Stillwater Lake
Master Plan

Draft Submittal
July 2025

Stillwater Lake
Master Plan
Susquehanna County, Pennsylvania

Draft Submittal
July 2025

For:
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STILLWATER LAKE
MASTER PLAN

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

FINDING OF NO SIGNIFICANT IMPACT

Environmental Assessment for the Stillwater Lake 2025 Master Plan

Susquehanna County, Pennsylvania

In accordance with the National Environmental Policy Act of 1969, as amended (NEPA), and 53 Fed. Reg. 3120-3137 (Feb. 3, 1988), the U.S. Army Corps of Engineers (USACE), Baltimore District has assessed the potential environmental, cultural, and social effects of updating the Stillwater Lake Master Plan. The Stillwater Dam and Reservoir Project (hereafter "Stillwater Lake Project", "Stillwater Lake", or "Project") was authorized by the Flood Control Act of August 18, 1941, Public Law 77-228, as a modification of the flood control project in southern New York and eastern Pennsylvania that was authorized by the Flood Control Act of June 22, 1936, Public Law 74-738, and described in House Document No. 702, 77th Congress,, 2nd Session. The Stillwater 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 Stillwater Lake Project, are federally owned, operated, and maintained by USACE. The project was operationally complete in December 1960.

The Stillwater Lake Project was authorized and constructed for the purpose of flood risk management for the downstream reach of the Lackawanna River at the communities of Carbondale, Olyphant, and Scranton, Pennsylvania (PA), as well as at the confluence of the Lackawanna River with the Susquehanna River. Additional uses of the Project are water quality, water supply, recreation, and environmental stewardship of natural and cultural resources. Implementation of the 2025 Stillwater Master Plan (hereafter "2025 Master Plan") and proposed land use changes must recognize and be compatible with the project purpose of flood risk management, and the additional uses of water quality, water supply, 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 Stillwater Lake. The 2025 Master Plan updates the 1959 Master Plan and establishes land and water surface classifications, which are fundamental to project land management. The 1959 Master Plan did not include designated land or water surface classifications and was written prior to recreation lease agreements between USACE and the Pennsylvania Fish and Boat Commission (PFBC). Land and water surface classifications (see Table S-1) provide for development and resource management consistent with the Stillwater Lake Project's authorized purposes and USACE regulations and policy. The 2025 Master Plan also provides a comprehensive description of the Stillwater 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 Stillwater Lake Project and would continue to operate and manage the project as outlined in the 1959 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 Stillwater 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 1959 Stillwater 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 Stillwater Lake

Classification	2025 Master Plan (acres)	Description
Project Operations	64.3[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	2.3	Lands that are currently developed for intensive recreational activities for the visiting public and includes a scenic overlook, a boat ramp, gravel parking area, and portable restroom. This land classification has been developed to support concentrated visitation and use of the recreational facilities they host. The High Density Recreation area is located within a small area on the east shore of Stillwater Lake and the scenic overlook just east of the dam.
Multiple Resource Management Land		
Low Density Recreation	359.1	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. The new land classification criteria exclude vegetation and wildlife management areas, leaving only areas with minimal development to support passive recreation use.
Water Surface		
Restricted	0.5[2]	Areas where recreational boating is prohibited or restricted for project operations, safety, and security purposes. The Restricted water at Stillwater Lake includes the intake channel.
Open Recreation	65.5	Water surface areas available for year-round or seasonal water-based recreational use. This area includes all water surface area other than restricted waters.
Total	492.0[2]	

[1]*Of the 64.3 acres classified under the land classification Project Operations; all 64.3 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.*

[2]*Mapping 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 classification and water surface acreages. Minor discrepancies also exist within this table due to rounding. This total acreage only includes lands owned in fee simple. Flowage easement acreage is excluded from this total. The total with flowage easements is 678 acres (flowage easements are 186 acres).*

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, social, and economic 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 Stillwater 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 also use BMPs associated with prevention of effects to sensitive species. These recommendations would be implemented at the time in which future projects are proposed and would include separate environmental reviews.

