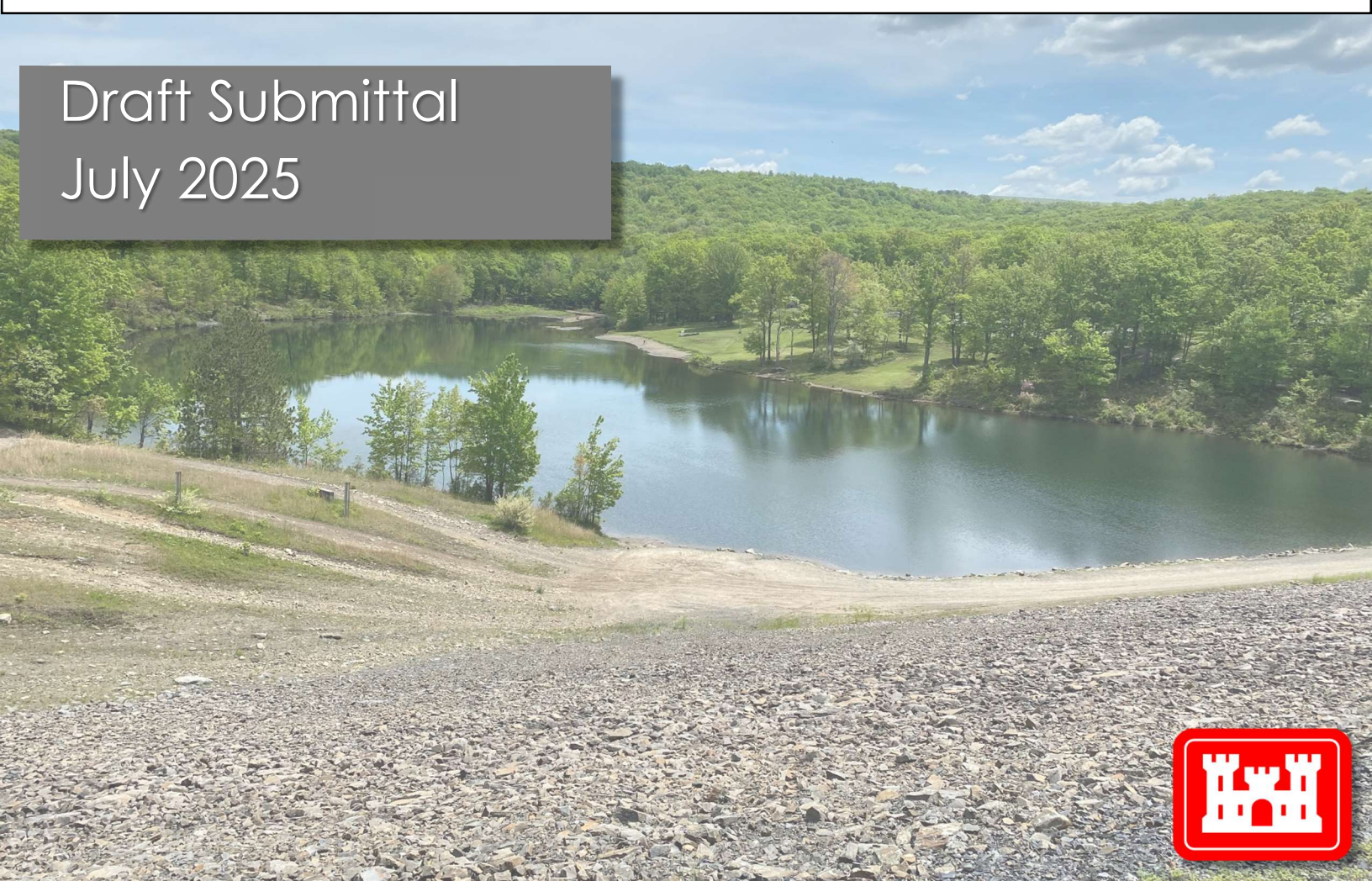
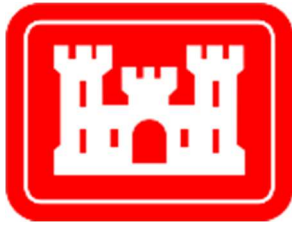


Aylesworth Creek Lake Master Plan



Draft Submittal
July 2025





**Aylesworth Creek Lake
Master Plan
Lackawanna County, Pennsylvania**



Draft Submittal
July 2025

For:

U.S. Army Corps of Engineers-Baltimore District
Operations Division
Aylesworth Creek Lake
511 Hudson Street
Jermyn, PA 18433

Prepared by:

U.S. Army Corps of Engineers—Baltimore District
Planning Division
2 Hopkins Plaza
Baltimore, Maryland 21201

This page intentionally left blank.



AYLESWORTH CREEK LAKE MASTER PLAN

TABLE OF CONTENTS

FINDING OF NO SIGNIFICANT IMPACT	i
1 Introduction.....	1-1
1.1 Project Purpose.....	1-1
1.2 Project Authorization.....	1-1
1.3 Purpose and Scope of Master Plan	1-2
1.4 Description of Project and Watershed	1-3
1.5 Description of the Lake and Project Structures	1-7
1.5.1 Embankment/Dam.....	1-7
1.5.2 Spillway.....	1-8
1.5.3 Flood Control Outlet Works.....	1-8
1.5.4 Mayfield Dike.....	1-9
1.6 Project Access	1-11
1.7 Pertinent Prior Reports and Related Studies	1-11
1.8 Pertinent Project Information	1-11
2 Existing Conditions & Analysis.....	2-1
2.1 Physiographic Setting	2-1
2.1.1 Ecological Setting.....	2-1
2.1.2 Climate.....	2-1
2.1.3 Topography, geology, and soils	2-1
2.1.4 Hydrology and Groundwater.....	2-5
2.2 Ecoregion and Natural Resources Analysis.....	2-5
2.2.1 Vegetation.....	2-5
2.2.2 Wetlands	2-5
2.2.3 Fish and Wildlife Resources	2-6
2.2.4 Threatened and Endangered Species	2-7
2.2.5 Other Protected Species	2-10
2.2.6 Invasive and Nuisance Species	2-10
2.2.7 Water Quality	2-11

2.3	Cultural Resources.....	2-11
2.3.1	Precontact.....	2-12
2.3.2	Historic	2-13
2.3.3	Previous Investigations at the Lake	2-14
2.3.4	Recorded Cultural Resources	2-14
2.3.5	Potential for Unidentified Cultural Resources.....	2-15
2.3.6	Long-Term Objectives for Cultural Resources	2-15
2.4	Demographic and Economic Resources.....	2-16
2.4.1	Current Demographics, Economics, Trends and Analysis	2-16
2.4.2	Population.....	2-16
2.4.3	Education and Employment	2-19
2.4.4	Households and Income.....	2-19
2.5	Recreation Facilities, Activities, and Needs	2-19
2.5.1	Zone of Influence	2-19
2.5.2	Visitation Profile	2-19
2.5.3	Recreation Facilities.....	2-20
2.5.4	Recreation Analysis	2-24
2.5.5	Recreational Carrying Capacity	2-25
2.6	Real Estate and Acquisition Policy	2-25
2.7	Pertinent Public Laws	2-25
2.7.1	Federal Laws.....	2-25
2.7.2	Executive Orders (EO)	2-29
2.7.3	State Laws.....	2-30
2.7.4	State Management Plans.....	2-31
3	Resource Objectives	3-1
3.1	Introduction.....	3-1
3.2	Management Goals	3-1
3.3	Resource Objectives.....	3-2
3.3.1	Project-Wide Objectives	3-2
3.3.2	Recreation Area Objectives.....	3-2
4	Land Classification.....	4-1
4.1	Land Allocation	4-1
4.2	Land Classification	4-1
4.2.1	Prior Land Classification	4-1

4.2.2	Proposed Land Classifications	4-5
4.3	Project Easement Lands	4-7
5	Resource Plan	5-1
5.1	Resource Plan Overview	5-1
5.2	Project Operations	5-1
5.3	High Density Recreation	5-2
5.4	Multiple Resource Management Lands	5-2
5.4.1	Low Density Recreation	5-2
5.4.2	Future Recreation	5-3
5.5	Water Surface	5-3
5.5.1	Restricted	5-3
5.5.2	Open Recreation	5-3
5.6	Project Easement Lands	5-4
6	Special Topics, Issues, Considerations	6-1
6.1	Competing Interests on Natural Resources	6-1
6.2	Utilities and Rights of Way	6-1
6.3	United States Geological Survey (USGS) Station	6-1
6.4	Acid Mine Drainage (AMD)	6-1
6.5	Special Events	6-2
7	Public and Agency Coordination.....	7-1
8	Summary of Recommendations	8-1
8.1	Summary Overview	8-1
8.2	Land Classification	8-1
9	Appendix.....	9-1
	Appendix A: Acronyms	9-1
	Appendix B: References	9-3
	Appendix C: Meeting Notes.....	9-8
	Appendix D: Public Notices and Pertinent Newspaper Articles.....	9-10
	Appendix E: Public Comments and USACE Response	9-11
	Appendix F: Land Classification and Recreational Asset Maps.....	9-12
	Appendix G: NEPA Documentation	9-13
	Appendix H: NEPA Environmental Coordination	9-14

LIST OF TABLES

Table S-1: Proposed Land and Water Surface Classifications at Aylesworth Creek Lake	ii
Table 1-1. Aylesworth Creek Lake Pertinent Data Table	1-12
Table 1-2. Proposed Land Classifications at Aylesworth Creek Lake.....	1-13
Table 2-1. Soils at Aylesworth Creek Lake.....	2-3
Table 2-2. Wetland areas within Aylesworth Creek Lake Project Area	2-6
Table 2-3. Recorded Cultural Resources at Aylesworth Creek Lake	2-15
Table 2-4. Population Estimates and 2030 Projections.....	2-17
Table 2-5. Population Estimates by Gender	2-17
Table 4-1. Proposed Land Classification Acreage	4-5
Table 4-2. Aylesworth Creek Lake Outgrants in 2024.....	4-7
Table 5-1. Land Classification & Applicable Management Goals	5-1
Table 8-1. Summary of Land Classifications and Justifications	8-1

LIST OF FIGURES

Figure 1-1. Regional Vicinity	1-5
Figure 1-2. Site Vicinity	1-6
Figure 1-3. Location of Project Structures at Aylesworth Creek Lake	1-10
Figure 2-1. Soils Map	2-4
Figure 2-2. 2022 Percent of Population by Age Group in Lackawanna County, Zone of Influence, and State.....	2-18
Figure 2-3. 2022 Population Percentages by Race in Zone of Influence	2-18
Figure 2-4. Visitation at Aylesworth Park for FY 2019 – FY 2023.....	2-20
Figure 2-5. Aylesworth Park Map.....	2-21
Figure 2-6. FY 2022 Aylesworth Creek Lake Visitation Data.....	2-24
Figure 4-1. Real Estate Map.....	4-3
Figure 4-2. Proposed Land Classifications	4-4
Figure 5-1. Existing Features Map.....	5-5

FINDING OF NO SIGNIFICANT IMPACT

Environmental Assessment for the 2025 Aylesworth Creek Lake Master Plan

Lackawanna County, Pennsylvania

In accordance with the National Environmental Policy Act of 1969, as amended (NEPA), and the U.S. Army Corps of Engineers (USACE) Procedures for Implementing NEPA in 33 Code of Federal Regulations, Part 230, the USACE, Baltimore District has assessed the potential environmental, cultural, and social effects of updating the Aylesworth Creek Lake Master Plan. The Aylesworth Creek Dam (hereafter "Aylesworth Creek Lake Project", "Aylesworth Creek Lake", or "Project") was authorized by the Flood Control Act of October 23, 1962, Public Law 87-874, 87th Congress, and is described in Senate Document No. 141, 87th Congress, 2nd Session. The Aylesworth Creek Lake Project is a multipurpose water resources project constructed and operated by USACE, Baltimore District. The dam and associated infrastructure, as well as all land acquired for the Aylesworth Creek Lake Project, are federally owned, operated, and maintained by USACE. The project was operationally complete in October 1970, and the federal cost was \$2,268,200. The original Aylesworth Creek Lake Master Plan was approved in June 1973.

The Aylesworth Creek Lake Project was authorized and constructed for the primary purpose of flood risk management for the downstream reach of the Lackawanna River at the communities of Olyphant, Dickson City, Scranton, Moosic, Old Forge, and Duryea, Pennsylvania (PA). Secondary purposes of the project are to provide recreation and environmental stewardship. Implementation of the 2025 Aylesworth Creek Lake Master Plan (hereafter "2025 Master Plan") including the proposed land and water use classifications must recognize and be compatible with the primary project purpose of flood risk management and the secondary project purposes of recreation and environmental stewardship.

The 2025 Master Plan provides guidance for the stewardship of natural resources and management for long-term public access to, and use of, the natural resources at Aylesworth Creek Lake. The 2025 Master Plan updates the 1973 Master Plan and establishes land and water surface classifications, which are fundamental to project land management. The 1973 Master Plan did not include designated land or water surface classifications and was written prior to recreation lease agreements between USACE and Lackawanna County. Land and water surface classifications (see Table S-1) provide for development and resource management consistent with the Aylesworth Creek Lake Project's authorized purposes and USACE regulations and policy. The 2025 Master Plan also provides a comprehensive description of the Aylesworth Creek Lake Project, a discussion of factors influencing resource management and development, new resource management objectives, a synopsis of public involvement, descriptions of existing development, and considerations of future development activities.

Under the No Action Alternative, USACE would take no action to establish land and water surface classifications for the Aylesworth Creek Lake Project and would continue to operate and manage the project as outlined in the 1973 Master Plan.

The Proposed Action is to adopt the 2025 Master Plan, which establishes land and water surface classifications based on current land and water uses at the Aylesworth Creek Lake Project while also meeting the authorized project purposes and resource objectives. This includes a mix of natural resource and recreation management objectives that are compatible with regional goals established by stakeholders and USACE during the master planning process, that recognize outdoor recreation trends, and that are responsive to agency and public comments. The purpose of the action is to update the 1973 Aylesworth Creek Lake Master Plan. The action is needed as required by Engineer Regulation (ER) 1130-2-550, Recreation Operations and Maintenance Policies, and Engineer Pamphlet (EP) 1130-2-550, Recreation Operations and Maintenance Guidance and Procedures. The 2025 Master Plan is intended to serve as a comprehensive land and recreation management plan for the next 15 to 25 years.

Table S-1 identifies the land and water surface classifications associated with the Proposed Action.

Table S-1: Proposed Land and Water Surface Classifications at Aylesworth Creek Lake

Classification	2025 Master Plan (acres)	Description
Project Operations	20.1 ¹	Lands required for the structure, operation, administration, or maintenance of the project and which all must be maintained to carry out the authorized primary purpose of flood risk management.
High Density Recreation	7.2	Lands that are currently developed for intensive recreational activities for the visiting public. This land classification has been developed to support concentrated visitation and use of the recreational facilities they host. The high density recreation area at Aylesworth Creek Lake is Aylesworth Park operated by Lackawanna County. The park includes a sandy beach, playground, a multipurpose field, picnic tables, and a pavilion.
Multiple Resource Management Land		
Low Density Recreation	214.3	Management of this land classification calls for maintaining a healthy, ecologically adapted vegetative cover to reduce erosion and improve aesthetics, while also supporting low impact recreational opportunities such as bank fishing, hiking, wildlife viewing, and shoreline access. The new land classification criteria exclude vegetation and wildlife management areas, leaving only areas with minimal development to support passive recreational use.
Future Recreation	3.6	Recreation areas planned for the future or that have been temporarily closed. These lands have site characteristics compatible with potential future recreation development. Some of these areas may have never been developed or were developed and subsequently closed or remain open but are no longer maintained. There is one area at Aylesworth Creek Lake designated as future recreation that connects to the

Classification	2025 Master Plan (acres)	Description
		existing Aylesworth Park via a direct gravel path from the playground and adjacent parking lot. Lackawanna County's 2011 Park Master Plan discusses future recreation expansion in this area and Lackawanna County Parks and Recreation has expressed interest in pursuing future development in this area. Thus, USACE has designated this area as future recreation.
Water Surface		
Restricted	0.1	Areas where recreational boating or swimming is prohibited or restricted for project operations, safety, and security purposes. Restricted waters at Aylesworth Creek Lake includes a small area around the drop inlet structure. Physical barriers or signage may be placed in the water in the future to prevent public access around the structure.
Open Recreation	7.6	Water surface areas available for year-round or seasonal water-based recreational use. This area includes all water surface areas other than restricted waters.
Total	252.9 ²	

¹Of the 20.1 acres classified under the land classification Project Operations; 18.2 acres includes a restricted area. The land classification Restricted is only listed under Water Surface in EP 1130-2-550. Therefore, the restricted area within the land classification Project Operations is not labeled as a separate land classification but is discussed in this Master Plan.

²Mapping for the Master Plan update has been compiled using the best information available and is believed to be accurate. Previous project boundaries are based on original acquisition real estate deed records and mapping. Due to improved mapping technologies, minor discrepancies exist when comparing prior project boundaries and proposed land and water use classification acreages.

USACE selected the Proposed Action because it meets regional goals associated with good stewardship of land and water resources, meets regional recreation goals, and allows for continued use and development of project lands without violating federal policies or public laws.

USACE used the effects analysis from the Environmental Assessment (EA) and comments received from other agencies to determine whether the Proposed Action requires the preparation of an Environmental Impact Statement (EIS). This included an assessment of environmental, cultural, and social factors that are relevant to the recommended alternative. The Master Plan Update is considered an administrative action and does not evaluate effects from project construction. Therefore, it was determined that no effects would occur to all relevant resources including water and biological resources, soils, air quality, noise, cultural resources, groundwater, utilities, recreation, land use, demographics, and traffic and transportation (see Section 3 of the EA). Future projects at Aylesworth Creek Lake would be analyzed in future NEPA documentation associated with those individual

actions. Efforts would be made to reduce adverse effects by using standard construction best management practices (BMPs) such as silt fences to reduce disturbance, soil erosion, and sedimentation into nearby surface waters and wetlands. Construction and operations of future master planning projects would use BMPs associated with prevention of effects to sensitive species. These recommendations would occur during the time future projects are proposed and would include environmental reviews of each project.

Conclusion

All applicable laws, executive orders, regulations, and local government plans were considered in the evaluation of alternatives. Based on this report, the reviews by other federal, state and local agencies, Tribes, input of the public, and the review of my staff, it is my determination that the Proposed Action alternative would not cause significant adverse effects on the quality of the human environment; therefore, preparation of an EIS is not required.

Date

Francis B. Pera
Colonel, U.S. Army
Commander and District Engineer

This page intentionally left blank.

1 INTRODUCTION

1.1 PROJECT PURPOSE

The Aylesworth Creek Lake Project was authorized and constructed for the primary purpose of flood risk management for the downstream reach of the Lackawanna River at the communities of Olyphant, Dickson City, Scranton, Moosic, Old Forge, and Duryea, Pennsylvania (PA). The secondary purpose of the project is to provide a resource base for recreation and environmental stewardship.

The project did not initially include any recreation facilities or leases. In a letter dated February 11, 1965, the Lackawanna County Commissioners expressed an interest in the development of a county recreation facility at the project site. Subsequent meetings and correspondence led to a resolution adopted by the Lackawanna County Commissioners on January 31, 1967, indicating the county's willingness and ability to construct and operate recreation facilities at the project site. The

Lackawanna County Commissioners, by letter of November 2, 1972, advised that they were no longer interested in cooperating in the development and operation of recreation facilities at the project site. Later, Aylesworth Creek Reservoir Park Authority (ACRPA), a volunteer organization comprised of officials from the Boroughs of Archbald and Jermy, PA was founded. The ACRPA constructed, managed, and



Aylesworth Creek Dam and Reservoir

maintained some of the project site areas for the purpose of recreation. In June 2006, Lackawanna County entered a 25-year lease with USACE to manage Aylesworth Park. Lackawanna County, PA designated Lackawanna County Parks and Recreation with the primary responsibility of operating, maintaining, and promoting the park for outdoor recreation use, enjoyment, and leisure.

1.2 PROJECT AUTHORIZATION

The Aylesworth Creek Lake Project (hereafter "Aylesworth Creek Lake Project", "Aylesworth Creek Lake" or "Project") was authorized by the Flood Control Act of October 23, 1962, Public Law 87-874, 87th Congress, and is described in Senate Document No. 141, 87th Congress, 2nd

Session. The project was operationally complete in October 1970 and the federal cost was \$2,268,200. The original Aylesworth Creek Lake Master Plan was approved in June 1973.

The Aylesworth Creek Lake Project is a multipurpose water resources project constructed and operated by the USACE, Baltimore District. The dam and associated infrastructure, as well as all land acquired for the Aylesworth Creek Lake Project, are federally owned, operated, and maintained by USACE.

1.3 PURPOSE AND SCOPE OF MASTER PLAN

The purpose of this document is to update the Aylesworth Creek Lake Master Plan ("Master Plan") originally written in June 1973. The Master Plan is the strategic land use management document that is a guide for the comprehensive management and development of the recreational, natural, and cultural resources throughout the life of the project. It is the basic document guiding USACE responsibilities pursuant to federal laws to preserve, conserve, restore, maintain, and develop the project lands, waters, and associated resources.



This update to the Master Plan is required per Engineer Regulation (ER) 1130-2-550, Recreation Operations and Maintenance Policies, and Engineer Pamphlet (EP) 1130-2-550, Recreation Operations and Maintenance Guidance and Procedures. USACE is also required to prepare the appropriate National Environmental Policy Act (NEPA) documentation to assess effects on the human environment from actions proposed in the Master Plan.

This document presents an evaluation of the assets, needs, and potential uses of the Aylesworth Creek Lake Project. This Master Plan reflects changes that have occurred to the project site, in the region, in recreation trends, and in USACE policy in the 52 years since the previous master plan was published. It provides a management framework that balances the stewardship of natural resources and provision of high-quality recreation activities with the primary project purpose of flood risk management. The 1973 Master Plan did not include designated land and water use classifications, and this 2025 Master Plan establishes land and water use classifications based on the current and future use of the land at the project site. This Master Plan addresses expressed public interest in the overall stewardship and management of all project resources and includes graphics showing the most desirable and feasible enhancements to existing facilities, as well as locations and types of new facilities needed to meet the identified needs. Any recreational improvements will be reviewed by USACE (including NEPA) but will be funded by Lackawanna County and its partners.

Implementation of the Master Plan must recognize and be compatible with the primary project purpose of flood risk management and the secondary project purposes of recreation and environmental stewardship.

The Master Plan update is a working document that is a guide for the use and development of the natural and constructed resources on USACE fee-owned lands for an estimated 15 to 25-year period (2025-2050). It is a dynamic and flexible tool designed to address changing conditions. The Master Plan focuses on carefully crafted, resource-specific goals and objectives.

Details of design, management and administration, and program implementation are not intended to be addressed within the scope of a master plan. Additionally, master plans are not intended to address the specifics of regional water quality, shoreline management, or water level management. Therefore, this Master Plan does not address these issues.

The master planning process encompasses a series of interrelated and overlapping tasks involving the examination and analysis of past, present, and future environmental, recreational, and socioeconomic conditions and trends. The master planning process uses a generalized conceptual framework focused on four primary components as follows:

- Regional and ecosystem needs,
- Project resource capabilities and suitability,
- Expressed public interests that are compatible with the Aylesworth Creek Lake Project's authorized purposes, and
- Environmental sustainability elements.

This Master Plan includes an environmental assessment (EA) and Finding of No Significant Impact (FONSI), which have been prepared in accordance with NEPA and ER 200-2-2: *Procedures for Implementing NEPA* for the USACE civil works program. The EA and FONSI are separate documents that provide an analysis of potential environmental, cultural, and social effects associated with actions in the Master Plan. The EA is in Appendix G. The FONSI is located at the front of this Master Plan.

1.4 DESCRIPTION OF PROJECT AND WATERSHED

The Aylesworth Creek dam is located on Aylesworth Creek approximately one mile upstream from its confluence with the Lackawanna River. The project is in the Borough of Archbald near the community of East Jermyn in Lackawanna County, PA, and is approximately one mile east of U.S. Route 6, between Scranton and Carbondale, PA. Aylesworth Creek is a tributary of the Lackawanna River which, in turn, is a tributary of the Susquehanna River. Located further upstream on the Lackawanna River is the USACE owned and operated Stillwater Lake Project. Water releases from the Stillwater Lake and Aylesworth Creek Lake dams meet at the confluence of Aylesworth Creek and the Lackawanna River at Jermyn, PA (USACE, 2021). Aylesworth Creek Lake is in Upper Susquehanna-Lackawanna Watershed, Hydrologic Unit Code (HUC), 02050107. Figure 1-1 shows the regional vicinity and Figure 1-2 shows the site vicinity of Aylesworth Creek Lake.

All elevations cited in this plan, unless otherwise noted, are referenced to the original Project Construction Datum (PCD). In previous versions of the *Master Manual for Reservoir Regulation Aylesworth Creek Lake* (USACE, 2001), elevations were referenced as the National Geodetic Vertical Datum of 1929 (NGVD 29). In 2009, USACE began a Comprehensive Evaluation of Project Datums (CEPD). The CEPD effort was specifically intended to ensure that project elevations and datums are properly and accurately referenced to nationwide spatial reference systems used by other USACE Districts as well as federal, state, and local agencies. To that end, a new project benchmark was established and linked to the 1988 North American Vertical Datum (NAVD 88). To convert PCD elevation for Aylesworth Creek Lake and its physical components to NAVD 88, subtract 1.56 feet from the PCD elevation (USACE, 2021).

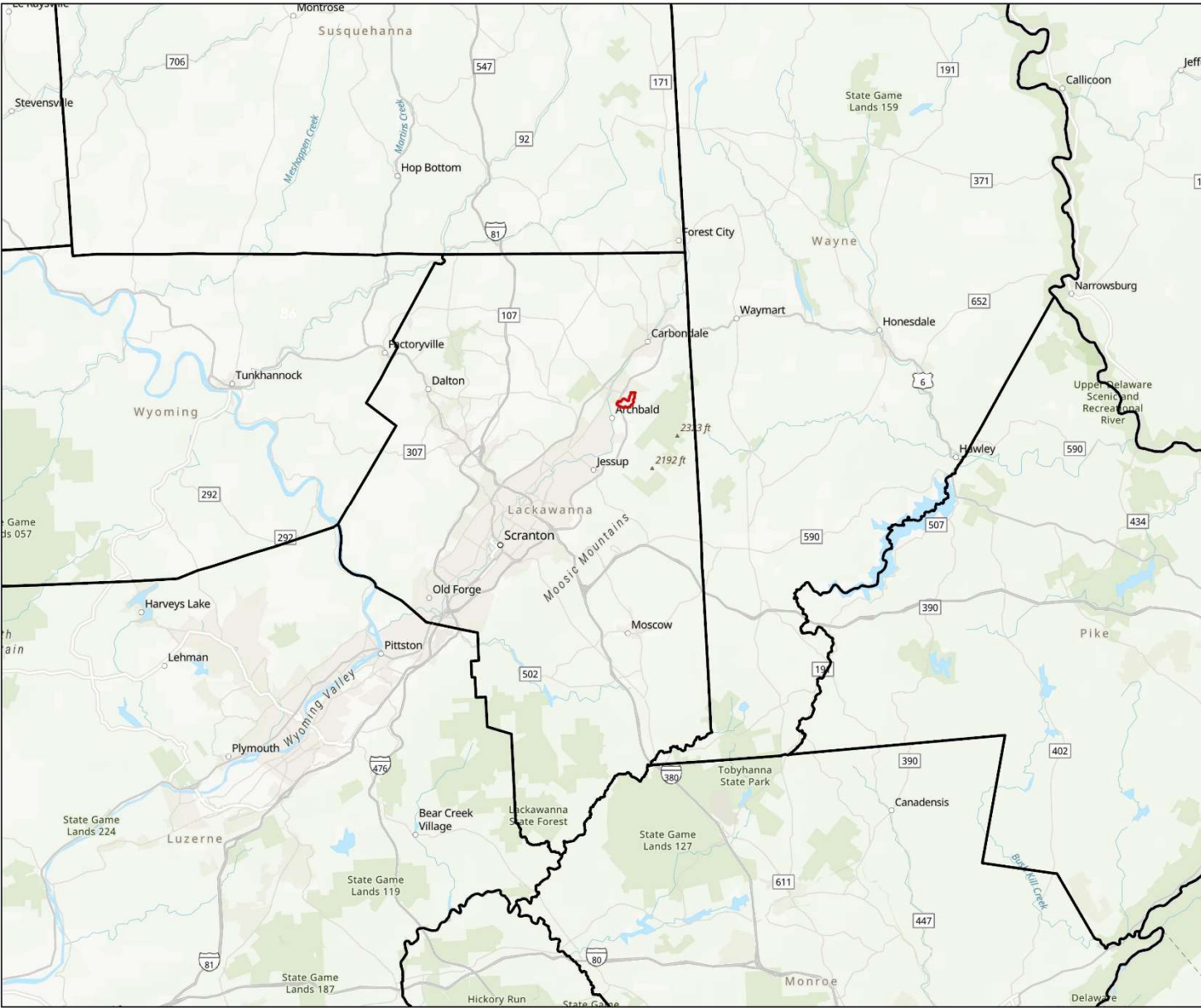
Aylesworth Creek Lake consists of an earth and rockfill dam with a maximum height above the streambed of 90 feet and a top length of 1,270 feet. A spillway with an 80-foot-long crest, having a discharge capacity of 10,000 cubic feet per second (cfs), is cut into the south bank. The outlet conduit is uncontrolled and consists of a 490-foot-long, 36-inch-diameter vitrified clay pipe encased in reinforced concrete. An auxiliary dike located at the Mayfield divide contains the reservoir during periods



Aylesworth Creek Lake and Dam

of high pools. The dike is 419 feet long and has a maximum height of 28 feet. The reservoir extends about 4,600 feet upstream and inundates 89 acres at spillway crest with an elevation of 1,150 feet PCD. The watershed above Aylesworth Creek Lake has a small drainage area of only six square miles; the terrain is steep with narrow valleys. Few people live in the vicinity of the project and the landscape is primarily wooded, but there are several abandoned strip mining operations. Due to the large mining presence, water quality in and around Aylesworth Creek and Lake has historically been, and continues to be, degraded by acid mine drainage (AMD).

Figure 1-1. Regional Vicinity



Aylesworth Creek Lake Master Plan

Regional Vicinity

Legend

- Aylesworth Creek Lake Project Area
- Pennsylvania Counties



Source: PSU Office of Physical Plant, data.pa.gov, Esri, TomTom, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS, USFWS, PSU Office of Physical Plant, data.pa.gov, New Jersey Office of GIS, Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS

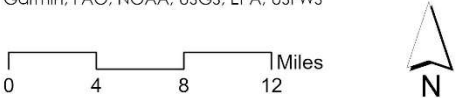
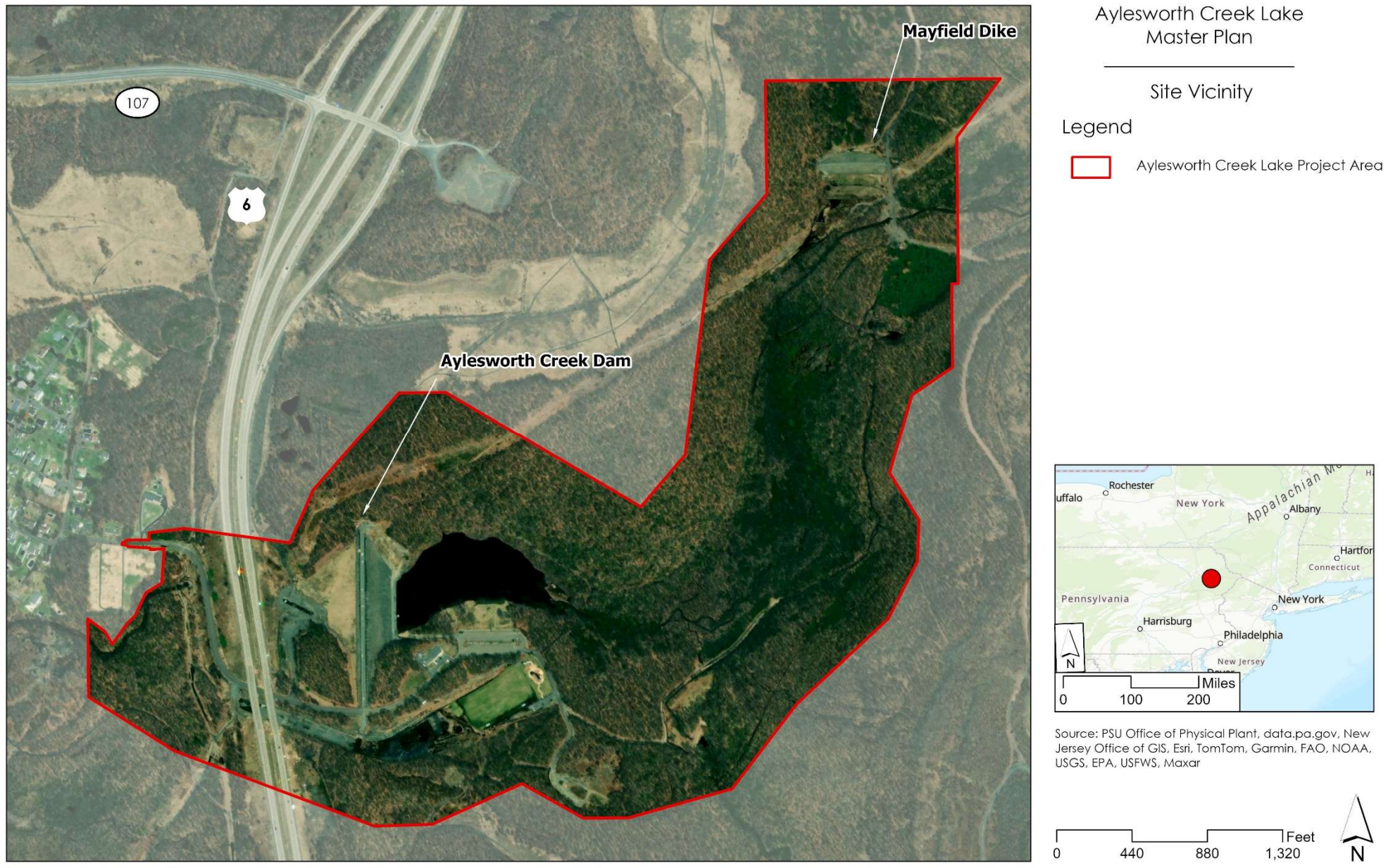


Figure 1-2. Site Vicinity



1.5 DESCRIPTION OF THE LAKE AND PROJECT STRUCTURES

The Aylesworth Creek Dam forms Aylesworth Creek Lake. The Aylesworth Creek Lake Project maintains a conservation pool of approximately 8 acres (at an elevation of 1,108 feet PCD) and stores approximately 62 acre-feet of water. At the full flood control pool (spillway crest at elevation 1,150 feet PCD), the lake covers 89 acres and stores 1,842 acre-feet of water. Locations of the project structures are shown in Figure 1-3.



1.5.1 Embankment/Dam

Aylesworth Creek Dam consists of a rolled earth and rockfill dam with an impervious zone and rolled rock shell on the upstream slope. The dam is approximately 1,270 feet long with a maximum height of 90 feet above the streambed. The elevation of the top of the dam is 1,167.5 feet PCD, providing 4.9 feet of freeboard above the spillway design flood. At the top of the dam, the maximum storage capacity is 3,770 acre-feet. The top of the dam is 25 feet wide and accommodates a service road that was re-paved and had guardrails installed in 2024. The base of the embankment is 550 feet wide. A transition zone is provided between the rockfill shell and the impervious fill. An inclined drain, supplemented by a horizontal drainage blanket, divides the impervious fill into approximately two equal sections. The dam along the left abutment was constructed on rock and the right abutment was constructed on dense impervious till.

1.5.2 Spillway

The spillway is an excavated channel with a concrete-paved control section. The approach and outlet channel are cut into rock and overburden. The channel has a flared approach varying in width from 290 feet at the entrance to 80 feet at the control, which has a sill elevation of 1,150.0 feet PCD. The outlet channel has a continuous 80-foot width. The spillway channel is unlined except for the concrete paved control section which is 25 feet wide and extends across the entire channel and 13 feet up the sides of the rock cut. The



Aylesworth Creek Dam Spillway

concrete control section acts like a weir by controlling the discharge of water from the spillway. The maximum discharge capacity of the spillway is 10,000 cfs with a maximum surcharge (depth of water within the spillway) of 12.6 feet. The outlet channel discharges onto an existing hillside which conveys the flow away from the toe of the dam. At the spillway crest, the lake covers approximately 89 acres and has a capacity of 1,842 acre-feet at 1,150 PCD. To date, spillway flow has not occurred.

1.5.3 Flood Control Outlet Works

Aylesworth Creek Lake does not have gates to adjust the flow of water. Water flows freely through a cut and cover outlet conduit located in the left abutment. The uncontrolled conduit is a 490-foot-long, 36-inch-diameter vitrified clay pipe encased in reinforced concrete. Under normal conditions, the conduit discharges on the west side of the dam/embankment structure. During floods, if the inflow exceeds the flow capacity of the pipe, water begins to impound in the lake. Other principal features of the outlet works include an uncontrolled reinforced concrete drop inlet tower with a crest elevation of 1,108 feet PCD, and an impact energy dissipator for the outlet structure. The drop inlet tower has horizontal metal bars to prevent large debris or objects from entering the system. A working platform at elevation 1,112 feet PCD, 4 feet above the conservation pool of 1,108 feet PCD, facilitates trash removal from the lake. Access to the working platform is by a walkway from the toe of the embankment. An 18-inch gate valve is located at the junction of the inlet structure and the 36-inch pipe upstream of the inlet structure. The gate valve is used to empty the reservoir. Due to the uncontrolled nature of the conduit, there is limited control of the lake level besides the use of the gate valve to empty the reservoir.

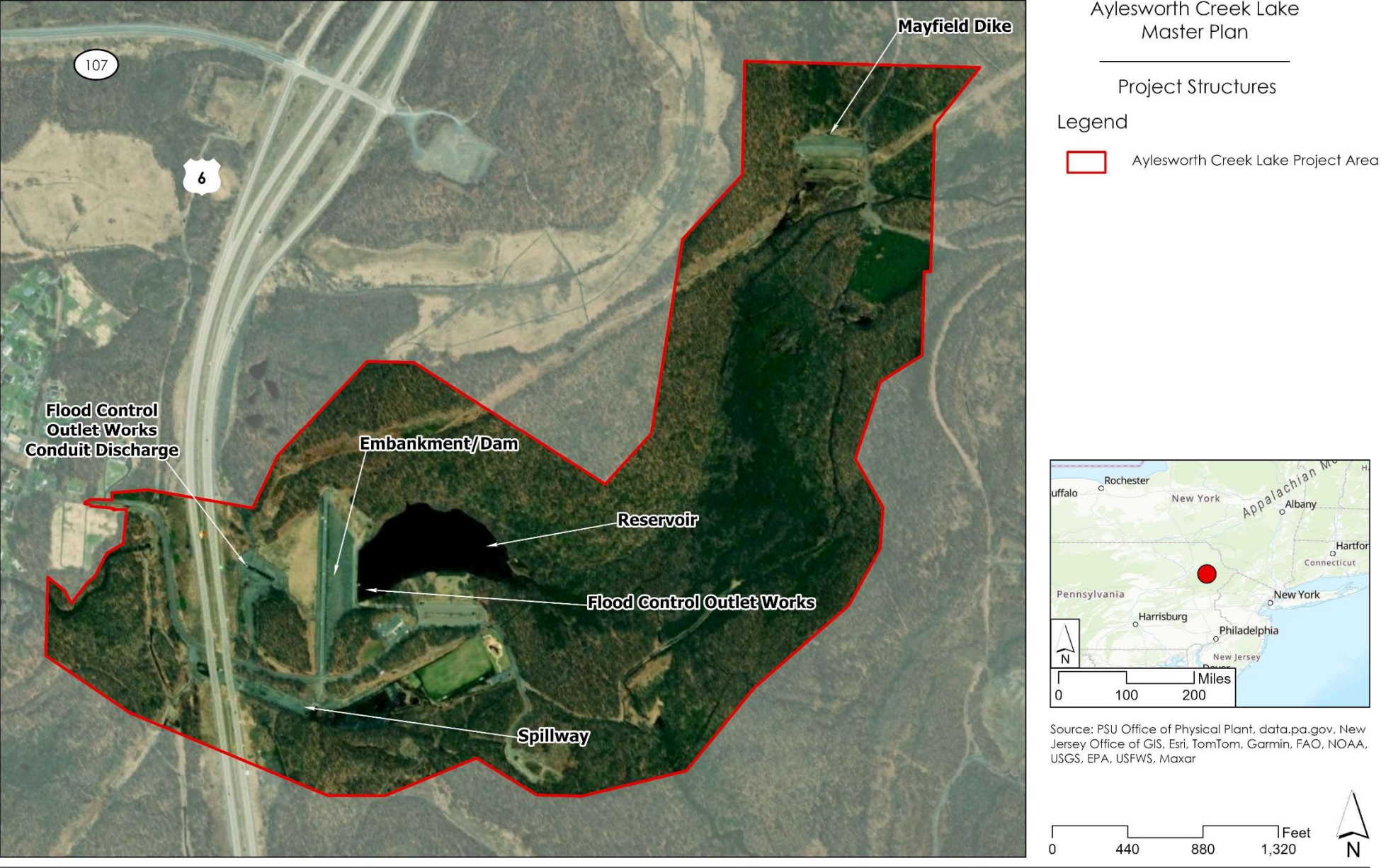
1.5.4 Mayfield Dike

This structure is a rolled earth and rockfill dike and is 419 feet long with a maximum height of 28 feet above existing grade. The elevation of the top of the dike is 1,167.5 feet PCD. The top of the dike is 15 feet wide and accommodates a service road. The dike embankment consists of an impervious central core, inclined transition zone, and dumped rock shell. An upstream impervious blanket and downstream toe drain are provided. The Mayfield Dike is located at the upstream end of Aylesworth Creek Lake to prevent damage to the Town of Mayfield in the event of full project capacity. The Mayfield Dike acts as an additional line of defense if the Aylesworth Creek Lake system becomes fully inundated. To date, flow has not reached the Mayfield Dike.



