans
- Regional needs
- Potential threats
- Best Management Practices
- Gaps and potential opportunities

Discussion – Preliminary Alternatives to Land Use Classifications

- Preferred qualities and characteristics

Next Steps

## ATTENDEES

PA State Police, Meadville Station  
PA Fish & Boat Commission  
Crawford County Dept. of Planning & Development  
PADEP Northwest Regional Office  
PADEP Waterways and Wetlands Program  
Crawford County Commissioners  
Woodcock Township  
Crawford County Convention & Visitors Bureau  
Crawford County Convention & Visitors Bureau  
PA Environmental Council  
Crawford County Maintenance  
Creek Connections – Allegheny College  
Edinboro University – ROTC  
USACE - District Office  
USACE – Woodcock Creek Lake  
USACE – Northern Area Office

## NOTES

### What would you say makes Woodcock Creek Lake unique?

- Trail around the lake (could make us a huge draw).
- Catering to canoes & Kayaks
- Dam is walked and run on all the time.
- Beautiful, maintained facility.
- Not overcrowded.
- Safe facility.
- Perfect place for 5k DamTri (because is flats or have trails for challenge, hit every fitness level)

### What regional needs should the Master Plan take into consideration?

- Increase in Tourism and coordination with current tourism efforts in Crawford County. Multiple brochures already feature Woodcock Creek Lake and many opportunities exist to take advantage of existing avenues for promotion. (POC: Juanita Hampton)
  - Potential Opportunities:
    - Pull through stations, full hookups, and cabins might draw more tourists into the area.
    - Coordinating marketing materials being handed out both at the project and at other sites.
    - Look into partners with outfitters in the area to promote kayak rentals.
    - Kiosk & Information booth. The Crawford County Convention & Visitors Bureau has someone to come fill up with that information.
    - Add something new to your facility to draw tourists.
      - Renting out property for big events.
      - Mini-conferences to do environmental studies
      - Programs with colleges; classes

- Promote the ability to rent out this space for offsites, meetings, etc. (package with hotels)
  - Advertising to get message out about the park.
    - Social media is huge in Crawford County – people love facebook. So if advertising to come out to the park to do activities – great way to do that. Draws people out.
    - Opportunity to post on Crawford County Tourism (send to Stacey an event). They hired someone to do their advertising.
    - Mobile friendly.
  - When a visitor comes, they typically don't stay in one spot. Let them know what else is around the region.
    - **Due-Out:** USACE to reach out to Crawford County Convention & Visitors Bureau for a list of those other activities in the region.
- Forestry Management. Not currently being done now
- Potential Opportunities:
    - Before forest management took place, the area should be analyzed.
    - Before having timber harvests, need to have invasive species plan in place before do this.
    - Decide what the land would be managed for.
- Monitoring and educating the public on Ticks. (POC: Lori from DEP).
- Potential Opportunities:
    - Put into plan on how to address for the recreation areas.
- Attention to Trails. Currently, networks of trails are not connected to other trail systems. Additionally some of the trails in the project are eroding (i.e. near playground by the road). 77% of people coming to ride the trails are coming from outside this area (PA Env Council). Crawford County has 3 trails to connect trails to grow the network. Two designated water trails (French creek – upper/lower; oil creek).
- Potential Opportunities:
    - Combine efforts to connect rails to make multi-day destinations.
    - Advertise trail riding/walking opportunities

### What potential threats need to be addressed in the Master Plan?

- Harmful Algal Blooms (HAB). Marginal the last couple of years. There is a team out of District Office that monitor our water. If gets severe enough, the project will post and shut down sites. While HABs have been monitored, they have never gotten severe. Also to note: There have been an increase in Lake Erie region and in the Ohio region, not necessarily harmful, but algal blooms. Working on posting and educating people on the threats (to pets).
  - Potential Opportunities:
    - Education opportunity to address and educate on HABs.
- Invasive Species (e.g. Hydrilla). Because of the way the Corps lakes are managed (drop pool in the winter time), deliberately drop pool in late august. Most aquatic vegetation is adapted to “zones” (how much light goes into the depths), the vegetation that is exposed tends to die off and changes amount of light and oxygen at lower depths. So tend to not have as much vegetation in our lakes (such as Conneaut and Pymatuning). Although the

Lake has almost no aquatic species, there may be opportunities to limit the spread of any unwanted vegetation since other sites such as Pymatuning are seeing glimpses of invasive species.