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

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1 INTRODUCTION

1.1 PROJECT AUTHORIZATION

The Stillwater Dam and Reservoir Project (hereafter "Stillwater Lake Project", "Stillwater Lake", or "Project") was authorized by the Flood Control Act of August 18, 1941, Public Law 77-228, as a modification of the flood control project in southern New York and eastern Pennsylvania authorized by the Flood Control Act of June 22, 1936, Public Law 74-738, and described in House Document No. 702, 77th Congress, 2nd Session. The authorizing legislation is as follows:

> *"SUSQUEHANNA RIVER BASIN...The project for flood control in the Susquehanna River Basin in southern New York and eastern Pennsylvania adopted by the Act of June 22, 1936, is hereby modified to include and authorize the construction of the Stillwater Reservoir on the Lackawanna River, Pennsylvania, for flood control and other purposes…"*

The Stillwater Lake Project was designed and constructed under the direction of the U.S. Army Corps of Engineers (USACE), Baltimore District. The construction of the dam and appurtenant works was started on May 19,1958, and was operationally complete on December 7, 1960 (USACE 2001).

1.2 PROJECT PURPOSE

The Stillwater Lake Project is a unit in the comprehensive flood control plan in the Susquehanna River Basin. This 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 Carbondale, Olyphant, and Scranton, Pennsylvania (PA), as well as at the confluence of the Lackawanna River with the Susquehanna River. Additional uses of the Project are water quality, water supply, recreation, and environmental stewardship of natural and cultural resources.

The Pennsylvania-American Water Company (PAWC) (formerly Pennsylvania Gas and Water Company, which formerly was the Scranton-Spring Brook Water Service Company) utilizes Stillwater Lake as a source of water supply for the Forest City Water Purification Plant under an easement with USACE, which is located downstream of the Stillwater Lake Project on the Lackawanna River.

The Pennsylvania Fish and Boat Commission (PFBC) has a license to operate and maintain approximately 35 acres of the Stillwater Lake Project for public parking and facilities and to enforce its regulations and manage public fishing and boating on the entire Stillwater Lake Project. The recreational area, managed by PFBC, is primarily used for boating and fishing. Additionally, N.E.P Snow Trails, Inc. operates approximately 4.1 acres to maintain their portion of the O&W Rail Trail for the purpose of ATV and Snowmobile use (with passes), that runs through the east side of the Stillwater Lake Project (east of Route 171).

1.3 PURPOSE AND SCOPE OF MASTER PLAN

The purpose of this document is to update the Stillwater Lake Master Plan, written in 1959. The Stillwater Lake Master Plan is the strategic land use management document that is a guide

for the comprehensive management and development of recreational, natural, and cultural resources and USACE responsibilities pursuant to federal laws to preserve, conserve, restore, maintain, manage, and develop the project lands, waters, and associated resources throughout the life of the project

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.

Since construction of the Stillwater Lake Project, the original purpose of flood risk management continues to be achieved, allowing the opportunity for recreation on and around the lake. This Master Plan provides an analysis and guidance for future recreation enhancement and development activities at Stillwater Lake in response to the increased demand for improvements to existing recreation resources, as well as additional new recreation resources on the project site. Since the recreation area is an outgrant to PFBC, they manage current and future recreation opportunities and ensure USACE missions are protected while providing quality and safe recreation opportunities for the public.

This document presents an evaluation of the assets, needs, and potential of the Stillwater 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 65 years since the last master plan was published. It provides a management framework that balances the stewardship of natural resources and provision of high-quality recreation activities (managed by the PFBC) with the primary project purpose of flood risk management. The 1959 Master Plan did not include designated land or water surface classifications and was written prior to recreation lease agreements between USACE and the PFBC. This Master Plan addresses expressed public interest in the overall stewardship and management of project resources and shows 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 the PFBC and its partners.

Implementation of the Stillwater Lake Master Plan must recognize and be compatible with the primary project purpose of flood risk management and the additional project uses including water quality, water supply, recreation, and environmental stewardship of natural and cultural resources.

The Master Plan update is a working document that will guide 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). The Master Plan articulates USACE responsibilities pursuant to federal laws to preserve, conserve, restore, maintain, manage, and develop the land, water, and associated resources. It is a dynamic and flexible tool designed to address changing conditions. The Master Plan focuses on carefully crafted resource-specific goals and objectives.