Mayfield Dike

Figure 1-3. Location of Project Structures at Aylesworth Creek Lake



1.6 PROJECT ACCESS

The Aylesworth Creek Lake Project can only be accessed via Hudson Street. Hudson Street runs east to west through the Boroughs of Jermyn and Archbald. U.S. Route 6 is located less than a mile east of Aylesworth Creek Lake and runs north to south between Scranton and Carbondale, PA. From U.S. Route 6, the most direct route to Aylesworth Creek Lake is to go west on Rushbrook Street, south on Bonnie Drive, and east onto Hudson Street. Hudson Street provides access around the project. There is currently no public access to the Mayfield dike.

1.7 PERTINENT PRIOR REPORTS AND RELATED STUDIES

Listed below are the primary design documents and reports associated with the initial construction and land acquisition, as well as relevant related studies and reports to the Master Plan update. The references list found in Appendix B contains the full annotation for each report or study.

- Aylesworth Creek Lake Operation and Maintenance Manual, Dated September 1970
- Aylesworth Creek Lake Master Plan, Dated June 1973
- USACE, Baltimore District Water Quality Program Annual Report, FY 2019, FY 2020, FY 2021, and FY 2022
- Master Manual for Reservoir Regulation Susquehanna River Basin, Volume II: Lower Basin, Appendix B: Aylesworth Creek Lake, Dated January 2001
- Aylesworth Creek Dam (PA00001) and Mayfield Dike (PA00001 AS01) Emergency Action Plan (EAP), Dated December 2021
- Aylesworth Creek Lake Fact Sheet, Dated March 1, 2023

1.8 PERTINENT PROJECT INFORMATION

Table 1-1 provides pertinent information regarding the existing storage capacity of Aylesworth Creek Lake.

Table 1-1. Aylesworth Creek Lake Pertinent Data Table

Drainage Area	Square Miles
Above the dam	6.2
Above the confluence with the Lackawanna River	6.4
Elevations (feet above mean sea level)	Elevation (feet Project Construction Datum [PCD])
Top of dam	1,167.5
Full flood control (spillway crest)	1,150.0
Conservation pool	1,108.0
Dam	Description
Type	Earth and rock fill embankment
Length	1,270 feet
Crest Width (top)	25 feet
Width at base	550 feet
Maximum height above streambed	90 feet
Spillway	Description
Type	Excavated channel with concrete-paved control section
Crest Length	80 feet
Maximum capacity at design surcharge	10,000 cubic feet per second (cfs) (at 1,162.6 feet PCD)
Outlet works	Description
Type	Uncontrolled conduit
Number of circular conduits	1
Diameter of conduit	36 inches
Length	490 feet
Mayfield Dike	Description
Type	Earth and rock fill embankment
Crest Elevation	1,167.5 feet PCD
Crest Length	419 feet
Crest Width	15 feet
Maximum height	28 feet

Source: USACE, 1970; USACE, 1973; USACE, 2021

Table 1-2 shows the proposed land classifications and associated acreages for this updated Aylesworth Creek Lake Master Plan. Land classifications are listed and described in EP 1130-2-500. Land classification acreage was estimated using Geographic Information Systems (GIS) data.

Table 1-2. Proposed Land Classifications at Aylesworth Creek Lake

Land Classification	Acres
Project Operations	20.1 ¹
High Density Recreation	7.2
Multiple Resource Management	
Low Density Recreation	214.3
Future Recreation	3.6
Water Surface	
Restricted	0.1
Open Recreation	7.6
Total	252.9²

¹Of the 20.1 acres classified under the land classification Project Operations; 18.2 acres include a restricted area. The land classification Restricted is only listed under Water Surface in EP 1130-2-550. Therefore, the restricted area within the land classification Project Operations is not labeled as a separate land classification but is discussed in this Master Plan.

²Mapping for the Master Plan update has been compiled using the best information available and is believed to be accurate. Previous project boundaries are based on original acquisition real estate deed records and mapping. Due to improved mapping technologies, minor discrepancies exist when comparing prior project boundaries and proposed land and water use classification acreages.

2 EXISTING CONDITIONS & ANALYSIS

2.1 PHYSIOGRAPHIC SETTING

2.1.1 Ecological Setting

The Aylesworth Creek Lake Project is located within the U.S. Environmental Protection Agency's (USEPA) Anthracite Subregion level IV Ecoregion and the Ridge and Valley level III Ecoregion. The Anthracite Subregion averages 6 miles in width and trends in a southwest-northeast direction through the northeastern areas of PA. The Aylesworth Creek Lake Project is located at the northernmost extent of the Anthracite Subregion. This ecoregion consists of a narrow to wide, canoe-shaped valley having irregular to linear hills and a valley enclosed by a steep-sloped mountain rim. This ecoregion was shaped by glacial erosion and some glacial deposition (PADCNr, n.d.). This region of PA has a rich mining history. The areas around Aylesworth Creek Lake display evidence of strip mining, haul roads, and similar industrial operations. The area has, however, recovered to some degree and is vegetated with scrub growth and new growth trees.

2.1.2 Climate

Aylesworth Creek Lake falls within the National Oceanic and Atmospheric Administration (NOAA) Climate Division 3606 – Upper Susquehanna (NOAA, n.d.). This area is characterized by a temperate climate with average annual temperatures between 40- and 59-degrees Fahrenheit and an average annual precipitation of 38.26 inches. The greatest monthly precipitation occurs from June through September. Most snowfall in the area occurs between December and March, with the area receiving on average 45 inches of snowfall a year (U.S. Climate Data, 2024).

2.1.3 Topography, geology, and soils

Lackawanna County is situated in northeastern PA, with the most prominent topographic features being the two nearly parallel mountain ranges that traverse the county in a southwest to northeast direction, forming the valley area. The range of mountains forming the east boundary of the valley is known as Moosic Mountain, while the opposite range is known as West Mountain. The two mountain ranges naturally trisect the county. Each of these ranges reaches an average height of 2,000 feet above sea level, while the valley floor ranges in elevation from 600 feet in the southwestern section to 1,500 feet in the northeast. Beyond West Mountain in the northwest section of the county, elevations are generally 800 to 2,000 feet. Beyond Moosic Mountain in the southeast section of the county, elevations range from 1,100 to 2,300 feet (Lackawanna County, 2024). The Lackawanna River flows through the valley between the two mountains. The westerly slopes of West Mountain drain to tributaries of the Susquehanna River, and the easterly slopes of Moosic Mountain drain to the Lackawanna and Lehigh Rivers and their tributaries. The slopes of both mountain ranges are generally 20 percent or greater; whereas, the rest of the county is fairly uniform. The section of the county beyond West Mountain mostly consists of 5 to 20 percent slopes, and the lands beyond Moosic Mountain consist of 1 to 10 percent slopes (Lackawanna County, 2024).

Aylesworth Creek Lake lies within the Appalachian Mountain section of the Ridge and Valley Geologic Province. The area, known as the Anthracite Coal Region, is oriented in a southwest-northeast direction and contains vast beds of anthracite coal. The main rock type is fine to coarse-grained sandstone and conglomerate with siltstone and shale (PADCNr, n.d.). The

Appalachian Mountain section of the Valley and Ridge Province is known as the Lackawanna Valley and is a long synclinal trough (syncline is a type of geological fold with younger layers closer to the center of the structure) with the outer rim made up of a very hard resistant sandstone and conglomerate of the Pocono Formation. The inner rim is made up of bedrock of the Pottsville Formation. Between the two rims is a thin section of soft Mauch Chunk shale. The inner synclinal trough contains folded and faulted beds of post-Pottsville shale, sandstone, and some conglomerate and several mineable anthracite coal layers. Several minor anticlines (type of geological fold with the oldest layers closer to the center of the structure) and synclines make up the Plateaus Province in the remaining part of the county (Lackawanna County, 2024).

Soils surrounding Aylesworth Creek Lake are primarily mapped as belonging to the Arnot-Rock outcrop complex, steep (map unit symbol ASE); Holly silt loam (Hm); Arnot-Rock outcrop complex, 8 to 25 percent slopes (AsD); Wurtsboro channery loam, 8 to 15 percent slopes (WkC); Udorthents, strip mine (UA); and Arnot-Rock outcrop complex, 0 to 8 percent slopes (AsB).

A variety of other soil types exist within the project boundary but mainly consist of silt loams and sandy loams with moderate slopes. Some soil complexes exist that possess rocky or gravelly characteristics including Volusia channery silt loam, 0 to 8 percent slopes, rubbly (VxB); Bath channery silt loam, 8 to 25 percent slopes, rubbly (BbD); and Lackawanna and Bath soils, steep, rubbly (LCE)(see Table 2-1 & Figure 2-1; USDA-NRCS, 2024).

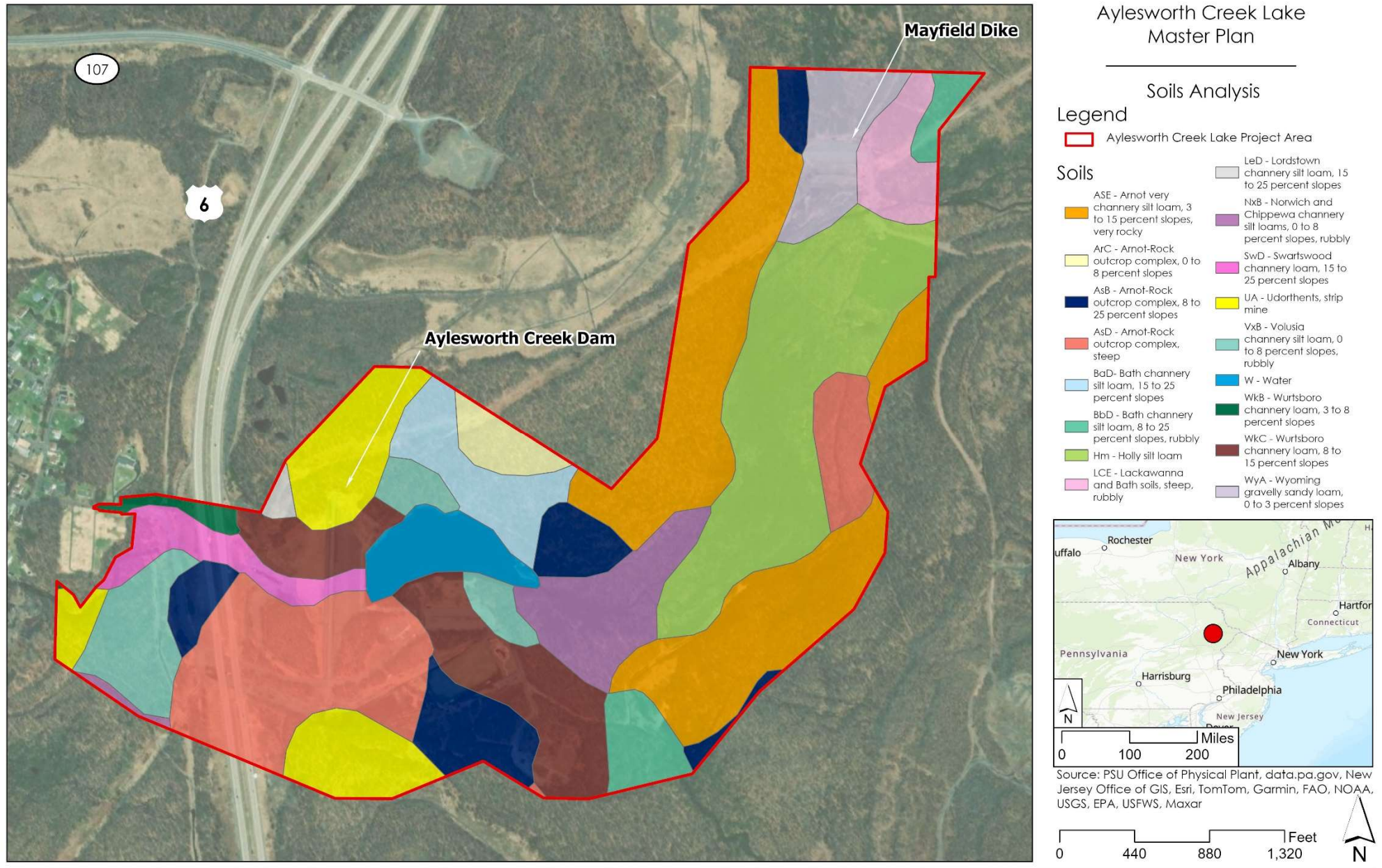
Of the soils within the project area, 66.6 acres are considered PA Farmland of Statewide importance including Holly silt loam (Hm); Wurtsboro channery loam, 8 to 15 percent slopes (WkC); and Wyoming gravelly sandy loam, 0 to 3 percent slopes (WyA). Additionally, 1.7 acres are categorized as Prime Farmland including Wurtsboro channery loam, 3 to 8 percent slopes (WkB). Thus, 27 percent of the project area is considered Farmland of Statewide Importance or Prime Farmland (USDA-NRCS, 2024).

Table 2-1. Soils at Aylesworth Creek Lake

Map Unit Symbol	Map Unit Name	Acres in Project Area	Percent of Project Area	Prime/Unique Farmland Status
ArC	Arnot very channery silt loam, 3 to 15 percent slopes, very rocky	3.9	1.5%	Not prime farmland
AsB	Arnot-Rock outcrop complex, 0 to 8 percent slopes	16.9	6.7%	Not prime farmland
AsD	Arnot-Rock outcrop complex, 8 to 25 percent slopes	32.4	12.8%	Not prime farmland
ASE	Arnot-Rock outcrop complex, steep	47.9	19.0%	Not prime farmland
BaD	Bath channery silt loam, 15 to 25 percent slopes	9.3	3.7%	Not prime farmland
BbD	Bath channery silt loam, 8 to 25 percent slopes, rubbly	7.1	2.8%	Not prime farmland
Hm	Holly silt loam	37.2	14.7%	Farmland of statewide importance
LCE	Lackawanna and Bath soils, steep, rubbly	6.6	2.6%	Not prime farmland
LeD	Lordstown channery silt loam, 15 to 25 percent slopes	0.8	0.3%	Not prime farmland
NxB	Norwich and Chippewa channery silt loams, 0 to 8 percent slopes, rubbly	12.4	4.9%	Not prime farmland
SwD	Swartwood channery loam, 15 to 25 percent slopes	6.7	2.7%	Not prime farmland
UA	Udorthents, strip mine	19.8	7.8%	Not prime farmland
VxB	Volusia channery silt loam, 0 to 8 percent slopes, rubbly	13.2	5.3%	Not prime farmland
W	Water	7.6	2.9%	Not prime farmland
WkB	Wurtsboro channery loam, 3 to 8 percent slopes	1.7	0.7%	Prime farmland
WkC	Wurtsboro channery loam, 8 to 15 percent slopes	20.7	8.2%	Farmland of statewide importance
WyA	Wyoming gravelly sandy loam, 0 to 3 percent slopes	8.7	3.4%	Farmland of statewide importance

Source: (USDA - NRCS, 2024)

Figure 2-1. Soils Map



2.1.4 Hydrology and Groundwater

Aylesworth Creek is a tributary of the Lackawanna River which, in turn, is a tributary of the Susquehanna River. The Aylesworth Creek drainage area is in the center of the long and narrow basin of the Lackawanna River and totals 6.2 square miles at the dam site. The headwaters of Aylesworth Creek are about 3.9 miles from the dam. For the first 2.4 miles, the creek descends on steep slopes of about 500 feet per mile; but for the last 1.5 miles it flows on flatter slopes of 100 feet per mile. The Stillwater Lake Project, a nearby USACE owned and operated facility, is not operationally connected to Aylesworth Creek Lake. However, they are hydrologically connected because water discharged from both dams meets at the confluence of Aylesworth Creek and the Lackawanna River at Jermyn, PA (USACE, 2021).

2.2 ECOREGION AND NATURAL RESOURCES ANALYSIS

2.2.1 Vegetation

Aylesworth Creek Lake supports many habitat types including wetlands, grassy areas, fields, edges, and forest. According to the U.S. Forest Service (USFS), PA has over 16 million acres of forest land (USDA-USFS, 2020). Northern hardwoods such as sugar maple (*Acer saccharinum*), black cherry (*Prunus serotina*), aspen (*Populus tremuloides*), birch (*Betula sp.*), eastern hemlock (*Tsuga canadensis*), and white ash (*Fraxinus americana*) cover about 32 percent of PA mostly in the high elevations of northern PA which includes the area around Aylesworth Creek Lake (PADCNr, 2024a). According to the PA Department of Conservation and Natural Resources (PADCNr), Aylesworth Creek Lake is in the vicinity of Pinchot State Forest. The Pinchot State Forest comprises approximately 54,000 acres near the confluence of the Susquehanna and Lackawanna Rivers in Lackawanna County, Luzerne County, Wyoming County, Susquehanna County, and Wayne County, PA (PADCNr, 2024d).

Between 2009 and 2014, northeast PA gained approximately 100,000 acres of forest, but lost approximately 90,000 acres, primarily due to development and conversion to agriculture. Northeast PA had the highest percentage of tree removals (27 percent) due to land use change. In PA, over half of all tree removals between 2009 and 2014 occurred in the north central and northeast regions (USDA-USFS, 2017).

According to Lackawanna County's 2011 Aylesworth Park Master Plan ("2011 Park Master Plan"), the park contains a mixture of grass, early growth forest, hemlock stands, and hardwood forest including red maple (*Acer rubrum*), red oak (*Quercus rubra*), beech (*Fagus sp.*), birch (*Betula sp.*), and sassafras (*Sassafras albidum*). Common understory plants include mountain laurel (*Kalmia latifolia*), witch hazel (*Hamamelis virginiana*), and a variety of fern species. Within the hemlock stands, yellow birch (*Betula alleghaniensis*) and rhododendron are common. The early growth forest is predominantly located in the southern portion of the park, an area that was historically strip mined. The dominant plant species in this area consists of birch (*Betula sp.*) and aspen (*Populus sp.*) which are common early successional species.

2.2.2 Wetlands

Natural wetlands are uncommon around the dam since the areas are managed for open recreation and fields. Wetlands found in the project area are generally located in low lying areas adjacent to Aylesworth Creek and its tributaries. According to the United States Fish &

Wildlife Service (USFWS) National Wetlands Inventory (NWI) Mapper, there is one mapped freshwater emergent wetland, two freshwater forested/scrub wetlands, one freshwater pond, and seven riverine (stream/river) systems, totaling approximately 31.8 acres, or 12.6 percent of the project's land area (Table 2-2; USFWS, 2024b).

Table 2-2. Wetland areas within Aylesworth Creek Lake Project Area

Wetland Type	Acres	Percent of Project Area
Freshwater Emergent Wetland	0.9	0.3%
Freshwater Forested/Shrub Wetland	19.4	7.7%
Freshwater Pond ¹	6.7 ²	2.7%
Riverine	4.8	1.9%
Total	31.8	12.6%
Project Area	252.9	

Source: USFWS, 2024b

¹Freshwater pond is terminology derived from the USFWS NWI Mapper. This "pond" is referring to Aylesworth Lake.

²This acreage is from the USFWS NWI Mapper data. The USFWS NWI data may differ from USACE acreage data for the Aylesworth Lake Project.

2.2.3 Fish and Wildlife Resources

The Aylesworth Creek Lake Project Area supports many habitat types including wetlands, grassy areas, fields, edges, and a variety of forest types, which attract several species of wildlife. Mammalian wildlife that may be found on project lands include black bear (*Ursus americanus*), white-tailed deer (*Odocoileus virginianus*), grey squirrel (*Sciurus carolinensis*), eastern wild turkey (*Meleagris gallopavo*) and groundhog (*Marmota monax*). Common avian species include a variety of waterfowl and wading birds, woodpeckers, and songbirds, as well as common game species.



Aylesworth Creek Lake and Aylesworth Creek hosts many fish species including native brook trout (*Salvelinus fontinalis*), black bullhead catfish (*Ameiurus melas*), yellow perch (*Perca flavescens*), rainbow trout (*Oncorhynchus mykiss*), banded killifish (*Fundulus diaphanous*), pumpkinseed (*Lepomis gibbosus*), and yellow bullhead (*Ameiurus natalis*). The PA Fish and Boat Commission (PFBC) stocks Aylesworth Creek Lake with trout species. In 2024, PFBC stocked Aylesworth Creek Lake with brook trout. Trout are the dominant species in Aylesworth Creek Lake given the stocking history at the lake by the PFBC.

2.2.4 Threatened and Endangered Species

2.2.4.1 Federally listed species

As of 2024, three federally listed species have the potential to occur within the project area, the endangered Indiana bat (*Myotis sodalis*), the endangered northern long-eared bat (*Myotis septentrionalis*), and the endangered northeastern bulrush (*Scirpus ancistrochaetus*) (USFWS, 2024a; Appendix H). Additionally, one proposed threatened species, the monarch butterfly (*Danaus plexippus*) was identified as potentially occurring within the project area (USFWS, 2024a; Appendix H). The project area does not contain any critical habitat for any species. The



species list generated from the USFWS Information for Planning and Consultation (IPaC) online system is located in Appendix H.

The Indiana bat is a small bat weighing only one-quarter of one ounce that was listed in 1967 and remains listed as federally endangered. During winter, Indiana bats hibernate in caves and mines. In summer, their habitat includes small to medium river and stream corridors with well-developed riparian woods, woodlots within 1 to 3 miles of small to medium rivers and streams, and upland forests. Major threats to their populations include winter disturbance of hibernacula, commercialization of caves, pesticides and other contaminants, summer habitat



destruction and mortality due to the white-nose syndrome fungus (USFWS, n.d - a). The Indiana bat may occur in the project area due to the intense mining history of the area along with the presence of Aylesworth Creek, riparian forest, and shrub wetlands at the project site. All these factors contribute to quality habitat for the Indiana bat in or around the Aylesworth Creek Lake project area. This Master Plan does not include construction of any proposed projects, but future projects will be subject to NEPA requirements, and potential effects on the Indiana bat should be analyzed.

Northern long-eared bats are medium sized bats (about 3-4 inches in length) associated with mature, interior forest environments. Unlike most other bats, northern long-eared bats forage along wooded hillsides and ridgelines instead of above valley-bottom streams and riparian forest edges. Populations at northern long-eared bat hibernation sites (e.g., caves and mines) have declined by 99 percent since the discovery of white-nose syndrome. For this reason, the northern long-eared bat is now listed as endangered throughout all its range. Forest fragmentation and conversion are also major threats to the species due to its association with large blocks of mature forest (USFWS, n.d. - d). The northern long-eared bat has the potential to occur in the project area along wooded hillsides and in and around the nearby abandoned mines. This Master Plan does not include construction of any proposed projects, but future projects will be subject to NEPA requirements, and potential effects on the northern long-eared bat should be analyzed.

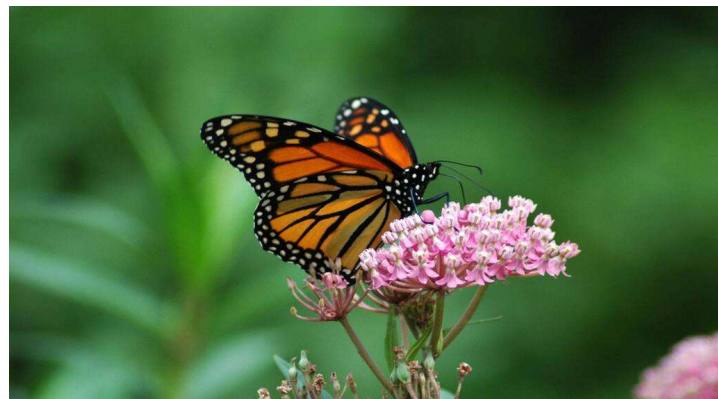
Northeastern bulrush is a leafy, perennial herb of the sedge family (Cyperaceae) approximately 80 to 120 centimeters in height. When flowering, it bears an inflorescence with distinctly arching rays and clusters of brown spikelets. Northeastern bulrush is found at the edge of natural ponds, wet depressions, or shallow sinkholes less than one acre in size. These wetlands primarily occur in low-lying areas with hilly topography and have seasonally variable



Northeastern bulrush

water levels ranging from inundation to desiccation (USFWS, n.d. - c). The northeastern bulrush was listed as endangered in 1991. Due to recovery efforts led by the USFWS and its partners, the northeastern bulrush is being proposed by USFWS to be removed from the Federal List of Endangered and Threatened Plants (Federal Register, 2024). It is unlikely that the northeastern bulrush would occur in the project area due to the absence of suitable habitat for this species.

The monarch butterfly is a proposed threatened species known to potentially occur within the project area. Adult monarch butterflies are large and conspicuous, with bright orange wings surrounded by a black border and covered with black veins. During the breeding season, monarchs lay their eggs on their obligate milkweed host plant and larvae emerge after two to five days. In PA, common milkweed (*Asclepias syrica*) is the most used host plant, followed by swamp milkweed



Monarch butterfly

(*Asclepias incarnata*). Larvae develop over a period of 9 to 18 days, feeding exclusively on milkweeds, and then pupate into a chrysalis before emerging 6 to 14 days later as an adult butterfly. There are multiple generations of monarchs produced during the breeding season, with most adult butterflies living approximately two to five weeks; overwintering adults enter reproductive suspension and live six to nine months. In many regions where monarchs are present, monarchs breed year-round. Individual monarchs in temperate climates, such as eastern and western North America, undergo long-distance migration, and live for an extended period. In the fall, in both eastern and western North America, monarchs begin migrating to their respective overwintering sites. This migration can take monarchs distances of over 1864 miles and last for over two months. In early spring (February-March), surviving monarchs break diapause and mate at the overwintering sites before dispersing. The same individuals that undertook the initial southward migration begin flying back to their breeding grounds and their offspring start the cycle of generational migration over again (USFWS n.d. - b). Monarchs can be found in PA from late April to early October and are more prevalent in the western half of the state. Monarchs can be found in a variety of habitats that contain

milkweed plants and nectar sources. Monarchs are in decline primarily due to declining milkweed availability (USDA-NRCS, 2020).

2.2.4.2 Pennsylvania Threatened & Endangered Species

The PA Natural Diversity Index (PNDI) Conservation Explorer website was consulted by USACE to identify state and federally listed species potentially occurring in the project area. The PNDI system did not identify any known impacts to threatened, endangered, or special concern species and resources within the project area, therefore; no further review was required (PADCNR, 2024c; Appendix H). The final PNDI report is located in Appendix H.

2.2.5 Other Protected Species

Bald eagles (*Haliaeetus leucocephalus*), a previously federally and state-listed endangered species, were removed from the federal endangered species list in August 2007 and PA's endangered species list in 2013. Although this species is not listed as an endangered or threatened species, it is protected under the Bald and Golden Eagle Protection Act, as noted by the USFWS Information, Planning, and Consultation online system (IPaC) system. No bald eagle nests are mapped in the vicinity of the project area (USFWS, 2024c). According to Cornell Lab of Ornithology's eBird system (2024), a bald eagle was sighted at Aylesworth Creek Lake in 2019.

2.2.6 Invasive and Nuisance Species

Invasive species are defined as non-native species whose introduction into an ecosystem is likely to cause environmental, human, or economic harm. Non-native species may not be affected by existing predators, disease, or other limiting factors in their introduced range and therefore may thrive and outcompete native species. Non-native invasive species are therefore often difficult and expensive to manage. No aquatic invasive species are documented within the reservoir. Some of the invasive and nuisance species found at the project area are described in the paragraphs below.

2.2.6.1 Plants

Most of the project lands, except those used for project operations and for recreation at Aylesworth Park, are densely wooded areas with little disturbance which minimizes the occurrence of invasive plant species. Project lands associated with project operations are routinely managed with mowing and spraying of vegetation as needed to maintain the flood risk management project. Common non-native invasive plant species such as Japanese knotweed (*Polygonum cuspidatum*) have been observed on project lands. Other invasive plant species may exist at the project site, but none are actively managed by dam staff.

2.2.6.2 Insects

Currently, the project area has few problems with invasive insect pests; however, invasive insects have caused damage in the past and are likely to cause damage in the future. The emerald ash borer (*Agrilus planipennis*), for example, was destructive for many years in the project area before the host species' (*Fraxinus spp.*) populations became too low to support emerald ash borer populations. Spotted lanternfly (*Lycorma delicatula*) is another invasive insect of concern in the project area. The species is native to China, Bangladesh, and Vietnam; it was found in Pennsylvania in 2014 and has since spread to 51 counties, all of which are under a state-imposed quarantine. The quarantine means precautions must be taken by residents and businesses to prevent the spread of spotted lanternfly. Spotted lanternfly can be easily spread by attaching to vehicles or equipment so one quarantine measure includes inspecting vehicles and equipment before transport elsewhere. Lackawanna County is included in the quarantine zone (PSU Extension, 2024). Finally, another potential invasive

insect of concern could be the hemlock woolly adelgid (*Adelges tsugae*). The adelgid feed on eastern hemlock sap, which interferes with the tree's use of nutrients causing needle drop, branch dieback, and tree mortality. By the end of 2023, this invasive species was found in all 67 PA counties (PADCNr, 2024b).

2.2.6.3 Birds

Both invasive and native nuisance bird species are present in the project area. The European starling (*Sturnus vulgaris*) was introduced to Central Park, New York City in 1890 and is now a common resident of both urban and rural areas in the United States. European starlings outcompete native cavity nesting species by evicting birds occupying a cavity and using it for their own nests (USDA - APHIS, 2017). Starlings are present in the project area but are not actively managed.

Canada geese (*Branta canadensis*) are common along both North American coastlines and throughout the central and lower United States and may exist in resident or migratory populations. Large populations of resident Canada geese can become a nuisance for many reasons, including causing damage to lawns, marshes, and cropland through overgrazing (USDA - APHIS, 2016). When the geese population becomes too large, there are concerns of geese causing elevated *Escherichia coli* (E. coli) levels in the lake. Canada geese have been found in the project area.

2.2.7 Water Quality

The water quality of Aylesworth Creek and Aylesworth Creek Lake has been historically degraded due to AMD. Pennsylvania Department of Environmental Protection (PADEP) has identified two main seeps, one along an unnamed tributary to Aylesworth Creek and one on the south shore of Aylesworth Creek Lake, that predominantly contribute to the AMD pollution (PADEP, 2005). An oxic limestone drain was constructed in 2007 to replace malfunctioning lime dosers and to treat AMD sources upstream of Aylesworth Creek Lake. The limestone drain construction project was developed by Lackawanna County and funded by the Lackawanna Watershed 2000 Program.

Historically, Aylesworth Creek Lake and Aylesworth Creek downstream of the dam were listed on the Pennsylvania Section 303(d) list due to impairments resulting from AMD and coal mining. In 2005, the EPA approved Total Maximum Daily Loads (TMDLs) for the Aylesworth Creek Watershed. Since implementation of the TMDLs, water quality in Aylesworth Creek Lake and Aylesworth Creek have steadily improved; since 2018, no impairments have been noted (USEPA, 2024).

USACE collects water quality data twice a year, usually in the summer, at four stations (one in the lake and three at the inflow to the lake). Water quality data collected in the field includes water temperature, dissolved oxygen, pH, and specific conductance. In the field, water samples are collected, and further analyzed for alkalinity, phenol alkalinity, acidity, orthophosphate, ammonia, nitrate, sulfate, and iron. Per recent water quality reports, alkalinity remains low, but pH has increased, and no detriments have been noted (USACE, 2024; PADEP, 2024).

2.3 CULTURAL RESOURCES

Cultural resources are locations of human activity, use, or occupation. They can be defined by expressions of human culture and history in the physical environment such as precontact or historic archaeological sites, buildings, structures, objects, districts, and sacred sites, among others. Cultural resources may also include natural features, plants, and animals that are deemed important or significant to a group or community. It is important to note that historic

properties, as defined by 36 CFR Part 800, the implementing regulations of Section 106 of the National Historic Preservation Act (NHPA), as amended, are cultural resources that are eligible for or listed in the National Register of Historic Places (NRHP). Additionally, to be considered a historic property, the resource must possess at least one of the following significance criteria:

- Criterion A: association with events that have made a substantial contribution to the broad patterns of our history; or,
- Criterion B: association with the lives of persons substantial in our past; or,
- Criterion C: embodies the distinctive characteristics of a type, period, or method of construction, or that represents the work of a master, or that possess high artistic value, or that represents a substantial or distinguishable entity whose components may lack individual distinction; or,
- Criterion D: have yielded, or may likely yield, information important in precontact or history.

Several laws, regulations, and executive orders direct the cultural resources program at Aylesworth Creek Lake. These include, but are not limited to:

- Sections 106 and 110 of the NHPA of 1966
- Archaeological Resources Protection Act (ARPA) of 1979
- American Indian Religious Freedom Act of 1978
- Native American Graves Protection and Repatriation Act (NAGPRA) of 1990
- Executive Order 13007 Indian Sacred Sites, May 24, 1996
- Executive Order 13175 Consultation and Coordination with Indian Tribal Governments, November 6, 2000
- Presidential Memorandum on Tribal Consultation and Strengthening Nation-to-Nation Relationships, January 26, 2021
- Presidential Memorandum on Uniform Standards for Tribal Consultation, November 20, 2022
- USACE Civil Works Tribal Consultation Policy, December 5, 2023
- Department of Defense American Indian and Alaska Native Policy, September 14, 2006
- ER 1130-2-540, Environmental Stewardship and Operations and Maintenance Policies, November 15, 1996
- EP 1130-2-540, Environmental Stewardship and Maintenance Guidance and Procedures, November 15, 1996

2.3.1 Precontact

Precontact history in PA can generally be divided into three periods: the Paleoindian Period (14,000 to 8,000 Before Common Era (BCE)), the Archaic Period (8,000 to 1,500 BCE), and the Woodland Period (1,000 BCE to [Common Era (CE)] 1600). Both the Archaic and Woodland Periods are sub-divided into Early, Middle, and Late sub-periods.

The Paleoindian Period is typically characterized by the presence of fluted spear points. Population groups during this time generally practiced less sedentary subsistence patterns by moving around to areas with predictable food resources. Some evidence also points to Paleoindians preferring high quality stone to make their tools. Archaeologists tracing sources of this stone have documented a range of over 200 miles per year in movement (Pennsylvania Historical and Museum Commission [PHMC], 2015d).

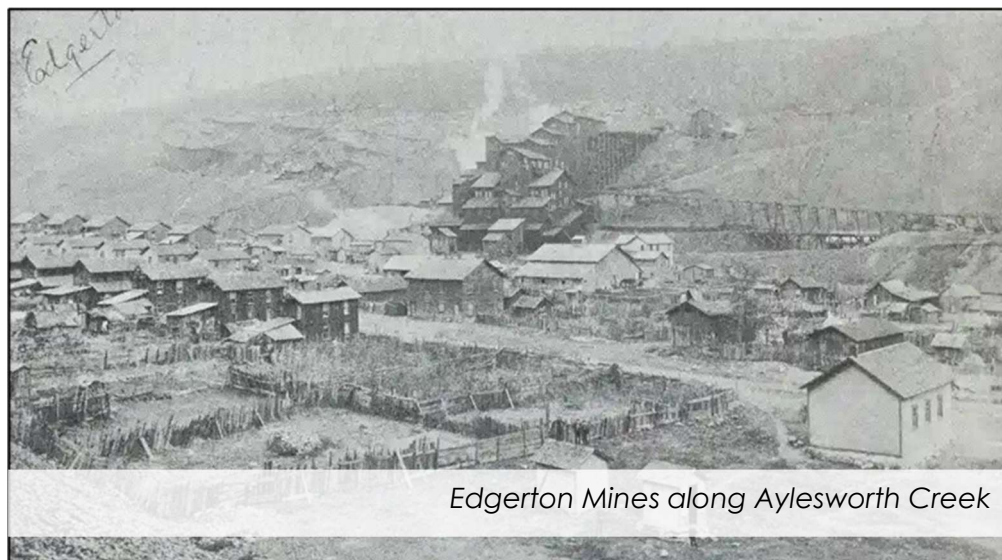
The Archaic Period is further divided into three sub-periods: the Early Archaic Period (8,000 to 6,000 BCE), the Middle Archaic Period (6,000 to 3,000 BCE), and the Late Archaic Period (3,000 to 1,500 BCE). The Archaic Period is also characterized by mobile hunter-gatherer groups practicing seasonal migrations and foraging patterns; however, there is an increased use of uplands and terraces by the end of the Archaic Period (PHMC, 2015a). After the Archaic Period, the Transitional Period took place from 1,500 to 1,000 BCE. The Transitional Period is characterized by the use of soapstone bowls, the precursors to fired ceramics used during the subsequent Woodland Period (PHMC, 2015e).

The Woodland Period is marked by the presence of pottery and can be divided into the Early Woodland Period (1,000 BCE to 100 CE), the Middle Woodland Period (100 CE to CE 900), and the Late Woodland Period (CE 900 to 1600). The frequency of upland sites increases during this time, as groups became increasingly more sedentary (PHMC, 2015b). Settlement continued to rely on more permanent base camps, with specialized camps for hunting or lithic collection and reduction. By the Late Woodland, there is an increased use and development of agricultural resources such as maize, squash, and beans (PHMC, 2015c).

2.3.2 Historic

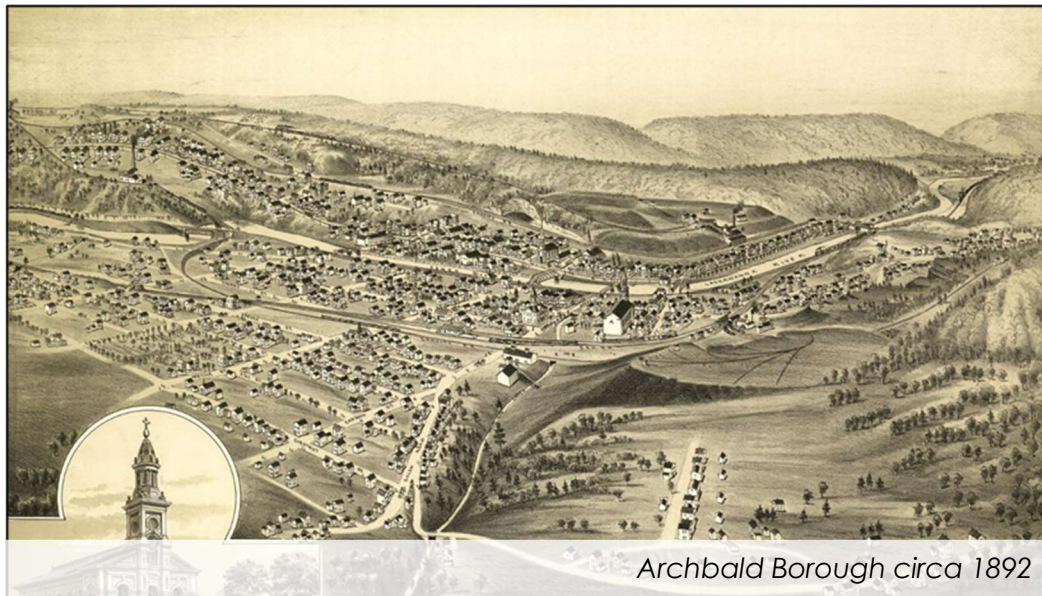
The following context is partially synopsised from the comprehensive background research conducted by Fortugno and Beadenkopf in their Phase I and II archaeological investigations of Lackawanna and Wayne Counties (Fortugno and Beadenkopf, 2010).