- Potential Opportunities:
  - Boat washing & Wader washing stations to decrease likelihood of spread. Boat washing stations are important to managing invasive species, but people also bring their bait buckets.
  - Teach people about threats from invasive with signage and other educational programs/methods
  - Invasive species management plan.
    - **Due-Out:** Corps to look into PA invasive species management council (Dept of Agriculture)
    - **Due-Out:** DEP to provide contacts and resources. (POC: Lori, DEP)
  - Nice hemlocks in the area, would like to work on protecting them. We could do a survey for hemlocks.
    - **Due-Out:** USACE to check whether the hemlock area is part of the ESA.
    - **Due-Out:** Lou Ann to check whether the PA Env Council has a resource list.
- Public safety around the lake. We have 3 hot areas to address from public safety perspective (at the bottom of the hill by 198; far end of the dam where it loops around ; parking lot off of Dixon road)
  - Potential Opportunities:
    - Cameras and suggestions for surveillance
    - Lighted areas
    - While many of these areas are day use only, these aren't monitored. Cell phone and radio coverage not strong there.
    - Emergency call boxes. (if could work off of solar, but utilities are not at these areas).
- Balancing recreational draw with resource conservation objectives. Opportunities for impacts will increase as we work to bring in more people to the area.
  - Potential Opportunities:
    - Study the 'carrying capacity' of the project in order to understand what types of numbers and activities are most feasible and appropriate.
    - When doing MP, drill down to 3 levels. First, State wide recommendations. Second, what else can be done at Woodcock, and Third, with all this input (on what the region wants, what the park wants), we then consider what the park can support/suitable for/capable of handling.
- Horsepower Demands. Some who come to the lake like that they can bring kayak out here and not be run over like Conneaut lake, appreciates restricted horsepower in the area.

### What opportunities and information are we missing, what gaps do we need to fill?

- Job training in environmental field.
  - Potential Opportunities:
    - DEP has a lot of expertise, so perhaps they could be a partner on this.
- Become part of a regional destination. Woodcock Creek Lake doesn't have to create all of the opportunities here.
  - Potential Opportunities:

- PA Environmental Council – doing feasibility study for landscape scale project. Looking at NW PA and what is here (e.g. Presque Isle – over crowded, over used – people don’t know Woodcock exists).
  - Creating landscape scale management where we all work together so that we don’t have to do it all.
  
- Concessions for activities such as bikes, kayaking. We had some concession here historically, but didn’t work before. But now, SUPing and interests have changed. Concessions wouldn’t change the land use classifications.
  - Potential Opportunities:
    - Potential Partner: KC from Carried Oasis (?).
  
- Establish a ‘friends group’ for the park – volunteers that come and do stuff, maintenance (e.g. trails)
  
- Providing opportunities for veterans and handicapped individuals to use Woodcock Creek Lake.
  - Potential Opportunities:
    - Col Beckett partnered to do MOAA 5k – Andy.
      - **Due-Out:** Tie back into the Master Plan (Maj. Kavanagh)
    - Expand upon wounded warriors.
    - Identify areas for handicap access, currently do not have handicap accessible docks.
  
- Expand upon Geocaching interests. Corps is not monitoring geocaching, but are located on the project sites. County has a geocaching program with coins.
  - Potential Opportunities:
    - Advertise this as an activity
    - Partner with the County on their geocaching program
  
- Better signage to announce arrival and departure from Woodcock Creek Lake.
  - Potential Opportunities:
    - Have signs on 198 and on 86 that says “Woodcock Creek Lake Hello/Goodbye”. More than just PennDoT sign.
    - BUT sign standard restricted. (POC: Zach Norwood, County Planning for Transportation Issues)
  
- Utilize the trails and the dam walkway since such a major draw to the community
  - Potential Opportunities:
    - Partnership opportunity: Senior Center for walking events. Or Nursing Homes (Westbury and Care Centers)
    - School trips for elementary kids.