It is important to note what the Master Plan does not address. 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.

The master planning process encompassed 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 Stillwater 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 53 Fed. Reg. 3120-3137 (Feb. 3, 1988). 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 Stillwater Lake Project is located on the Lackawanna River in Susquehanna County, PA. It is 4 miles north (and upstream) of Forest City, PA, 30 miles upstream from Scranton, PA, and 39.4 miles upstream from its confluence with the Susquehanna River (as shown in Figure 1-1). The Stillwater Dam is located within a reservoir created by an existing water supply dam about 1.4 miles downstream on the Lackawanna River. The Stillwater Lake Project occupies approximately 678.0 acres of land. The Stillwater Dam formed Stillwater Lake, which has a drainage area of 36.8 square miles. The West and East Branches of the Lackawanna River flow generally south and converge within the reservoir just above Stillwater Dam. The dam reduces flooding downstream primarily to Carbondale, Olyphant, and Scranton, PA.

Stillwater Dam and Reservoir

Located further downstream, on Aylesworth Creek approximately one mile upstream from its confluence with the Lackawanna River, is the USACE owned and operated Aylesworth Creek 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). The Stillwater Lake Project is located in the Upper Susquehanna-Lackawanna Watershed, Hydrologic Unit Code (HUC) 02050107. Figure 1-2 is a site vicinity map of Stillwater Lake. The total federal cost of the project was approximately $6 million in 1960.

Upstream of the Stillwater Dam, the valley has a comparatively mild slope when generally the hillsides in this area are steep. Downstream of Stillwater Lake, the watershed is characterized by short, flashy tributaries that flow through steep, narrow valleys (USACE 2001). Common use of the valley floor is farming and small communities reside with the valley. Upstream of the Stillwater Lake Project, the land is sparsely populated. However, downstream of the Stillwater Lake Project, the land is intensely developed and the tributaries of the Lackawanna River are heavily degraded as a result of acid mine drainage.

1.5 DESCRIPTION OF LAKE AND PROJECT STRUCTURES

At the conservation pool level of 1,572 feet Project Construction Datum (PCD), Stillwater Lake is about 0.2 miles wide at its widest point, about 0.9 miles long, and has a surface area of 66 acres. At this level, the lake contains 247 acre-feet of water. The pool is maintained year-round at 1,572 feet PCD to allow for storage space during and after precipitation events, which supports the primary project purpose of flood risk management for the Lackawanna River from the dam to the confluence of the Lackawanna River with the Susquehanna River. If the reservoir reaches the spillway crest (top of the flood control pool) at 1,621 feet PCD, the reservoir surface area covers 416 acres and stores 11,558 acre-feet of water when there is no spillway discharge and no additional flooding downstream. Data on surface area and storage of Stillwater Lake are based on the last hydrographic surveys in January 2001.

1.5.1 Embankment/Dam

Stillwater Dam and Spillway

The Stillwater Dam consists of a rolled earthfill embankment, 1,700 feet long having a width at its top of 25 feet and rises about 77 feet above the streambed. The top of the dam elevation is 1,637 feet PCD (USACE 2001). The upstream and downstream faces of the dam are protected with dumped riprap overlaying filter material (USACE 1959). A dike about 500 feet in length parallels the former Delaware and Hudson Railroad (now D&H Rail Trail) upstream from the embankment on the right (west) abutment where the railroad grade falls below the top-of-dam elevation.

1.5.2 Spillway

The uncontrolled side channel spillway was constructed in the left abutment (east) with an ogee weir. The spillway is 264 feet long and has a crest elevation of 1,621 feet PCD. The design discharge capacity of the spillway is 39,600 cubic feet per second (cfs) under a total surcharge of 11.1 feet (USACE 2001). To date, spillway flow has not occurred.

1.5.3 Flood Control Outlet Works

The outlet works consists of the following principal structures:

1.5.3.1 *Intake Structure*

The face of the structure is divided into three openings located side-by-side. Permanent concrete weirs with crest elevations of 1,572 feet PCD form the side openings. The central opening, with an invert elevation of 1,568 feet PCD, forms a concrete stop-log sluice gate for low flow regulation of the conservation pool. Each stop-log is 16 inches high, and, under normal conditions, three stop-logs are placed to form a minimum pool level of 1,572 feet PCD (USACE 2001).