Historically, European settlement near Archbald Borough and Jermyn occurred in the 1820s and 1830s when they were part of Blakely Township. At Archbald, these residents were of Welsh descent and settled along a ridge in the Borough's western extent. Settlement increased throughout the 1830s and 1840s to take advantage of the geographic and industrial position between Scranton and Carbondale. By 1846, the Delaware and Hudson Canal Company established several mines, including the White Oak Colliery and the company's Number 1 and 2 mines, bringing additional and more permanent residents to the area. The area's importance as a coal supplier was solidified at this time once the Delaware and Hudson Gravity Railroad was constructed between Carbondale and the Delaware and Hudson Canal, when coal mined near Archbald could be transported to the canal and shipped to various east coast markets (W.W. Munsell, 1880:462-65; Murphy, 1928:458). An



undated photograph of the Edgerton Mines along Aylesworth Creek reveals features typical of the coal operations in this area (Jermyn Centennial Executive Committee, 1970:47).

Fowler's Birds-eye-view of Archbald, PA depicts the extent of development by 1892 (Fowler, Downs, and Moyer, 1892). The illustration primarily shows Archbald Borough; however, Jermyn can be seen in the upper-right corner along the Lackawanna River.



Following historic floods in the 1950s, Congress included dam authorizations in the Flood Control Act of 1962 (Public Law 87-874, 87th Congress, second session). The specific purpose of the project authorization was to provide flood risk management measures for the protection of communities in the Lackawanna and Main Stem Susquehanna River basins. Aylesworth Creek Dam was operationally complete in 1970 and has prevented approximately \$220.9 million in flood damages (USACE, 2023).

2.3.3 Previous Investigations at the Lake

One cultural resources survey has been conducted within the project area. In 2010, the Louis Berger Group, Inc. conducted a combined Phase I and II archaeological survey for the installation of a 500-kilovolt transmission line in Lackawanna and Wayne Counties. Only a small portion of the surveyed area was within the Aylesworth Creek Lake project area, and no archeological resources were identified.

2.3.4 Recorded Cultural Resources

Three cultural resources have been identified within or adjacent to the project area (Table 2-3). One has been determined eligible for the NRHP, while one has been recommended not eligible. The third resource has not been evaluated for listing in the NRHP.

Table 2-3. Recorded Cultural Resources at Aylesworth Creek Lake

Resource Name	PHMC No.	NRHP Eligibility	Resource Type	Description
Aylesworth Creek Dam Complex	N/A	Not evaluated	Above-ground district	An earthen embankment and appurtenant features constructed for flood risk management.
Delaware & Hudson Canal Company Gravity Railroad	2010RE00087	Eligible	Above-ground district	An 1829-1899 railroad eligible under Criterion A for its association with the development of Lackawanna County.
Saint Michael's Greek Catholic Cemetery	1992RE00170	Not eligible	Above-ground site	An early twentieth century cemetery with approximately 75-100 graves.

2.3.5 Potential for Unidentified Cultural Resources

Although the landscape around the project area has been extensively impacted by mining operations and dam creation, the potential for unidentified cultural resources remains moderate to high in undisturbed, low to moderately sloped areas within the Aylesworth Creek floodplain.

A review of historic aerial images taken between 1939 and 1960 indicates that the most extensive disturbances caused by mining operations took place in the upland regions north and south of the project area. Additionally, a comparison with the PA State Historic and Archaeological Resource Exchange (PA-SHARE) statewide pre contact probability model indicates that areas within and adjacent to the Aylesworth Creek floodplain have a moderate to high potential for containing unidentified cultural resources.

2.3.6 Long-Term Objectives for Cultural Resources

The objectives below are listed to provide goals for complying with Sections 106 and 110 of the NHPA, ER 1130-2-540, and EP 1130-2-540. These regulations and guidance documents establish and help guide stewardship and preservation programs for USACE operations at flood risk management projects such as Aylesworth Creek Lake.

- Identify and inventory historic properties within the project area as funds permit; and,
- Increase public awareness and education of the history of the Aylesworth Creek Dam complex, regional histories, archaeological studies, etc. through interpretive displays, pamphlets, presentations, or other methods as appropriate; and,
- Draft and finalize a Cultural Resources Management Plan that would provide a comprehensive program to direct historic preservation activities and objectives, as appropriate; and,
- Prevent unauthorized or illegal excavation of sites and removal of artifacts from project lands; and,
- Maintain compliance with Sections 106 and 110 of the NHPA, ARPA, NAGPRA, and the various other laws, regulations, and guidance listed above.

2.4 DEMOGRAPHIC AND ECONOMIC RESOURCES

2.4.1 Current Demographics, Economics, Trends and Analysis

The zone of interest (ZOI) for the socio-economic analysis of the Aylesworth Creek Lake Project consists of six PA counties. The lake lies within Lackawanna County and the surrounding counties include Luzerne, Wyoming, Susquehanna, Wayne, and Monroe County.

2.4.2 Population

According to the 2022 American Community Survey (ACS) 5-year population estimate projections, the total population in the ZOI in 2022 was 826,098, up from 824,838 in 2010. The population in the ZOI was approximately 6 percent of the total population of PA (12,972,008) in 2022. From 2022 to 2030, the population in the ZOI is expected to increase to 829,651, an annual growth rate of 0.12 percent per year. Of the ZOI counties, only Wyoming, Susquehanna, and Wayne Counties have a predicted negative growth rate from 2022 to 2030 (-0.38 percent per year, -0.55 percent per year, and -0.46 percent per year, respectively). Luzerne County has the highest predicted annual growth rate from 2022 to 2030 at 0.18 percent. Table 2-4 exhibits the population estimates and projections for the ZOI.

The distribution of the population among gender, as shown in Table 2-5, is approximately 50.1 percent male and 49.9 percent female in the ZOI, compared to 49.3 percent male and 50.7 percent female in all of PA. Most counties (5 out of 6) within the ZOI have nearly equal male and female populations (+/- 1 percent); however, Wayne County has a relatively large difference in gender populations with an approximately 46.7 percent female to 53.3 percent male population (Table 2-5; U.S. Census Bureau, 2024).

Figure 2-2 represents the population age structure in Lackawanna County, the ZOI, and in PA. The median ages in Lackawanna County and PA are 41.7 years and 40.8 years, respectively, with ZOI median ages ranging from 41.7 years in Lackawanna County to 48.8 years in Wayne County.

As shown in Figure 2-3, the overwhelming majority of the ZOI population is white, with non-white races making up 11.1 percent of the total population. Approximately 13.5 percent of the ZOI population identified as Hispanic or Latino (of any race), and 0.1 percent identified as American Indian (U.S. Census Bureau, 2024).

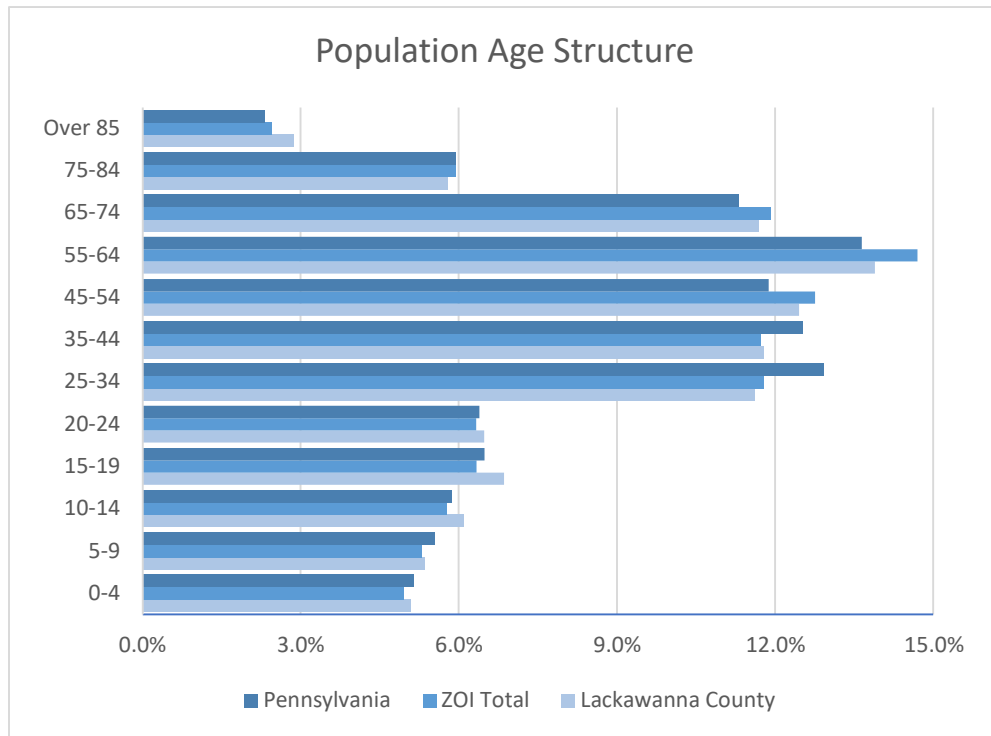
Table 2-4. Population Estimates and 2030 Projections

County/State	2010 Estimate		2020 Estimate		2030 Estimate		Growth rate
	Number	% of Zone of Influence (ZOI)	Number	% of ZOI	Number	% of ZOI	
Pennsylvania	12,612,705	-	12,972,008	-	13,185,540	-	0.21%
Lackawanna County, PA	213,731	25.9%	215,615	26.1%	217,307	26.2%	0.10%
Luzerne County, PA	319,120	38.7%	326,369	39.5%	331,038	39.9%	0.18%
Wyoming County, PA	28,262	3.4%	26,219	3.2%	25,414	3.1%	-0.38%
Susquehanna County, PA	43,343	5.3%	38,540	4.7%	36,845	4.4%	-0.55%
Wayne County, PA	52,302	6.3%	51,227	6.2%	49,332	5.9%	-0.46%
Monroe County, PA	168,080	20.4%	168,128	20.4%	169,715	20.5%	0.12%
ZOI Total*	824,838	-	826,098	-	829,651	-	0.07%
*Lackawanna, Luzerne, Wyoming, Susquehanna, Wayne, and Monroe Counties Only Sources: U.S. Census Bureau, 2024 (2010 and 2020 Estimates); Pennsylvania State Data Center for the Center for Rural Pennsylvania, 2024 (2030 Estimates)							

Table 2-5. Population Estimates by Gender

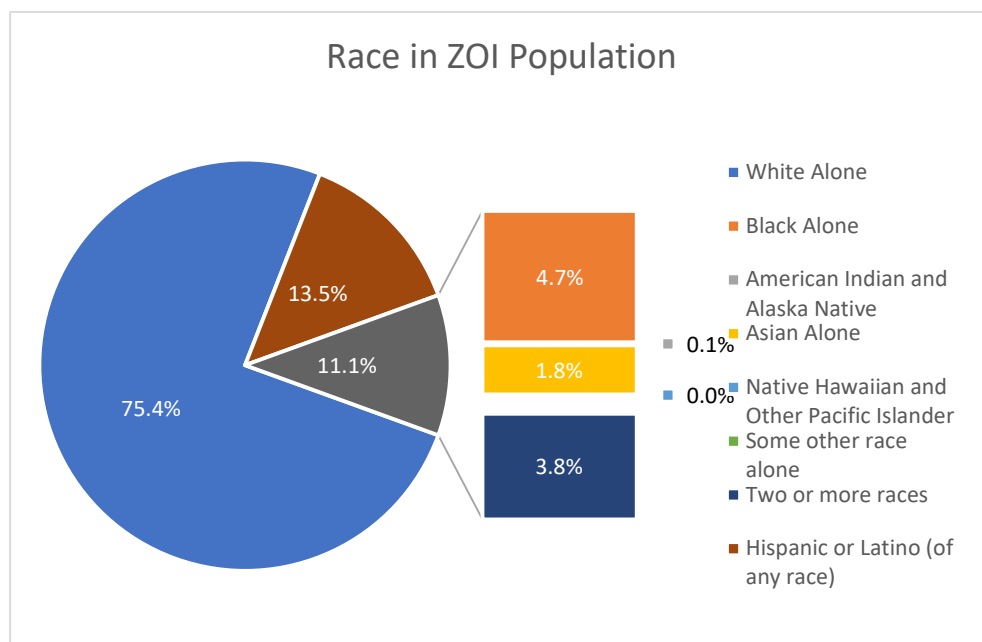
County/State	Population	
	Female	Male
Pennsylvania	6,572,178	6,399,830
Lackawanna County, PA	108,785	106,830
Luzerne County, PA	163,117	163,252
Wyoming County, PA	12,965	13,254
Susquehanna County, PA	19,018	19,522
Wayne County, PA	23,938	27,289
Monroe County, PA	83,997	84,131
Zone of Influence Total*	411,820	414,278
*Lackawanna, Luzerne, Wyoming, Susquehanna, Wayne, and Monroe Counties Only Source: U.S. Census Bureau, 2024 (2022 Estimates)		

Figure 2-2. 2022 Percent of Population by Age Group in Lackawanna County, Zone of Influence, and State



Source: (U.S. Census Bureau, 2024)

Figure 2-3. 2022 Population Percentages by Race in Zone of Influence



Source: (U.S. Census Bureau, 2024)

2.4.3 Education and Employment

In the ZOI, 38 percent of the population has obtained a high school diploma or equivalent. Approximately 16.7 percent have some college education but no degree, 10.1 percent have an associate degree, 16.5 percent have a bachelor's degree, 10.2 percent have a graduate degree or professional certification, 5.8 percent have a 9th to 12th grade education, and 2.8 percent have less than a 9th grade education.

The largest employment industries in the ZOI are educational services, health care and social assistance at approximately 24.1 percent, followed by 13.5 percent in retail trade, 10.6 percent in manufacturing, and 10.1 percent in professional, scientific and management, and administrative and waste management services. All other industries make up 41.7 percent of employment. The civilian labor force unemployment rate within the ZOI is 5.3 percent, like the 5.4 percent unemployment rate for all of PA.

2.4.4 Households and Income

There are approximately 328,330 households in the ZOI and 5,193,727 in PA. The median household income in the ZOI (\$65,622) is lower than PA overall (\$73,170). Of the ZOI counties, Wayne County has the lowest household income at \$59,240, and Monroe County has the highest household income at \$81,580. Approximately 12.6 percent of people living in the ZOI are below the poverty level, compared to 11.8 percent statewide. Luzerne County has the highest percentage of persons below the poverty level at 15.6 percent (U.S. Census Bureau, 2024).

2.5 RECREATION FACILITIES, ACTIVITIES, AND NEEDS

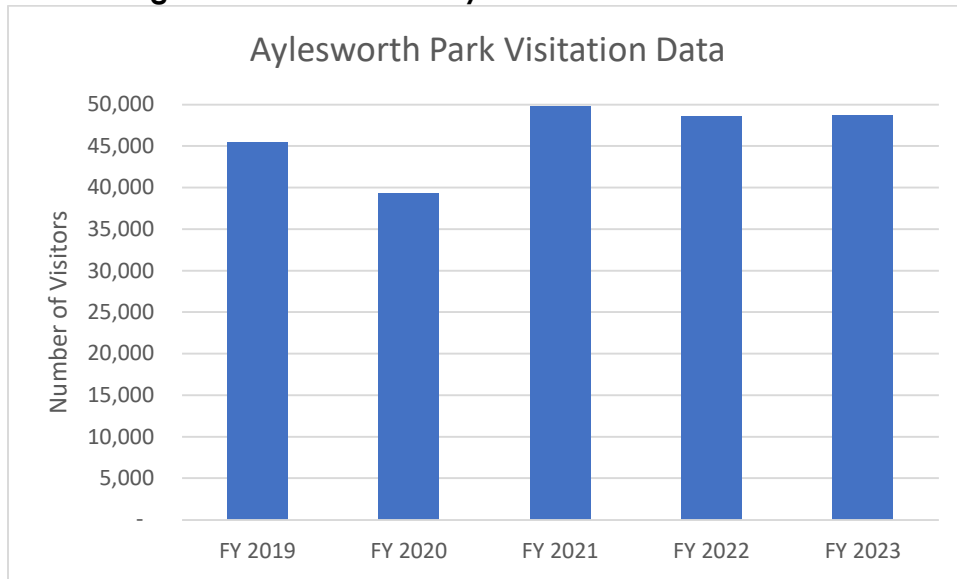
2.5.1 Zone of Influence

The ZOI for the recreation use analysis for the Aylesworth Creek Lake Project consists of six PA counties. The lake lies within Lackawanna County and the surrounding counties include Luzerne, Wyoming, Susquehanna, Wayne, and Monroe County.

2.5.2 Visitation Profile

Visitation data is maintained by USACE in the Visitor Estimation and Reporting System (VERS). During the period between October 2018 and September 2023, there were over 200,000 visitors to the Aylesworth Creek Lake property, with its heaviest visitation during the summer months and specifically the month of July. From Fiscal Year (FY) 2019 to FY 2023, there was a steady number of visitors each year, with an average of over 46,000 visitors per year (Figure 2-4). Aylesworth Creek Lake saw its lowest visitation in FY 2020, a timeframe that included the height of the COVID-19 pandemic. Aylesworth Park does not have camping; therefore, all users are considered day use visitors.

Figure 2-4. Visitation at Aylesworth Park for FY 2019 – FY 2023

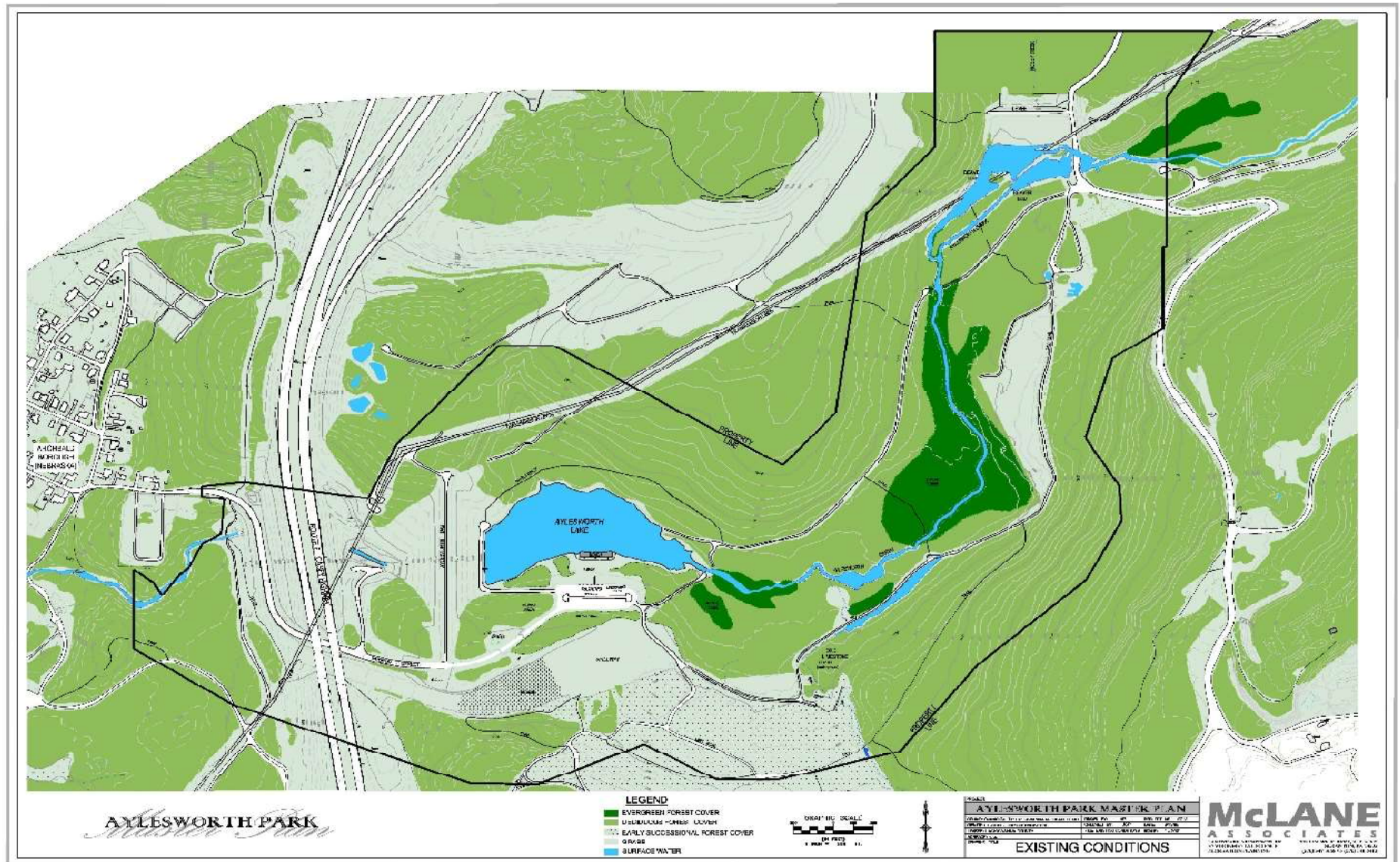


Source: USACE Visitation & Estimation Reporting System (2019-2023)

2.5.3 Recreation Facilities

A large portion of the Aylesworth Creek Lake Project lands are leased to Lackawanna County for the operation of Aylesworth Park. The park was created in 1970 because of the USACE Aylesworth Creek Lake Flood Risk Management Project. The park was previously operated and maintained by the Aylesworth Creek Reservoir Park Authority, a volunteer organization formed by the boroughs of Jermyn and Archbald. In 2006, the USACE and Lackawanna County entered into a 25-year lease agreement that included approximately 182.76 acres of the total 252.9 acres at the Aylesworth Creek Lake Project. The lease area does not include Mayfield Dike and the area around the dike. The park is managed and maintained by Lackawanna County Parks and Recreation which currently has two full time staff dedicated to the stewardship of Aylesworth Park. Most of the park features are located around the lake and the remainder of the leased area is forested lands that can be used for passive recreation. Features of the park include the park offices connected to a pavilion and restrooms, a playground, picnic tables and grills, a beach on Aylesworth Creek Lake, as well as a multipurpose field. The park allows fishing and swimming in the lake as well as non-motorized boating such as kayaking. The lake is stocked with fish twice a year by PFBC. Hunting is prohibited in Lackawanna County parks. Additionally, the recreation area includes parking areas and open grass space for picnics or gatherings. There is also a trail around the lake and trails can be found throughout the site. All recreation is open year round. Additionally, the USACE owned property, excluding restricted areas around the top of the dam and spillway, is used by the public for a variety of passive recreation such as hiking and nature watching.

Figure 2-5. Aylesworth Park Map



Source: Aylesworth Creek Park Master Site Plan, 2011

2.5.3.1 Parking Areas

The entrance to Aylesworth Park leads directly to the main parking area. There are a few parking spaces including ADA accessible parking spaces in front of the pavilion and restroom facility. Further down the road, there is a large parking lot with paths down to the lake for water access. Additionally, there is another parking lot adjacent to the playground and multipurpose field.

2.5.3.2 Swimming Beach and Water Access

A grass covered slope leads from the parking lot to the beach area. The beach is comprised of a rough gravel/sand composite and there are signs of erosion. The lake is open year round. Swimming is permitted at the lake. Non-motorized boats such as kayaks are allowed on the lake although there is no boat launch.



Aylesworth Park Beach and Swimming Area

2.5.3.3 Fishing

Aylesworth Creek Lake is stocked by PFBC. Historically, the lake has been stocked up to twice a year with trout species. In April 2024, PFBC stocked Aylesworth Creek Lake with brook trout. Fish species found in Aylesworth Creek Lake and the adjacent Aylesworth Creek include brook trout (*Salvelinus fontinalis*), black bullhead catfish (*Ameiurus melas*), yellow perch (*Perca flavescens*), rainbow trout (*Oncorhynchus mykiss*), banded killifish (*Fundulus diaphanous*), pumpkinseed (*Lepomis gibbosus*), and yellow bullhead (*Ameiurus natalis*). Fishing at Aylesworth Creek Lake is mostly limited to shore fishing due to the small lake size and lack of a boat launch; however, small, non-motorized boats such as kayaks and canoes are allowed and could be used for fishing.

2.5.3.4 Day Use Areas

The day use area consists of a park office, pavilion, and restrooms. The pavilion has electricity and wireless internet for public use. There are also picnic tables and grills available for public use. A playground is located south of the pavilion and park office and has its own parking area. The multipurpose field is located next to the playground near the spillway of the dam. There is path from the playground and parking lot to an unused area in the southeast portion of the park. The area consists of a gravel loop path and has potential for future day use area expansion given the existing path and proximity to other day use features.



Aylesworth Park Office and Pavilion



Aylesworth Park Day Use Area

2.5.3.5 Trails

Numerous trails exist throughout the park and the entire USACE owned property; however, none of the trails are consistently maintained. A circular trail runs through the parking lot, along the toe of the dam, and into the forested areas adjacent to the lake. The trail intersects Aylesworth Creek and is often impassible making it an incomplete loop.

All-terrain vehicle (ATV) usage is prohibited at the Aylesworth Creek Lake Project site. There is signage around the Aylesworth Park indicating “No ATVs”. The ATV trails are located within the Lackawanna County lease area for Aylesworth Park; therefore, it is the responsibility of Lackawanna County to post, enforce, and maintain the No ATV compliance.

USACE will prohibit those vehicles not authorized by federal regulations as well as those bared by USACE policy (see 36 CFR 327.1 (a) and 36 CFR 327.2(c)). In addition to the policy concerns, the use of ATVs on the project site could have potential environmental concerns that have not been evaluated. Per item 27 (b) of the Lackawanna County lease agreement with USACE, the Lessee agreed to use all reasonable means available to protect the environment and natural resources, and where damage nonetheless occurs from the Lessee's activities, the Lessee shall be liable to restore the damaged resources. To date, USACE has not received a formal application for ATV trails at the Aylesworth Creek Lake Project, and at the time of this Master Plan writing, ATV trails are not a recreational activity suitable for the Aylesworth Creek Lake Project as it is currently operated.

2.5.3.6 Special Events

Aylesworth Park is the site of various events throughout the year, particularly during the summer months. Examples of events at Aylesworth Park include family fun day, fishing derbies, community beach days, Fridays in the park, and art in the park. Most events are hosted by Lackawanna County and the various offices and departments within the local government.

2.5.3.7 Future Recreation, Upgrades, and Park Improvements

Lackawanna County Parks and Recreation has new leadership and has expanded their recreation goals for Aylesworth Park since the inception of the 2011 Park Master Plan. The County hopes to update the 2011 Park Master Plan through public engagement and expanding recreation options at Aylesworth Park. Currently, the park is undergoing an ADA compliance review with the goal of improving ADA accessibility throughout the park. Additionally, changes to and expansion of recreation areas are being considered throughout the county's leased area at the Aylesworth Creek Lake Project. There is a possibility that the

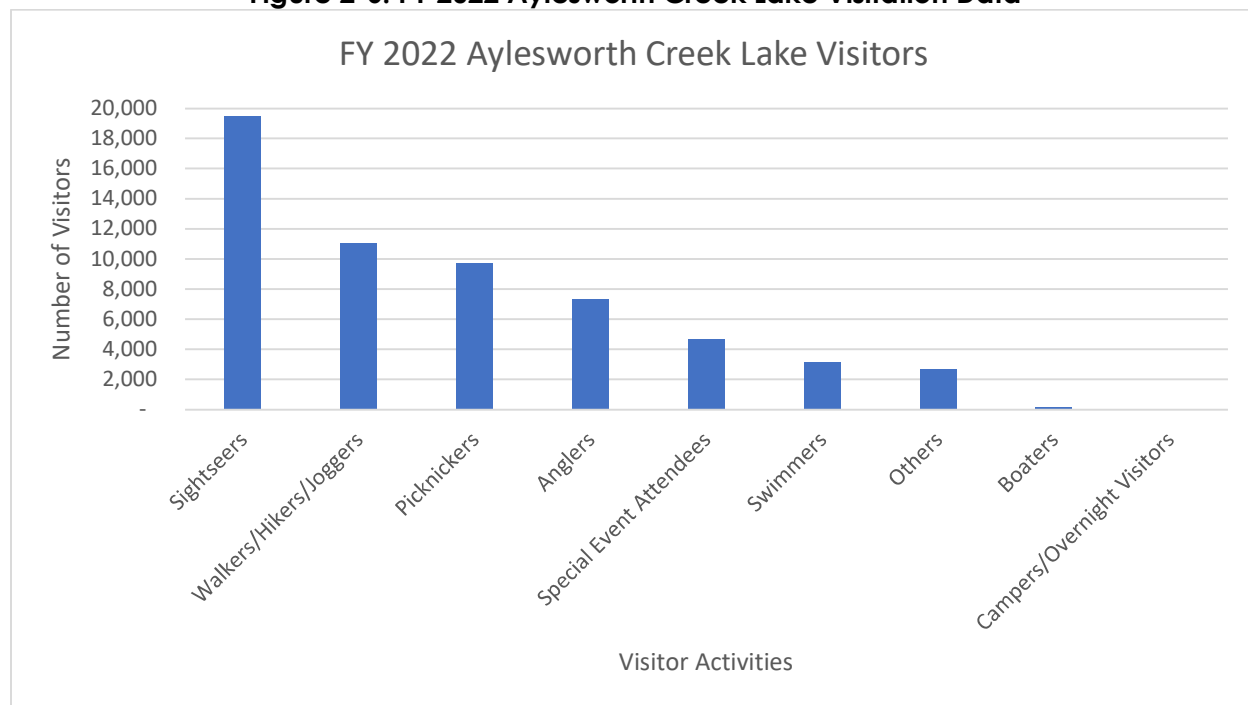
County could re-develop portions of the park or add additional recreation spaces in coordination with USACE in the future. A portion of the County's leased area is currently underutilized and is slated for potential future recreation expansion. The area is located southeast of the playground and parking lot and is discussed further in Sections 4.2.2.3.2 and Section 5.4.2. Communication is ongoing between Lackawanna County and the USACE regarding the potential expansion of recreation at Aylesworth Park.

2.5.4 Recreation Analysis

The Aylesworth Creek Lake project is beneficial to the local economy through indirect job creation and local spending by visitors. In FY 2022, data was collected highlighting the social and economic benefits of the Aylesworth Creek Lake Project (USACE, 2022a). By providing opportunities for active recreation, the USACE-owned lake and the recreation areas leased to Lackawanna County helps promote physical activity, provides recreational programs, and increases awareness of the environment. See Figure 2-6 for a breakdown of how visitors spent their time at the Aylesworth Creek Lake Project in FY 2022 (USACE, 2022a).

The money spent by visitors to USACE flood risk management projects on trip expenses adds to the local and national economies by supporting jobs and generating income. Visitor spending represents a sizable component of the economy in many communities around the project. In FY 2022, Aylesworth Creek Lake had 48,604 visits (person-trips). USACE estimated that visits to Aylesworth Park resulted in \$1,700,016 in visitor spending in the surrounding communities within a 30-mile radius of the project. The economic benefits fluctuate with park attendance observed from year to year. Aylesworth Creek Lake also provides significant social and environmental benefits so the net benefit of Aylesworth Creek Lake to the community is greater than the economic benefits alone.

Figure 2-6. FY 2022 Aylesworth Creek Lake Visitation Data



Source: USACE, 2022a

2.5.5 Recreational Carrying Capacity

Recreational carrying capacity generally refers to the maximum level of use of a recreation resource that does not exceed either the resource capacity or social capacity of that resource. Resource capacity refers to the level of use beyond which deterioration and degradation of natural resources and/or the physical environment occurs, while social capacity refers to overcrowding to the level of visitor dissatisfaction (URDC, 1980).

Recreational carrying capacity was not studied in-depth for this master plan, since recreation on USACE lands is managed by Lackawanna County. However, use of the Aylesworth Creek Lake Project and surrounding lands is limited by the recreational area's resource capacity. For example, day use is limited by the number of parking facilities and does not require permits or reservations. The use of Aylesworth Creek Lake by swimmers, anglers, and boaters is limited by parking facilities and/or space available on and around the lake. At this time there are no plans of actively limiting uses, and there is no evidence of facilities or natural resources being negatively impacted by overuse or overcrowding.

2.6 REAL ESTATE AND ACQUISITION POLICY

Real Estate acquisition in the Aylesworth Creek Lake Project area includes approximately 252.9 acres acquired in fee title, thus, USACE owns the complete rights and legal privileges over the land. Easement lands include all lands for which USACE holds an easement interest but not fee title. These could describe a situation in which USACE agreed to easement rights on fee title property or pursued easement rights on land outside the original fee simple purchase. Flowage easements are easements purchased by USACE giving the right to temporarily flood private land during flood risk management operations. No flowage easements exist at Aylesworth Creek Lake. However, there is a small portion of the Aylesworth Creek Lake Project under a road easement to provide access to the site. This easement is located adjacent to the west project boundary and is shown in Figure 4-1. The Aylesworth Creek Lake Project holds road easement interests on approximately 0.1 acres of land.

2.7 PERTINENT PUBLIC LAWS

2.7.1 Federal Laws

Public Law 59-209, Antiquities Act, 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.

Public Law 74-292 Historic Sites Act, 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 field of protection, recovery, and interpretation of 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".

Bald and Golden Eagles Protections Act (16 USC. 668-668d), 1940, as amended. This Act prohibits anyone, without a permit issued by the Secretary of the Interior, from "taking" bald or golden eagles, including their parts (including feathers), nests, or eggs. The Act provides

criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part (including feathers), nest, or egg thereof."

Public Law 78-534, Flood Control Act, 1944. Section 4 of the act as last amended in 1962 by Section 207 of Public Law 87-874 authorizes USACE 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.

Public Law 85-624, Fish and Wildlife Coordination Act, 1958. This act as amended in 1965 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.

Public Law 86-717, Forest Conservation, 1960. This act provides for the protection of forest and other vegetative cover for reservoir areas under the jurisdiction of the Secretary of the Army and the Chief of Engineers.

Public Law 87-874, Rivers and Harbors Act, 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.

Public Law 88-578, Land and Water Conservation Fund Act, 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.

Public Law 89-80, 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. Title II of this act established the River Basin Commissions and stipulated their duties and authorities. The President of the United States signed the Susquehanna River Basin Compact into law on December 24, 1970, subsequent to its approval by Congress and the prior approval of the involved states. The Compact provided for the creation of a single administrative agency to coordinate water resources efforts and programs of federal, state, local and private interests in the basin.

Public Law 89-665, 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 NRHP.

Public Law 90-480, Architectural Barriers Act of 1969. This act ensures that certain buildings financed or leased by Federal agencies are constructed (or renovated) so that they will be accessible to the physically disabled.

Public Law 90-483, River and Harbor and Flood Control Act, Mitigation of Shore Damages, 1968. Section 210 restricted collection of entrance fee at USACE lakes and reservoirs to users of highly developed facilities requiring continuous presence of personnel.

Public Law 91-190, National Environmental Policy Act (NEPA), 1969. 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.

Public Law 92-347, Golden Eagle Passbook and Special Recreation User Fees. This act revises Public Law 88-578, the Public Land and Water Conservation Act of 1965, to require federal agencies to collect special recreation user fees from the use of specialized sites developed at federal expense and to prohibit USACE from collecting entrance fees to projects.

Public Law 92-500, Federal Water Pollution Control Act Amendments, 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. Public Law 92-500 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."

Public Law 92-516, Federal Environmental Pesticide Control Act, 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.

Public Law 92-574, Noise Control Act of 1972, as amended. This Act establishes a national policy to promote an environment for all Americans free from noise that jeopardizes their health and welfare.

Public Law 93-81, Collection of Fees for Use of Certain Outdoor Recreation Facilities, 1978. 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.

Public Law 93-112, Rehabilitation Act of 1973, as amended. The USACE responsibility to provide access to programs and activities for persons with disabilities is identified in the Rehabilitation Act of 1973 and its subsequent amendments, entitled the "Rehabilitation, Comprehensive Services and Development Disabilities Amendment of 1978."

Public Law 93-205, Conservation, Protection, and Propagation of Endangered Species Act of 1973, as amended. This law repeals the Endangered Species Conservation Act of 1969. It also directs all Federal departments/agencies to carry out programs to conserve endangered and threatened species of fish, wildlife, and plants and to preserve the habitat of these species in consultation with the Secretary of the Interior. This Act establishes a procedure for coordination, assessment, and consultation. This Act was amended by Public Law 96-159.

Public Law 93-291, Archeological Conservation Act, 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.

Public Law 93-303, Recreation Use Fees, 1974. 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.

Public Law 93-523, Safe Drinking Water Act, 1974. 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.

Public Law 94-422, Amendment of the Land and Water Conservation Fund Act, 1965. Expands the role of the Advisory Council on Historic Preservation. 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 NRHP.

Public Law 94-580, Resource Conservation and Recovery Act, as amended, 43 U.S. C. 6901, et seq.). The Resource Conservation and Recovery Act (RCRA) controls the management and disposal of hazardous waste. "Hazardous and/or toxic wastes", classified by RCRA, are materials that may pose a potential hazard to human health or the environment due to quantity, concentration, chemical characteristics, or physical characteristics. This applies to discarded or spent materials that are listed in 40 C.F.R. 261.31-.34 and/or that exhibit one of the following characteristics: ignitable, corrosive, reactive, or toxic. Radioactive wastes are materials contaminated with radioactive isotopes from anthropogenic sources (e.g., generated by fission reactions) or naturally occurring radioactive materials (e.g., radon gas, uranium ore).

Public Law 95-95, Clean Air Act of 1977, as amended. This Act regulates air emissions from stationary and mobile sources. The law authorizes USEPA to establish National Ambient Air Quality Standards (NAAQS) to protect public health and public welfare and to regulate emissions of hazardous air pollutants. Based on ambient levels of a pollutant compared with the established national standards for that pollutant, regions are designated as either being in attainment or non-attainment.

Public Law 95-217, Clean Water Act of 1972, as amended. This Act amended the Federal Water Pollution Control Act enacted in 1948 and extends the appropriations authorization. The Clean Water Act is a comprehensive Federal water pollution control program that has as its primary goal, the reduction and control of the discharge of pollutants into waters of the U.S

Public Law 95-632, Endangered Species Act Amendments of 1978. This law amends the Endangered Species Act Amendments of 1973. Section 7 directs agencies to conduct a

biological assessment to identify threatened or endangered species that may be present around any proposed project. This assessment is conducted as part of a federal agency's compliance with the requirements of NEPA.

Public Law 96-95, Archeological Resources Protection Act of 1979. This Act protects archeological resources and sites that are on public and tribal lands and fosters increased cooperation and exchange of information between governmental authorities, the professional archeological community, and private individuals. It also establishes requirements for issuance of permits by the Federal land managers to excavate or remove any archeological resource located on public or Indian lands.

Public Law 96-510, Comprehensive Environmental Response, Compensation, and Liability Act (42 USC 9601, et. seq). The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) governs the liability, compensation, cleanup, and emergency response for hazardous substances released into the environment and the cleanup of inactive hazardous substance disposal sites.

Public Law 97-98, Farmland Protection Policy Act (FPPA) of 1981 (7 USC 4201-4209). This Act is intended to minimize the impact Federal programs have on the unnecessary and irreversible conversion of farmland to nonagricultural uses. It assures that to the extent possible federal programs are administered to be compatible with state, local units of government, and private programs and policies to protect farmland.

Public Law 99-662, The Water Resources Development Act, 1986. Provides the conservation and development of water and related resources and the improvement and rehabilitation of the Nation's water resources infrastructure.