What areas or resources need to be protected for their environmental, cultural, or archeological significance? Are there any specific areas on the map we should consider changing the proposed land use?

- Change in Land Use status (from low density to high density or potentially mark as future/inactive) for proposed Boat Launch
  - Potential Opportunities:

- Furthered maintenance may create safer area.
- HP Restrictions. Interest by some in increasing to 20, while others would prefer to keep as is in order to maintain safety for kayakers and other types of boaters.
  - Potential Opportunities:
    - Would like the flexibility in the master plan but if were to survey, likely would find there are more concerns about increasing than interest.
- Edinboro ROTC department. Looking for training areas for Cadets. What areas would be available for them to do their trainings on the project lands? Potentially could use the Game Commission lands when not in hunting seasons.
  - Potential Opportunities:
    - Build allowances into the Master Plan for the ROTC to use the underutilized game commission lands for:
      - Use for Land Navigation (similar to geocaching).
    - Would need to coordinate with hunting seasons (perhaps only train in off-seasons)
- Identify areas that should be fish & wildlife designated (both land or water)?
  - Potential Opportunities:
    - Work with Erie Natural Wildlife Refuge as a Potential Partnership to identify these areas.
- See map for other specific noted interests.

## EXISTING PLANS

County Planning - Township is rewriting their zoning ordinance.

- **Due-Out:** USACE – Investigate whether there are opportunities to overlap and leverage these plans. Do their zoning districts match up with our interests at the park? ]

County Wide Comprehensive Plan

Greenways Recreation Plan – County

Peer to Peer Study from DCNR funding for Campground – County

- **Due-Out:** Zach Norwood – To forward these plans onto USACE.

## ADDITIONAL STAKEHOLDERS TO INCLUDE IN FUTURE MEETINGS

- Edinboro MOAA POC

## NEXT STEPS & SUMMARY OF DUE-OUTS

### USACE

- Offer to supply Master Plan to those interested.

- Reach out to Crawford County Convention & Visitors Bureau for a list of those other activities in the region.
- Looks into PA invasive species management council (Dept of Agriculture)
- To check whether the hemlock area is part of the ESA.
- Lou Ann to check whether the PA Env Council has a resource list.
- Investigate whether there are opportunities to overlap and leverage these County plans. Do their zoning districts match up with our interests at the park? ]

#### PADEP

- To provide contacts and resources. (POC: Lori, DEP)

#### Edinboro ROTC

- Col Beckett partnered to do MOAA 5k; reconnect appropriate contacts in order to tie back into the Master Plan (Maj. Kavanagh)

#### Crawford County Dept of Planning & Development

- Zach Norwood to forward relevant plans onto USACE.

DRAFT



DEPARTMENT OF THE ARMY  
PITTSBURGH DISTRICT, CORPS OF ENGINEERS  
WILLIAM S. MOORHEAD FEDERAL BUILDING  
1000 LIBERTY AVENUE  
PITTSBURGH, PA 15222-4186  
April 10, 2018

REPLY TO  
ATTENTION OF  
Planning & Environmental Branch

Erin Thompson  
Shawnee Tribe of Oklahoma  
2025 S. Gordon Cooper Drive  
Shawnee, OK 74801

Dear Erin Thompson:

The U.S. Army Corps of Engineers, Pittsburgh District, is in the process of updating the Master Plan for Woodcock Creek Lake, a project located in Crawford County, Pennsylvania. A Master Plan is a document that guides the comprehensive management and development of recreation, natural, and cultural resources at a Corps reservoir. The original Master Plan for Woodcock Creek Lake was developed in 1975. Changes in Corps regulations and community needs necessitate a revision of this outdated document.

As an Indian Nation with ties to Crawford County, we would like to consult with you in order to discuss any of your interests or concerns regarding impacts to the project area and to update our site inventory. This information will enable us to make better informed decisions regarding proposed land uses and will increase our awareness of significant cultural resources that should be protected within the project area.