Stillwater Dam Intake

1.5.3.2 *Conduit*

A six-foot-diameter reinforced concrete conduit carries discharge from the inlet structure to the gate chamber and then to the stilling basin. The length of the conduit, including transition zones, is 352 feet (USACE 2001).

1.5.3.3 *Gate Structure*

The gate structure houses a single slide gate, 4 feet by 8 feet, and hoist that regulates the discharge through the outlet works. The tower rises about 58 feet through the dam and 34 feet above the embankment to its full height of 92 feet. The operating floor is located at elevation 1,637 feet PCD, 70 feet above the floor of the gate chamber. Located on the operating floor are the gate hoist and the control panel (USACE 2001).

1.5.3.4 *Stilling Basin*

The stilling basin is composed of reinforced concrete and is 104 feet long and 20 feet wide. The stilling basin has three baffle blocks, each measuring 3 feet high and 3 feet 4 inches wide (USACE 2001).

Stillwater Dam Stilling Basin

1.6 HYDROPOWER FACILITIES

There are currently no hydropower facilities on project lands and no exploration has been recently done. Preliminary analysis was completed in 1956, but the conclusion was not economically favorable, so it was not investigated further.

1.7 PROJECT ACCESS

The Stillwater Lake Project (dam, offices, and recreational area) can be accessed from PA Route 171 that runs about 40 miles from Carbondale to Great Bend in PA. PA Route 171 connects directly to the Stillwater Lake Scenic Overlook parking area adjacent to the

Stillwater Dam. Access to the dam is across a reinforced concrete arch bridge spanning the spillway chute at the left (east) end of the embankment (USACE 2001). The Stillwater Dam Operator Offices (located at the former Stillwater Lake Scenic Overlook) is located roughly a tenth of a mile north of the existing Stillwater Lake Scenic Overlook. The recreation area on Stillwater Lake, "Pennsylvania Fish and Boat Commission Stillwater Lake Access Area", is located a half mile north of the Stillwater Dam off PA Route 171.

1.8 PERTINENT PRIOR REPORTS AND RELATED STUDIES

Documents and studies related to the Master Plan update are listed in this section with the dates of publication. The Bibliography section contains the full annotation for each report or study.

- Stillwater Lake, General Design Memorandum, 1956
- Stillwater Lake Master Plan, 1959
- Stillwater Lake Operation and Maintenance Manual, 1987
- Stillwater Lake Regulation Manual, updated 2001
- USACE, Baltimore District Water Quality Program Annual Report, FY 2019, FY 2020, FY 2021, and FY 2022