Public Law 101-336, Americans With Disabilities Act of 1990 (42 USC 12101-12103). The purpose of the Act was to extend the rights, privileges, and protection that had been made available to the disabled on federal projects for many years prior to the ADA, to the private sector.

Public Law 103-66, Section 500. Omnibus Budget Reconciliation Act of 1993. This act authorizes USACE to expand its recreation user fee program.

2.7.2 Executive Orders (EO)

EO 11514, Protection and Enhancement of Environmental Quality – EO 11514 requires federal agencies to provide leadership in protecting and enhancing the quality of the Nation's environment to sustain and enrich human life.

EO 11593, Protection and Enhancement of Cultural Environment – EO 11593 requires federal agencies to administer the cultural properties under their control in a spirit of stewardship and trusteeship for future generations.

EO 11990, Protection of Wetlands – EO 11990 requires federal agencies to minimize the destruction, loss, or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands in executing federal projects.

EO 11988, Floodplain Management – This EO directs federal agencies to evaluate the potential impacts of proposed actions in floodplains.

EO 13045, Protection of Children from Health Risks & Safety Risks – This EO directs federal agencies to evaluate environmental health or safety risks that may disproportionately affect children.

EO 13112, amended under EO 13751, Invasive Species – This EO directs federal agencies to evaluate the occurrence of invasive species, the prevention for the introduction of invasive species, and measures of their control to minimize the economic, ecological, and human health impacts.

EO 13175, Consultation and Coordination with Indian Tribal Governments – This EO reaffirms the federal government's commitment to tribal sovereignty, self-determination, and self-government by ensuring agencies consult with Indian tribes and respect tribal sovereignty as they develop policy on issues that impact Indian communities.

EO 13186, Migratory Bird Habitat Protection – Sections 3a and 3e of EO 13186 direct federal agencies to evaluate the impacts of their actions on migratory birds, with emphasis on species of concern, and inform the USFWS of potential negative impacts on migratory birds.

EO 13508, Chesapeake Bay Protection and Restoration – This EO directs federal agencies to implement best management practices to restore and maintain the health of the Chesapeake Bay.

EO 13751, Safeguarding the Nation from the Impacts of Invasive Species – This EO builds on EO 13112 by strengthening and clarifying various aspects of EO 13112. This EO maintains the National Invasive Species Council (Council) and the Invasive Species Advisory Committee; expands the membership of the Council; clarifies the operations of the Council; incorporates considerations of human and environmental health, technological innovation, and other emerging priorities into Federal efforts to address invasive species; and strengthens coordinated, cost-efficient Federal action.

2.7.3 State Laws

Commonwealth of Pennsylvania, Act 170 Wild Resource Conservation Act, 1982. This law was passed to protect endangered plants and animals.

Commonwealth of Pennsylvania, Environmental Stewardship and Watershed Protection Act, 1999. This law provides money to protect open space and critical habitat, conserve river resources, create greenways, build community parks, and enhance tourism.

Commonwealth of Pennsylvania, Clean Streams Law, 1937. This law provided Pennsylvania with the authority to protect streams from pollution. It prohibits littering or dumping that effects the waters and can fine up to \$10,000 for offenses.

Commonwealth of Pennsylvania, Article 1 Section 27 Environmental Rights Amendment, 1969. This article provides two rights to a clean environment for Pennsylvania's citizens: a right to clean air, pure water, and the preservation of the natural, scenic, historic, and aesthetic values of the environment; and a right to have public natural resources conserved and maintained by the Commonwealth for the benefit of present and future generations.

2.7.4 State Management Plans

Pennsylvania statewide Comprehensive Outdoor Recreation Plan (SCORP), 2020-2024. The 2020 – 2024 outdoor recreation plan is Pennsylvania's strategic plan for how outdoor recreation should meet the needs of the state's residents and visitors. A State's outdoor recreation plans must be updated every five years for states to remain eligible for Federal Land and Water Conservation Fund. The 2020 – 2024 plan includes several goals, all of which center around a framework of five priorities, including health and wellness, recreation for all, sustainable systems, funding and economic development, and technology.

3 RESOURCE OBJECTIVES

3.1 INTRODUCTION

The purpose of the Master Plan is to establish the guidelines for sustainable stewardship of natural and recreational resources managed directly and indirectly on USACE owned lands. The resource objectives and goals are consistent with the authorized project purposes, federal laws and directives, regional needs, and resource capabilities, and take public input into consideration. The Pennsylvania SCORP was considered as well. The goals presented in the plan express the overall desired end state of the cumulative land and recreation management programs at Aylesworth Creek Lake. The resource objectives specify task-oriented actions necessary to achieve the plan goals.

Overarching USACE management goals and environmental operating principles (EOPs) are presented in the following sections. Specific project wide and Aylesworth Park resource objectives are presented in Section 3.3.

3.2 MANAGEMENT GOALS

The following goals are the priorities for consideration when determining management objectives and development activities. Implementation of these goals is based upon time, workload, and budget. The objectives provided in this chapter are established to provide high levels of stewardship to USACE managed lands and resources, while still providing a high level of public service. These goals will be pursued using a variety of mechanisms such as: assistance from volunteer efforts, hired labor, contract labor, permit conditions, remediation, and special lease conditions. It is the intention of USACE and Aylesworth Creek Lake Project staff to provide a realistic approach to the management of all resources.

Project Management Goals:

- **Goal A** – Provide the best management practices to respond to regional needs, resource capabilities and capacities, and expressed public interests consistent with authorized project purposes.
- **Goal B** – Protect and manage project natural and cultural resources through sustainable environmental stewardship programs.
- **Goal C** – Provide public outdoor recreation opportunities that support project purposes and public interests while sustaining project natural resources.
- **Goal D** – Recognize the unique qualities, characteristics, and potentials of the Project.
- **Goal E** – Provide consistency and compatibility with national objectives and other state and regional goals and programs.

In addition to the goals, USACE management activities are guided by USACE-wide EOPs as follows:

- Strive to achieve environmental sustainability. An environment maintained in a healthy, diverse, and sustainable condition is necessary to support life.
- Proactively consider environmental consequences of USACE programs and act accordingly in all appropriate circumstances.
- Seek balance and synergy among human development activities and natural systems by designing economic and environmental solutions that support and reinforce one another.
- Continue to meet corporate responsibility and accountability under the law for activities and decisions under our control, which may impact human health and welfare and the continued viability of natural systems.
- Seek ways and means to assess and mitigate impacts to the environment. Consider the environment in employing a risk management and systems approach to the full life cycle of our projects and processes.
- Build and share an integrated scientific, economic, and social knowledge base that supports a greater understanding of the environment and impacts of our work in a collaborative manner.
- Employ an open, transparent process that respects the views of individuals and groups interested in USACE activities; listen to them actively and learn from their perspective in the search to find innovative win-win solutions to the nations' problems, that also protect and enhance the environment.

3.3 RESOURCE OBJECTIVES

Resource objectives are defined as clearly written statements that respond to identified issues and that specify measurable and attainable activities for resource development and management of the lands and waters under USACE jurisdiction. The objectives stated in this master plan support the project management goals, USACE 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.

The objectives in this master plan are intended to provide project benefits, meet public needs, and foster environmental sustainability for Aylesworth Creek Lake to the greatest extent possible.

3.3.1 Project-Wide Objectives

- Mitigate potential flood damage to downstream communities including Olyphant, Dickson City, Scranton, Moosic, Old Forge, and Duryea in Pennsylvania due flooding of Aylesworth Creek, the Lackawanna River, and the main stem of the Susquehanna River.
- Execute environmental stewardship activities on project lands to sustain natural and cultural resources.
- Maintain stable lake conditions throughout the prime recreation season to support both in-lake and shoreline use.

3.3.2 Recreation Area Objectives

Aylesworth Creek Lake provides for a variety of recreational opportunities to the local region. There are numerous passive recreational benefits such as hiking and wildlife viewing. In addition, Aylesworth Park, leased and operated by Lackawanna County, is available for

additional outdoor recreation opportunities such as picnicking, playing on the playground and other outdoor sports. The lake also provides swimming and fishing opportunities. There is no charge to enter the Park; however, there are rental fees associated with reserving the pavilion on site.

According to the Lackawanna County 2011 Park Master Plan, expanded recreational facilities are desired at Aylesworth Park; however, most current users would like to see low environmental impacts and minimal large scale construction improvements at the park. Also, stakeholders want Aylesworth to have its own identity when compared among other regional parks. One idea for the park is to center the identity around environmental and historical interpretation as well as by the preservation of important ecosystems and passive recreation within much of the park. The highest priorities for improvements include handicap accessibility and restroom facilities. Improvements are most needed to existing facilities, like the swimming beach, trails, and picnic areas. According to the 2011 Park Master Plan, new construction needs center around a fishing dock, horseshoe pits, and a bocce court. Future expansion of Aylesworth Park is generally limited to the area around the lake as the steep slopes, the Aylesworth Creek flood plain, several wetland areas and suboptimal soils constrain development from expanding elsewhere in the park.



Aylesworth Creek Lake

4 LAND CLASSIFICATION

4.1 LAND ALLOCATION

All project lands, for USACE water resource development projects, are allocated by USACE into one of four categories, in accordance with the congressionally authorized purpose for which the project lands were acquired. There are four possible categories of allocation identified in USACE regulation EP 1130-2-550, Chapter 3, including: Operations, Recreation, Fish and Wildlife, and Mitigation. The Aylesworth Creek Lake Project was established for flood risk management on Aylesworth Creek, the Lackawanna River, and the main stem Susquehanna River. The Aylesworth Master Plan was completed as Design Memorandum Number 3 in 1973. The 1973 Aylesworth Creek Lake Master Plan (1973 Master Plan) included lands for project operations and recreation, recommending that all land not reserved for project operations be allocated for recreation, specifically low density recreation.

4.2 LAND CLASSIFICATION

The objective of classifying project lands is to identify how a given parcel of land shall be used now and in the foreseeable future. Land classification is a central component of this plan, and once a particular classification is established, any significant change to that classification would require a formal process including public review and comment.

Land classifications are designated for any project parcel owned in fee by USACE. Figure 4-1 shows the locations of fee and easement lands for the project site. Lands held in easements are described in Section 4.3. Ongoing and planned management practices for each classification are outlined in Chapter 5 – Resource Plan.

4.2.1 Prior Land Classification

The land classification process refines the land allocations to fully utilize project lands and must consider public desires, legislative authority, regional and project specific resource requirements, and suitability. Typically, land classifications are designated when the project is originally constructed. However, the 1973 Aylesworth Creek Lake Master Plan did not include designated land classifications. The 1973 Master Plan does include guidelines regarding future land use at the Aylesworth Creek Lake Project. When the Aylesworth Creek Lake Project was initiated, the Commissioners of Lackawanna County requested provisions for development and operation of recreational facilities by the County. As a result, an access road and parking area were constructed. However, following completion of project construction, the County changed administration, and no agreements or leases were executed between USACE and the County. At the time of the 1973 Master Plan, no local public agency was interested in developing recreation at the reservoir, so the purpose of the 1973 Master Plan was to present a guide for the administration of project lands and the future recreation use of the project area.

In the 1973 Master Plan, two general land use types are discussed: project operation lands and recreation lands. Project operation lands were described as those lands acquired and specifically allocated to provide safe, efficient operation of the project for its primary authorized purpose of flood risk management. Those lands included the area around the dam and spillway, and the Mayfield Dike. The remaining lands in the project area not

allocated for project operations were recommended for recreation use, specifically low density recreation. The lake itself was determined to be suitable for non-power boating and swimming. Any future picnic and bathing facilities would be sited around the lake adjacent to the parking area. The 1973 Master Plan encouraged future partnership with a local public entity. However, the 1973 Master Plan was clear that any further development at the Aylesworth Creek Lake Project would be the responsibility of a local sponsor, including cost, construction, and operation and maintenance.

Since no formal land classifications were presented in the 1973 Master Plan, no further discussion of prior land classifications is included in this updated Master Plan.

Figure 4-1. Real Estate Map

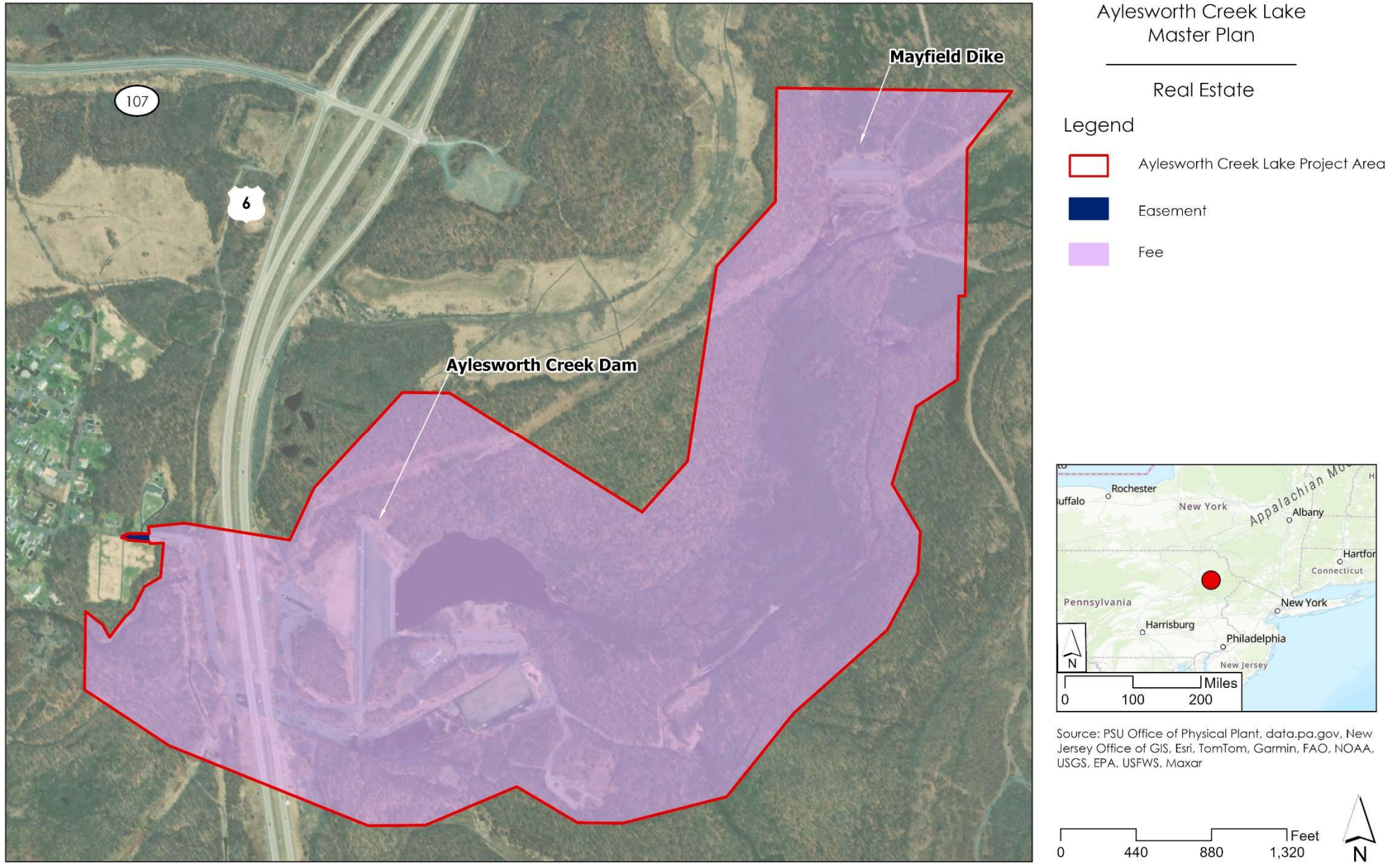
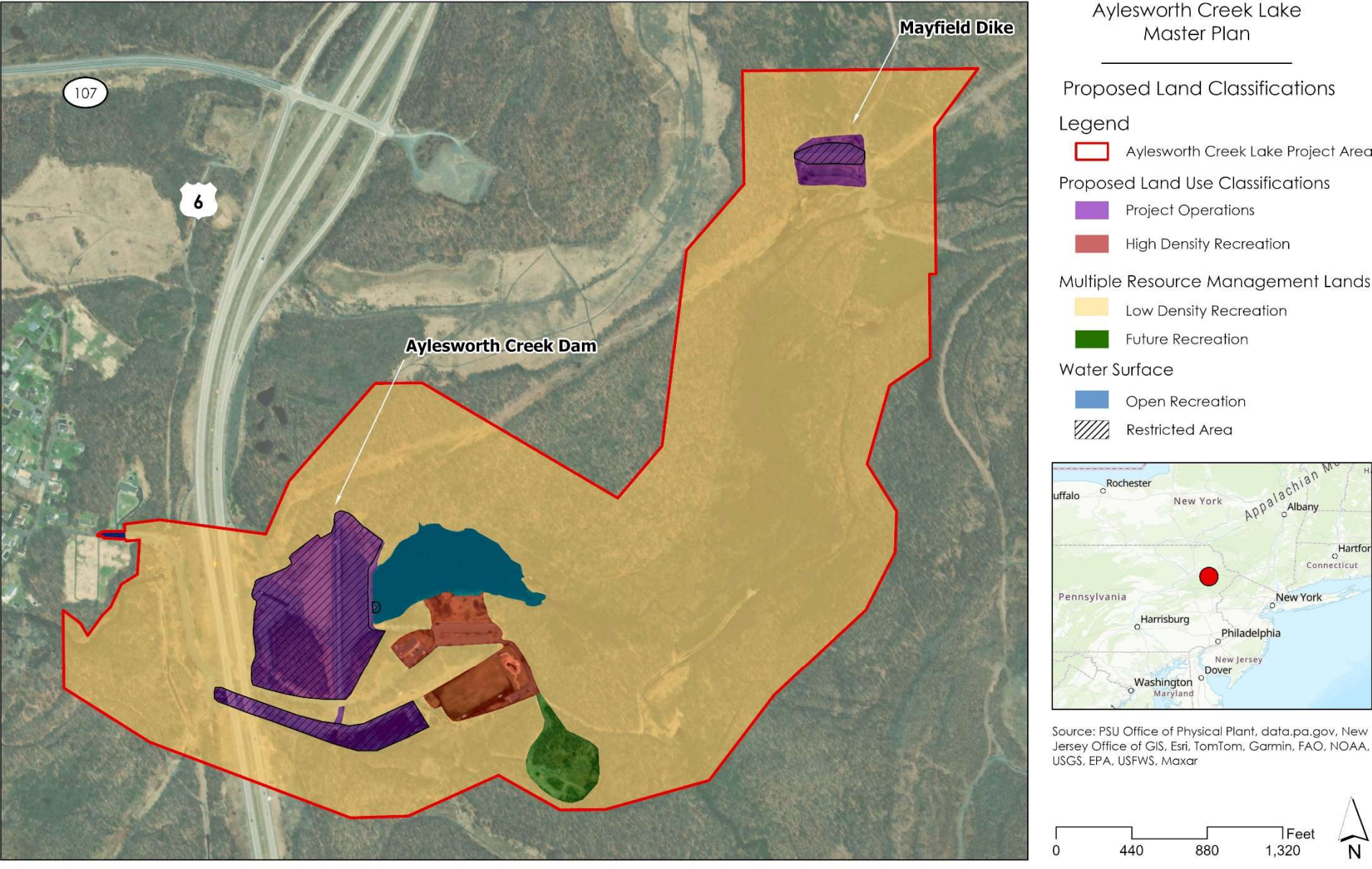


Figure 4-2. Proposed Land Classifications



4.2.2 Proposed Land Classifications

Land classification indicates the primary use for which project lands are managed. There are 6 categories of classification identified in USACE regulation EP 1130-2-550, Chapter 3: Project Operations, High Density Recreation, Mitigation, Environmentally Sensitive Areas, Multiple Resource Management Lands (MRML), and Water Surface. The project does not have any lands classified as Mitigation or Environmentally Sensitive Areas. Figure 4-1 illustrates the total land acreages, either in fee or under easement, for the site. Project Easements are also explained in Section 4.3. Figure 4-2 shows the proposed land classifications at Aylesworth Creek Lake and Table 4-1 expresses the acreage per land classification.

Proposed land classifications were determined by referencing land use discussions in the 1973 Master Plan, evaluating the current primary use the lands are managed for, and identifying the land classification that would apply to those areas.

Table 4-1. Proposed Land Classification Acreage

Proposed Land Classifications	Acres
Project Operations	20.1 ¹
High Density Recreation	7.2
Multiple Resource Management	
Low Density Recreation	214.3
Future Recreation	3.6
Water Surface	
Restricted	0.1
Open Recreation	7.6
Total	252.9²

¹Of the 20.1 acres classified under the land classification Project Operations, 18.2 acres include a restricted area. The land classification Restricted is only listed under Water Surface in EP 1130-2-550. Therefore, the restricted area within the land classification Project Operations is not labeled as a separate land classification but is discussed in this Master Plan.

²Mapping for the Master Plan update has been compiled using the best information available and is believed to be accurate. Previous project boundaries are based on original acquisition real estate deed records and mapping. Due to improved mapping technologies, minor discrepancies exist when comparing prior project boundaries and proposed land and water use classification acreages.

4.2.2.1 Project Operations

This classification category includes all project land required for the structure, operation, administration, or maintenance of the project and that must be maintained to carry out the authorized purpose of flood risk management. Approximately 20.1 acres at the Aylesworth Creek Lake Project are allocated to project operations, including the dam, drop inlet structure, spillway, and Mayfield Dike. Within the 20.1 acres classified as Project Operations, 18.2 acres include a restricted area. The restricted area surrounds the dam, spillway, and

Mayfield Dike and includes signage and barriers to prevent unauthorized personnel. Figure 4-2 shows the restricted area overlayed on the Project Operations area.

4.2.2.2 High Density Recreation

The High Density Recreation category includes lands developed for intensive recreational activities for the visiting public including the beach, playground, pavilion, and day use/picnic area. At the Aylesworth Creek Lake Project, these lands include all day use areas of Aylesworth Park. This category includes approximately 7.2 acres of land.

4.2.2.3 Multiple Resource Management

This classification category identifies the predominant use of an area with the understanding that other compatible uses can occur within the area. This classification is divided into four sub-classifications identified as: Low Density Recreation, Vegetative Management, Wildlife Management, and Future or Inactive Recreation. A given tract of land may be classified using one or more of these sub-classifications. There are 217.9 acres of land at the Aylesworth Creek Lake Project under this classification. The proposed land classification map (Figure 4-2) reflects the predominant sub-classifications. Sections 4.2.2.3.1 and 4.2.2.3.2 identify the amount contained in each sub-classification under Multiple Resource Management Lands.

4.2.2.3.1 Low Density Recreation

The Low Density Recreation sub-classification covers lands with minimal development or infrastructure that support passive public recreation use including fishing, wildlife viewing, and hiking. There are 214.3 acres of low density recreation areas on project lands which includes all federally owned lands not designated as Project Operations, High Density Recreation, Future Recreation, or Water Surface.

4.2.2.3.2 Future Recreation

These are lands with recreation areas planned for the future or that have been temporarily closed. These lands have site characteristics compatible with potential future recreation development. Some of these areas may have never been developed or were developed and subsequently closed or remain open but are no longer maintained. There is one area designated as Future Recreation at the Aylesworth Creek Lake Project consisting of 3.6 acres.

4.2.2.4 Water Surface

In accordance with national USACE guidance set forth in EP 1130-2-550, the water surface of the lake at the conservation pool elevation may be classified using the following four classifications: Restricted, Designated No-Wake, Fish and Wildlife Sanctuary, or Open Recreation. At the Aylesworth Creek Lake Project, only the Restricted and Open Recreation Water Surface sub-classifications are present.

4.2.2.4.1 Restricted

Restricted water surface includes those areas where recreational boating is prohibited or restricted for project operations, safety, and security purposes. The Restricted water surface at Aylesworth Creek Lake includes a small area around the drop inlet structure. The total acreage of Restricted water surface is approximately 0.1 acres.

4.2.2.4.2 Open Recreation

Open Recreation includes all water surface areas available for year-round or seasonal water-based recreational use. Apart from the Restricted area described above, the remaining

water surface of approximately 7.6 acres at Aylesworth Creek Lake is designated as Open Recreation.

4.3 PROJECT EASEMENT LANDS

As discussed in Section 2.6, real estate acquisition in the reservoir area includes approximately 252.9 acres acquired in fees and road easement interests on approximately 0.1 acres of land. Figure 4-1 shows the locations of the fee and easement lands at Aylesworth Creek Lake. Outgrants are a real estate instrument that authorize a private or public entity, that is not the USACE, to access Federally controlled property for non-mission related purposes. The Aylesworth Creek Lake Project has several outgrants throughout the property. The most notable outgrant is to Lackawanna County for the operation of Aylesworth Park. Additional outgrants include utility lines, roads, driveways, and rights of way access. Table 4-2 below lists the outgrants at the Aylesworth Creek Lake Project.

Table 4-2. Aylesworth Creek Lake Outgrants in 2024

Grantee	Description
Lackawanna County	Park and Recreational Purposes
PPL Electric Utilities Corporation	Electric Lines
Pennsylvania Gas and Water Company	Water Pipeline
PG Energy	Gas Pipeline and Cathodic Protection
Silverbrook Anthracite Inc.	Road
Pennsylvania Department of Transportation	Easement for Lackawanna Bypass Highway
Private Citizen	Driveway and Fence

5 RESOURCE PLAN

5.1 RESOURCE PLAN OVERVIEW

This chapter sets forth a resource plan describing, in broad terms, how each land classification within the Master Plan will be managed. The management goals are included below and described in Section 3.2.

Project management goals:

- **Goal A** – Provide the best management practices to respond to regional needs, resource capabilities and capacities, and expressed public interests consistent with authorized project purposes.
- **Goal B** – Protect and manage project natural and cultural resources through sustainable environmental stewardship programs.
- **Goal C** – Provide public outdoor recreation opportunities that support project purposes and public interests while sustaining project natural resources.
- **Goal D** – Recognize the unique qualities, characteristics, and potentials of the Project.
- **Goal E** – Provide consistency and compatibility with national objectives and other state and regional goals and programs.

Management of lands, recreation facilities and related infrastructure must take into consideration the effects of pool fluctuations associated with the authorized flood risk management mission. Management actions are dependent on congressional appropriations, the financial capability of lessees and other key stakeholders, and the contributions of labor and other resources by volunteers. Table 5-1 lists the land classifications and applicable goals for each land classification at the Aylesworth Creek Lake Project.

Table 5-1. Land Classification & Applicable Management Goals

Land Classification	Goals
Project Operations	A, E
High Density Recreation	A, B, C, D, E
Multiple Resource Management Lands:	
• Low Density Recreation	A, B, C, E
• Future Recreation	A, B, C, D, E
Water Surface:	
• Restricted Area	A, E
• Open Recreation	A, C, E

5.2 PROJECT OPERATIONS

This land is associated with the dam and spillway structures that are operated and maintained for the purpose of fulfilling the flood risk management mission of Aylesworth Creek Lake, including Mayfield Dike. There are 20.1 acres of lands under this classification, all of which are managed by USACE. Future projects associated with this land classification include

maintaining, updating, and enhancing existing infrastructure. Such projects may include concrete repair in the spillway and installation of guardrails and signage.

5.3 HIGH DENSITY RECREATION

Lands classified for High Density Recreation are currently developed for intensive recreational activities. The Aylesworth Creek Lake Project has one distinct area included in this classification. Depending on available space, funding, and public demand, lands classified for High Density Recreation may support additional outdoor recreation development in the future. These areas include day use areas, a beach, a playground, trails and recreational fields. These areas have been developed to support concentrated visitation and use of the recreational facilities.

There are 7.2 acres of High Density Recreation within project lands, all of which are leased and managed by Lackawanna County Parks and Recreation for the operation of Aylesworth Park. Thus, USACE does not provide direct maintenance within these areas, but does review requests and ensures compliance with applicable laws and regulations for proposed activities. USACE works with Lackawanna County to ensure that the recreation areas are managed and operated in accordance with the goals and objectives prescribed in Chapter 3.

Lackawanna County's 2011 Park Master Plan outlined plans for park revitalization and expansion. Lackawanna County leadership, specifically Parks and Recreation leadership, has changed since the inception of these plans. The County hopes to update the 2011 Park Master Plan document through public engagement and expanding recreation options at Aylesworth Park. Currently, the park is undergoing an ADA compliance review with the goal of improving ADA accessibility throughout the park. Additionally, changes and expansion are being considered throughout the County's leased area and there is a possibility the County could re-develop portions of the park or add additional recreation spaces in coordination with USACE. There are no current plans in review by USACE, but communication remains ongoing between Lackawanna County and the USACE regarding recreation uses and amenities at Aylesworth Park.

Figure 5-1 illustrates all existing recreational interests, including the high density recreational amenities stated above and the low density recreational amenities discussed in the next section.

5.4 MULTIPLE RESOURCE MANAGEMENT LANDS

Multiple Resource Management Lands (MRML) are lands that serve multiple purposes but are sub-classified and managed for a predominant use (if the land falls under multiple sub-classifications). The following paragraphs describe the various sub-classifications of these lands at the Aylesworth Creek Lake Project, the number of acres in each sub-classification, and the management plan for these lands.

5.4.1 Low Density Recreation

Management of these lands will continue to maintain a healthy, ecologically adapted vegetative cover to reduce erosion and improve aesthetics while also supporting low impact recreational opportunities. The public may use these lands for bank fishing, hiking, wildlife viewing, and for access to the shoreline. Most of the land at Aylesworth Creek Lake within this

land classification are leased to Lackawanna County for recreational purposes. Thus, USACE does not provide direct maintenance within most of these areas but does review requests for proposed activities and ensures compliance with applicable laws and regulations. There are currently 214.3 acres of Low Density Recreation at the Aylesworth Creek Lake Project.

5.4.2 Future Recreation

Future Recreation lands include recreation areas planned for the future or that have been temporarily closed. At the Aylesworth Creek Lake Project, there is one area designated as Future Recreation. This area connects to the existing Aylesworth Park via a direct gravel and dirt path from the playground and adjacent parking lot. This area is currently used as a dirt lot and is accessible by foot for park visitors. A gate typically remains locked to prevent vehicle access from this area. According to Lackawanna County's 2011 Park Master Plan, this area is designated as "Phase 3 improvements" and would consist of road enhancements, parking lots, a multi-use field, and a pavilion/restrooms facility. Lackawanna County Parks and Recreation has new leadership and the final plans for this area may change; however, the County wishes to continue to pursue recreation expansion in this area. USACE is not responsible for the planning, construction, or maintenance of future recreation facilities in this area, but USACE would review requests and ensure compliance with applicable laws and regulations for proposed activities. There are 3.6 acres of Future Recreation designated at Aylesworth Creek Lake.

5.5 WATER SURFACE

Per USACE policy set forth in EP 1130-2-550, the water surface of the lake at the conservation pool elevation may be classified as Restricted, No-Wake, Fish and Wildlife Sanctuary, or Open Recreation. At the Aylesworth Creek Lake Project, only Restricted and Open Recreation Water Surface sub-classifications are present. The Aylesworth Creek Lake Project maintains a conservation pool of approximately 8 acres (at an elevation of 1,108 feet PCD) and stores approximately 62 acre-feet of water.

5.5.1 Restricted

Restricted water surface includes those areas where recreational boating is prohibited or restricted for project operations, safety, and security purposes. The Restricted water surface at Aylesworth Creek Lake includes a small area around the drop inlet structure. The total acreage of Restricted water surface is approximately 0.1 acres.

5.5.2 Open Recreation

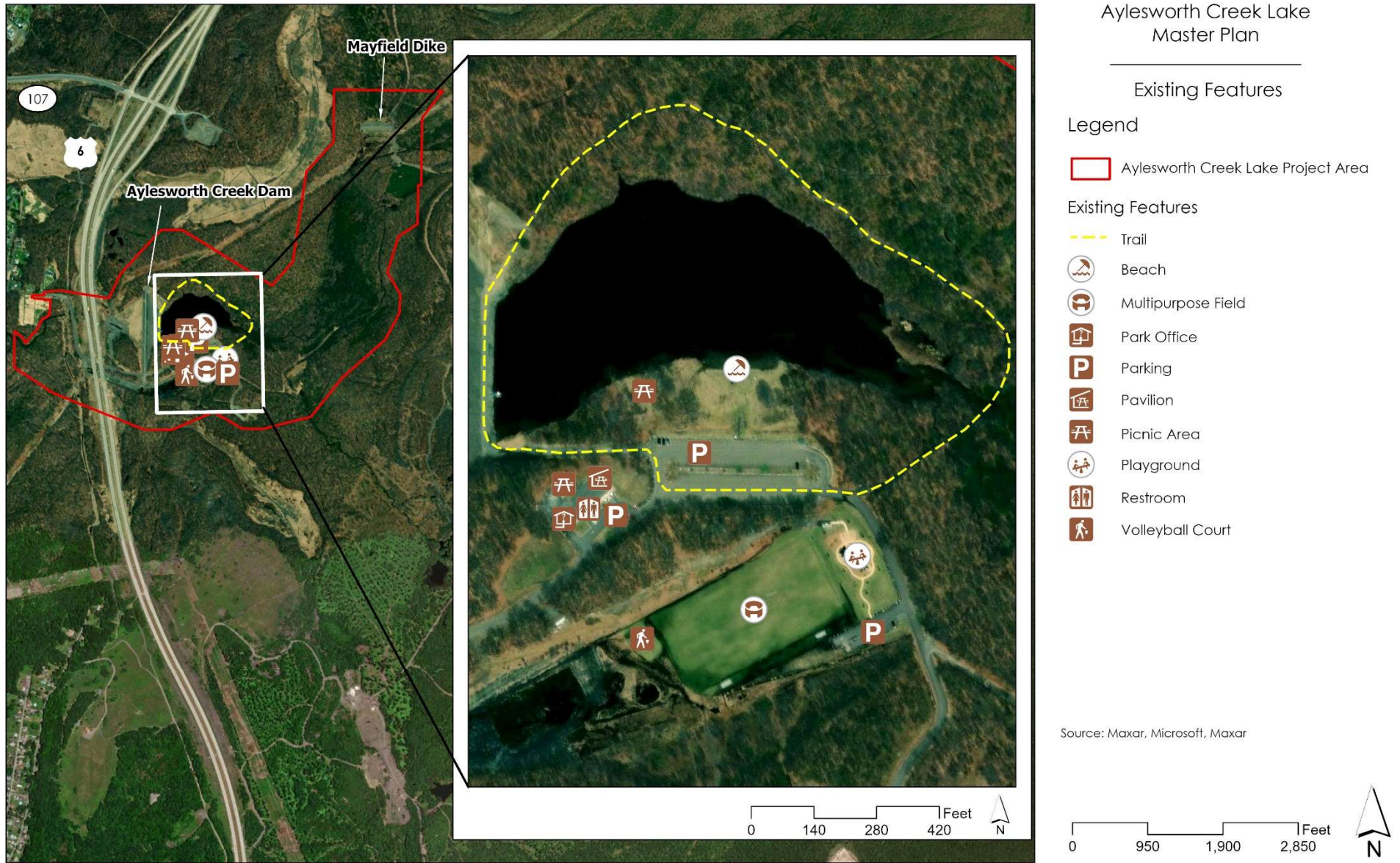
Open Recreation includes all water surface areas available for year-round or seasonal water-based recreational use. Except for the areas designated as Restricted, described in Section 5.5.1, the remaining water surface of approximately 7.6 acres at Aylesworth Creek Lake is designated as Open Recreation.

A "No Wake" designation is available under the guidelines in EP 1130-2-550; however, Aylesworth Creek Lake is unique in that it is a small lake and does not have a boat launch, thus, limiting the types of vessels able to access the water. Small electric or non-motorized vessels such as kayaks and canoes are not likely to produce any appreciable wake; therefore, a No Wake condition is an inherent characteristic of the Open Recreation land classification.

5.6 PROJECT EASEMENT LANDS

Future management of the approximate 0.1 acres of road easement lands includes routine inspection of these areas to ensure that the Government's rights specified in the easement deeds are protected. Placement of any structure that may interfere with the USACE flood risk management mission may be prohibited.

Figure 5-1. Existing Features Map



6 SPECIAL TOPICS, ISSUES, CONSIDERATIONS

6.1 COMPETING INTERESTS ON NATURAL RESOURCES

Aylesworth Creek Lake Project's authorized purposes of flood risk management and recreation accommodate the needs of federal, state, and municipal users that have developed over time. The benefits provided by the project are critical to the local and regional economies and are of great interest to the public. Aside from operating the lake to meet the needs of those entities with contractual rights, there are many competing interests for the utilization of federal lands including recreational users, adjacent landowners, utility providers, and entities that provide and maintain public roads. A major challenge is balancing the interests of each of these groups to ensure that valid needs are met while simultaneously protecting natural and cultural resources. The purpose of this plan is to guide management into the foreseeable future to ensure the responsible stewardship and sustainability of the project's resources for the benefit of present and future generations.

6.2 UTILITIES AND RIGHTS OF WAY

The Aylesworth Creek Lake Project includes civil outgrants for electric lines as well as water and gas pipelines. Transmission lines of the PPL Electric Utilities Corporation are suspended above the project. The Pennsylvania Department of Transportation maintains an easement for the Lackawanna Bypass Highway (US Highway 6). A water pipeline owned by Pennsylvania Gas and Water Company and a gas pipeline owned by PG Energy traverse the site. Also, there are a few right of way easements with residents or businesses.

6.3 UNITED STATES GEOLOGICAL SURVEY (USGS) STATION

The Aylesworth Creek Lake Project property contains a USGS water gauge. Site 01534490 (Aylesworth Creek Lake at Jermyn, PA), installed in 1970, is located within the reservoir, upstream of the dam embankment. The water gauge reports elevations of the reservoir water surface on a 15-minute interval. There is also a precipitation gauge that reports rainfall amounts on a 15-minute interval (USGS, 2024).

6.4 ACID MINE DRAINAGE (AMD)

Due to the past mining history of the area, AMD is a concern in the Aylesworth Creek watershed. In the early 1980s, the PADEP Bureau of Abandoned Mine Reclamation constructed a limestone barrel treatment system along a tributary stream to Aylesworth Creek and Aylesworth Creek Lake to treat acidic mine water seeping into the stream before it flowed into the lake. The system remains in place today, but it is no longer in use due to vandalism and lack of maintenance. In the late 2000s, Lackawanna County, under the county's Lackawanna Watershed 2000 program, installed an underground oxic limestone drain system to replace the defunct barrel treatment system. The hydrology around the limestone drain system has changed over time, presumably due to erosion, and currently water flows around the limestone drain system in several places. As a result, the effectiveness of the limestone drain system remains in question and AMD continues to be an issue in Aylesworth Creek Lake. Park staff test water quality weekly, since swimming is allowed in the lake, and if the pH is too low, lime is added directly to the lake to raise the pH. As part of Lackawanna County's lease agreement with the USACE, the County is responsible for

operation and maintenance of the AMD remediation project. AMD in Aylesworth Creek Lake has not impacted the flood risk management mission or project operations to date, but it remains a primary environmental concern.

6.5 SPECIAL EVENTS

Aylesworth Park is the site of various events throughout the year, particularly during the summer months. Examples of events at Aylesworth Park include family fun day, fishing derbies, community beach days, Fridays in the park, and art in the park. Most events are hosted by Lackawanna County and the various offices and departments within the local government.

7 PUBLIC AND AGENCY COORDINATION

USACE policy guidance in ER 1130-2-550, Change 7, dated January 30, 2013, and EP 1130-2-550, Change 5, dated January 30, 2013, requires thorough public involvement and agency coordination throughout the master plan revision process including any associated NEPA process. The following milestones provide a brief look at the overall process of revising the Aylesworth Creek Lake Master Plan:

- May 20, 2024 - The USACE planning team visited Aylesworth Creek Lake where initial introductions, site orientation, a site tour, and concept discussions took place.
- MONTH, DATE, USACE published a Notice of Availability for the draft Environmental Assessment (EA).
- MONTH, DATE, Draft Master Plan and EA Submittal (Public Review)
- MONTH, DATE, Final Master Plan and EA Submittal

Agency coordination was conducted by USACE with the USFWS through the IPaC system to ensure compliance with Section 7 of the Endangered Species Act (ESA). The most recent IPaC report was provided on June 24, 2025. Review was also performed by USACE staff using the PNDI Conservation Explorer website to identify state and federally listed species potentially occurring in the project area. Consultation letters under Section 106 of the NHPA were sent to the State Historic Preservation Office and tribal nations on November 12, 2024. Coordination correspondence is included in Appendix H.