Should you be interested in discussing the project, we would like to propose a conference call with you, either one-on-one or in coordination with other tribal interests in the area, based on your preference. Please let us know if there is another way you would prefer to participate with us regarding this project. Ms. Andrea Carson, a Community Planner on my staff, is available at any time to discuss the project and schedule the proposed conference call ([andrea.l.carson@usace.army.mil](mailto:andrea.l.carson@usace.army.mil) or 412-395-7444).

Thank you in advance for your consideration.

Enclosed is a fact sheet and a map which provides additional information on the Master Plan and the Woodcock Creek Lake site.

Respectfully,

Lenna Hawkins  
Deputy District Engineer, Pittsburgh

Enclosures



DEPARTMENT OF THE ARMY  
PITTSBURGH DISTRICT, CORPS OF ENGINEERS  
WILLIAM S. MOORHEAD FEDERAL BUILDING  
1000 LIBERTY AVENUE  
PITTSBURGH, PA 15222-4186

August 29, 2017

REPLY TO  
ATTENTION OF

Planning & Environmental Branch

Darrin Ahshapanek  
Delaware Nation  
31064 State Highway 281  
Anadarko, OK 73005

Dear Darrin Ahshapanek:

The U.S. Army Corps of Engineers, Pittsburgh District, is in the process of updating the Master Plan for Woodcock Creek Lake, a project located in Crawford County, Pennsylvania. A Master Plan is a document that guides the comprehensive management and development of recreation, natural, and cultural resources at a Corps reservoir. The original Master Plan for Woodcock Creek Lake was developed in 1975. Changes in Corps regulations and community needs necessitate a revision of this outdated document.

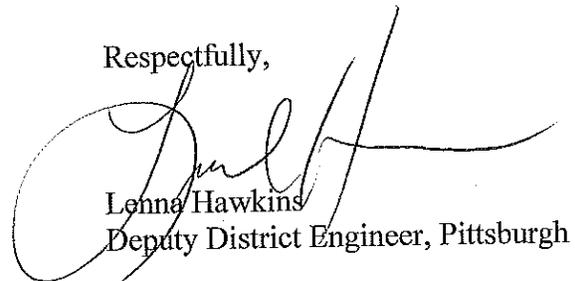
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Respectfully,



Lenne Hawkins  
Deputy District Engineer, Pittsburgh

Enclosures



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PITTSBURGH DISTRICT, CORPS OF ENGINEERS  
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1000 LIBERTY AVENUE  
PITTSBURGH, PA 15222-4186

April 10, 2018

REPLY TO  
ATTENTION OF

Planning & Environmental Branch

Roxane Weldon  
Eastern Shawnee Tribe of Oklahoma  
PO Box 350  
Seneca, MO 64865

Dear Roxane Weldon:

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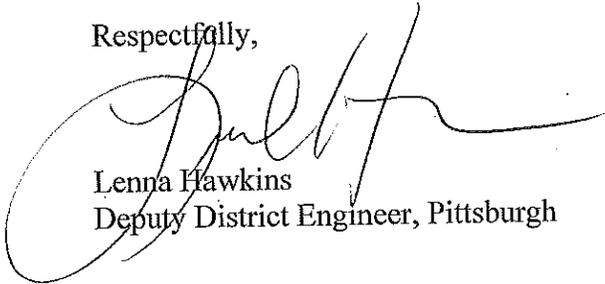
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Respectfully,

  
Lenna Hawkins  
Deputy District Engineer, Pittsburgh

Enclosures

Planning & Environmental Branch



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April 10, 2018

REPLY TO  
ATTENTION OF

Stephen J. Selden  
Oneida Indian Nation  
5218 Patrick Road  
Oneida, NY 13421

Dear Stephen J. Selden:

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Thank you in advance for your consideration.

Enclosed is a fact sheet and a map which provides additional information on the Master Plan and the Woodcock Creek Lake site.

Respectfully,

A handwritten signature in black ink, appearing to read "Lenna Hawkins".