[This section will be updated in subsequent submittals to provide an accurate description of all review milestones and public engagement initiatives]

8 SUMMARY OF RECOMMENDATIONS

8.1 SUMMARY OVERVIEW

The preparation of the Aylesworth Creek Lake Master Plan follows the USACE master planning guidance in ER 1130-2-550 and EP 1130-2-550, both dated January 30, 2013. Three major requirements set forth in the new guidance include (1) the preparation of contemporary Resource Objectives, (2) classification of project lands using the newly approved classification standards, and (3) the preparation of a Resource Plan describing in broad terms how the land under each land classification will be managed into the foreseeable future. The master plan project team followed this guidance to prepare a master plan that will improve environmental quality and foster a management philosophy conducive to existing and projected staff levels at the Aylesworth Creek Lake Project. Factors considered in the plan were identified through discussions with project representatives, USACE, federal and state resource agencies, and the public. This Master Plan will ensure the long-term sustainability of natural resources associated with Aylesworth Creek Lake.

8.2 LAND CLASSIFICATION

During development of the 2025 Aylesworth Creek Lake Master Plan, there was no previous land classification mapping at Aylesworth Creek Lake to be referenced. As such, land classifications were designated based on current land management and land classification definitions from Chapter 3 of the USACE master planning guidance EP 1130-2-550 as described in Section 4. A summary of land classification designations and justifications are provided in Table 8-1.

Table 8-1. Summary of Land Classifications for Aylesworth Creek Lake Project

Classification	2025 Master Plan (acres)	Description
Project Operations	20.1 ¹	Lands required for the structure, operation, administration, or maintenance of the project and which all must be maintained to carry out the authorized primary purpose of flood risk management.
High Density Recreation	7.2	Lands that are currently developed for intensive recreational activities for the visiting public. This land classification has been developed to support concentrated visitation and use of the recreational facilities they host. The high density recreation area at Aylesworth Creek Lake is Aylesworth Park operated by Lackawanna County. The park includes a sandy beach, playground, a multipurpose field, picnic tables, and a pavilion.
Multiple Resource Management Land		
Low Density Recreation	214.3	Management of this land classification calls for maintaining a healthy, ecologically adapted vegetative cover to reduce erosion and improve aesthetics, while also supporting low impact recreational opportunities

Classification	2025 Master Plan (acres)	Description
		such as bank fishing, hiking, wildlife viewing, and shoreline access. The new land classification criteria exclude vegetation and wildlife management areas, leaving only areas with minimal development to support passive recreational use.
Future Recreation	3.6	Recreation areas planned for the future or that have been temporarily closed. These lands have site characteristics compatible with potential future recreation development. Some of these areas may have never been developed or were developed and subsequently closed or remain open but are no longer maintained. There is one area at Aylesworth Creek Lake designated as future recreation that connects to the existing Aylesworth Park via a direct gravel path from the playground and adjacent parking lot. Lackawanna County's 2011 Park Master Plan discusses future recreation expansion in this area and Lackawanna County Parks and Recreation has expressed interest in pursuing future development in this area. Thus, USACE has designated this area as future recreation.
Water Surface		
Restricted	0.1	Areas where recreational boating or swimming is prohibited or restricted for project operations, safety, and security purposes. Restricted waters at Aylesworth Creek Lake includes a small area around the drop inlet structure. Physical barriers or signage may be placed in the water in the future to prevent public access around the structure.
Open Recreation	7.6	Water surface areas available for year-round or seasonal water-based recreational use. This area includes all water surface areas other than restricted waters.
Total	252.9 ²	

¹Of the 20.1 acres classified under the land classification Project Operations, 18.2 acres include a restricted area. The land classification Restricted is only listed under Water Surface in EP 1130-2-550. Therefore, the restricted area within the land classification Project Operations is not labeled as a separate land classification but is discussed in this Master Plan.

²Mapping for the Master Plan update has been compiled using the best information available and is believed to be accurate. Previous project boundaries are based on original acquisition real estate deed records and mapping. Due to improved mapping technologies, minor discrepancies exist when comparing prior project boundaries and proposed land and water use classification acreages.

9 APPENDIX

APPENDIX A: ACRONYMS

ACRPA	Aylesworth Creek Reservoir Park Authority
ACS	American Community Service
AMD	Acid Mine Drainage
APHIS	Animal & Plant Health Inspection Service Wildlife Services
ARPA	Archaeological Resources Protection Act
BCE	Before Common Era
BMPs	Best Management Practices
CE	Common Era
CEPD	Comprehensive Evaluation of Project Datums
CFR	Code of Federal Regulations
EA	Environmental Assessment
EO	Executive Order
EOP	Environmental Operating Principles
EP	Engineering Pamphlet
ER	Engineering Regulation
FY	Fiscal Year
GIS	Geographic Information Systems
MP	Master Plan
MRML	Multiple Resource Management Lands
NAGPRA	Native American Graves Protection and Repatriation Act
NAVD 88	1988 North American Vertical Datum
NEPA	National Environmental Policy Act
NGVD 29	National Geodetic Vertical Datum of 1929
NHPA	National Historic Preservation Act
NOAA	National Oceanic and Atmospheric Administration

NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWI	National Wetland Inventory
PADCNR	Pennsylvania Department of Conservation and Natural Resources
PADEP	Pennsylvania Department of Environmental Protection
PA-SHARE	Pennsylvania State Historic and Archaeological Resource Exchange
PCD	Project Construction Datum
PFBC	Pennsylvania Fish and Boat Commission
PHMC	Pennsylvania Historical and Museum Commission
Project	Aylesworth Creek Lake Project
PSU	Penn State University
SCORP	Statewide Comprehensive Outdoor Recreation Plan
SPDES	State Pollutant Discharge Elimination System
TMDL	Total Maximum Daily Load
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VERS	Visitor Estimation and Reporting System
ZOI	Zone of Interest

APPENDIX B: REFERENCES

- Cornell Lab of Ornithology. (2024). *Aylesworth Park, Lackawanna County, Pennsylvania*. Retrieved August 14, 2024, from <https://ebird.org/hotspot/L7575444>
- Engineering Toolbox. (n.d.). *Outdoor Ambient Sound Levels*. Retrieved April 29, 2024, from https://www.engineeringtoolbox.com/outdoor-noise-d_62.html
- Federal Register. (2024). *Endangered and Threatened Wildlife and Plants; Removal of Northeastern Bulrush From the Federal List of Endangered and Threatened Plants*. Tool. Retrieved October 30, 2024, from <https://www.federalregister.gov/documents/2024/07/31/2024-16417/endangered-and-threatened-wildlife-and-plants-removal-of-northeastern-bulrush-from-the-federal-list#citation-1-p61389>
- Fortugno, T., & Beadenkopf, K. M. (2010). *Susquehanna to Roseland 500kV Transmission Project, Luzerne, Lackawanna, Wayne, Pike, and Monroe Counties Pennsylvania, Phase I/II Archaeological Investigations: Lackawanna and Wayne Counties, Pennsylvania*. Morristown: The Louis Berger Group, Inc.
- Fowler, T. M., Downs, A. E., & Moyer, J. B. (1892). *Archbald, Lackawanna County, PA. 1892*. Retrieved October 15, 2024, from Library of Congress: <https://www.loc.gov/item/75694946/>
- Jermyn Centennial Executive Committee. (1970). *First Hundred Years, Jermyn, Pennsylvania*. Backstage Library Works.
- Lackawanna County. (2011). *Aylesworth Creek Park Master Site Plan, 2011*. PDF
- Lackawanna County. (2024). *About Lackawanna County*. Retrieved May 7, 2024, from https://www.lackawannacounty.org/about/about_lackawanna_county/index.php
- Murphy, T. (1928). *Jubilee History Commemorative of the Fiftieth Anniversary of the Creation of Lackawanna County, Pennsylvania*. Indianapolis: Historical Publishing Company.
- National Oceanic and Atmospheric Administration (NOAA) National Centers for Environmental Information. (n.d.). U.S. Climate Divisions. Retrieved May 14, 2024, from <https://www.ncdc.noaa.gov/monitoring-references/maps/us-climate-divisions.php>
- Pennsylvania Department of Conservation and Natural Resources (PADCNR). (2024a). *Forests and Trees*. Retrieved May 7, 2024, from <https://www.dcnr.pa.gov/Conservation/ForestsAndTrees/Pages/default.aspx>
- PADCNR. (2024b). *Hemlock Woolly Adelgid*. Retrieved August 12, 2024, from <https://www.dcnr.pa.gov/Conservation/ForestsAndTrees/InsectsAndDiseases/HemlockWoollyAdelgid/Pages/default.aspx>
- PADCNR. (2024c). *Pennsylvania Natural Heritage Program, Pennsylvania Conservation Explorer*. Retrieved April 29, 2024, from <https://conservationexplorer.dcnr.pa.gov/>

- PADCNR. (2024d). *Pinchot State Forest*. Retrieved May 7, 2024, from <https://www.dcnr.pa.gov/StateForests/FindAForest/Pinchot/Pages/default.aspx>
- PADCNR. (n.d.). *Physiographic Provinces of Pennsylvania*. Retrieved May 7, 2024, from https://elibrary.dcnr.pa.gov/PDFProvider.ashx?action=PDFStream&docID=1752507&chksum=&revision=0&docName=Map13_PhysProvs_Pa&nativeExt=pdf&PromptToSave=False&Size=810216&ViewerMode=2&overlay=0
- Pennsylvania Department of Environmental Protection (PADEP). (2005). *Aylesworth Creek Watershed TMDL*. Retrieved May 14, 2024, from https://www.dep.state.pa.us/dep/deputate/watermgmt/wqp/wqstandards/TMDL/AylesworthCrTMDL_FINAL-032505.pdf
- PADEP. (2024). *2024 Pennsylvania Integrated Water Quality Report*. Retrieved December 3, 2024, from <https://experience.arcgis.com/experience/368a9200df5e43eb8267dcbdb34a0ccc>
- Pennsylvania Game Commission (PAGC). 2016. Project Annual Job Report, Indiana Bat Research/Management, Indiana Bat Hibernacula Surveys. Retrieved November 5, 2024., from [extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.pgc.pa.gov/InformationResources/MediaReportsSurveys/AnnualWildlifeManagementReports/Documents/71401-15z.pdf](https://www.pgc.pa.gov/InformationResources/MediaReportsSurveys/AnnualWildlifeManagementReports/Documents/71401-15z.pdf)
- PAGC. 2010. Indiana Bat Species Profile. Retrieved November 5, 2024. <https://www.pgc.pa.gov/Wildlife/EndangeredandThreatened/Pages/IndianaBat.aspx>
- Pennsylvania Historical and Museum Commission (PHMC). (2015a, September 10). *Archaic Period*. Retrieved October 15, 2024, from Pennsylvania Archaeology: <https://www.phmc.state.pa.us/portal/communities/archaeology/native-american/archaic-period.html>
- PHMC. (2015b, September 10). *Early and Middle Woodland Period*. Retrieved October 15, 2024, from Pennsylvania Archaeology: <https://www.phmc.state.pa.us/portal/communities/archaeology/native-american/early-middle-woodland-period.html>
- PHMC. (2015c, September 10). *Late Woodland*. Retrieved October 15, 2024, from Pennsylvania Archaeology: <https://www.phmc.state.pa.us/portal/communities/archaeology/native-american/late-woodland-period.html>
- PHMC. (2015d, September 10). *Paleo Indian Period: Settling of the New World*. Retrieved October 15, 2024, from Pennsylvania Archaeology: <https://www.phmc.state.pa.us/portal/communities/archaeology/native-american/paleoindian-period.html>

- PHMC. (2015e, September 10). *Transitional Period*. Retrieved October 15, 2024, from Pennsylvania Archaeology:
<https://www.phmc.state.pa.us/portal/communities/archaeology/native-american/transitional-period.html>
- Penn State University (PSU). (2024). *Pennsylvania Flood Risk Tool*. Retrieved August 12, 2024, from <https://pafloodrisk.psu.edu/>
- PSU Extension. (2024). *Spotted Lanternfly*. Retrieved July 23, 2024, from <https://extension.psu.edu/spotted-lanternfly>
- Pennsylvania State Data Center for the Center for Rural Pennsylvania. (2024). *Pennsylvania Population Projections, 2020 to 2050*. Retrieved May 14, 2024, from <https://www.rural.pa.gov/data/population-projections>
- United States Army Corps of Engineers (USACE), Baltimore District (USACE, Baltimore District). (1970). *Aylesworth Creek Lake Operation and Maintenance Manual*. PDF.
- USACE, Baltimore District. (1973). *Aylesworth Creek Lake Master Plan*. PDF.
- USACE, Baltimore District. (2001). *Master Manual for Reservoir Regulation Susquehanna River Basin, Volume II: Lower Basin, Appendix B: Aylesworth Creek Lake*. PDF.
- USACE, Baltimore District. (2021). *Aylesworth Creek Dam (PA00001) and Mayfield Dike (PA00001 AS01) Emergency Action Plan (EAP)*. PDF.
- USACE, Baltimore District. (2022a). *Value to the Nation Fast Facts, Lake Report Aylesworth Creek Lake*. PDF.
- USACE, Baltimore District. (2023, March 1). *Aylesworth Creek Lake, PA Fact Sheet*. United States Army Corps of Engineers, Baltimore District. PDF.
- USACE, Baltimore District. (2024). *Water Quality DASLER Data Report 2000-2024*. PDF.
- U.S. Census Bureau. (2024.). *American Community Survey 5-year Estimates, Lackawanna County, Luzerne County, Wyoming County, Susquehanna County, Wayne County, Monroe County, and Pennsylvania*. Retrieved May 14, 2024, from <https://data.census.gov>
- U.S. Climate Data. (2024). *Pittston – Pennsylvania*. Retrieved August 6, 2024, from <https://www.usclimatedata.com/climate/pittston/pennsylvania/united-states/uspa3151>
- United States Department of Agriculture (USDA), Animal & Plant Health Inspection Service Wildlife Services (APHIS). (2016). *Geese, Ducks, Coots, Wildlife Damage Management Technical Series*. Retrieved July 23, 2024, from <https://www.aphis.usda.gov/sites/default/files/GeeseDucksCoots-WDM-Technical-Series.pdf>
- USDA - APHIS. (2017). *European Starlings, Wildlife Damage Management Technical Series*. Retrieved July 23, 2024, from

- https://www.aphis.usda.gov/wildlife_damage/reports/Wildlife%20Damage%20Management%20Technical%20Series/European-Starlings-WDM-Technical-Series.pdf
- USDA, U.S. Forest Service (USFS). (2017). *Pennsylvania Forests 2014*. Retrieved August 13, 2024, from https://www.fs.usda.gov/nrs/pubs/rb/rb_nrs111.pdf
- USDA - USFS. (2020). *Forests of Pennsylvania, 2020*. Retrieved May 7, 2024, from https://www.fs.usda.gov/nrs/pubs/ru/ru_fs345.pdf
- USDA, Natural Resources Conservation Service (NRCS) (2024). Web Soil Survey. Retrieved August 6, 2024, from <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>
- USDA, Natural Resources Conservation Service (NRCS) (2020). *Monarch Butterfly (Danaus Plexippus Plexippus) Landowner Guide*. Retrieved October 30, 2024, from <https://www.fws.gov/media/monarch-butterfly-landowner-guide>
- United States Environmental Protection Agency (USEPA). 2024. My Waterway. Retrieved December 3, 2024, from <https://mywaterway.epa.gov/community/>
- United States Fish & Wildlife Service (USFWS). (2024a). *Information for Planning and Consultation (IPaC)*. Retrieved June 24 2025, from <https://ipac.ecosphere.fws.gov/>
- USFWS. (2024b). *National Wetlands Inventory (NWI)*. Retrieved June 6, 2024, from <https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/>
- USFWS. (2024c). *Pennsylvania Bald Eagle Nesting Sites*. Accessed August 14, 2024. <https://www.arcgis.com/home/item.html?id=87ac96536654495b9f4041d81f75d7a0>
- USFWS. (n.d. - a). *Indiana Bat*. Retrieved August 8, 2024, from <https://www.fws.gov/species/indiana-bat-myotis-sodalis>
- USFWS. (n.d. - b). *Monarchs*. Retrieved August 8, 2024, from <https://fws.gov/initiative/pollinators/monarchs>
- USFWS. (n.d. - c). *Northeastern Bulrush*. Retrieved August 8, 2024, from <https://www.fws.gov/species/northeastern-bulrush-scirpus-ancistrochaetus>
- USFWS. (n.d. - d). *Northern Long-eared Bat*. Retrieved August 8, 2024, from <https://www.fws.gov/species/northern-long-eared-bat-myotis-septentrionalis>
- United States Geological Survey (USGS). (2024). National Water Information System. Retrieved August 27, 2024, from https://waterdata.usgs.gov/nwis/inventory/?site_no=01534490&agency_cd=USGS&
- Urban Research and Development Corporation (URDC). 1980. *Recreation Carrying Capacity Handbook: Methods and Techniques for Planning, Design, and Management*. Instruction Report R-B0-1. Retrieved October 6, 2023, from <https://ntrl.ntis.gov/NTRL/dashboard/searchResults/titleDetail/ADA096446.xhtml>

W. W. Munsell & Company. (1880). *History of Luzerne, Lackawanna, & Wyoming Counties, PA with Illustrations & Biographical Sketches of some of their Prominent Men and Pioneers*. New York: W. W. Munsell & Company.

APPENDIX C: MEETING NOTES

Aylesworth Creek Lake Site Visit Notes – May 20, 2024

Attendees:

- Lauren (McDonald) Southern – Planning, Civil Project Development Branch
- Melanie Mathesz – Planning, Civil Project Development Branch
- Brian Luprek – Operations, Flood Risk Management
- Nate Slingerland – Operations, Flood Risk Management
- Andy Hofmann – Operations, Flood Risk Management
- Cheryl Janiszewski – Real Estate
- Josh Herzog – Dam Operator
- Vinny Burney – Dam Operator

Notes:

- New pavement on top of dam, will be adding new guardrails later this summer.
- Dam cannot have vegetation growth – a contractor herbicides the dam once a year.
- Intake structure is a drop inlet and there is no way for dam operators to control the lake level, they cannot close the structure.
- The dam operators can lower the lake level by turning and opening a pipe that is in the middle of the lake that will drain the lake – Aylesworth Creek Lake can be drained but it would have to naturally refill.
- To everyone's knowledge, the spillway has never been used.
- USACE's main maintenance responsibility at Aylesworth Creek Lake is mowing.
- USACE does not do any water testing for recreation.
- The County/Park staff does regular water testing because swimming is allowed in the lake. Bacteria has not historically been an issue. The pH is a concern due to AMD. Occasionally, the County/park staff will have to add lime to the lake to increase the pH.
- There is a USGS gauge house/station located at the top of the dam.
- ATV's/off road vehicles have created trails in the woods throughout the site.
- There is a lime doser located along Aylesworth Creek prior to its confluence with the reservoir. However, per County/Park staff and dam operators, it does not appear to be functioning, and it hasn't in a long time.
- Per the park's 2011 Master Plan, "A limestone barrel treatment system was constructed in the early 1980's by PADEP Bureau of Abandoned Mine Reclamation along a tributary stream to Aylesworth Creek in order to treat acidic mine water seeping into the stream, before it flowed into the lake. The system is no longer in use due to vandalism and lack of upkeep. As recently as 2004, trout were not stocked because state testing measured elevated levels of sulfate in the lake. An underground oxic limestone drain system was installed last year, under the county's Lackawanna Watershed 2000 program, to replace the defunct barrel

treatment system. originally, the lime doser was put in as a remediation project by the State (the wheel turning device)"

- Language from the lease agreement between USACE and the County: "operation and maintenance of the AMD remediation project is included in this lease and is the responsibility of the lessee, the Lackawanna County Commissioners."
- Mayfield Dike has potential future access concerns as the best current access route involves using a neighboring property owned by a private citizen. Accessing the dike from inside the USACE property and from the lake area is difficult due to the terrain and would be costly to install proper access.

APPENDIX D: PUBLIC NOTICES AND PERTINENT NEWSPAPER ARTICLES

APPENDIX E: PUBLIC COMMENTS AND USACE RESPONSE

APPENDIX F: LAND CLASSIFICATION AND RECREATIONAL ASSET MAPS

Aylesworth Creek Lake Master Plan

Proposed Land Classifications

Legend

 Aylesworth Creek Lake Project Area

Proposed Land Use Classifications

 Project Operations

 High Density Recreation

Multiple Resource Management Lands

 Low Density Recreation

 Future Recreation

Water Surface

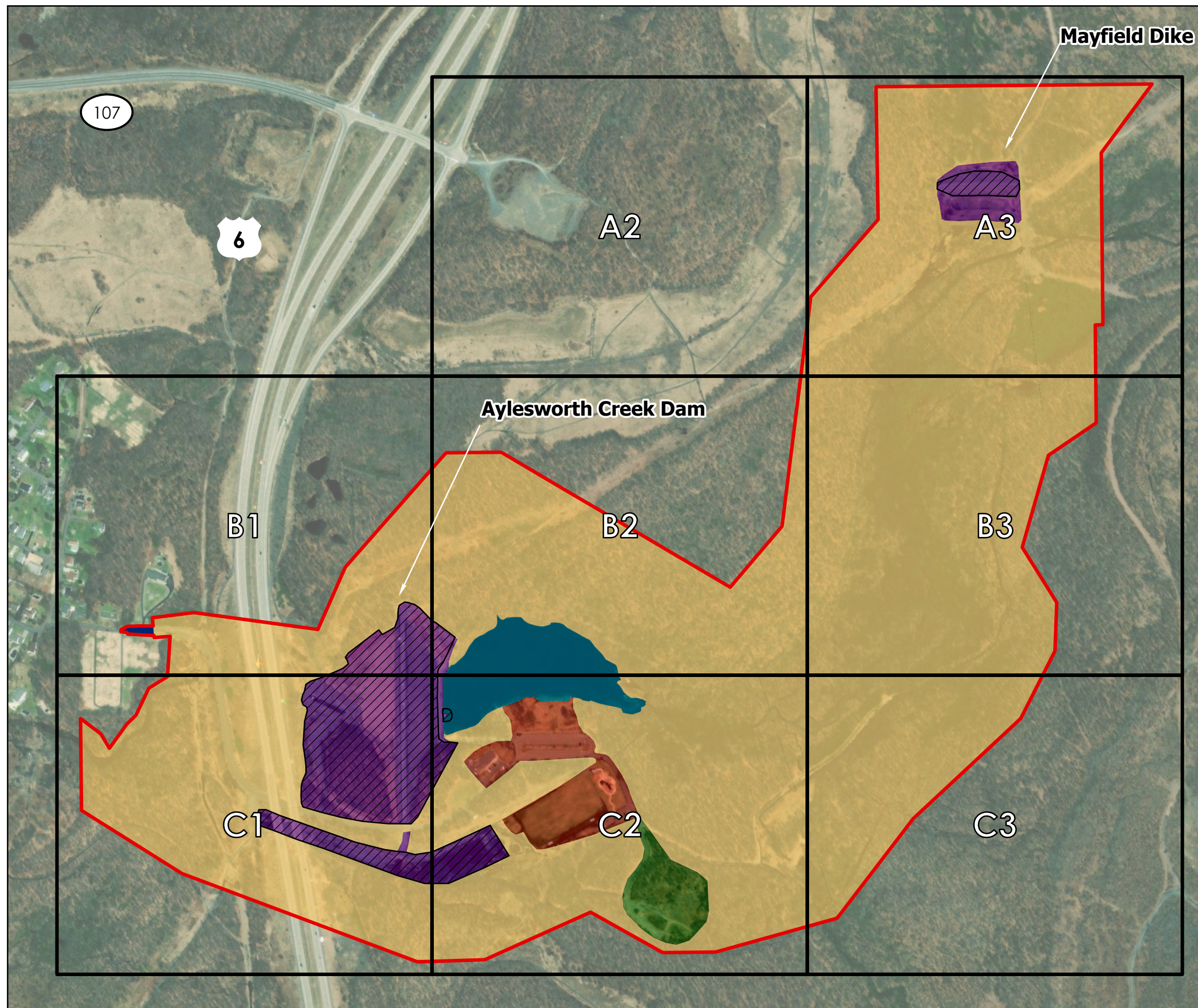
 Open Recreation

 Restricted Area



Source: PSU Office of Physical Plant, data.pa.gov, New Jersey Office of GIS, Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS, Maxar

0 440 880 1,320 Feet



Aylesworth Creek Lake Master Plan

Proposed Land Classifications

Legend

 Aylesworth Creek Lake Project Area

Proposed Land Use Classifications

 Project Operations

 High Density Recreation

Multiple Resource Management Lands

 Low Density Recreation

 Future Recreation

Water Surface

 Open Recreation

 Restricted Area



Source: Maxar, Microsoft, PSU Office of Physical Plant, data.pa.gov, New Jersey Office of GIS, Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS

0 140 280 420 Feet



Aylesworth Creek Lake Master Plan

Proposed Land Classifications

Legend

 Aylesworth Creek Lake Project Area

Proposed Land Use Classifications

 Project Operations

 High Density Recreation

Multiple Resource Management Lands

 Low Density Recreation

 Future Recreation

Water Surface

 Open Recreation

 Restricted Area



Source: Maxar, Microsoft, PSU Office of Physical Plant, data.pa.gov, New Jersey Office of GIS, Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS

0 140 280 420 Feet



A2

A3

B2

B3

Aylesworth Creek Lake Master Plan

Proposed Land Classifications

Legend

 Aylesworth Creek Lake Project Area

Proposed Land Use Classifications

 Project Operations

 High Density Recreation

Multiple Resource Management Lands

 Low Density Recreation

 Future Recreation

Water Surface

 Open Recreation

 Restricted Area



Source: Maxar, Microsoft, PSU Office of Physical Plant, data.pa.gov, New Jersey Office of GIS, Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS

0 140 280 420 Feet





Aylesworth Creek Lake
Master Plan

Proposed Land Classifications

Legend

 Aylesworth Creek Lake Project Area


Proposed Land Use Classifications

 Project Operations

 High Density Recreation

Multiple Resource Management Lands

 Low Density Recreation

 Future Recreation

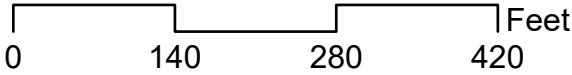
Water Surface

 Open Recreation

 Restricted Area



Source: Maxar, Microsoft, PSU Office of Physical Plant, data.pa.gov, New Jersey Office of GIS, Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS





Aylesworth Creek Lake
Master Plan

Proposed Land Classifications

Legend

 Aylesworth Creek Lake Project Area

Proposed Land Use Classifications

 Project Operations

 High Density Recreation

Multiple Resource Management Lands

 Low Density Recreation

 Future Recreation

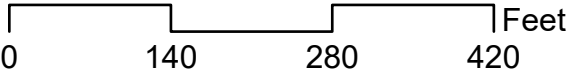
Water Surface

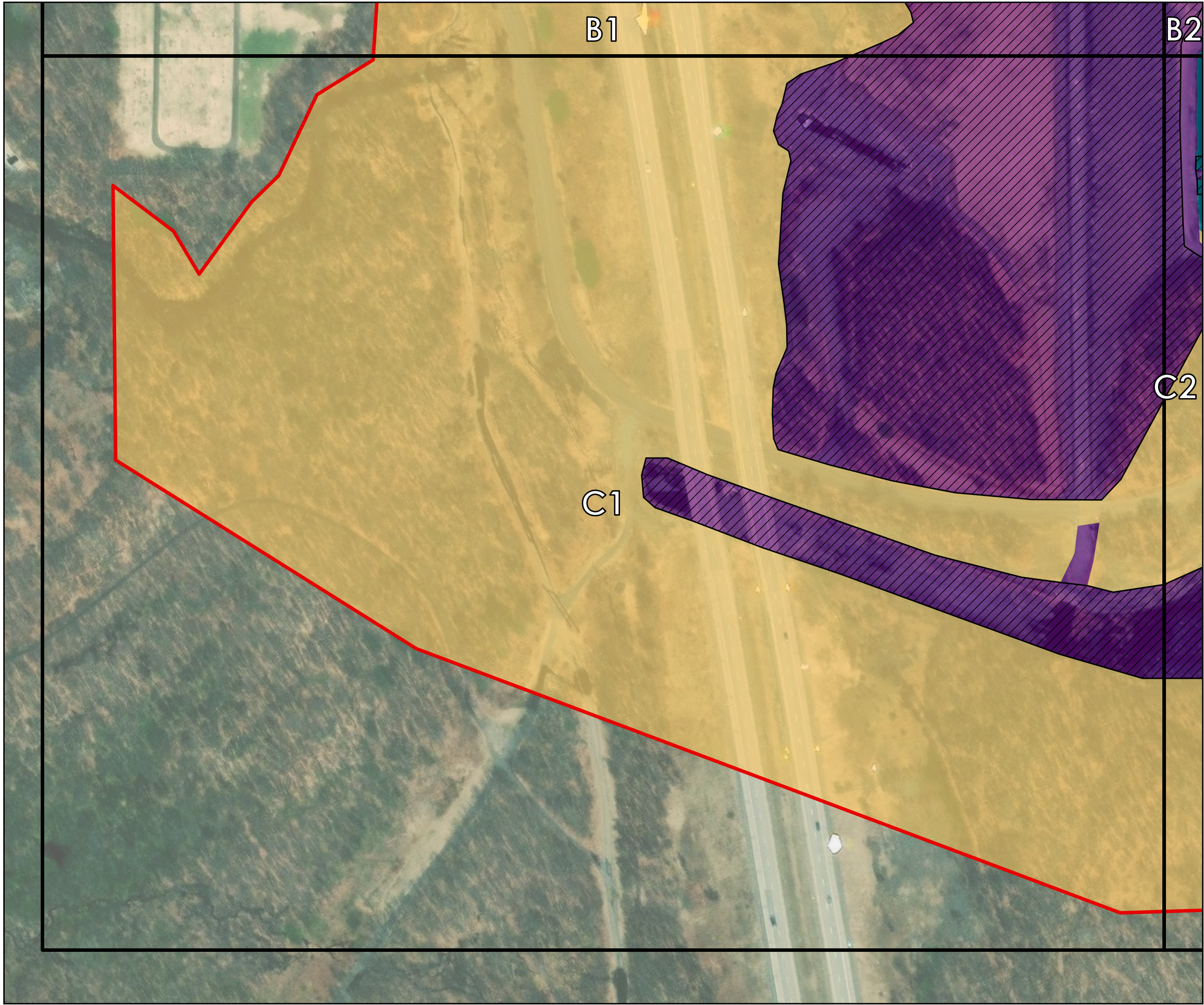
 Open Recreation

 Restricted Area



Source: Maxar, Microsoft, PSU Office of Physical Plant, data.pa.gov, New Jersey Office of GIS, Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS





Aylesworth Creek Lake
Master Plan

Proposed Land Classifications

Legend

 Aylesworth Creek Lake Project Area


Proposed Land Use Classifications

 Project Operations

 High Density Recreation

Multiple Resource Management Lands

 Low Density Recreation

 Future Recreation

Water Surface

 Open Recreation

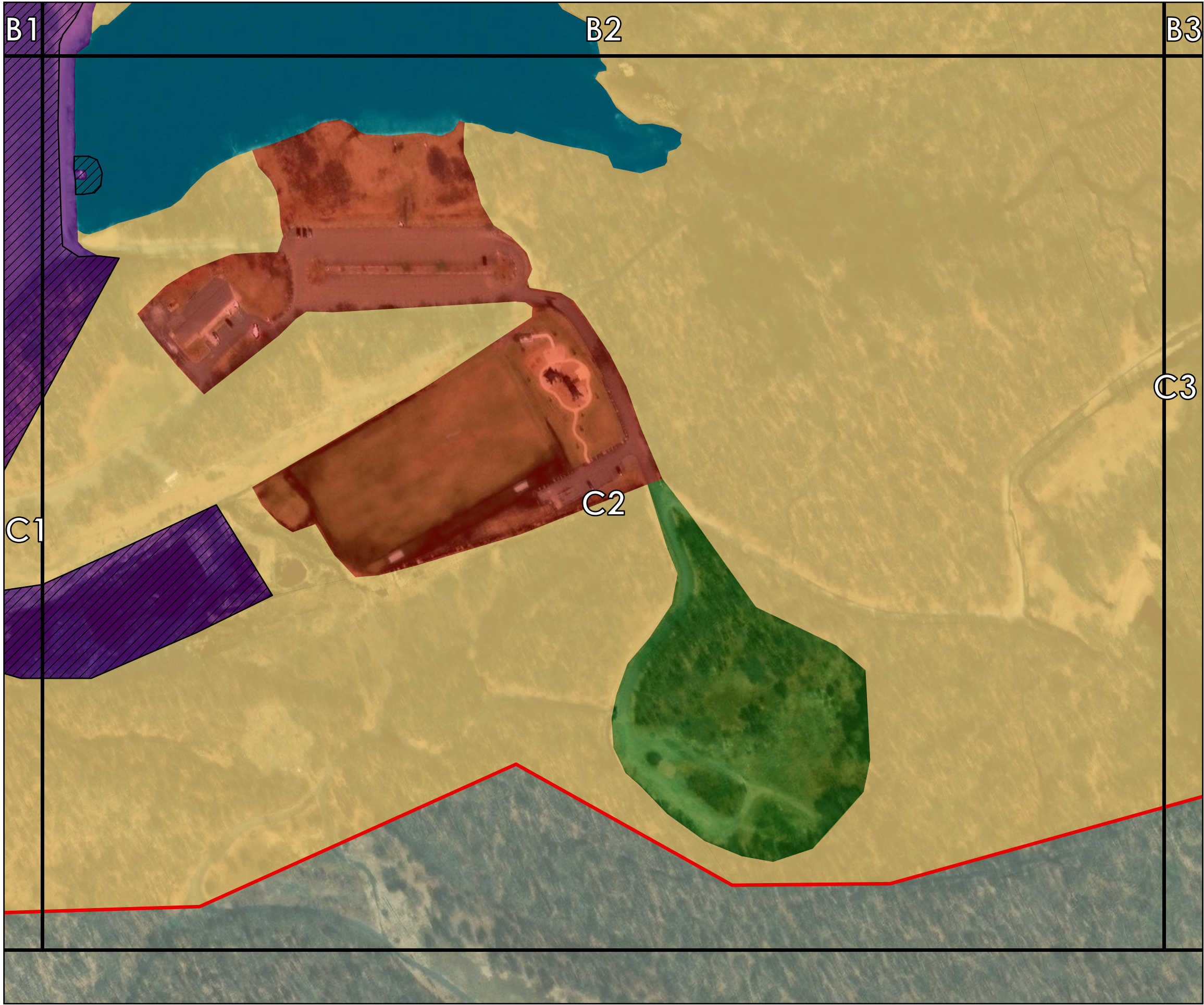
 Restricted Area



Source: Maxar, Microsoft, PSU Office of Physical Plant, data.pa.gov, New Jersey Office of GIS, Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS

0 140 280 420 Feet





Aylesworth Creek Lake Master Plan

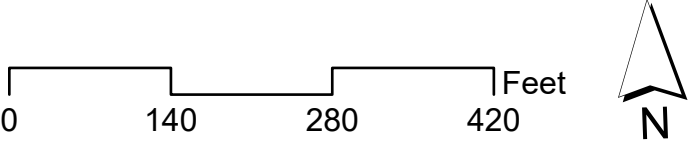
Proposed Land Classifications

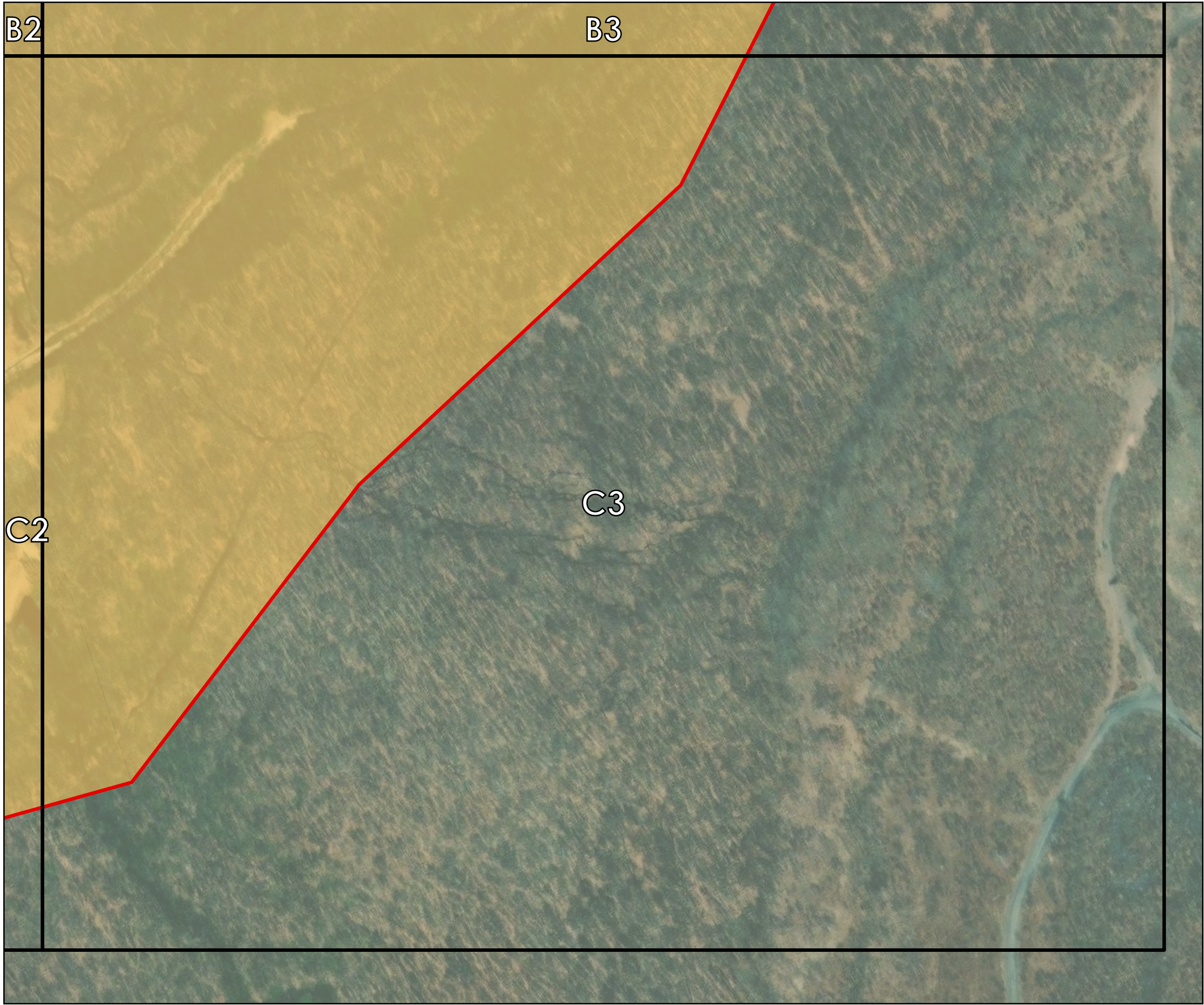
Legend

- Aylesworth Creek Lake Project Area
- Project Operations
- High Density Recreation
- Low Density Recreation
- Future Recreation
- Open Recreation
- Restricted Area



Source: Maxar, Microsoft, PSU Office of Physical Plant, data.pa.gov, New Jersey Office of GIS, Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS





Aylesworth Creek Lake Master Plan

Proposed Land Classifications

Legend

 Aylesworth Creek Lake Project Area

Proposed Land Use Classifications

 Project Operations

 High Density Recreation

Multiple Resource Management Lands

 Low Density Recreation

 Future Recreation

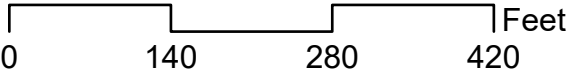
Water Surface

 Open Recreation

 Restricted Area



Source: Maxar, Microsoft, PSU Office of Physical Plant, data.pa.gov, New Jersey Office of GIS, Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS



APPENDIX G: NEPA DOCUMENTATION

THIS PAGE INTENTIONALLY BLANK

FINDING OF NO SIGNIFICANT IMPACT

Environmental Assessment for the 2025 Aylesworth Creek Lake Master Plan

Lackawanna County, Pennsylvania

In accordance with the National Environmental Policy Act of 1969, as amended (NEPA), and the U.S. Army Corps of Engineers (USACE) Procedures for Implementing NEPA in 33 Code of Federal Regulations, Part 230, the USACE, Baltimore District has assessed the potential environmental, cultural, and social effects of updating the Aylesworth Creek Lake Master Plan. The Aylesworth Creek Dam (hereafter "Aylesworth Creek Lake Project", "Aylesworth Creek Lake", or "Project") was authorized by the Flood Control Act of October 23, 1962, Public Law 87-874, 87th Congress, and is described in Senate Document No. 141, 87th Congress, 2nd Session. The Aylesworth Creek Lake Project is a multipurpose water resources project constructed and operated by USACE, Baltimore District. The dam and associated infrastructure, as well as all land acquired for the Aylesworth Creek Lake Project, are federally owned, maintained, and operated by USACE. The project was operationally complete in October 1970 and the federal cost was \$2,268,200. The original Aylesworth Creek Lake Master Plan was approved in June 1973.

The Aylesworth Creek Lake Project was authorized and constructed for the primary purpose of flood risk management for the downstream reach of the Lackawanna River at the communities of Olyphant, Dickson City, Scranton, Moosic, Old Forge, and Duryea, Pennsylvania (PA). Secondary purposes of the project are to provide recreation and environmental stewardship. Implementation of the 2025 Aylesworth Creek Lake Master Plan (hereafter "2025 Master Plan") including the proposed land and water use classifications must recognize and be compatible with the primary project purpose of flood risk management and the secondary project purposes of recreation and environmental stewardship.

The 2025 Master Plan provides guidance for the stewardship of natural resources and management for long-term public access to, and use of, the natural resources at Aylesworth Creek Lake. The 2025 Master Plan updates the 1973 Master Plan and establishes land and water surface classifications, which are fundamental to project land management. The 1973 Master Plan did not include designated land or water surface classifications and was written prior to recreation lease agreements between USACE and Lackawanna County. Land and water surface classifications (see Table S-1) provide for development and resource management consistent with the Aylesworth Creek Lake Project's authorized purposes and USACE regulations and policy. The 2025 Master Plan also provides a comprehensive description of the Aylesworth Creek Lake Project, a discussion of factors influencing resource management and development, new resource management objectives, a synopsis of public involvement, descriptions of existing development, and considerations of future development activities.

Under the No Action Alternative, USACE would take no action to establish land and water surface classifications for the Aylesworth Creek Lake Project and would continue to operate and manage the project as outlined in the 1973 Master Plan.

The Proposed Action is to adopt the 2025 Master Plan, which establishes land and water surface classifications based on current land and water uses at the Aylesworth Creek Lake

Project while also meeting the authorized project purposes and resource objectives. This includes a mix of natural resource and recreation management objectives that are compatible with regional goals established by stakeholders and USACE during the master planning process, that recognize outdoor recreation trends, and that are responsive to agency and public comments. The purpose of the action is to update the 1973 Aylesworth Creek Lake Master Plan. The action is needed as required by Engineer Regulation (ER) 1130-2-550, Recreation Operations and Maintenance Policies, and Engineer Pamphlet (EP) 1130-2-550, Recreation Operations and Maintenance Guidance and Procedures. The 2025 Master Plan is intended to serve as a comprehensive land and recreation management plan for the next 15 to 25 years.

Table S-1 identifies the land and water surface classifications associated with the Proposed Action.

Table S-1: Proposed Land and Water Surface Classifications at Aylesworth Creek Lake

Classification	2025 Master Plan (acres)	Description
Project Operations	20.1 ¹	Lands required for the structure, operation, administration, or maintenance of the project and which all must be maintained to carry out the authorized primary purpose of flood risk management.
High Density Recreation	7.2	Lands that are currently developed for intensive recreational activities for the visiting public. This land classification has been developed to support concentrated visitation and use of the recreational facilities they host. The high density recreation area at Aylesworth Creek Lake is Aylesworth Park operated by Lackawanna County. The park includes a sandy beach, playground, a multipurpose field, picnic tables, and a pavilion.
Multiple Resource Management Land		
Low Density Recreation	214.3	Management of this land classification calls for maintaining a healthy, ecologically adapted vegetative cover to reduce erosion and improve aesthetics, while also supporting low impact recreational opportunities such as bank fishing, hiking, wildlife viewing, and shoreline access. The new land classification criteria exclude vegetation and wildlife management areas, leaving only areas with minimal development to support passive recreational use.
Future Recreation	3.6	Recreation areas planned for the future or that have been temporarily closed. These lands have site characteristics compatible with potential future recreation development. Some of these areas may have never been developed or were developed and subsequently closed or remain open but are no longer maintained. There is one area at Aylesworth Creek Lake designated as future recreation that connects to the existing Aylesworth Park via a direct gravel path from the

Classification	2025 Master Plan (acres)	Description
		playground and adjacent parking lot. Lackawanna County's 2011 Park Master Plan discusses future recreation expansion in this area and Lackawanna County Parks and Recreation has expressed interest in pursuing future development in this area. Thus, USACE has designated this area as future recreation.
Water Surface		
Restricted	0.1	Areas where recreational boating or swimming is prohibited or restricted for project operations, safety, and security purposes. Restricted waters at Aylesworth Creek Lake includes a small area around the drop inlet structure. Physical barriers or signage may be placed in the water in the future to prevent public access around the structure.
Open Recreation	7.6	Water surface areas available for year-round or seasonal water-based recreational use. This area includes all water surface areas other than restricted waters.
Total	252.9 ²	

¹Of the 20.1 acres classified under the land classification Project Operations, 18.2 acres includes a restricted area. The land classification Restricted is only listed under Water Surface in EP 1130-2-550. Therefore, the restricted area within the land classification Project Operations is not labeled as a separate land classification but is discussed in this Master Plan.

²Mapping for the Master Plan update has been compiled using the best information available and is believed to be accurate. Previous project boundaries are based on original acquisition real estate deed records and mapping. Due to improved mapping technologies, minor discrepancies exist when comparing prior project boundaries and proposed land and water use classification acreages.

USACE selected the Proposed Action because it meets regional goals associated with good stewardship of land and water resources, meets regional recreation goals, and allows for continued use and development of project lands without violating federal policies or public laws.

USACE used the effects analysis from the Environmental Assessment (EA) and comments received from other agencies to determine whether the Proposed Action requires the preparation of an Environmental Impact Statement (EIS). This included an assessment of environmental, cultural, and social factors that are relevant to the recommended alternative. The Master Plan Update is considered an administrative action and does not evaluate effects from project construction. Therefore, it was determined that no effects would occur to all relevant resources including water and biological resources, soils, air quality, noise, cultural resources, groundwater, utilities, recreation, land use, demographics, and traffic and transportation (see Section 3 of the EA). Future projects at Aylesworth Creek Lake would be analyzed in future NEPA documentation associated with those individual actions. Efforts would be made to reduce adverse effects by using standard construction best management practices (BMPs) such as silt fences to reduce disturbance, soil erosion, and sedimentation into nearby surface waters and wetlands. Construction and operations of

future master planning projects would use BMPs associated with prevention of effects to sensitive species. These recommendations would occur during the time future projects are proposed and would include environmental reviews of each project.

Conclusion

All applicable laws, executive orders, regulations, and local government plans were considered in the evaluation of alternatives. Based on this report, the reviews by other federal, state and local agencies, Tribes, input of the public, and the review of my staff, it is my determination that the Proposed Action alternative would not cause significant adverse effects on the quality of the human environment; therefore, preparation of an EIS is not required.

Date

Francis B. Pera
Colonel, U.S. Army
Commander and District Engineer

TABLE OF CONTENTS

FINDING OF NO SIGNIFICANT IMPACT.....	i
ACRONYMS	vii
1 Introduction	1
1.1 Project Background	1
1.1.1 Project Location and Setting.....	1
1.1.2 Project History	2
1.2 Purpose and Need for the Action.....	2
1.3 Scope of the EA.....	2
1.4 Coordination and Public Review	3
2 Proposed Action and Alternatives.....	4
2.1 Development of Alternatives.....	4
2.1.1 Master Planning Process	4
2.1.2 Screening Criteria	4
2.2 Alternative 1: No Action	4
2.3 Alternative 2: Proposed Action (Preferred Alternative)	5
3 Environmental Setting and Consequences.....	9
3.1 Introduction.....	9
3.1.1 Description of Baseline Data and Data Sources	9
3.1.2 Approach for Analyzing Effects.....	9
3.1.3 Level of Resource Area Analysis	10
3.1.4 Environmental Consequences – No Action Alternative	10
3.1.5 Environmental Consequences – Proposed Action.....	10
3.2 Water Resources.....	10
3.2.1 <i>Surface Waters and Wetlands</i>	10
3.2.2 <i>Water Quality</i>	11
3.2.3 <i>Floodplains</i>	11
3.3 Soils	12
3.4 Biological Resources	14
3.4.1 <i>Vegetation</i>	14
3.4.2 <i>Wildlife and Fisheries</i>	14
3.4.3 <i>Threatened and Endangered Species</i>	15
3.5 Land Use and Recreation	18

3.6	Air Quality	19
3.7	Greenhouse Gases and Climate	19
3.8	Geology and Topography	19
3.9	Groundwater	20
3.10	Noise	20
3.11	Cultural Resources	20
3.12	Utilities	21
3.13	Hazardous Materials and Wastes	21
3.14	Demographics	21
3.15	Traffic and Transportation	21
4	Cumulative Effects	22
4.1	Current and Reasonably Foreseeable Projects Within the ROI	22
4.2	Analysis of Cumulative Effects	22
5	Irretrievable and Irreversible Commitment of Resources	23
6	Summary	24
7	References	27

LIST OF FIGURES

Figure 2-1. Proposed Land Classifications	6
---	---

LIST OF TABLES

Table S-1: Proposed Land and Water Surface Classifications at Aylesworth Creek Lake ..	ii
Table 2-1. Proposed Land Classifications at Aylesworth Creek Lake	7
Table 3-1. Project area wetlands	11
Table 3-2. Soils at Aylesworth Creek Lake	13
Table 3-3. Recorded Cultural Resources at Aylesworth Creek Lake	20
Table 6-1. Summary of Potential Environmental Effects	24
Table 6-2. Conservation Measures for Future Master Planning Projects	25
Table 6-3. Compliance of the Proposed Action with Environmental Protection Statutes and Other Environmental Requirements	26

ACRONYMS

Acronym	Definition
2025 Master Plan	2025 Aylesworth Creek Lake Master Plan
AMD	Acid Mine Drainage
APHIS	Animal & Plant Health Inspection Service Wildlife Services
BMPs	Best Management Practices
EA	Environmental Assessment
EAF	Environmental Assessment Form
EO	Executive Order
EP	Engineering Pamphlet
ER	Engineer Regulation
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
GIS	Geographical Information System
IPaC	Information, Planning, and Consultation
MP	Master Plan
NEPA	National Environmental Policy Act
NFIP	National Flood Insurance Program
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollution Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
PADCNR	Pennsylvania Department of Conservation and Natural Resources
PA-SHARE	Pennsylvania State Historic and Archaeological Resource Exchange
PCD	Project Construction Datum
PFBC	Pennsylvania Fish and Boat Commission
pH	Potential of Hydrogen
PHMC	Pennsylvania Historical and Museum Commission
Project	Aylesworth Creek Lake Project
PSU	Penn State University
ROI	Region of Influence
SME	Subject Matter Expert
SPDES	State Pollution Discharge Elimination System
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VERS	Visitor Estimation and Reporting System

1 INTRODUCTION

1.1 PROJECT BACKGROUND

The Aylesworth Creek Lake Flood Risk Management Project (hereafter “Aylesworth Creek Lake Project” or “Project”) was authorized by the Flood Control Act of October 23, 1962, Public Law 87-874, 87th Congress, and is described in Senate Document No. 141, 87th Congress, 2nd Session. The project was authorized and constructed for the primary purpose of flood risk management for the downstream reach of the Lackawanna River at the communities of Olyphant, Dickson City, Scranton, Moosic, Old Forge, and Duryea, Pennsylvania (PA). The secondary purposes of the project are to provide recreation and environmental stewardship. The Aylesworth Creek Lake Project is owned and operated by the United States Army Corps of Engineers (USACE), Baltimore District. The Master Plan for the project is the strategic land use management document that guides the comprehensive management and development actions related to project recreational, natural, and cultural resources throughout the life of the project. Implementation of the Master Plan and the proposed land and water use classifications must recognize and be compatible with the primary project purpose of flood risk management.

The USACE produces and uses the Master Plan to guide the responsible stewardship of USACE-administered lands and resources for the benefit of present and future generations. The Master Plan presents an inventory and analysis of land and water resources, resource management objectives, land and water use classifications, resource use plans for each land and water use classification, current and projected park facility needs, an analysis of existing and anticipated resource use, and anticipated influences on overall project operation and management. Specific to the project, the Master Plan presents an evaluation of the assets, needs, and potential uses of the project reservoir and lands and provides direction for appropriate management, use, development, enhancement, protection, and conservation of the natural and man-made resources at the project. The Master Plan is guided by Engineer Regulation (ER) 1130-2-550, Recreation Operations and Maintenance Policies; and Engineering Pamphlet (EP) 1130-2-550, Recreation Operations and Maintenance Guidance and Procedures. Per guidance, USACE land and water use classifications provide for development and resource management consistent with authorized project purposes and federal Laws.

The USACE is proposing to adopt an updated Master Plan for the Aylesworth Creek Lake Project to reflect changes that have occurred to the project, in the region, in recreation trends, and in USACE policy since the original 1973 Aylesworth Creek Lake Master Plan (hereafter “1973 Master Plan”) was published. This Environmental Assessment (EA) considers the potential effects to the human environment from implementation of the 2025 Aylesworth Creek Lake Master Plan (hereafter “2025 Master Plan”).

1.1.1 Project Location and Setting

The Aylesworth Creek Dam is located on Aylesworth Creek approximately one mile upstream from its confluence with the Lackawanna River. The project is in the Borough of Archbald near the community of East Jermyn in Lackawanna County, PA, and is approximately one mile east of U.S. Route 6, between Scranton and Carbondale. Aylesworth Creek is a tributary of the Lackawanna River which, in turn, is a tributary of the Susquehanna River. Aylesworth Creek

Lake is in Upper Susquehanna-Lackawanna Watershed, Hydrologic Unit Code (HUC), 02050107.

All elevations cited in this EA, unless otherwise noted, are referenced to the original Project Construction Datum (PCD). The Aylesworth Creek Lake Project maintains a conservation pool at approximately 8 acres (at an elevation of 1,108 feet PCD) and stores approximately 62 acre-feet of water. At the full flood control pool (spillway crest at elevation 1,150 PCD), the lake covers 89 acres and stores 1,842 acre-feet of water.

Aylesworth Creek Lake is in Lackawanna County in northeastern PA, with the most prominent topographic features being the two nearly parallel mountain ranges that traverse the county in a southwest to northeast direction, forming the valley area. The watershed above Aylesworth Creek Lake has a small drainage area of only six square miles. The terrain is steep with narrow valleys. Few people live in the vicinity of the project and the landscape is primarily wooded, but there are several abandoned strip mining operations. Due to the large mining presence, water quality in and around Aylesworth Creek and Lake has historically been, and continues to be, degraded by acid mine drainage (AMD).

1.1.2 Project History

The Aylesworth Creek Lake Project was authorized by the Flood Control Act of October 23, 1962, Public Law 87-874, 87th Congress, and is described in Senate Document No. 141, 87th Congress, 2nd Session. The project was operationally complete in October 1970 and the federal cost was \$2,268,200. The original Aylesworth Creek Lake Master Plan was approved in June 1973. The Aylesworth Creek Lake Project is a multipurpose water resources project constructed and operated by USACE, Baltimore District. The dam and associated infrastructure, as well as all land acquired for the Aylesworth Creek Lake Project, are federally owned and administered by USACE.

Aylesworth Creek Lake consists of an earth and rockfill dam with a maximum height above the streambed of 90 feet, a top length of 1,270 feet, and an 80-foot-wide spillway cut into the south bank that has a discharge capacity of 10,000 cubic feet per second. The outlet conduit is uncontrolled and consists of a 490-foot-long, 36-inch-diameter vitrified clay pipe encased in reinforced concrete. The reservoir extends about 4,600 feet upstream and inundates 89 acres at spillway crest with an elevation of 1,150 feet above mean sea level. The lake covers seven acres at normal pool (1108 feet PCD) and 89 acres at full flood control level (1150 feet PCD).

1.2 PURPOSE AND NEED FOR THE ACTION

The purpose of the action is to update the Aylesworth Creek Lake Master Plan. The action is needed as required by ER and EP 1130-2-550. The 2025 Master Plan is intended to serve as a comprehensive land and recreation management plan for the next 15 to 25 years, which reflects changes that have occurred in outdoor recreation trends, land use, population trends, USACE management policy, and wildlife habitat at the Project.

1.3 SCOPE OF THE EA

USACE prepared this EA pursuant to the National Environmental Policy Act of 1969, as amended (NEPA), USACE Procedures for Implementing NEPA in 33 Code of Federal Regulations, Part 230, and ER 200-2-2, *Procedures for Implementing NEPA* for the USACE civil works program. NEPA requires federal agencies to review potential environmental effects of

federal actions that include the adoption of formal plans, such as master plans, approved by federal agencies upon which future agency actions will be based. This EA and Finding of No Significant Impact (FONSI) are separate documents that provide an analysis of potential environmental, cultural, and social effects associated with the actions in the Master Plan.

Alternatives considered within this EA focus on the proposed land classifications as presented in the 2025 Master Plan and the types of future development projects that could occur within the land classifications. This action is an administrative update and does not involve the construction of any physical projects. The EA does not consider implementation of specific projects identified within the 2025 Master Plan during the master planning process as those projects are conceptual in nature, nor does it consider specific future development opportunities for leased areas. USACE would conduct further NEPA analysis on projects on USACE owned land identified within the 2025 Master Plan once funding is available and detailed project planning and design occur.

1.4 COORDINATION AND PUBLIC REVIEW

USACE coordinated with agencies, non-governmental organizations, and members of the public with a potential interest in the Proposed Action during the development of the 2025 Master Plan and during preparation of this EA. Appendix H of the Master Plan provides a record of public involvement and agency coordination related to this EA. Additionally, Appendices D and E of the Master Plan provide a record of coordination for the overall Master Plan, with this EA, and with project stakeholders, agencies, and the public.

Agency coordination was conducted by USACE with the United States Fish and Wildlife Service (USFWS) through the Information, Planning, and Consultation online system (IPaC) to ensure compliance with Section 7 of the Endangered Species Act (ESA). The most recent IPaC report was provided on June 24, 2025. Review was also performed by USACE staff using the PA Natural Diversity Inventory (PNDI) Conservation Explorer website to identify state and federally listed species potentially occurring in the project area. Consultation letters under Section 106 of the National Historic Preservation Act (NHPA) were sent to the State Historic Preservation Office (SHPO) and tribal nations on November 12, 2024. Coordination correspondence is included in Appendix H of the Master Plan.

The 2025 draft Master Plan, EA, and FONSI were made available for public review for a period of 30 days beginning on [date] and ending on [date]. The draft documents were also distributed to stakeholders and agencies. Responses to public and agency comments are included in Appendix E of the Master Plan.

Information on the progress of the Master Plan and instructions on participating in the public comment process were published on the Project's web page: <https://www.nab.usace.army.mil/missions/dams-recreation/aylesworth-lake/aylesworth-lake-master-plan/>

{This section will be updated as additional coordination and public review occur.}

2 PROPOSED ACTION AND ALTERNATIVES

2.1 DEVELOPMENT OF ALTERNATIVES

USACE identified alternatives considered within this EA as a part of the master planning process. This section describes the master planning process, screening criteria for alternative development, and the alternatives carried forth for detailed analysis within this EA.

2.1.1 Master Planning Process

USACE guidance recommends the establishment of resource goals and objectives for the purposes of development, conservation, and management of natural, cultural, and man-made resources at a project location. Goals describe the desired end state of overall management efforts, whereas objectives are concise statements describing measurable and attainable management activities that support the stated goals. Goals and objectives are hierarchical guidelines for obtaining maximum public benefits while minimizing adverse effects on the human environment and are developed in accordance with 1) authorized project purposes, 2) applicable laws and regulations, 3) resource capabilities and suitability, 4) regional needs, 5) other governmental plans and programs, and 6) expressed public desires.

The 2025 Master Plan establishes the following management goals for the Aylesworth Creek Lake Project:

- **Goal A** – Provide the best management practices to respond to regional needs, resource capabilities and capacities, and expressed public interests consistent with authorized project purposes.
- **Goal B** – Protect and manage project natural and cultural resources through sustainable environmental stewardship programs.
- **Goal C** – Provide public outdoor recreation opportunities that support project purposes and public interests while sustaining project natural resources.
- **Goal D** – Recognize the unique qualities, characteristics, and potentials of the Project.
- **Goal E** – Provide consistency and compatibility with national objectives and other state and regional goals and programs.

2.1.2 Screening Criteria

For an alternative to be considered viable, it must be compatible with the primary project purpose of flood risk management. In addition, the alternative must meet management goals and objectives and USACE-wide Environmental Operating Principles. Based on these criteria, this EA evaluates the No Action Alternative and the Proposed Action Alternative.

2.2 ALTERNATIVE 1: NO ACTION

The No Action Alternative serves as a basis for comparison to the anticipated effects of the other action alternatives. Under the No Action Alternative, USACE would not adopt the 2025 Master Plan and would continue to operate and manage the project in accordance with the 1973 Master Plan. No land or water use classifications would be designated. The No Action Alternative would not meet the purpose and need for the action and would not be compliant with current USACE regulations and guidance.

2.3 ALTERNATIVE 2: PROPOSED ACTION (PREFERRED ALTERNATIVE)

Under Alternative 2 or the Proposed Action Alternative, USACE would implement the 2025 Master Plan including the new land and water use management designations in compliance with USACE regulations and guidance. This alternative establishes land and water use classifications and includes resource objectives that reflect current and projected needs compatible with regional goals. Required changes associated with the Proposed Action include classifications of land and water surface uses, and adoption of new resource management and recreation objectives. Figure 2-1 depicts the proposed new land and water use classifications within the 2025 Master Plan. Table 2-1 quantifies the proposed land and water surface classifications and provides a description of the land and water use classification along with types of future projects that could occur within each classification, as applicable. This alternative is an administrative update and does not involve the construction of any physical projects. All future projects would be subject to further NEPA analysis once funding is available and detailed project planning and design occur. The Proposed Action would update the original 1973 Master Plan to be compliant with ER and EP 1130-2-550. Therefore, this alternative is the Preferred Alternative and will be carried forward as the Proposed Action.

Figure 2-1. Proposed Land Classifications

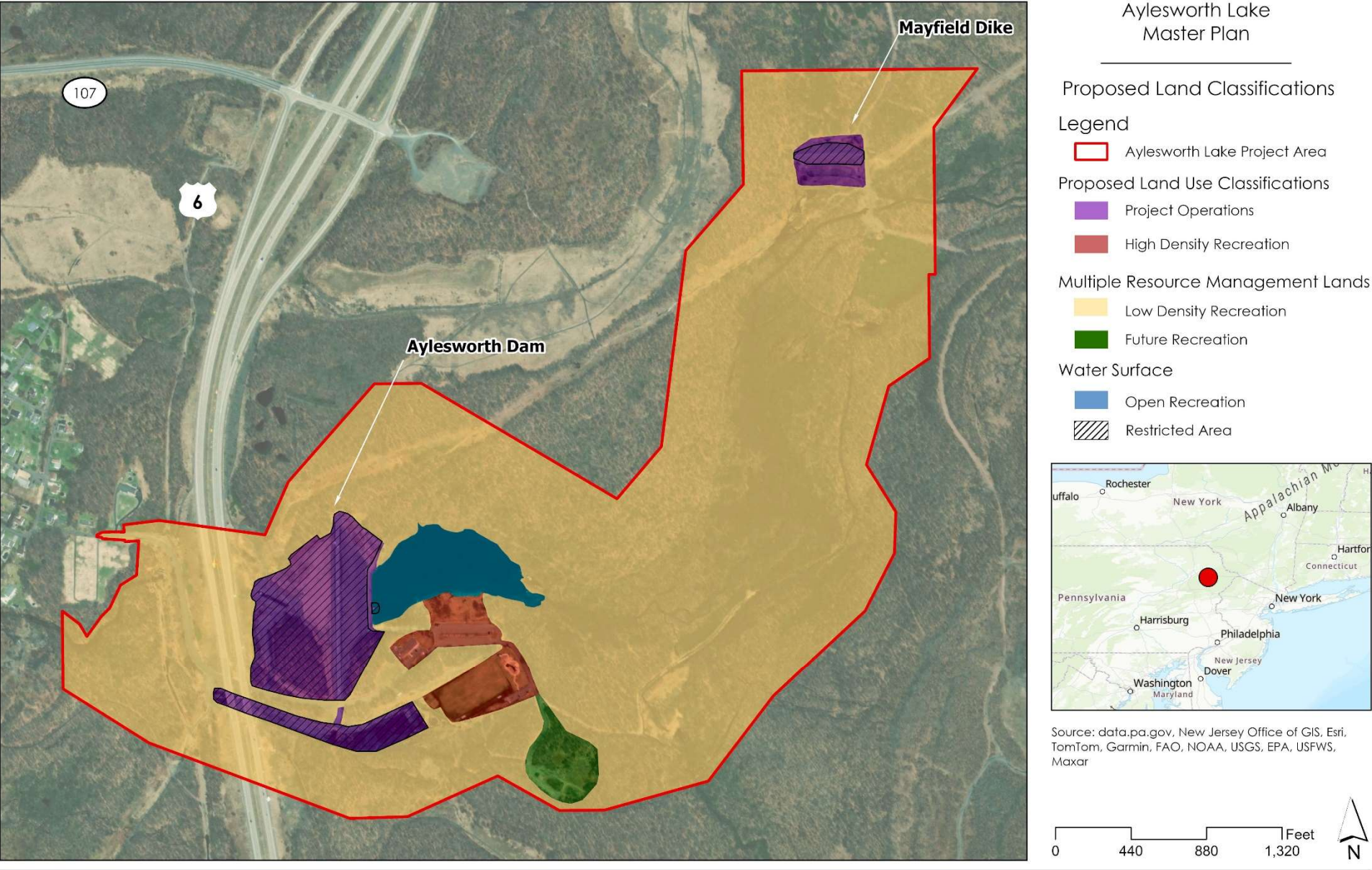


Table 2-1. Proposed Land Classifications at Aylesworth Creek Lake

Classification	2025 Master Plan (acres)	Description
Project Operations	20.1 ¹	Lands required for the structure, operation, administration, or maintenance of the project and which all must be maintained to carry out the authorized primary purpose of flood risk management.
High Density Recreation	7.2	Lands that are currently developed for intensive recreational activities for the visiting public. This land classification has been developed to support concentrated visitation and use of the recreational facilities they host. The high density recreation area at Aylesworth Creek Lake is Aylesworth Park operated by Lackawanna County. The park includes a sandy beach, playground, a multipurpose field, picnic tables, and a pavilion.
Multiple Resource Management Land		
Low Density Recreation	214.3	Management of this land classification calls for maintaining a healthy, ecologically adapted vegetative cover to reduce erosion and improve aesthetics, while also supporting low impact recreational opportunities such as bank fishing, hiking, wildlife viewing, and shoreline access. The new land classification criteria exclude vegetation and wildlife management areas, leaving only areas with minimal development to support passive recreation use.
Future Recreation	3.6	Recreation areas planned for the future or that have been temporarily closed. These lands have site characteristics compatible with potential future recreation development. Some of these areas may have never been developed or were developed and subsequently closed or remain open but are no longer maintained. There is one area at Aylesworth Creek Lake designated as future recreation that connects to the existing Aylesworth Park via a direct gravel path from the playground and adjacent parking lot. Lackawanna County's 2011 Park Master Plan discusses future recreation expansion in this area and Lackawanna County Parks and Recreation has expressed interest in pursuing future development in this area. Thus, USACE has designated this area as future recreation.
Water Surface		
Restricted	0.1	Areas where recreational boating or swimming is prohibited or restricted for project operations, safety, and security purposes. Restricted waters at Aylesworth Creek Lake includes a small area around the drop inlet structure. Physical barriers or signage may be placed in the water in the future to prevent public access around the structure.

Classification	2025 Master Plan (acres)	Description
Open Recreation	7.6	Water surface areas available for year-round or seasonal water-based recreational use. This area includes all water surface areas other than restricted waters.
Total	252.9 ²	

¹Of the 20.1 acres classified under the land classification Project Operations, 18.2 acres include a restricted area. The land classification Restricted is only listed under Water Surface in EP 1130-2-550. Therefore, the restricted area within the land classification Project Operations is not labeled as a separate land classification but is discussed in this Master Plan.

²Mapping for the Master Plan update has been compiled using the best information available and is believed to be accurate. Previous project boundaries are based on original acquisition real estate deed records and mapping. Due to improved mapping technologies, minor discrepancies exist when comparing prior project boundaries and proposed land and water use classification acreages.

3 ENVIRONMENTAL SETTING AND CONSEQUENCES

3.1 INTRODUCTION

This chapter describes the natural and physical resources within and surrounding the Project and the potential effects of the No Action Alternative and Proposed Action (Preferred Alternative) on each resource. A description of baseline data sources and an approach for analyzing effects are discussed in Sections 3.1.1 and 3.1.2, respectively.

3.1.1 Description of Baseline Data and Data Sources

The EA used the following types of data to characterize the affected environment of the project:

- Geographical Information System (GIS), including waters and wetlands inventory, floodplain mapping, and vegetation.
- Aerial photography (ESRI, Google Earth).
- Regional and local reports: including Natural Resources Conservation Service (NRCS) Soil Surveys and previous studies conducted at the project.
- Agency databases including the USFWS IPaC and the National Wetlands Inventory (NWI), the United States Environmental Protection Agency (USEPA) Green Book National Area and County-Level Multi-Pollutant Information list and Envirofacts database, and the PA Natural Heritage Conservation Explorer
- Information presented within the 2025 Master Plan.
- Agency coordination.
- Information collected from site visits.

3.1.2 Approach for Analyzing Effects

Effects can either be beneficial or adverse and either directly or indirectly relate to the action. The alternatives may create temporary (less than 1 year), short-term (up to 3 years), long term (3 to 10 years), or permanent effects.

Effects on each resource can vary in degree or magnitude from a slightly noticeable change to a total change in the environment. This analysis classifies the intensity of effects as beneficial, none/negligible, minor, moderate, or significant. The intensity thresholds are defined as follows:

- Beneficial – Effects would improve or enhance the resource.
- None/Negligible – A resource would not be affected, or the effects would be at or below the level of detection, and changes would not be of any measurable or perceptible consequence.
- Minor – Effects on a resource would be detectable, although the effects would be localized, small, and of little consequence to the sustainability of the resource. Mitigation measures, if needed to offset adverse effects, would be simple and achievable.
- Moderate – Effects on a resource would be readily detectable, long-term, localized, and measurable. Mitigation measures, if needed to offset adverse effects, would be extensive and likely achievable.
- Significant – Effects on a resource would be obvious and long-term and would have substantial consequences on a regional scale. Mitigation measures to offset the

adverse effects would be required and extensive, and success of the mitigation measures would not be guaranteed.

As stated in Section 1.3, Scope of the EA, the analysis focuses on the proposed land use classifications as presented in the 2025 Master Plan. The Proposed Action is an administrative update and does not involve the construction of any physical projects. USACE would conduct further NEPA analysis on projects once funding is available and detailed planning and design occur.

3.1.3 Level of Resource Area Analysis

All relevant resource areas were considered for analysis in this EA. Consistent with NEPA implementing regulations, this EA concentrates on issues and resources that are truly relevant to the alternatives being analyzed. For example, the Susquehanna-Lackawanna Watershed in which the Aylesworth Creek Lake is located does not have federally designated Wild or Scenic Rivers, so this resource is not included in the analysis.

3.1.4 Environmental Consequences – No Action Alternative

Under the No Action Alternative, USACE would not implement the 2025 Master Plan and an administrative action to establish new land and water use classifications within the proposed 2025 Master Plan would not occur. The operation and management of Aylesworth Creek Lake and USACE lands would continue as outlined in the 1973 Master Plan. Although this alternative does not result in a 2025 Master Plan that meets current regulations and guidance, there would be no significant effects to any of the resources areas on project lands.

3.1.5 Environmental Consequences – Proposed Action

Potential direct, indirect, and cumulative effects of the Proposed Action were analyzed relative to each environmental, cultural, and socioeconomic resource. The existing conditions of each resource area within the project alternatives' region of influence (ROI) were also analyzed. Due to the fact that the Master Plan update is an administrative action and the project alternatives do not include construction of physical projects, it was determined that negligible or no effects would occur to all resource areas. All future projects would be subject to further NEPA analysis once funding is available and detailed project planning and design occur.

3.2 WATER RESOURCES

3.2.1 Surface Waters and Wetlands

Aylesworth Creek is a tributary of the Lackawanna River which, in turn, is a tributary of the Susquehanna River. The Aylesworth Creek drainage area is in the center of the long and narrow basin of the Lackawanna River and totals 6.2 square miles at the dam site. The headwaters of Aylesworth Creek are about 3.9 miles from the dam. Aylesworth Creek flows through a large portion of the Aylesworth Creek Lake project area.

Natural wetlands are uncommon around the dam due to the open recreation areas and fields. Wetlands found in the project area are generally located in low lying areas adjacent to Aylesworth Creek and its tributaries. According to the USFWS NWI Mapper, there is one mapped freshwater emergent wetland, two freshwater forested/scrub wetlands, one freshwater pond, and seven riverine (stream/river) systems, totaling approximately 31.8 acres, or 12.6 percent of the project's land area (Table 2-3; USFWS, 2024b).

Table 3-1. Project area wetlands

Wetland Type	Acres	Percent of Project Area
Freshwater Emergent Wetland	0.9	0.3%
Freshwater Forested/ Shrub Wetland	19.4	7.7%
Freshwater Pond ¹	6.7 ²	2.7%
Riverine	4.8	1.9%
Total	31.8	12.6%
Project Area	252.9	

¹Freshwater pond is terminology derived from the USFWS NWI Mapper. This "pond" is referring to Aylesworth Lake.

²This acreage is from the USFWS NWI Mapper data. The USFWS NWI data may differ from USACE acreage data for the Aylesworth Lake Project.

3.2.2 Water Quality

The water quality of Aylesworth Creek and Aylesworth Creek Lake has been historically degraded due to AMD. Pennsylvania Department of Environmental Protection (PADEP) has identified two main seeps, one along an unnamed tributary to Aylesworth Creek and one on the south shore of Aylesworth Creek Lake, that predominantly contribute to the AMD pollution (PADEP, 2005). An oxic limestone drain was constructed in 2007 to replace malfunctioning lime dosers and to treat AMD sources upstream of Aylesworth Creek Lake. The limestone drain construction project was developed by Lackawanna County and funded by the Lackawanna Watershed 2000 Program.

Historically, Aylesworth Creek Lake and Aylesworth Creek downstream of the dam were listed on the Pennsylvania Section 303(d) list due to impairments resulting from AMD and coal mining. In 2005, the EPA approved Total Maximum Daily Loads (TMDLs) for the Aylesworth Creek Watershed. Since implementation of the TMDLs, water quality in Aylesworth Creek Lake and Aylesworth Creek have steadily improved; since 2018, no impairments have been noted (USEPA, 2024c).

USACE collects water quality data twice a year, usually in the summer, at four stations (one in the lake and three at the inflow to the lake). Water quality data collected in the field includes water temperature, dissolved oxygen, pH, and specific conductance. In the field, water samples are collected, and further analyzed for alkalinity, phenol alkalinity, acidity, orthophosphate, ammonia, nitrate, sulfate, and iron. Per recent water quality reports, alkalinity remains low, but pH has increased, and no detriments have been noted (USACE, 2024; PADEP, 2024a).

3.2.3 Floodplains

Floodplains are areas of land adjacent to rivers and streams that convey overflows during flood events. The Federal Emergency Management Agency (FEMA) defines a floodplain as any land area susceptible to being inundated by water from any source. FEMA prepares Flood Insurance Rate Maps (FIRMs) that delineate flood hazard areas, such as floodplains, for

communities. These maps are used to administer floodplain regulations and to reduce flood damage. Typically, these maps indicate the locations of 100-year floodplains, which are areas with a 1 percent chance of flooding occurring in any single year. Executive Order (EO) 11988, Floodplain Management, states that actions by federal agencies are to avoid to the extent possible the long- and short-term adverse effects associated with the occupancy and modification of floodplain development wherever there is a practicable alternative.

The National Flood Insurance Program (NFIP) requires local jurisdictions to issue permits for all development in the 100-year floodplain. Development is broadly defined to include any human-made change to land, including grading, filling, clearing, dredging, extraction, storage, subdivision of land, and construction and improvement of structures and buildings. For any development to take place, all necessary permits must be obtained, which may include federal, state, and local permits. To be properly permitted, proposed development may not increase flooding or create a dangerous situation during flooding, especially on another person's property. If a structure is involved, it must be constructed to minimize damage during flooding. The PADEP is responsible for issuing floodplain development permits in PA.

The 100-year floodplain is primarily restricted to the immediate shores of Aylesworth Creek Lake, Aylesworth Creek, and its tributaries. FEMA classifies this area as Zone A (1 percent annual chance of flooding) (Penn State University [PSU]. 2024).

Water resources would not be affected by the newly established land and water use classifications at the Aylesworth Creek Lake Project, which consists of an administrative action. Future projects that arise from the master planning process or are independently pursued would require separate NEPA analyses or effects to water resources.

3.3 SOILS

In the areas around Aylesworth Creek Lake, soils are primarily mapped as belonging to the Arnot-Rock outcrop complex, steep (ASE), Holly silt loam (Hm), and Arnot-Rock outcrop complex, 8 to 25 percent slopes (AsD), Wurtsboro channery loam, 8 to 15 percent slopes (WkC), Udorthents, strip mine (UA), and Arnot-Rock outcrop complex, 0 to 8 percent slopes (AsB).

A variety of other soil types exist within the project boundary but mainly consist of silt loams and sandy loams with moderate slopes. Some soil complexes exist that possess rocky or gravelly characteristics, including Volusia channery silt loam, 0 to 8 percent slopes, rubbly (VxB), Bath channery silt loam, 8 to 25 percent slopes, rubbly (BbD), and Lackawanna and Bath soils, steep, rubbly (LCE)(see Table 3-3; USDA - NRCS, 2024).

Of the soils within the project area, 66.6 acres are considered Farmland of Statewide importance including Holly silt loam (Hm), Wurtsboro channery loam, 8 to 15 percent slopes (WkC), and Wyoming gravelly sandy loam, 0 to 3 percent slopes (WyA). Additionally, 1.7 acres are categorized as Prime Farmland including Wurtsboro channery loam, 3 to 8 percent slopes (WkB). Thus, 27percent of the project area is considered Farmland of Statewide Importance or Prime Farmland (USDA-NRCS, 2024).