Lenna Hawkins  
Deputy District Engineer, Pittsburgh

Enclosures



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PITTSBURGH DISTRICT, CORPS OF ENGINEERS  
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April 10, 2018

REPLY TO  
ATTENTION OF

Planning & Environmental Branch

Corina Williams  
Oneida Nation of Wisconsin  
PO Box 365  
Oneida, WI 54155

Dear Corina Williams:

The U.S. Army Corps of Engineers, Pittsburgh District, is in the process of updating the Master Plan for Woodcock Creek Lake, a project located in Crawford County, Pennsylvania. A Master Plan is a document that guides the comprehensive management and development of recreation, natural, and cultural resources at a Corps reservoir. The original Master Plan for Woodcock Creek Lake was developed in 1976. Changes in Corps regulations and community needs necessitate a revision of this outdated document.

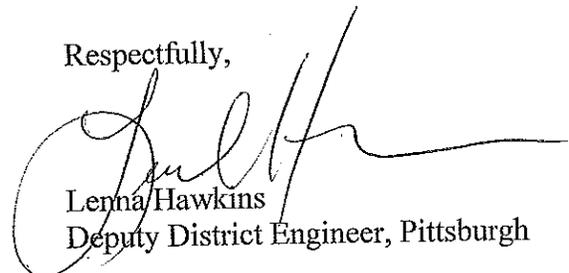
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Thank you in advance for your consideration.

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Respectfully,



Lenna Hawkins  
Deputy District Engineer, Pittsburgh

Enclosures



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April 10, 2018

REPLY TO  
ATTENTION OF

Planning & Environmental Branch

William Tarrant  
Seneca-Cayuga Tribe of Oklahoma  
PO Box 365  
Oneida, WI 54155

Dear William Tarrant:

The U.S. Army Corps of Engineers, Pittsburgh District, is in the process of updating the Master Plan for Woodcock Creek Lake, a project located in Crawford County, Pennsylvania. A Master Plan is a document that guides the comprehensive management and development of recreation, natural, and cultural resources at a Corps reservoir. The original Master Plan for Woodcock Creek Lake was developed in 1976. Changes in Corps regulations and community needs necessitate a revision of this outdated document.

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Thank you in advance for your consideration.

Enclosed is a fact sheet and a map which provides additional information on the Master Plan and the Woodcock Creek Lake site.

Respectfully,

A handwritten signature in black ink, appearing to read "Lenna Hawkins".

Lenna Hawkins  
Deputy District Engineer, Pittsburgh

Enclosures



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PITTSBURGH DISTRICT, CORPS OF ENGINEERS  
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April 10, 2018

REPLY TO  
ATTENTION OF

Planning & Environmental Branch

Jay Toth  
Seneca Nation of Indians  
90 O:hi'yoh Way  
Salamanca, NY 14779

Dear Jay Toth:

The U.S. Army Corps of Engineers, Pittsburgh District, is in the process of updating the Master Plan for Woodcock Creek Lake, a project located in Crawford County, Pennsylvania. A Master Plan is a document that guides the comprehensive management and development of recreation, natural, and cultural resources at a Corps reservoir. The original Master Plan for Woodcock Creek Lake was developed in 1976. Changes in Corps regulations and community needs necessitate a revision of this outdated document.

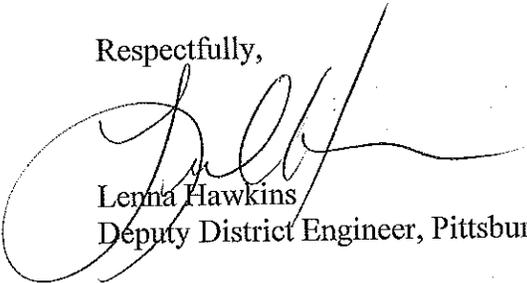
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Respectfully,

  
Lenna Hawkins  
Deputy District Engineer, Pittsburgh

Enclosures



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April 10, 2018

REPLY TO  
ATTENTION OF

Planning & Environmental Branch

Tony Gonyea  
Onondaga Nation  
P.O. Box 1283  
Miami, OH 74355

Dear Tony Gonyea:

The U.S. Army Corps of Engineers, Pittsburgh District, is in the process of updating the Master Plan for Woodcock Creek Lake, a project located in Crawford County, Pennsylvania. A Master Plan is a document that guides the comprehensive management and development of recreation, natural, and cultural resources at a Corps reservoir. The original Master Plan for Woodcock Creek Lake was developed in 1976. Changes in Corps regulations and community needs necessitate a revision of this outdated document.