Table 3-2. Soils at Aylesworth Creek Lake

Map Unit Symbol	Map Unit Name	Acres in Project Area	Percent of Project Area	Prime/Unique Farmland Status
ArC	Arnot very channery silt loam, 3 to 15 percent slopes, very rocky	3.9	1.5%	Not prime farmland
AsB	Arnot-Rock outcrop complex, 0 to 8 percent slopes	16.9	6.7%	Not prime farmland
AsD	Arnot-Rock outcrop complex, 8 to 25 percent slopes	32.4	12.8%	Not prime farmland
ASE	Arnot-Rock outcrop complex, steep	47.9	19.0%	Not prime farmland
BaD	Bath channery silt loam, 15 to 25 percent slopes	9.3	3.7%	Not prime farmland
BbD	Bath channery silt loam, 8 to 25 percent slopes, rubbly	7.1	2.8%	Not prime farmland
Hm	Holly silt loam	37.2	14.7%	Farmland of statewide importance
LCE	Lackawanna and Bath soils, steep, rubbly	6.6	2.6%	Not prime farmland
LeD	Lordstown channery silt loam, 15 to 25 percent slopes	0.8	0.3%	Not prime farmland
NxB	Norwich and Chippewa channery silt loams, 0 to 8 percent slopes, rubbly	12.4	4.9%	Not prime farmland
SwD	Swartwood channery loam, 15 to 25 percent slopes	6.7	2.7%	Not prime farmland
UA	Udorthents, strip mine	19.8	7.8%	Not prime farmland
VxB	Volusia channery silt loam, 0 to 8 percent slopes, rubbly	13.2	5.3%	
W	Water	7.6	2.9%	Not prime farmland
WkB	Wurtsboro channery loam, 3 to 8 percent slopes	1.7	0.7%	All areas are prime farmland
WkC	Wurtsboro channery loam, 8 to 15 percent slopes	20.7	8.2%	Farmland of statewide importance
WyA	Wyoming gravelly sandy loam, 0 to 3 percent slopes	8.7	3.4%	Farmland of statewide importance

Soils at the Aylesworth Creek Lake Project would not be affected by the newly established land and water use classifications, which consists of an administrative action. Future projects that arise from the master planning process or are independently pursued would require separate NEPA analyses of effects to soils resources.

3.4 BIOLOGICAL RESOURCES

3.4.1 Vegetation

The Aylesworth Creek Lake Project supports many habitat types including wetlands, grassy areas, fields, edges, and forest. According to the U.S. Forest Service (USFS), PA has over 16 million acres of forest land (USDA-USFS, 2020). Northern hardwoods such as sugar maple (*Acer saccharinum*), black cherry (*Prunus serotina*), aspen (*Populus tremuloides*), birch (*Betula sp.*), eastern hemlock (*Tsuga canadensis*), and white ash (*Fraxinus americana*) cover about 32 percent of PA mostly in the high elevations of northern PA which includes the area around Aylesworth Creek Lake (PADCNR, 2024a). According to the PA Department of Conservation and Natural Resources (PADCNR), Aylesworth Creek Lake is in the vicinity of the Pinchot State Forest. The Pinchot State Forest comprises approximately 54,000 acres near the confluence of the Susquehanna and Lackawanna Rivers in Lackawanna County, Luzerne County, Wyoming County, Susquehanna County, and Wayne County (PADCNR, 2024d).

Between 2009 and 2014, northeast PA gained approximately 100,000 acres of forest, but lost approximately 90,000 acres, primarily due to development and conversion to agriculture. Northeast PA had the highest percentage of tree removals (27 percent) due to land-use change. In PA, over half of all tree removals between 2009 and 2014 occurred in the north central and northeast regions (USDA-USFS, 2017).

According to Lackawanna County's 2011 Aylesworth Park Master Plan ("2011 Park Master Plan"), the park contains a mixture of grass, early growth forest, hemlock stands, and hardwood forest including red maple (*Acer rubrum*), red oak (*Quercus rubra*), beech (*Fagus sp.*), birch (*Betula sp.*), and sassafras (*Sassafras albidum*). Common understory plants include mountain laurel (*Kalmia latifolia*), witch hazel (*Hamamelis virginiana*), and a variety of ferns species. Within the hemlock stands, yellow birch (*Betula alleghaniensis*) and rhododendron are common. The early growth forest is predominantly located in the southern portion of the park, an area that was historically strip mined. The dominant plant species in this area consists of birch (*Betula sp.*) and aspen (*Populus sp.*), which are common early successional species.

3.4.2 Wildlife and Fisheries

The Aylesworth Creek Lake Project supports many habitat types including wetlands, grassy areas, fields, edges, and a variety of forest types, which attract several species of wildlife. Mammalian wildlife that may be found on project lands include black bear (*Ursus americanus*), white-tailed deer (*Odocoileus virginianus*), grey squirrel (*Sciurus carolinensis*), eastern wild turkey (*Meleagris gallopavo*) and groundhog (*Marmota monax*). Common avian species include a variety of waterfowl and wading birds, woodpeckers, and songbirds, as well as common game species.

Aylesworth Creek Lake and Aylesworth Creek hosts many fish species including native brook trout (*Salvelinus fontinalis*), black bullhead catfish (*Ameiurus melas*), yellow perch (*Perca flavescens*), rainbow trout (*Oncorhynchus mykiss*), banded killifish (*Fundulus diaphanus*), pumpkinseed (*Lepomis gibbosus*), and yellow bullhead (*Ameiurus natalis*). The PA Fish and Boat Commission (PFBC) stocks Aylesworth Creek Lake with trout species. In 2024, PFBC stocked Aylesworth Creek Lake with brook trout. Trout are the dominant species in Aylesworth Creek Lake given the stocking history at the lake by the PFBC.

3.4.3 Threatened and Endangered Species

3.4.3.1 Federally Listed Species

As of 2025, three federally listed species have the potential to occur within the project area: the endangered Indiana bat (*Myotis sodalis*), the endangered northern long-eared bat (*Myotis septentironalis*), and the endangered northeastern bulrush (*Scirpus ancistrochaetus*) (USFWS, 2024a; Appendix Hof the Master Plan). Additionally, one proposed threatened species, the monarch butterfly (*Danaus plexippus*) was identified as potentially occurring within the project area (USFWS, 2024a; Appendix H of the Master Plan). The project area does not contain any critical habitat for any species.

The Indiana bat is a small bat weighing only one-quarter of one ounce that was listed in 1967 and remains listed as federally endangered. In winter, Indiana bats hibernate in caves and mines. In summer, their habitat includes small to medium river and stream corridors with well-developed riparian woods, woodlots within 1 to 3 miles of small to medium rivers and streams, and upland forests. Major threats to their populations include winter disturbance of hibernacula, commercialization of caves, pesticides and other contaminants, summer habitat destruction and mortality due to the white-nose syndrome fungus (USFWS, n.d - a). The Indiana bat may occur in the project area due to the intense mining history of the area along with the presence of Aylesworth Creek, riparian forest, and shrub wetlands at the project site. All these factors contribute to quality habitat for the Indiana bat in or around the Aylesworth Creek Lake project area. This Master Plan does not include construction of any proposed projects, but future projects will be subject to NEPA requirements, and potential effects on the Indiana bat should be analyzed.

Northern long-eared bats are medium sized bats (about 3-4 inches in length) associated with mature, interior forest environments. Unlike most other bats, northern long-eared bats forage along wooded hillsides and ridgelines instead of above valley-bottom streams and riparian forest edges. Populations at northern long-eared bat hibernation sites (e.g., caves and mines) have declined by 99 percent since the discovery of white-nose syndrome. For this reason, the northern long-eared bat is now listed as endangered throughout all of its range. Forest fragmentation and conversion are also major threats to the species due to its association with large blocks of mature forest (USFWS, n.d. - d). The northern long-eared bat has the potential to occur in the project area along wooded hillsides and in and around the nearby abandoned mines. This Master Plan does not include construction of any proposed projects, but future projects will be subject to NEPA requirements, and potential effects on the northern long-eared bat should be analyzed.

Northeastern bulrush is a leafy, perennial herb of the sedge family (Cyperaceae) approximately 80 to 120 centimeters in height. When flowering, it bears an inflorescence with distinctly arching rays and clusters of brown spikelets. Northeastern bulrush is found at the

edge of natural ponds, wet depressions, or shallow sinkholes less than one acre in size. These wetlands primarily occur in low-lying areas with hilly topography and have seasonally variable water levels ranging from inundation to desiccation (USFWS, n.d. - c). The northeastern bulrush was listed as endangered in 1991. Due to recovery efforts led by the USFWS and its partners, the northeastern bulrush is being proposed by USFWS to be removed from the Federal List of Endangered and Threatened Plants (Federal Register, 2024). It is unlikely that the northeastern bulrush would occur in the project area due to the absence of suitable habitat for this species.

Adult monarch butterflies are large and conspicuous, with bright orange wings surrounded by a black border and covered with black veins. During the breeding season, monarchs lay their eggs on their obligate milkweed host plant and larvae emerge after two to five days. In PA, common milkweed (*Asclepias syrica*) is the most used host plant, followed by swamp milkweed (*Asclepias incarnata*). Larvae develop over a period of 9 to 18 days, feeding exclusively on milkweeds, and then pupate into a chrysalis before emerging 6 to 14 days later as an adult butterfly. There are multiple generations of monarchs produced during the breeding season, with most adult butterflies living approximately two to five weeks; overwintering adults enter reproductive suspension and live six to nine months. In many regions where monarchs are present, monarchs breed year-round. Individual monarchs in temperate climates, such as eastern and western North America, undergo long-distance migration, and live for an extended period. In the fall, in both eastern and western North America, monarchs begin migrating to their respective overwintering sites. This migration can take monarchs distances of over 3,000 kilometers and last for over two months. In early spring (February-March), surviving monarchs break diapause and mate at the overwintering sites before dispersing. The same individuals that undertook the initial southward migration begin flying back through the breeding grounds and their offspring start the cycle of generational migration over again (USFWS, n.d. - b). Monarchs can be found in PA from late April to early October and are more prevalent in the western half of the state. Monarchs can be found in a variety of habitats that contain milkweed plants and nectar sources. Monarchs are in decline primarily due to declining milkweed availability (USDA-NRCS, 2020).

3.4.3.2 *Pennsylvania Threatened and Endangered Species*

The PA Natural Diversity Index (PNDI) Conservation Explorer website was consulted by USACE to identify state and federally listed species potentially occurring in the project area. The PNDI system did not identify any known effects to threatened, endangered, or special concern species and resources within the project area, therefore; no further review was required (PADCNr, 2024c; Appendix H of the Master Plan).

3.4.3.3 *Other Protected Species*

Bald eagles (*Haliaeetus leucocephalus*), a previously federally and state-listed endangered species, were removed from the federal list in August 2007 and PA's list in 2013. Although this species is not listed as an endangered or threatened species, it is protected under the Bald and Golden Eagle Protection Act, as noted by the USFWS IPaC system. No bald eagle nests are mapped in the vicinity of the project area (USFWS, 2024c). According to Cornell Lab of Ornithology's eBird system (2024), a bald eagle was sited at Aylesworth Creek Lake in 2019.

3.4.3.4 *Invasive and Nuisance Species*

Invasive species are defined as non-native species whose introduction into an ecosystem is likely to cause environmental, human, or economic harm. Non-native species may not be

affected by existing predators, disease, or other limiting factors in their introduced range and therefore may thrive and outcompete native species. Non-native invasive species are therefore often difficult and expensive to control. No aquatic invasive species are documented within the reservoir. Some of the invasive and nuisance species found at the project area are described in the paragraphs below.

Most of the project lands, except those used for project operations and for recreation at Aylesworth Park, are densely wooded areas with little disturbance which minimizes the occurrence of invasive plant species. Project lands associated with project operations are routinely managed with mowing and spraying as needed to maintain the flood risk management project. Common non-native invasive plant species such as Japanese knotweed (*Polygonum cuspidatum*) have been observed on project lands. Other invasive plant species may exist at the project site, but none are actively managed by dam staff.

Currently, the project area has few problems with invasive insect pests; however, invasive insects have caused damage in the past and are likely to cause damage in the future. The emerald ash borer (*Agrilus planipennis*), for example, was destructive for many years in the project area before the host species' (*Fraxinus spp.*) populations became too low to support emerald ash borer populations. Spotted lanternfly (*Lycorma delicatula*) is another invasive insect of concern in the project area. The species is native to China, Bangladesh, and Vietnam; it was found in PA in 2014 and has since spread to 51 counties, all of which are under a state-imposed quarantine. The quarantine means precautions must be taken by residents and businesses to prevent the spread of spotted lanternfly. For example, spotted lanternfly can be easily spread by attaching to vehicles or equipment so one quarantine measure includes inspecting vehicles and equipment before being transported. Lackawanna County is included in the quarantine zone (PSU Extension, 2024). Finally, another potential invasive insect of concern could be the hemlock wooly adelgid (*Adelges tsugae*). The adelgid's feed on the sap of the eastern hemlock and interfere with the tree's use of nutrients causing needle drop, branch dieback, and tree mortality. By the end of 2023, this invasive species was found in all 67 PA counties (PADCNr, 2024b).

Both invasive and native nuisance bird species are present in the project area. The European starling (*Sturnus vulgaris*) was introduced to Central Park, New York City in 1890 and is now a common resident of both urban and rural areas in the United States. European starlings outcompete native cavity nesting species by evicting birds occupying a cavity and using it for their own nests (USDA - APHIS, 2017). Starlings are present in the project area but are not actively managed.

Canada geese (*Branta canadensis*) are common along both North American coastlines and throughout the central and lower United States and may exist in resident or migratory populations. Large populations of resident Canada geese can become a nuisance for many reasons, including causing damage to lawns, marshes, and cropland through overgrazing (USDA - APHIS, 2016). When the geese population becomes too large, there are concerns of geese causing elevated *Escherichia coli* (*E. coli*) levels in the lake. Canada geese have been found in the project area.

Biological resources would not be affected by the newly established land and water use classifications at the Aylesworth Creek Lake Project, which consists of an administrative

action. Future projects that arise from the master planning process or are independently pursued would require separate NEPA analyses of effects to biological resources.

3.5 LAND USE AND RECREATION

A large portion of the Aylesworth Creek Lake Project lands are leased to Lackawanna County for the operation of Aylesworth Park. The park was created in 1970 as a result of the USACE Aylesworth Creek Lake Flood Risk Management Project. The park was previously operated and maintained by the Aylesworth Creek Reservoir Park Authority, a volunteer organization formed by the boroughs of Jermyn and Archbald. In 2006, the USACE and Lackawanna County entered into a 25-year lease agreement that included approximately 182.76 acres of the total 252.9 acres at the Aylesworth Creek Lake Project. The lease area does not include Mayfield Dike and the area around the dike. The park is managed and maintained by Lackawanna County Parks and Recreation which currently has two full time staff dedicated to the stewardship of Aylesworth Park. Most of the park features are located around the lake and the remainder of the leased area is forested lands that can be used for passive recreation. Features of the park include the park offices connected to a pavilion and restrooms, a playground, picnic tables and grills, a beach on Aylesworth Creek Lake, as well as a multipurpose field. The park allows fishing and swimming in the lake as well as non-motorized boating such as kayaking. The lake is stocked with fish twice a year by PFBC. Hunting is prohibited in Lackawanna County parks. Additionally, the recreation area includes parking areas and open grass space for picnics or gatherings. There is also a trail around the lake and trails can be found throughout the site. All recreation is open year round. Additionally, the USACE owned property, excluding restricted areas around the top of the dam and spillway, is used by the public for a variety of passive recreation such as hiking and nature watching.

Lackawanna County Parks and Recreation has new leadership and has expanded their recreation goals for Aylesworth Park since the inception of the 2011 Park Master Plan. The County hopes to update the 2011 Park Master Plan through public engagement and expanding recreation options at Aylesworth Park. Currently, the park is undergoing an ADA compliance review with the goal of improving ADA accessibility throughout the park. Additionally, changes to and expansion of recreation areas are being considered throughout the county's leased area at the Aylesworth Creek Lake Project. There is a possibility that the County could re-develop portions of the park or add additional recreation spaces in coordination with USACE in the future. A portion of the County's leased area is currently underutilized and is slated for potential future recreation expansion, as noted in this 2025 Master Plan. Communication is ongoing between Lackawanna County and the USACE regarding the potential expansion of recreation at Aylesworth Park.

According to USACE's Visitor Estimation and Reporting Systems (VERS), during the period between October 2018 and September 2023, there were over 200,000 visitors to the Aylesworth Creek Lake property, with its heaviest visitation during the summer months and specifically the month of July. From Fiscal Year (FY) 2019 to FY 2023, there was a steady number of visitors each year, with an average of over 46,000 visitors per year. Aylesworth Creek Lake saw its lowest visitation in FY 2020, a timeframe that included the height of the COVID-19 pandemic. Aylesworth Park does not have camping; therefore, all users are considered day use visitors.

Changes to visitation patterns resulting from any projects that arise from the 2025 Master Plan may lead to effects on land use and recreation, but those effects fall outside the scope of this EA and would require a separate NEPA analysis.

3.6 AIR QUALITY

Aylesworth Creek Lake is in Lackawanna County which is in attainment for all criteria pollutants. Lackawanna County was in non-attainment for 1-Hour and 8-Hour Ozone until it was redesignated to maintenance status in 2004 and 2006, respectively (USEPA, 2024b). Since the Proposed Action is an administrative action and does not include construction, an analysis to determine the Proposed Action's compliance with the Clean Air Act's General Conformity Rule does not apply. Implementation of future master planning projects may generate temporary emissions from construction activities, including particulate matter and other criteria pollutants. Future development and increased recreational opportunities may also generate increased visitation and corresponding vehicle emissions. These effects are outside the scope of this EA and will be evaluated under future EAs as funding becomes available to implement the future master planning projects.

3.7 GREENHOUSE GASES AND CLIMATE

Aylesworth Creek Lake falls within the National Oceanic and Atmospheric Administration (NOAA) Climate Division 3606 – Upper Susquehanna (NOAA, n.d.). This area is characterized by a temperate climate, with average annual temperatures between 40- and 59-degrees Fahrenheit and an average annual precipitation of 38.26 inches. The greatest monthly precipitation occurs from June through September. Most snowfall in the area occurs between December and March, with the area receiving on average 45 inches of snowfall a year (U.S. Climate Data, 2024). Since the Proposed Action is an administrative action and does not include construction, the Proposed Action would not have any greenhouse gas emissions. Potential greenhouse gas emissions and climate effects associated with the implementation of future master planning projects will be evaluated in future EAs associated with project development and are outside of the scope of this EA.

3.8 GEOLOGY AND TOPOGRAPHY

Lackawanna County is situated in northeastern PA, with the most prominent topographic features being the two nearly parallel mountain ranges that traverse the county in a southwest to northeast direction, forming the valley area. The Lackawanna River flows through the valley between the two mountains. The slopes of both mountain ranges are generally 20 percent or greater; whereas, the rest of the county is fairly uniform (Lackawanna County, 2024). Aylesworth Creek Lake lies within the Appalachian Mountain section of the Ridge and Valley geologic province. The area, known as the Anthracite Coal Region, is oriented in a southwest-northeast direction and contains vast beds of anthracite coal. The main rock type is fine to coarse-grained sandstone and conglomerate with siltstone and shale (PADCNr, n.d.).

The establishment of land and water use classifications under the Proposed Action would not affect geology or topography. Construction activities associated with implementation of proposed future projects will be evaluated for effects to geology and topography in future EAs specific to individual development projects.

3.9 GROUNDWATER

The establishment of land and water use classifications will not adversely affect the quality or availability of groundwater. Assessment of future master planning project's water use would be performed during detailed project-specific planning.

3.10 NOISE

The project area is in a physical setting characterized as rural. In rural areas, most noise comes from transportation, farming operations, and other miscellaneous human and animal sources (Engineering Toolbox, n.d.). The establishment of land and water use classifications under the Proposed Action would not change the existing noise environment. Assessment of any future master planning project's impact on noise would be performed during detailed project-specific planning.

3.11 CULTURAL RESOURCES

One cultural resources survey has been conducted within the Aylesworth Creek Lake project area. In 2010, the Louis Berger Group, Inc. conducted a combined Phase I and II archaeological survey for the installation of a 500-kilovolt transmission line in Lackawanna and Wayne Counties. Only a small portion of the surveyed areas was within the Aylesworth Creek Lake project area, and no sites were identified.

Three cultural resources have been identified within or adjacent to the project area (Table 3-7). One has been determined eligible for the NRHP, while one has been recommended not eligible. The third resource has not been evaluated for listing in the NRHP.

Table 3-3. Recorded Cultural Resources at Aylesworth Creek Lake

Resource Name	Pennsylvania Historical and Museum Commission (PHMC) No.	NRHP Eligibility	Resource Type	Description
Aylesworth Creek Dam Complex	N/A	Not evaluated	Above-ground district	An earthen embankment and appurtenant features constructed for flood risk management.
Delaware & Hudson Canal Company Gravity Railroad	2010RE00087	Eligible	Above-ground district	An 1829-1899 railroad eligible under Criterion A for its association with the development of Lackawanna County.
Saint Michael's Greek Catholic Cemetery	1992RE00170	Not eligible	Above-ground site	An early twentieth century cemetery with approximately 75-100 graves.

Although the landscape around the project area has been extensively impacted by mining operations and dam creation, the potential for unidentified cultural resources remains moderate to high in undisturbed, low to moderately sloped areas within the Aylesworth Creek floodplain. A review of historic aerial images taken between 1939 and 1960 indicates that the

most extensive disturbances caused by mining operations took place in the upland regions north and south of the project area. Additionally, a comparison with the PA State Historic and Archaeological Resource Exchange (PA-SHARE) statewide pre contact probability model indicates that areas within and adjacent to the Aylesworth Creek floodplain have a moderate to high potential for containing unidentified cultural resources.

Consultation letters under Section 106 of the NHPA regarding this Master Plan update were sent to the PA SHPO and four tribal nations; the Delaware Nation, the Delaware Tribe of Indians, the Onondaga Nation, and the Seneca-Cayuga Nation of Indians, on November 12, 2024. The PA SHPO responded on December 10, 2024, that the proposed Master Plan will have no effect on above ground or archaeological resources. Coordination correspondence is included in Appendix H of the Master Plan.

If specific project actions are proposed in the future, they will be subject to consultation and review under Section 106 of the NHPA.

3.12 UTILITIES

The establishment of land and water use classifications under the Proposed Action would not affect utilities. An assessment of utilities associated with any future master planning projects would be performed during detailed project-specific planning.

3.13 HAZARDOUS MATERIALS AND WASTES

According to EPA's Envirofacts database, no known contaminated sites occur at the project area. Additionally, no Superfund or brownfields sites were identified within two miles of the project area from which large quantities of hazardous materials would have escaped uncontrolled into the environment (USEPA, 2024a). The establishment of land and water use classifications under the Proposed Action would not affect hazardous materials and wastes. An assessment of hazardous materials and wastes associated with any future master planning projects would be performed during detailed project-specific planning.

3.14 DEMOGRAPHICS

According to the U.S. Census Bureau (USCB), the 2022 population for the six counties surrounding Aylesworth Creek Lake (Lackawanna County, Luzerne County, Wyoming, County, Susquehanna County, Wayne County, and Monroe County, PA) was 826,098, up from 824,838 in 2010 (USCB, 2022). The 2022 poverty rate in the region was 12.6 percent, slightly higher than the 11.8 percent poverty rate across PA. The largest employment sector in the region is the educational services, health care, and social assistance industry. The Proposed Action would not result in any appreciable effects to the local or regional demographic environment. Potential effects to socioeconomics arising from any future projects would be studied during detailed project-specific planning.

3.15 TRAFFIC AND TRANSPORTATION

The establishment of land and water use classifications would have no impact on traffic and transportation. Any temporary effects from increased truck traffic during construction of future master planning projects would be assessed during detailed project-specific planning.

4 CUMULATIVE EFFECTS

Cumulative effects may accrue over time and/or in conjunction with other pre-existing effects from other activities in the area; therefore, pre-existing effects and multiple smaller effects should also be considered. Cumulative effects can result from individually minor, but collectively significant, actions taking place over time. As noted above, cumulative effects are most likely to arise when a Proposed Action is related to other actions that could occur in the same location and at a similar time. The geographic scope or region of the cumulative effects analysis includes the county the project is in (Lackawanna County) and its surrounding counties (Luzerne, Wyoming, Susquehanna, Wayne, and Monroe counties). The temporal scope is 15 to 25-year timeframe.

The Proposed Action focuses solely on the implementation of the proposed land and water use classifications presented in the 2025 Master Plan. The Proposed Action is an administrative update and does not involve the construction of any physical projects. This EA does not consider implementation of specific projects identified within the 2025 Master Plan during the master planning process, as those projects are conceptual in nature, nor does it consider specific future development opportunities. Projects identified during the master planning process within the 2025 Master Plan would require separate NEPA analyses including an evaluation of cumulative effects prior to construction.

4.1 CURRENT AND REASONABLY FORESEEABLE PROJECTS WITHIN THE ROI

This section identifies reasonably foreseeable projects that may have cumulative, incremental effects in conjunction with the Proposed Action. Beyond the future master planning projects identified in the 2025 Master Plan, no other projects were identified within or near the Project area that would lead to cumulative effects.

4.2 ANALYSIS OF CUMULATIVE EFFECTS

Effects on each resource were analyzed according to how other actions and projects within the ROI might be affected by the No Action Alternative and Proposed Action. Effects can vary in degree or magnitude from a slightly noticeable change to a total change in the environment. As discussed above, minimal growth and development are expected to continue near Aylesworth Creek Lake. No cumulative effects from this administrative action on resources are expected when added to the effects of activities associated with the Proposed Action or No Action Alternative or from the potential projects identified in the 2025 Master Plan.

5 IRRETRIEVABLE AND IRREVERSIBLE COMMITMENT OF RESOURCES

NEPA requires that federal agencies identify "any irreversible and irretrievable commitments of resources which would be involved in the Proposed Action should it be implemented" (42 U.S. Code § 4332). An irreversible commitment of resources occurs when the primary or secondary effects of an action result in the loss of future options for a resource. Usually, this is when the action affects the use of a nonrenewable resource, or it affects a renewable resource that takes a long time to renew. The effects of this project from the reclassification of land or future master planning projects centered on recreation enhancement and development would not be considered an irreversible commitment because much of the land could be converted back to prior use at a future date. An irretrievable commitment of resources is typically associated with the loss of productivity or use of a natural resource (e.g., loss of production or harvest). No irreversible or irretrievable effects are anticipated from implementation of the Proposed Action.

6 SUMMARY

Table 6-1 presents a summary of the environmental consequences by alternative analyzed in this EA. As discussed in Chapter 4, selection of the Proposed Action Alternative would not be anticipated to cause cumulative adverse effects. Table 6-2 presents conservation measures recommended within Chapter 3.

Table 6-1. Summary of Potential Environmental Effects

Alternative	Effect Type*		
	<i>Beneficial</i>	<i>None/ Negligible</i>	<i>Negative</i>
Water Resources			
No Action Alternative	-	X	-
Proposed Action Alternative	-	X	-
Soil Resources			
No Action Alternative	-	X	-
Proposed Action Alternative	-	X	-
Biological Resources			
No Action Alternative	-	X	-
Proposed Action Alternative	-	X	-
Land Use and Recreation			
No Action Alternative	-	X	-
Proposed Action Alternative	-	X	-
Air Quality			
No Action Alternative	-	X	-
Proposed Action Alternative	-	X	-
Greenhouse Gases and Climate			
No Action Alternative	-	X	-
Proposed Action Alternative	-	X	-
Geology and Topography			
No Action Alternative	-	X	-
Proposed Action Alternative	-	X	-
Groundwater			
No Action Alternative	-	X	-
Proposed Action Alternative	-	X	-
Noise			
No Action Alternative	-	X	-
Proposed Action Alternative	-	X	-
Cultural Resources			
No Action Alternative	-	X	-
Proposed Action Alternative	-	X	-
Utilities			
No Action Alternative	-	X	-

Alternative	Effect Type*		
	<i>Beneficial</i>	<i>None/ Negligible</i>	<i>Negative</i>
Proposed Action Alternative	--	x	-
Hazardous Materials and Wastes			
No Action Alternative	-	x	-
Proposed Action Alternative	-	x	-
Demographics			
No Action Alternative		x	-
Proposed Action Alternative	-	x	-
Traffic and Transportation			
No Action Alternative	-	x	-
Proposed Action Alternative	-	x	-

*Effects on resource categories are based on applicable land classifications changes. Section 3 describes anticipated effects from changes to land classification under the Proposed Action alternative.

Table 6-2. Conservation Measures for Future Master Planning Projects

Measure	Resource Protected
Construction and operations of future master planning projects would use BMPs associated with prevention of erosion and control of stormwater runoff. This includes obtaining a NPDES permit for projects involving earth disturbances exceeding one acre.	Water and Soil
USACE would consider the presence of the 100-year floodplain in design and siting future master planning projects within floodplain areas.	Water
USACE would consider the potential for erosion and occurrence of Prime Farmland soils in design and siting future master planning projects.	Soil
Construction and operations of future master planning projects would use BMPs associated with the prevention of effects to sensitive species recommended by resource agencies during future environmental review of projects proposed in the 2025 Master Plan.	Biological
Effects to sensitive receptors (e.g., adjacent residences and campers) would be minimized as these activities would be restricted to the daytime and would be temporary in nature	Noise Environment
If any human remains or cultural items are found within or adjacent to Aylesworth Creek Lake that may be demonstrably related to one of the recognized tribal entities, then Public Law 101-601, the Native American Grave Protection and Repatriation Act, would be implemented and the affected group contacted.	Cultural Resources

Table 6-3 summarizes the compliance of the proposed alternative with environmental protection statutes and other environmental regulations. Based on the evaluation of project effects described in Section 3, there are no significant effects from the proposed action, and a FONSI has been prepared.

Table 6-3. Compliance of the Proposed Action with Environmental Protection Statutes and Other Environmental Requirements

Federal Statutes	Level of Compliance
Anadromous Fish Conservation Act	N/A
Archeological and Historic Preservation Act	Full
Archeological Resources Protection Act	Full
Bald and Golden Eagle Act	Full
Clean Air Act	Full
Clean Water Act	Full
Comprehensive Environmental Response, Compensation and Liability Act	N/A
Endangered Species Act	Full
Farmland Protection Policy Act	Full
Federal Water Project Recreation Act	N/A
Fish and Wildlife Coordination Act	Full
Flood Control Act	Full
Land and Water Conservation Fund Act	N/A
Migratory Bird Treaty Act	Full
National Environmental Policy Act	Pending
National Historic Preservation Act	Full
Noise Control Act	Full
Resource Conservation and Recovery Act	N/A
Rivers and Harbors Act	N/A
Safe Drinking Water Act	N/A
Solid Waste Disposal Act	N/A
Toxic Substances Control Act	N/A
Water Resources Planning Act	N/A
Watershed Protection and Flood Prevention Act	Full
Wetlands Conservation Act	N/A
Wild and Scenic Rivers Act	N/A
Executive Orders (EOs), Memoranda, etc.	
Protection and Enhancement of Environmental Quality (EO 11514)	Full
Protection and Enhancement of Cultural Environment (EO 11593)	Full
Floodplain Management (EO 11988)	Full
Protection of Wetlands (EO 11990)	Full
Protection of Children from Health Risks and Safety Risks (EO 13045)	Full
Consultation and Coordination with Indian Tribal Governments (EO 13175)	Full
Indian Sacred Sites (EO 13007)	N/A
Invasive Species (EO 13112)	Full
Migratory Birds (EO 13186)	Full
Facilitation of Cooperative Conservation (EO 13175)	N/A
Chesapeake Bay Protection and Restoration (EO 13508)	Full

7 REFERENCES

- Cornell Lab of Ornithology. (2024). *Aylesworth Park, Lackawanna County, Pennsylvania*. Retrieved August 14, 2024, from <https://ebird.org/hotspot/L7575444>
- Engineering Toolbox. (n.d.). *Outdoor Ambient Sound Levels*. Retrieved April 29, 2024, from https://www.engineeringtoolbox.com/outdoor-noise-d_62.html
- Federal Register. (2024). *Endangered and Threatened Wildlife and Plants; Removal of Northeastern Bulrush From the Federal List of Endangered and Threatened Plants*. Tool. Retrieved October 30, 2024, from <https://www.federalregister.gov/documents/2024/07/31/2024-16417/endangered-and-threatened-wildlife-and-plants-removal-of-northeastern-bulrush-from-the-federal-list#citation-1-p61389>
- Lackawanna County. (2024). *About Lackawanna County*. Retrieved May 7, 2024, from https://www.lackawannacounty.org/about/about_lackawanna_county/index.php
- National Oceanic and Atmospheric Administration (NOAA) National Centers for Environmental Information. (n.d.). U.S. Climate Divisions. Retrieved May 14, 2024, from <https://www.ncdc.noaa.gov/monitoring-references/maps/us-climate-divisions.php>
- Pennsylvania Department of Conservation and Natural Resources (PADCNR). (2024a). *Forests and Trees*. Retrieved May 7, 2024, from <https://www.dcnr.pa.gov/Conservation/ForestsAndTrees/Pages/default.aspx>
- PADCNR. (2024b). *Hemlock Woolly Adelgid*. Retrieved August 12, 2024, from <https://www.dcnr.pa.gov/Conservation/ForestsAndTrees/InsectsAndDiseases/HemlockWoollyAdelgid/Pages/default.aspx>
- PADCNR. (2024c). *Pennsylvania Natural Heritage Program, Pennsylvania Conservation Explorer*. Retrieved April 29, 2024, from <https://conservationexplorer.dcnr.pa.gov/>
- PADCNR. (2024d). *Pinchot State Forest*. Retrieved May 7, 2024, from <https://www.dcnr.pa.gov/StateForests/FindAForest/Pinchot/Pages/default.aspx>
- PADCNR. (n.d.). *Physiographic Provinces of Pennsylvania*. Retrieved May 7, 2024, from https://elibrary.dcnr.pa.gov/PDFProvider.ashx?action=PDFStream&docID=1752507&chksum=&revision=0&docName=Map13_PhysProvs_Pa&nativeExt=pdf&PromptToSave=False&Size=810216&ViewerMode=2&overlay=0
- Pennsylvania Department of Environmental Protection (PADEP). (2005). *Aylesworth Creek Watershed TMDL*. Retrieved May 14, 2024, from https://www.dep.state.pa.us/dep/deputate/watermgmt/wqp/wqstandards/TMDL/AylesworthCrTMDL_FINAL-032505.pdf
- PADEP. (2024a). *2024 Pennsylvania Integrated Water Quality Report*. Retrieved December 3, 2024, from <https://experience.arcgis.com/experience/368a9200df5e43eb8267dcbdb34a0ccc>

Penn State University (PSU). (2024). *Pennsylvania Flood Risk Tool*. Retrieved August 12, 2024, from <https://pafloodrisk.psu.edu/>

PSU Extension. (2024). *Spotted Lanternfly*. Retrieved July 23, 2024, from <https://extension.psu.edu/spotted-lanternfly>

United States Army Corps of Engineers (USACE). (1988). Engineering Regulation 200-2, Procedures for Implementing NEPA. https://www.publications.usace.army.mil/Portals/76/Publications/EngineerRegulations/ER_200-2-2.pdf

United States Army Corps of Engineers, Baltimore District (USACE, Baltimore District). 1970. Aylesworth Creek Lake Operation and Maintenance Manual. PDF.

USACE, Baltimore District. 1973. Aylesworth Creek Lake Master Plan. PDF.

USACE, Baltimore District. (2024). *Water Quality DASLER Data Report 2000-2024*. PDF.

U.S. Census Bureau (USCB). (2022). *American Community Survey 5-year Estimates, Lackawanna County, Luzerne County, Wyoming County, Susquehanna County, Wayne County, Monroe County, and Pennsylvania*. Retrieved May 14, 2024, from <https://data.census.gov>

U.S. Climate Data. (2024). *Pittston – Pennsylvania*. Retrieved August 6, 2024, from <https://www.usclimatedata.com/climate/pittston/pennsylvania/united-states/uspa3151>

United States Department of Agriculture (USDA), Animal & Plant Health Inspection Service Wildlife Services (APHIS). (2016). *Geese, Ducks, Coots, Wildlife Damage Management Technical Series*. Retrieved July 23, 2024, from <https://www.aphis.usda.gov/sites/default/files/GeeseDucksCoots-WDM-Technical-Series.pdf>

USDA - APHIS. (2017). *European Starlings, Wildlife Damage Management Technical Series*. Retrieved July 23, 2024, from https://www.aphis.usda.gov/wildlife_damage/reports/Wildlife%20Damage%20Management%20Technical%20Series/European-Starlings-WDM-Technical-Series.pdf

USDA - U.S. Forest Service (USFS). (2017). *Pennsylvania Forests 2014*. Retrieved August 13, 2024, from https://www.fs.usda.gov/nrs/pubs/rb/rb_nrs111.pdf

USDA - USFS. (2020). *Forests of Pennsylvania, 2020*. Retrieved May 7, 2024, from https://www.fs.usda.gov/nrs/pubs/ru/ru_fs345.pdf

USDA - Natural Resources Conservation Service (NRCS) (2024). *Web Soil Survey*. Retrieved August 6, 2024, from <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>

USDA, Natural Resources Conservation Service (NRCS) (2020). *Monarch Butterfly (Danaus Plexippus Plexippus) Landowner Guide*. Retrieved October 30, 2024, from <https://www.fws.gov/media/monarch-butterfly-landowner-guide>

USEPA. 2024a. *EnviroMapper for Enviro Facts*. Retrieved November 12, 2024, from <https://enviro.epa.gov/enviro/em4ef.home>

- USEPA. 2024b. Green Book - Pennsylvania Nonattainment/Maintenance Status for Each County by Year for All Criteria Pollutants. Retrieved April 29, 2024, from https://www3.epa.gov/airquality/greenbook/anayo_pa.html
- USAEPA. 2024c. My Waterway. Retrieved December 3, 2024, from <https://mywaterway.epa.gov/community/>
- United States Fish & Wildlife Service (USFWS). (2024a). *Information for Planning and Consultation (IPaC)*. Retrieved June 24, 2025, from <https://ipac.ecosphere.fws.gov/>
- USFWS. (2024b). *National Wetlands Inventory (NWI)*. Retrieved June 6, 2024, from <https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/>
- USFWS. (2024c). *Pennsylvania Bald Eagle Nesting Sites*. Accessed August 14, 2024. <https://www.arcgis.com/home/item.html?id=87ac96536654495b9f4041d81f75d7a0>
- USFWS. (n.d. - a). *Indiana Bat*. Retrieved August 8, 2024, from <https://www.fws.gov/species/indiana-bat-myotis-sodalis>
- USFWS. (n.d. - b). *Monarchs*. Retrieved August 8, 2024, from <https://fws.gov/initiative/pollinators/monarchs>
- USFWS. (n.d. - c). *Northeastern Bulrush*. Retrieved August 8, 2024, from <https://www.fws.gov/species/northeastern-bulrush-scirpus-ancistrochaetus>
- USFWS. (n.d. - d). *Northern Long-eared Bat*. Retrieved August 8, 2024, from <https://www.fws.gov/species/northern-long-eared-bat-myotis-septentrionalis>

APPENDIX H: NEPA ENVIRONMENTAL COORDINATION

1. PROJECT INFORMATION

Project Name: **Aylesworth Lake Master Plan Update**

Date of Review: **4/29/2024 01:47:53 PM**

Project Category: **Recreation, Pond/lake maintenance (drawdown, plant control, dredging, dam repair)**

Project Area: **252.33 acres**

County(s): **Lackawanna**

Township/Municipality(s): **ARCHBALD; MAYFIELD**

ZIP Code:

Quadrangle Name(s): **CARBONDALE**

Watersheds HUC 8: **Upper Susquehanna-Lackawanna**

Watersheds HUC 12: **Rush Brook-Lackawanna River**

Decimal Degrees: **41.523147, -75.526095**

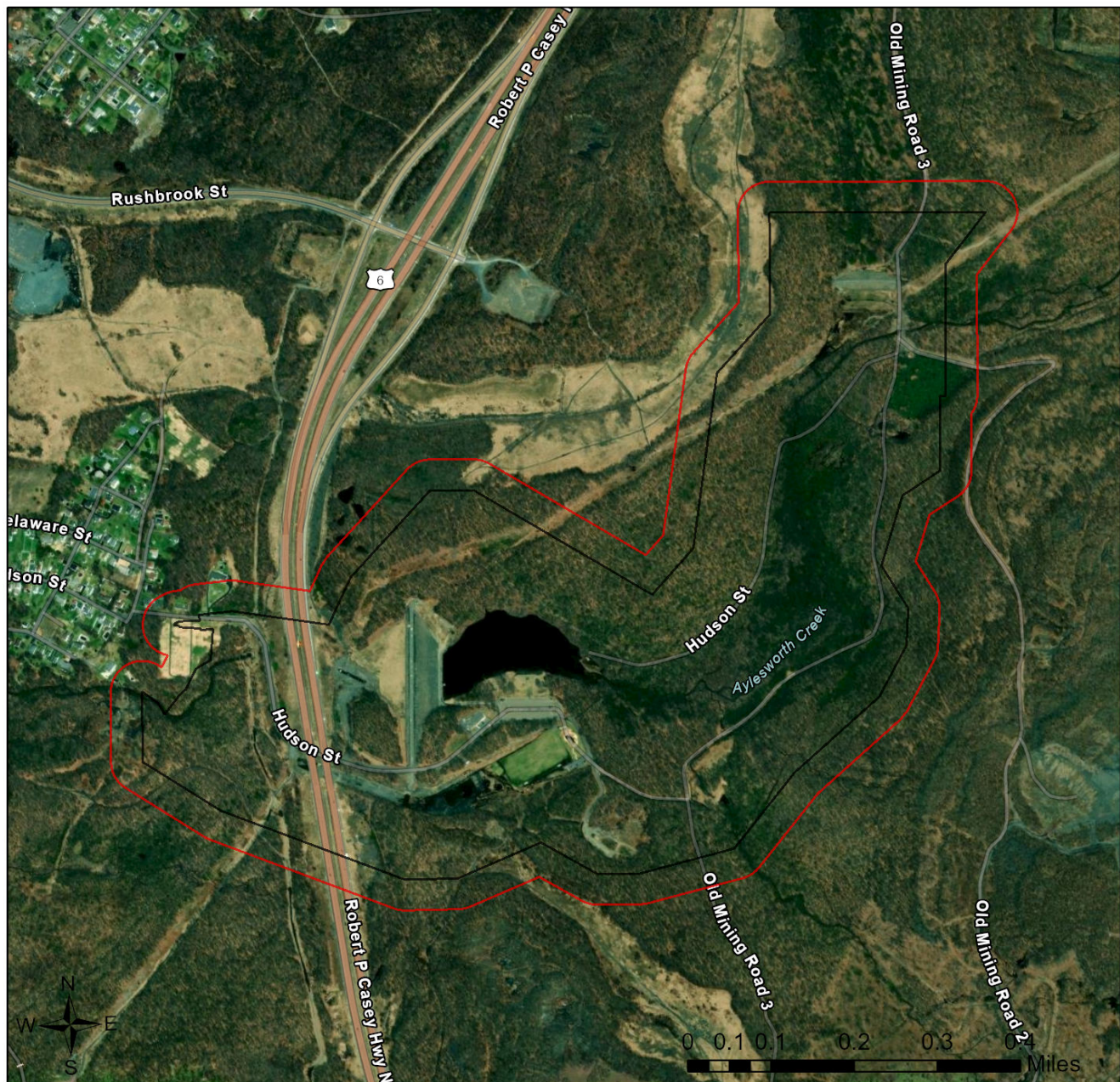
Degrees Minutes Seconds: **41° 31' 23.3280" N, 75° 31' 33.9434" W**

2. SEARCH RESULTS

Agency	Results	Response
PA Game Commission	No Known Impact	No Further Review Required
PA Department of Conservation and Natural Resources	No Known Impact	No Further Review Required
PA Fish and Boat Commission	No Known Impact	No Further Review Required
U.S. Fish and Wildlife Service	No Known Impact	No Further Review Required

As summarized above, Pennsylvania Natural Diversity Inventory (PNDI) records indicate no known impacts to threatened and endangered species and/or special concern species and resources within the project area. Therefore, based on the information you provided, no further coordination is required with the jurisdictional agencies. This response does not reflect potential agency concerns regarding impacts to other ecological resources, such as wetlands.