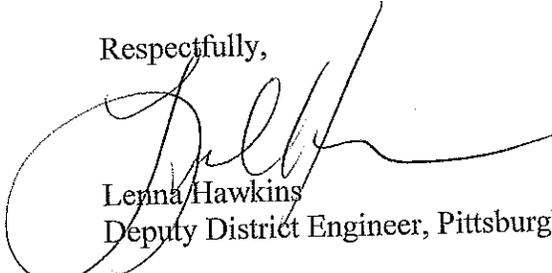
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Respectfully,

  
Lenna Hawkins

Deputy District Engineer, Pittsburgh

Enclosures



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PITTSBURGH DISTRICT, CORPS OF ENGINEERS  
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April 10, 2018

REPLY TO  
ATTENTION OF

Planning & Environmental Branch

Tonya Tipton  
Shawnee Tribe  
29 South 69a Highway  
Miami, OH 74354

Dear Tonya Tipton:

The U.S. Army Corps of Engineers, Pittsburgh District, is in the process of updating the Master Plan for Woodcock Creek Lake, a project located in Crawford County, Pennsylvania. A Master Plan is a document that guides the comprehensive management and development of recreation, natural, and cultural resources at a Corps reservoir. The original Master Plan for Woodcock Creek Lake was developed in 1976. Changes in Corps regulations and community needs necessitate a revision of this outdated document.

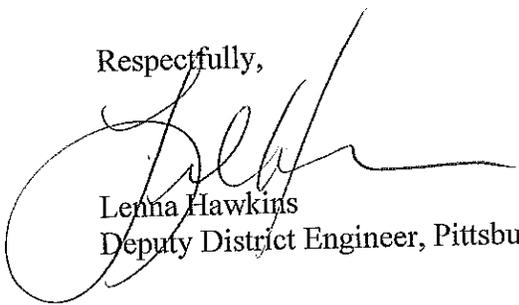
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Respectfully,

  
Lenna Hawkins

Deputy District Engineer, Pittsburgh

Enclosures



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PITTSBURGH DISTRICT, CORPS OF ENGINEERS  
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April 10, 2018

REPLY TO  
ATTENTION OF  
Planning & Environmental Branch

Morris Abrams  
Seneca Nation of Indians  
90 O:hi'yoh Way  
Salamanca, NY 14779

Dear Morris Abrams:

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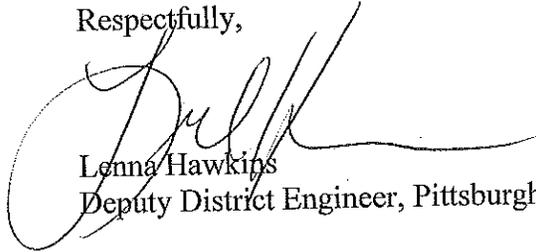
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Respectfully,

  
Lenna Hawkins  
Deputy District Engineer, Pittsburgh

Enclosures



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PITTSBURGH DISTRICT, CORPS OF ENGINEERS  
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April 10, 2018

REPLY TO  
ATTENTION OF  
Planning & Environmental Branch

Darwin Hill  
Tonawanda Seneca Nation  
7027 Meadville Road  
Basom, NY 14013

Dear Darwin Hill:

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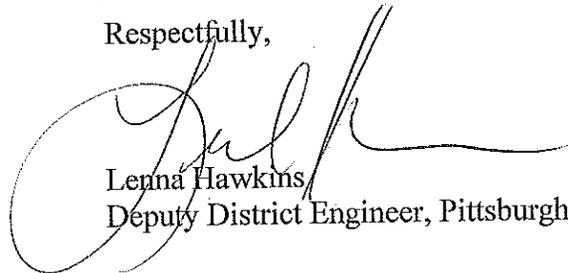
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Thank you in advance for your consideration.