Aylesworth Lake Master Plan Update

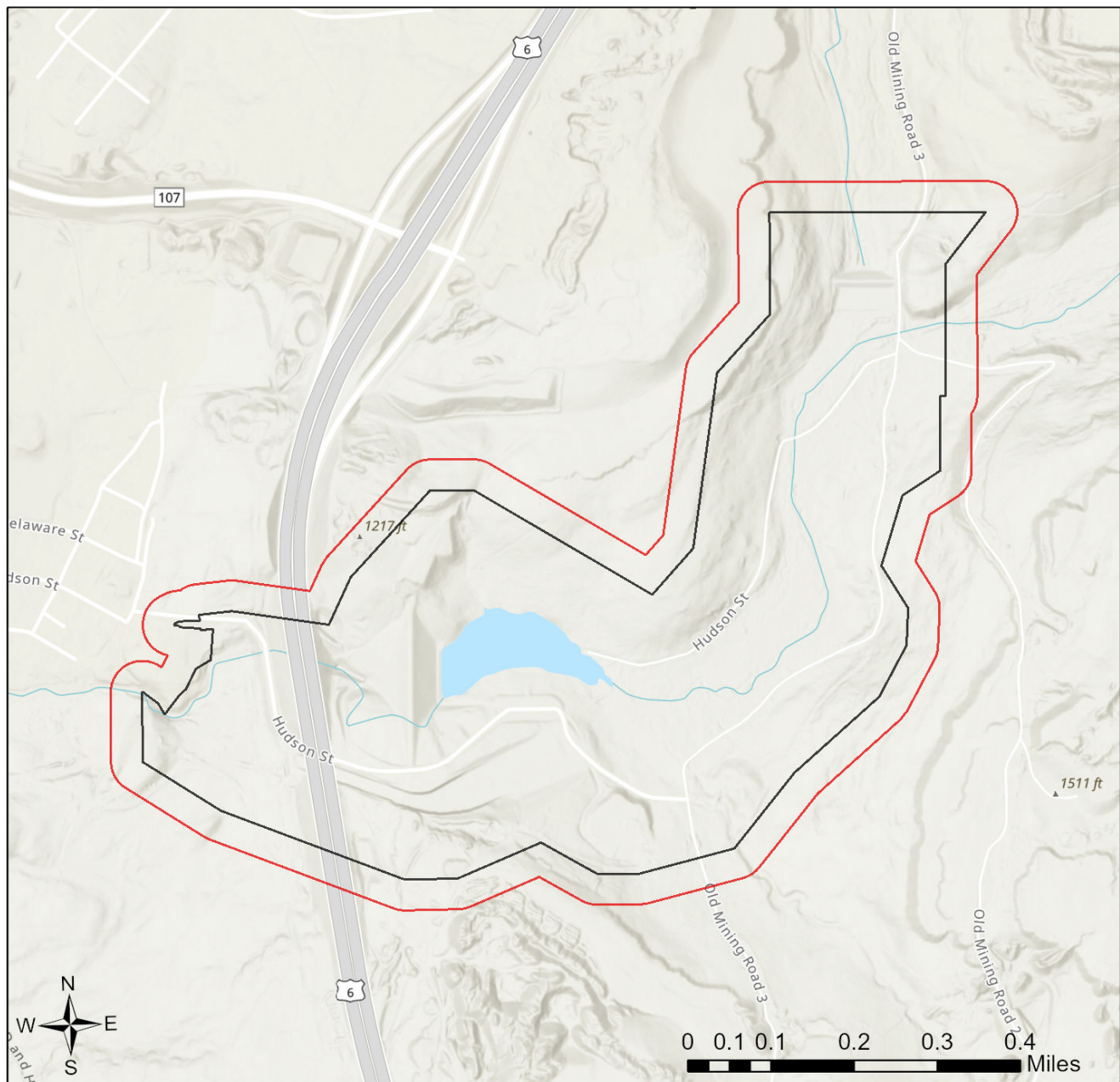




- Buffered Project Boundary
- Project Boundary



Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

Aylesworth Lake Master Plan Update



-  Buffered Project Boundary
-  Project Boundary



Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

RESPONSE TO QUESTION(S) ASKED

Q1: Is tree removal, tree cutting or forest clearing necessary to implement all aspects of this project?

Your answer is: No

Q2: How many acres of woodland, forest, forested fencerows and trees will be cut, cleared, removed, disturbed or flooded (inundated) as a result of carrying out all aspects or phases of this project? [Round acreages UP to the nearest acre (e.g., 0.2 acres = 1 acre).]

Your answer is: zero acres

3. AGENCY COMMENTS

Regardless of whether a DEP permit is necessary for this proposed project, any potential impacts to threatened and endangered species and/or special concern species and resources must be resolved with the appropriate jurisdictional agency. In some cases, a permit or authorization from the jurisdictional agency may be needed if adverse impacts to these species and habitats cannot be avoided.

These agency determinations and responses are **valid for two years** (from the date of the review), and are based on the project information that was provided, including the exact project location; the project type, description, and features; and any responses to questions that were generated during this search. If any of the following change: 1) project location, 2) project size or configuration, 3) project type, or 4) responses to the questions that were asked during the online review, the results of this review are not valid, and the review must be searched again via the PNDI Environmental Review Tool and resubmitted to the jurisdictional agencies. The PNDI tool is a primary screening tool, and a desktop review may reveal more or fewer impacts than what is listed on this PNDI receipt. The jurisdictional agencies **strongly advise against** conducting surveys for the species listed on the receipt prior to consultation with the agencies.

PA Game Commission

RESPONSE:

No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

PA Department of Conservation and Natural Resources

RESPONSE:

No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

PA Fish and Boat Commission

RESPONSE:

No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

U.S. Fish and Wildlife Service

RESPONSE:

No impacts to **federally** listed or proposed species are anticipated. Therefore, no further consultation/coordination under the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq. is required. Because no take of federally listed species is anticipated, none is authorized. This response does not reflect potential Fish and Wildlife Service concerns under the Fish and Wildlife Coordination Act or other authorities.

4. DEP INFORMATION

The Pa Department of Environmental Protection (DEP) requires that a signed copy of this receipt, along with any required documentation from jurisdictional agencies concerning resolution of potential impacts, be submitted with applications for permits requiring PNDI review. Two review options are available to permit applicants for handling PNDI coordination in conjunction with DEP's permit review process involving either T&E Species or species of special concern. Under sequential review, the permit applicant performs a PNDI screening and completes all coordination with the appropriate jurisdictional agencies prior to submitting the permit application. The applicant will include with its application, both a PNDI receipt and/or a clearance letter from the jurisdictional agency if the PNDI Receipt shows a Potential Impact to a species or the applicant chooses to obtain letters directly from the jurisdictional agencies. Under concurrent review, DEP, where feasible, will allow technical review of the permit to occur concurrently with the T&E species consultation with the jurisdictional agency. The applicant must still supply a copy of the PNDI Receipt with its permit application. The PNDI Receipt should also be submitted to the appropriate agency according to directions on the PNDI Receipt. The applicant and the jurisdictional agency will work together to resolve the potential impact(s). See the DEP PNDI policy at <https://conservationexplorer.dcnr.pa.gov/content/resources>.



5. ADDITIONAL INFORMATION

The PNDI environmental review website is a preliminary screening tool. There are often delays in updating species status classifications. Because the proposed status represents the best available information regarding the conservation status of the species, state jurisdictional agency staff give the proposed statuses at least the same consideration as the current legal status. If surveys or further information reveal that a threatened and endangered and/or special concern species and resources exist in your project area, contact the appropriate jurisdictional agency/agencies immediately to identify and resolve any impacts.

For a list of species known to occur in the county where your project is located, please see the species lists by county found on the PA Natural Heritage Program (PNHP) home page (www.naturalheritage.state.pa.us). Also note that the PNDI Environmental Review Tool only contains information about species occurrences that have actually been reported to the PNHP.

6. AGENCY CONTACT INFORMATION

PA Department of Conservation and Natural Resources

Bureau of Forestry, Ecological Services Section
400 Market Street, PO Box 8552
Harrisburg, PA 17105-8552
Email: RA-HeritageReview@pa.gov

PA Fish and Boat Commission

Division of Environmental Services
595 E. Rolling Ridge Dr., Bellefonte, PA 16823
Email: RA-FBPACENOTIFY@pa.gov

U.S. Fish and Wildlife Service

Pennsylvania Field Office
Endangered Species Section
110 Radnor Rd; Suite 101
State College, PA 16801
Email: IR1_ESPenn@fws.gov
NO Faxes Please

PA Game Commission

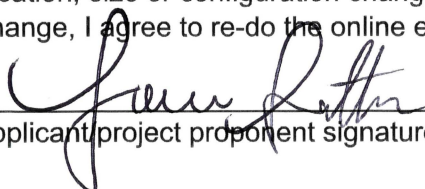
Bureau of Wildlife Management
Division of Environmental Review
2001 Elmerton Avenue, Harrisburg, PA 17110-9797
Email: RA-PGC_PNDI@pa.gov
NO Faxes Please

7. PROJECT CONTACT INFORMATION

Name: Lauren Southern
Company/Business Name: USACE - Baltimore
Address: 2 Hopkins Plaza
City, State, Zip: Baltimore, MD 21201
Phone: (443) 990 6291 Fax: ()
Email: lauren.n.mcdonald@usace.army.mil

8. CERTIFICATION

I certify that ALL of the project information contained in this receipt (including project location, project size/configuration, project type, answers to questions) is true, accurate and complete. In addition, if the project type, location, size or configuration changes, or if the answers to any questions that were asked during this online review change, I agree to re-do the online environmental review.


applicant/project proponent signature

4/3/2025
date



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Pennsylvania Ecological Services Field Office
110 Radnor Road Suite 101
State College, PA 16801-7987
Phone: (814) 234-4090 Fax: (814) 234-0748



In Reply Refer To:

06/24/2025 17:45:09 UTC

Project Code: 2025-0113321

Project Name: Aylesworth Lake Master Plan Update

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see <https://www.fws.gov/program/migratory-bird-permit/what-we-do>.

It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

- USFWS National Wildlife Refuges and Fish Hatcheries

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Pennsylvania Ecological Services Field Office
110 Radnor Road Suite 101
State College, PA 16801-7987
(814) 234-4090

PROJECT SUMMARY

Project Code: 2025-0113321
Project Name: Aylesworth Lake Master Plan Update
Project Type: Land Management Plans - NWR
Project Description: USACE Aylesworth Lake Master Plan Update. There are no specific projects associated with this master plan update, it is only the update of the master plan document. Any future projects mentioned in the master plan update will have their own NEPA and environmental evaluations.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@41.52457025,-75.52142904969236,14z>



Counties: Lackawanna County, Pennsylvania

ENDANGERED SPECIES ACT SPECIES

There is a total of 4 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered
Tricolored Bat <i>Perimyotis subflavus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10515	Proposed Endangered

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> There is proposed critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

FLOWERING PLANTS

NAME	STATUS
Northeastern Bulrush <i>Scirpus ancistrochaetus</i> Population: No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6715	Endangered

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

IPAC USER CONTACT INFORMATION

Agency: Army Corps of Engineers
Name: Grant Cunningham
Address: 2 Hopkins Plaza
Address Line 2: 10-E-27
City: Baltimore
State: MD
Zip: 21201
Email: grant.m.cunningham@usace.army.mil
Phone: 4107905628



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Pennsylvania Ecological Services Field Office
110 Radnor Road Suite 101
State College, PA 16801-7987
Phone: (814) 234-4090 Fax: (814) 234-0748



In Reply Refer To:
Project code: 2025-0113321
Project Name: Aylesworth Lake Master Plan Update

06/24/2025 17:47:23 UTC

Federal Nexus: yes
Federal Action Agency (if applicable): Army Corps of Engineers

Subject: Record of project representative's no effect determination for 'Aylesworth Lake Master Plan Update'

Dear Grant Cunningham:

This letter records your determination using the Information for Planning and Consultation (IPaC) system provided to the U.S. Fish and Wildlife Service (Service) on June 24, 2025, for 'Aylesworth Lake Master Plan Update' (here forward, Project). This project has been assigned Project Code 2025-0113321 and all future correspondence should clearly reference this number. **Please carefully review this letter.**

Ensuring Accurate Determinations When Using IPaC

The Service developed the IPaC system and associated species' determination keys in accordance with the Endangered Species Act of 1973 (ESA; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and based on a standing analysis. All information submitted by the Project proponent into IPaC must accurately represent the full scope and details of the Project.

Failure to accurately represent or implement the Project as detailed in IPaC or the **Northern Long-eared Bat and Tricolored Bat Range-wide Determination Key (Dkey)**, invalidates this letter. ***Answers to certain questions in the DKey commit the project proponent to implementation of conservation measures that must be followed for the ESA determination to remain valid.***

Determination for the Northern Long-Eared Bat and/or Tricolored Bat

Based upon your IPaC submission and a standing analysis, your project has reached the following effect determinations:

Species	Listing Status	Determination
Northern Long-eared Bat (<i>Myotis septentrionalis</i>)	Endangered	No effect

Tricolored Bat (*Perimyotis subflavus*)Proposed
Endangered

No effect

Federal agencies must consult with U.S. Fish and Wildlife Service under section 7(a)(2) of the Endangered Species Act (ESA) when an action *may affect* a listed species. Tricolored bat is proposed for listing as endangered under the ESA, but not yet listed. For actions that may affect a proposed species, agencies cannot consult, but they can *confer* under the authority of section 7(a)(4) of the ESA. Such conferences can follow the procedures for a consultation and be adopted as such if and when the proposed species is listed. Should the tricolored bat be listed, agencies must review projects that are not yet complete, or projects with ongoing effects within the tricolored bat range that previously received a NE or NLAA determination from the key to confirm that the determination is still accurate.

To make a no effect determination, the full scope of the proposed project implementation (action) should not have any effects (either positive or negative), to a federally listed species or designated critical habitat. Effects of the action are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action. (See § 402.17).

Under Section 7 of the ESA, if a federal action agency makes a no effect determination, no consultation with the Service is required (ESA §7). If a proposed Federal action may affect a listed species or designated critical habitat, formal consultation is required except when the Service concurs, in writing, that a proposed action "is not likely to adversely affect" listed species or designated critical habitat [50 CFR §402.02, 50 CFR§402.13].

Other Species and Critical Habitat that May be Present in the Action Area

The IPaC-assisted determination key for the northern long-eared bat and tricolored bat does not apply to the following ESA-protected species and/or critical habitat that also may occur in your Action area:

- Monarch Butterfly *Danaus plexippus* Proposed Threatened
- Northeastern Bulrush *Scirpus ancistrochaetus* Endangered

You may coordinate with our Office to determine whether the Action may affect the animal species listed above and, if so, how they may be affected.

Next Steps

If there are no updates on listed species, no further consultation/coordination for this project is required with respect to the species covered by this key. However, the Service recommends that project proponents re-evaluate the Project in IPaC if: 1) the scope, timing, duration, or location of the Project changes (includes any project changes or amendments); 2) new information reveals

the Project may impact (positively or negatively) federally listed species or designated critical habitat; or 3) a new species is listed, or critical habitat designated. If any of the above conditions occurs, additional coordination with the Service should take place to ensure compliance with the Act.

If you have any questions regarding this letter or need further assistance, please contact the Pennsylvania Ecological Services Field Office and reference Project Code 2025-0113321 associated with this Project.

Action Description

You provided to IPaC the following name and description for the subject Action.

1. Name

Aylesworth Lake Master Plan Update

2. Description

The following description was provided for the project 'Aylesworth Lake Master Plan Update':

USACE Aylesworth Lake Master Plan Update. There are no specific projects associated with this master plan update, it is only the update of the master plan document. Any future projects mentioned in the master plan update will have their own NEPA and environmental evaluations.

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@41.52457025,-75.52142904969236,14z>



DETERMINATION KEY RESULT

Based on the information you provided, you have determined that the Proposed Action will have no effect on the species covered by this determination key. Therefore, no consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (87 Stat. 884, as amended 16 U.S.C. 1531 *et seq.*) is required for those species.

QUALIFICATION INTERVIEW

1. Does the proposed project include, or is it reasonably certain to cause, intentional take of listed bats or any other listed species?

Note: Intentional take is defined as take that is the intended result of a project. Intentional take could refer to research, direct species management, surveys, and/or studies that include intentional handling/encountering, harassment, collection, or capturing of any individual of a federally listed threatened, endangered or proposed species?

No

2. Is the action area wholly within Zone 2 of the year-round active area for northern long-eared bat and/or tricolored bat?

Automatically answered

No

3. Does the action area intersect Zone 1 of the year-round active area for northern long-eared bat and/or tricolored bat?

Automatically answered

No

4. Does any component of the action involve leasing, construction or operation of wind turbines? Answer 'yes' if the activities considered are conducted with the intention of gathering survey information to inform the leasing, construction, or operation of wind turbines.

Note: For federal actions, answer 'yes' if the construction or operation of wind power facilities is either (1) part of the federal action or (2) would not occur but for a federal agency action (federal permit, funding, etc.).

No

5. Is the proposed action authorized, permitted, licensed, funded, or being carried out by a Federal agency in whole or in part?

Yes

6. Is the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), or Federal Transit Administration (FTA) funding or authorizing the proposed action, in whole or in part?

No

7. Are you an employee of the federal action agency or have you been officially designated in writing by the agency as its designated non-federal representative for the purposes of Endangered Species Act Section 7 informal consultation per 50 CFR § 402.08?

Note: This key may be used for federal actions and for non-federal actions to facilitate section 7 consultation and to help determine whether an incidental take permit may be needed, respectively. This question is for information purposes only.

Yes

8. Is the lead federal action agency the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC)? Is the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC) funding or authorizing the proposed action, in whole or in part?

No

9. Is the lead federal action agency the Federal Energy Regulatory Commission (FERC)?

No

10. [Semantic] Is the action area located within 0.5 miles of a known bat hibernaculum? Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.

Automatically answered

No

11. Does the action area contain any winter roosts or caves (or associated sinkholes, fissures, or other karst features), mines, rocky outcroppings, or tunnels that could provide habitat for hibernating bats?

No

12. Does the action area contain (1) talus or (2) anthropogenic or naturally formed rock shelters or crevices in rocky outcrops, rock faces or cliffs?

No

13. Will the action cause effects to a bridge?

Note: Covered bridges should be considered as bridges in this question.

No

14. Will the action result in effects to a culvert or tunnel at any time of year?

No

15. Are trees present within 1000 feet of the action area?

Note: If there are trees within the action area that are of a sufficient size to be potential roosts for bats answer "Yes". If unsure, additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: <https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines>.

No

16. Does the action area intersect the northern long-eared bat species list area?

Automatically answered

Yes

17. [Semantic] Is the action area located within 0.5 miles of radius of an entrance/opening to any known NLEB hibernacula? Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.

Automatically answered

No

18. [Semantic] Is the action area located within 0.25 miles of a culvert that is known to be occupied by northern long-eared or tricolored bats? **Note:** The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.

Automatically answered

No

19. [Semantic] Is the action area located within 0.25 miles of a culvert that is known to be occupied by northern long-eared or tricolored bats?

Automatically answered

No

20. [Semantic] Is the action area located within 150 feet of a documented northern long-eared bat roost site?

Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency. Have you contacted the appropriate agency to determine if your action is within 150 feet of any documented northern long-eared bat roosts?

Note: A document with links to Natural Heritage Inventory databases and other state-specific sources of information on the locations of northern long-eared bat roosts is available here. Location information for northern long-eared bat roosts is generally kept in state natural heritage inventory databases – the availability of this data varies by state. Many states provide online access to their data, either directly by providing maps or by providing the opportunity to make a data request. In some cases, to protect those resources, access to the information may be limited.

Automatically answered

No

21. Does the action area intersect the tricolored bat species list area?

Automatically answered

Yes

22. [Semantic] Is the action area located within 0.5 miles of radius of an entrance/opening to any known tricolored bat hibernacula? Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.

Automatically answered

No

23. [Semantic] Is the action area located within 0.25 miles of a culvert that is known to be occupied by northern long-eared or tricolored bats? **Note:** The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.

Automatically answered

No

24. Do you have any documents that you want to include with this submission?

No

PROJECT QUESTIONNAIRE

IPAC USER CONTACT INFORMATION

Agency: Army Corps of Engineers
Name: Grant Cunningham
Address: 2 Hopkins Plaza
Address Line 2: 10-E-27
City: Baltimore
State: MD
Zip: 21201
Email: grant.m.cunningham@usace.army.mil
Phone: 4107905628



Pennsylvania State Historic Preservation Office

PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION

December 10, 2024

Sent Via PA-SHARE

RE: ER Project # 2024PR05280.001, Aylesworth Creek Dam Master Plan Update, Army Corps of Engineers, Archbald Borough, Lackawanna County

Dear Submitter,

Thank you for submitting information concerning the above referenced project. The Pennsylvania State Historic Preservation Office (PA SHPO) reviews projects in accordance with state and federal laws. Section 106 of the National Historic Preservation Act of 1966, and the implementing regulations (36 CFR Part 800) of the Advisory Council on Historic Preservation, is the primary federal legislation. The Environmental Rights amendment, Article 1, Section 27 of the Pennsylvania Constitution and the Pennsylvania History Code, 37 Pa. Cons. Stat. Section 500 et seq. (1988) is the primary state legislation. These laws include consideration of the project's potential effects on both historic and archaeological resources.

Above Ground Resources

SHPO Sends Comments - Environmental Review - SHPO Sends Above Ground Comments

We look forward to additional consultation on the identification, evaluation and consideration of historic properties to ensure historic preservation is integrated into the master plan, as required under Section 110 of the National Historic Preservation Act. This should include documentation of the Aylesworth Creek Lake and Dam and related physical features and assessment of the significance of the resource.

SHPO Sends Comments - Environmental Review - No Effect - Above Ground

Based on the information received and available within our files, it is our opinion that the proposed project will have No Effect on above ground historic properties, including historic buildings, districts, structures, and/or objects, should they exist. Should the scope of the project change and/or should you be made aware of historic property concerns, you will need to reinstate consultation with our office using PA-SHARE.

For questions concerning above ground resources, please contact Barbara Frederick at bafrederic@pa.gov.

Archaeological Resources

More Information Requested - Environmental Review - No Effect - Archaeological

Based on the information received and available in our files, in our opinion, the proposed 2025 Master Plan project should have No Effect on archaeological resources. Should the scope of the project be amended to include additional ground-disturbing activity and/or should you be made aware of historic property concerns regarding archaeological resources, you will need to reinstate consultation with our office using PA-SHARE.

More Information Requested - New Attachment

Please use this request for more information to submit the proposed 2025 Master Plan when completed. Please submit the requested materials to the PA SHPO through PA-SHARE using the link under SHPO Requests More Information on the Response screen.

For questions concerning archaeological resources, please contact Casey Hanson at chanson@pa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "B. Frederick".

Barbara Frederick
Environmental Review Division Manager



**DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, BALTIMORE DISTRICT
2 HOPKINS PLAZA
BALTIMORE, MD 21201**

November 12, 2024

Andrea Lowery
State Historic Preservation Officer
Pennsylvania Historical & Museum Commission
400 North Street
Harrisburg, PA 17120-0093

RE: Section 106 National Historic Preservation Act Consultation, Aylesworth Creek Lake Master Plan Update

Dear Ms. Lowery:

The purpose of this letter is to initiate consultation with your office in accordance with Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations at 36 Code of Federal Regulations Part 800, regarding an update to the Aylesworth Creek Lake Master Plan. The U.S. Army Corps of Engineers, Baltimore District (USACE) is updating the Master Plan for the Aylesworth Creek Dam in Lackawanna County, Pennsylvania (Enclosure 1). Aylesworth Creek Dam is a multipurpose dam operated and maintained by USACE.

The 2025 Master Plan is intended to serve as a comprehensive land and recreation management plan for the next 15 to 25 years. The Master Plan is a strategic land use management document that guides the comprehensive management and development of all natural and cultural resources throughout the life of the project. To comply with the National Environmental Policy Act, an Environmental Assessment is also being prepared as part of this update.

The Master Plan update is an administrative action and does not include any proposed construction projects; therefore, effects to historic properties are not anticipated as part of this effort. Any future actions or projects will have their own environmental and cultural review and coordination, as appropriate. Should we become aware of any specific undertakings with the potential to affect historic properties, we will consult further with your office regarding identification and/or assessment of those resources.

Thank you for assistance with this project. We ask that your office review the enclosed information and assist us in identifying and assessing the project's effect on historic properties. If you have any questions about the project, please contact Ethan A. Bean at: ethan.a.bean@usace.army.mil.

Sincerely,

A handwritten signature in blue ink, appearing to read "D. Bierly", with a stylized flourish at the end.

Daniel M. Bierly, P.E.
Chief, Civil Project Development Branch
Planning Division

Enclosure



DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, BALTIMORE DISTRICT
2 HOPKINS PLAZA
BALTIMORE, MD 21201

November 12, 2024

Katelyn Lucas, THPO
Delaware Nation
P.O. Box 825
Anadarko, OK 73005

RE: Section 106 National Historic Preservation Act Consultation, Aylesworth Creek Lake Master Plan Update

Dear Ms. Lucas:

The purpose of this letter is to initiate consultation with your office in accordance with Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations at 36 Code of Federal Regulations Part 800, regarding an update to the Aylesworth Creek Lake Master Plan. The U.S. Army Corps of Engineers, Baltimore District (USACE) is updating the Master Plan for the Aylesworth Creek Dam in Lackawanna County, Pennsylvania (Enclosure 1). Aylesworth Dam is a multipurpose dam operated and maintained by USACE.

The 2025 Master Plan is intended to serve as a comprehensive land and recreation management plan for the next 15 to 25 years. The Master Plan is a strategic land use management document that guides the comprehensive management and development of all natural and cultural resources throughout the life of the project. To comply with the National Environmental Policy Act, an Environmental Assessment is also being prepared as part of this update.

The Master Plan update is an administrative action and does not include any proposed construction projects; therefore, effects to historic properties are not anticipated as part of this effort. Any future actions or projects will have their own environmental and cultural review and coordination, as appropriate. Should we become aware of any specific undertakings with the potential to affect historic properties, we will consult further with your office regarding identification and/or assessment of those resources.

Please let us know if you are interested in consulting on this project on a Government-to-Government basis, and the extent to which you wish to participate. We will provide a USACE representative at consultation meetings, and we will fully consider any information you wish to provide

Thank you for assistance with this project. We ask that your office review the enclosed information and assist us in identifying and assessing the project's effect on historic properties. If you have any questions about the project, please contact Ethan A. Bean at: ethan.a.bean@usace.army.mil.

Sincerely,

A handwritten signature in blue ink, appearing to read "D. Bierly", with a stylized flourish at the end.

Daniel M. Bierly, P.E.
Chief, Civil Project Development Branch
Planning Division

Enclosure



DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, BALTIMORE DISTRICT
2 HOPKINS PLAZA
BALTIMORE, MD 21201

November 12, 2024

Susan Bachor, THPO
Delaware Tribe of Indians
126 University Circle
East Stroudsburg, PA 18301

RE: Section 106 National Historic Preservation Act Consultation, Aylesworth Creek Lake Master Plan Update

Dear Ms. Bachor:

The purpose of this letter is to initiate consultation with your office in accordance with Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations at 36 Code of Federal Regulations Part 800, regarding an update to the Aylesworth Creek Lake Master Plan. The U.S. Army Corps of Engineers, Baltimore District (USACE) is updating the Master Plan for the Aylesworth Creek Dam in Lackawanna County, Pennsylvania (Enclosure 1). Aylesworth Creek Dam is a multipurpose dam operated and maintained by USACE.


The 2025 Master Plan is intended to serve as a comprehensive land and recreation management plan for the next 15 to 25 years. The Master Plan is a strategic land use management document that guides the comprehensive management and development of all natural and cultural resources throughout the life of the project. To comply with the National Environmental Policy Act, an Environmental Assessment is also being prepared as part of this update.

The Master Plan update is an administrative action and does not include any proposed construction projects; therefore, effects to historic properties are not anticipated as part of this effort. Any future actions or projects will have their own environmental and cultural review and coordination, as appropriate. Should we become aware of any specific undertakings with the potential to affect historic properties, we will consult further with your office regarding identification and/or assessment of those resources.

Please let us know if you are interested in consulting on this project on a Government-to-Government basis, and the extent to which you wish to participate. We will provide a USACE representative at consultation meetings, and we will fully consider any information you wish to provide

Thank you for assistance with this project. We ask that your office review the enclosed information and assist us in identifying and assessing the project's effect on historic properties. If you have any questions about the project, please contact Ethan A. Bean at: ethan.a.bean@usace.army.mil.

Sincerely,

A handwritten signature in blue ink, appearing to read "D. Bierly", with a stylized flourish at the end.

Daniel M. Bierly, P.E.
Chief, Civil Project Development Branch
Planning Division

Enclosure



DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, BALTIMORE DISTRICT
2 HOPKINS PLAZA
BALTIMORE, MD 21201

November 12, 2024

Anthony Gonyea, THPO
Onondaga Nation
4040 Route 11
Nedrow, NY 13120

RE: Section 106 National Historic Preservation Act Consultation, Aylesworth Creek Lake Master Plan Update

Dear Mr. Gonyea:

The purpose of this letter is to initiate consultation with your office in accordance with Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations at 36 Code of Federal Regulations Part 800, regarding an update to the Aylesworth Creek Lake Master Plan. The U.S. Army Corps of Engineers, Baltimore District (USACE) is updating the Master Plan for the Aylesworth Creek Dam in Lackawanna County, Pennsylvania (Enclosure 1). Aylesworth Creek Dam is a multipurpose dam operated and maintained by USACE.

The 2025 Master Plan is intended to serve as a comprehensive land and recreation management plan for the next 15 to 25 years. The Master Plan is a strategic land use management document that guides the comprehensive management and development of all natural and cultural resources throughout the life of the project. To comply with the National Environmental Policy Act, an Environmental Assessment is also being prepared as part of this update.

The Master Plan update is an administrative action and does not include any proposed construction projects; therefore, effects to historic properties are not anticipated as part of this effort. Any future actions or projects will have their own environmental and cultural review and coordination, as appropriate. Should we become aware of any specific undertakings with the potential to affect historic properties, we will consult further with your office regarding identification and/or assessment of those resources.

Please let us know if you are interested in consulting on this project on a Government-to-Government basis, and the extent to which you wish to participate. We will provide a USACE representative at consultation meetings, and we will fully consider any information you wish to provide

Thank you for assistance with this project. We ask that your office review the enclosed information and assist us in identifying and assessing the project's effect on historic properties. If you have any questions about the project, please contact Ethan A. Bean at: ethan.a.bean@usace.army.mil.

Sincerely,

A handwritten signature in blue ink, appearing to read "D. Bierly".

Daniel M. Bierly, P.E.
Chief, Civil Project Development Branch
Planning Division

Enclosure



DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, BALTIMORE DISTRICT
2 HOPKINS PLAZA
BALTIMORE, MD 21201

November 12, 2024

William Tarrant, THPO
Seneca-Cayuga Nation of Indians
P.O. Box 453220
Grove, OK 74345-3220

RE: Section 106 National Historic Preservation Act Consultation, Aylesworth Creek Lake Master Plan Update

Dear Mr. Tarrant:

The purpose of this letter is to initiate consultation with your office in accordance with Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations at 36 Code of Federal Regulations Part 800, regarding an update to the Aylesworth Creek Lake Master Plan. The U.S. Army Corps of Engineers, Baltimore District (USACE) is updating the Master Plan for the Aylesworth Creek Dam in Lackawanna County, Pennsylvania (Enclosure 1). Aylesworth Creek Dam is a multipurpose dam operated and maintained by USACE.

The 2025 Master Plan is intended to serve as a comprehensive land and recreation management plan for the next 15 to 25 years. The Master Plan is a strategic land use management document that guides the comprehensive management and development of all natural and cultural resources throughout the life of the project. To comply with the National Environmental Policy Act, an Environmental Assessment is also being prepared as part of this update.

The Master Plan update is an administrative action and does not include any proposed construction projects; therefore, effects to historic properties are not anticipated as part of this effort. Any future actions or projects will have their own environmental and cultural review and coordination, as appropriate. Should we become aware of any specific undertakings with the potential to affect historic properties, we will consult further with your office regarding identification and/or assessment of those resources.

Please let us know if you are interested in consulting on this project on a Government-to-Government basis, and the extent to which you wish to participate. We will provide a USACE representative at consultation meetings, and we will fully consider any information you wish to provide

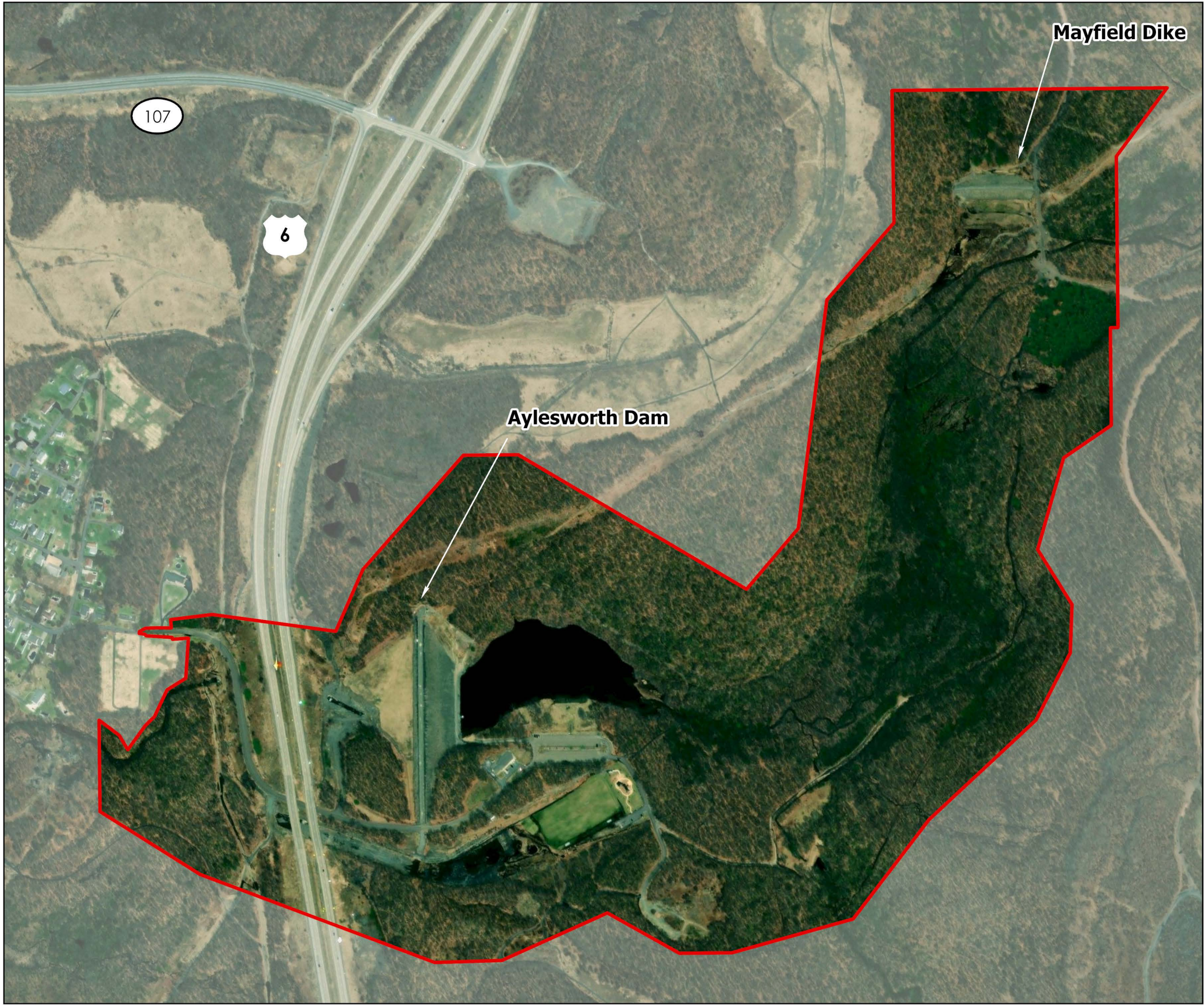
Thank you for assistance with this project. We ask that your office review the enclosed information and assist us in identifying and assessing the project's effect on historic properties. If you have any questions about the project, please contact Ethan A. Bean at: ethan.a.bean@usace.army.mil.

Sincerely,

A handwritten signature in blue ink, appearing to read "D. Bierly".

Daniel M. Bierly, P.E.
Chief, Civil Project Development Branch
Planning Division

Enclosure



Aylesworth Lake
Master Plan

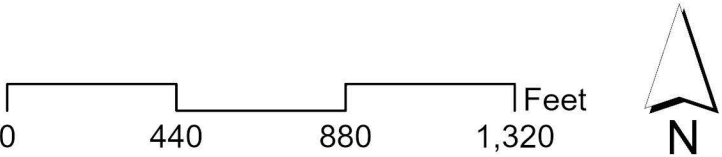
Site Vicinity

Legend

 Aylesworth Lake Project Area



Source: data.pa.gov, New Jersey Office of GIS, Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS, Maxar





Draft Submittal
July 2025