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Respectfully,

  
Lenna Hawkins  
Deputy District Engineer, Pittsburgh

Enclosures



DEPARTMENT OF THE ARMY  
PITTSBURGH DISTRICT, CORPS OF ENGINEERS  
WILLIAM S. MOORHEAD FEDERAL BUILDING  
1000 LIBERTY AVENUE  
PITTSBURGH, PA 15222-4186  
April 10, 2018

REPLY TO  
ATTENTION OF

Planning & Environmental Branch

Neil Patterson, Jr.  
Tuscarora Nation  
2045 Upper Mountain Road  
Sanborn, NY 14132

Dear Neil Patterson, Jr.:

The U.S. Army Corps of Engineers, Pittsburgh District, is in the process of updating the Master Plan for Woodcock Creek Lake, a project located in Crawford County, Pennsylvania. A Master Plan is a document that guides the comprehensive management and development of recreation, natural, and cultural resources at a Corps reservoir. The original Master Plan for Woodcock Creek Lake was developed in 1976. Changes in Corps regulations and community needs necessitate a revision of this outdated document.

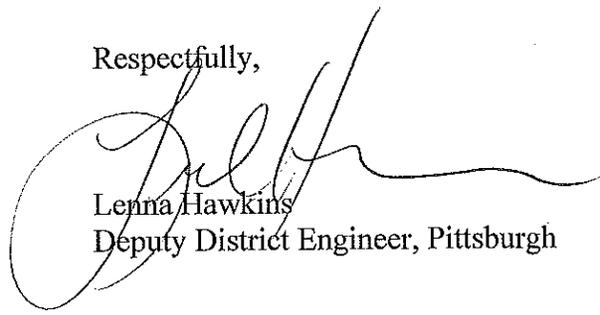
As an Indian Nation with ties to Crawford County, we would like to consult with you in order to discuss any of your interests or concerns regarding impacts to the project area and to update our site inventory. This information will enable us to make better informed decisions regarding proposed land uses and will increase our awareness of significant cultural resources that should be protected within the project area.

Should you be interested in discussing the project, we would like to propose a conference call with you, either one-on-one or in coordination with other tribal interests in the area, based on your preference. Please let us know if there is another way you would prefer to engage with us regarding this project. Ms. Andrea Carson, a Community Planner on my staff, is available at any time to discuss the project and schedule the proposed conference call ([andrea.l.carson@usace.army.mil](mailto:andrea.l.carson@usace.army.mil) or 412-395-7444).

Thank you in advance for your consideration.

Enclosed is a fact sheet and a map which provides additional information on the Master Plan and the Woodcock Creek Lake site.

Respectfully,

  
Lenna Hawkins  
Deputy District Engineer, Pittsburgh

Enclosures

## **APPENDIX E**

### **ENGINEER REGULATIONS, PAMPHLETS, AND MANUALS**

- E.1** ER 200-1-5, Environmental Quality – Policy for Implementation and Integrated Application of the U.S. Army Corps of Engineers Environmental Operating Principles and Doctrine, 30 Oct 2003
- E.2** ER 200-2-2, Environmental Quality – Procedures for Implementing the National Environmental Policy Act, 4 Mar 1988
- E.3** ER 1105-2-100, Planning Guidance, 22 April 2000 (with Appendices D and G revised Jun 2004 and Appendix F revised Jan 2006)
- E.4** ER 1130-2-540, Environmental Stewardship Operations and Maintenance Policies, 4 Nov 2002
- E.5** ER 1130-2-550, Project Operations – Recreation Operations and Maintenance Guidance and Procedures (Change 5; 30 Jan 2013)
- E.6** Executive Order (EO) 13751 - Safeguarding the Nation From the Impacts of Invasive Species (FR: 08 Dec 2016; amending EO 13112)
- E.7** EO 11987 - Exotic Organisms (FR: 24 May 1977)
- E.8** Engineer Manual 1110-1-400, Engineering and Design – Recreation Facility and Customer Service Standards, 1 Nov 2004

**APPENDIX F**

**PROGRAMMATIC ENVIRONMENTAL ASSESSMENT**

DRAFT