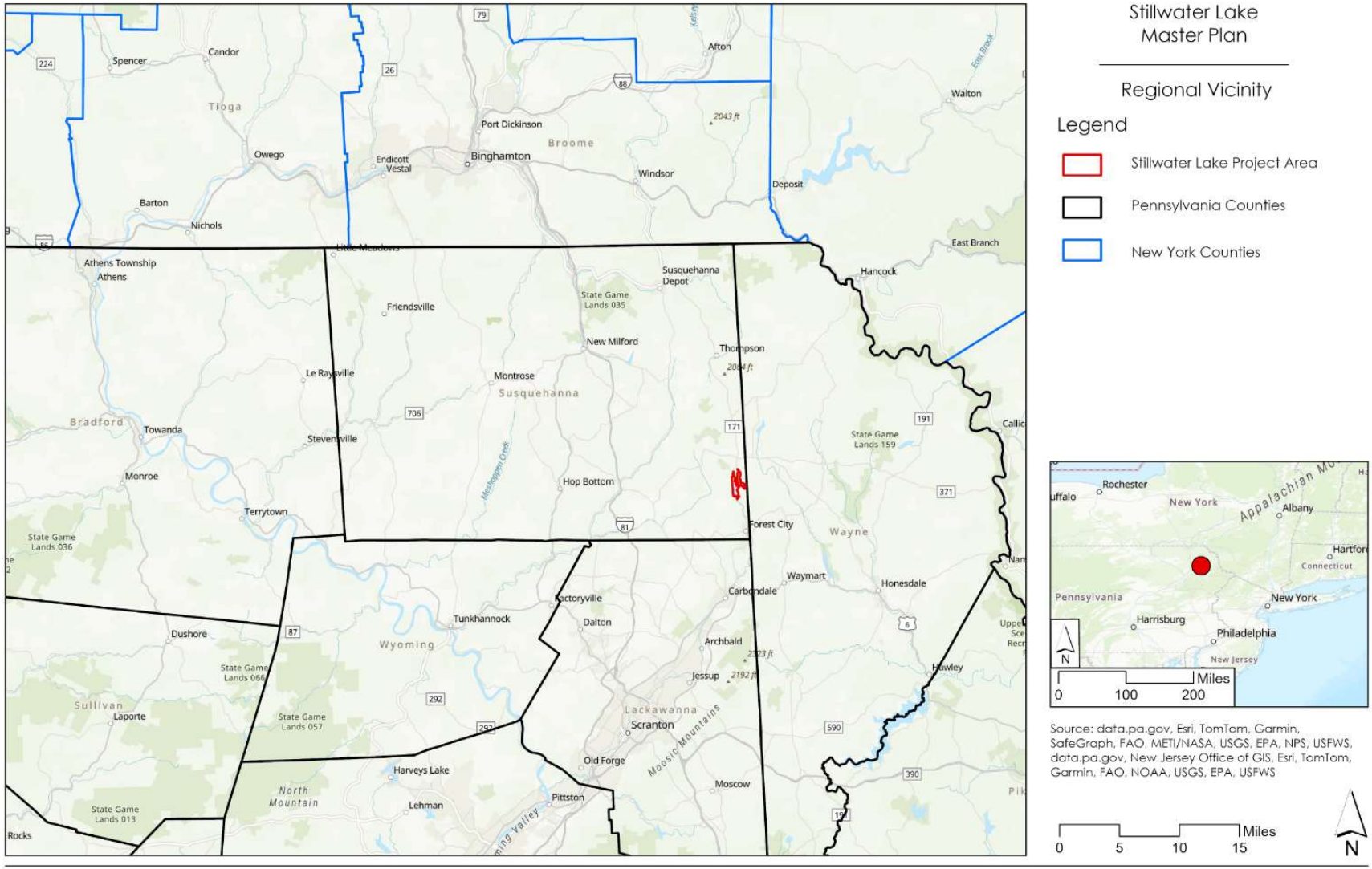


Figure 1-1. Regional Vicinity Map

Note: map is for display purposes only and does not reflect surveyed boundaries

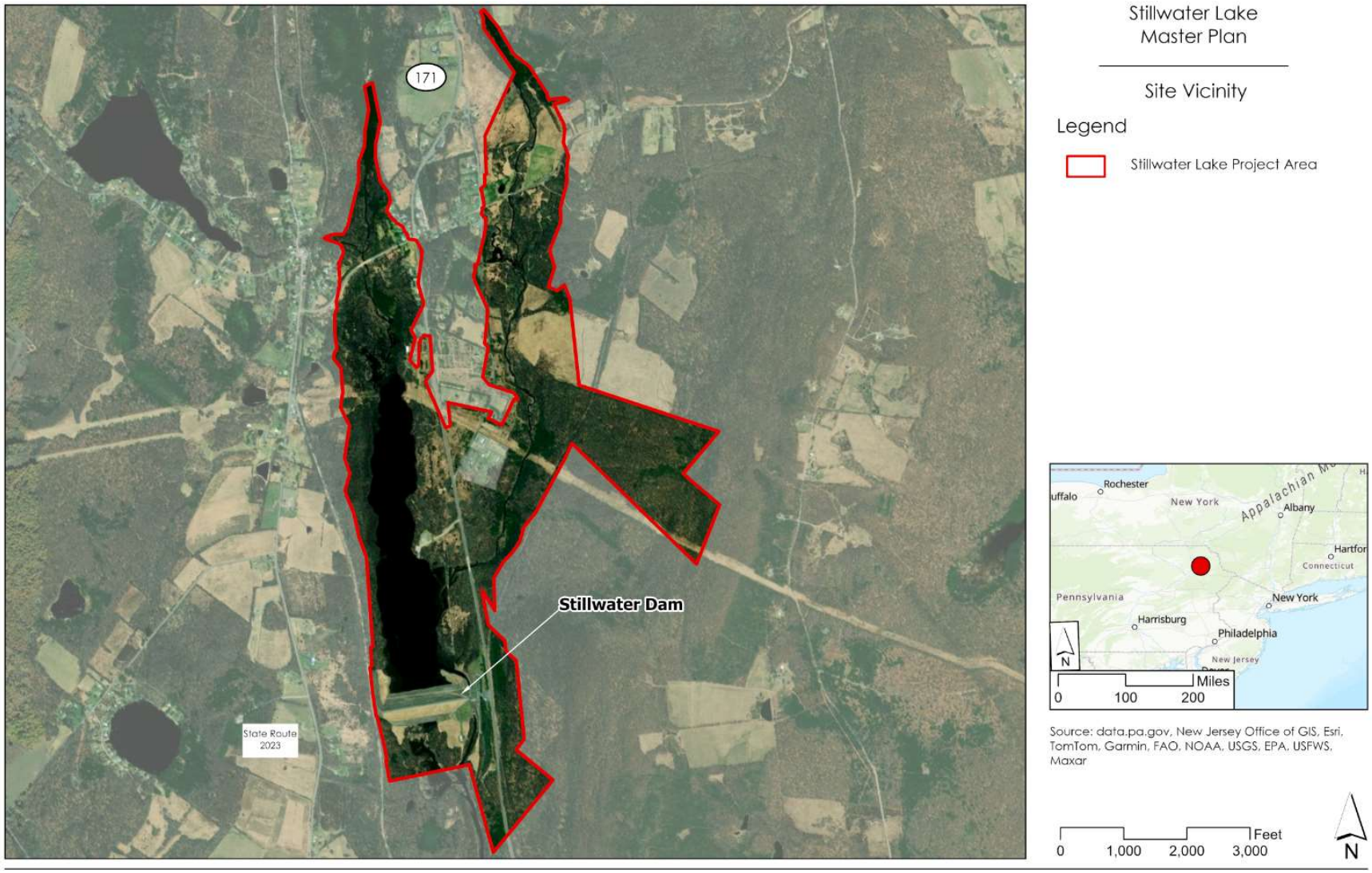


Figure 1-2. Site Vicinity Map

Note: map is for display purposes only and does not reflect surveyed boundaries

1.9 PERTINENT PROJECT INFORMATION

Table 1-1 below provides pertinent information regarding the existing storage capacity of Stillwater Lake.

Table 1-1. Water Storage Capacity and Related Pertinent Data at Stillwater Lake.

	Elevation (Feet PCD)	Storage (Acre-feet)	Acres
Top of Dam	1637	19,627	573
Maximum Pool (Design Surcharge)	1632	16,682	521
Full Flood Control (Spillway Crest)	1621	11,558	416
Conservation Pool (all year)	1572	247	66
Dead Storage	1568	38	36

Source: 2001 Stillwater Lake Regulation Manual. Data based on 2001 hydrographic survey

All elevations cited in this plan unless otherwise noted are referenced to the original PCD. In previous versions of the *Master Manual for Reservoir Regulation Stillwater 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 were 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 the PCD elevation for Stillwater Lake and its physical components to NAVD 88, subtract 0.29 feet from the PCD elevation.

Table 1-2 shows the proposed land classifications and associated acreages for this updated Stillwater 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 the Stillwater Lake Project

Proposed Land Classification	Acres
Project Operations	64.3[1]
High Density Recreation	2.3
Multiple Resource Management	
Low Density Recreation	359.1
Water Surface	
Restricted	0.5[2]
Open Recreation	65.5
Total	**492.0**[2]

[1]*Of the 64.3 acres classified under the land classification Project Operations; all 64.3 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.*

[2]*Mapping 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 classification and water surface acreages. Minor discrepancies also exist within this table due to rounding. This total acreage only includes lands owned in fee simple. Flowage easement acreage is excluded from this total. The total with flowage easements is 678 acres (flowage easements are 186 acres).*

2 EXISTING CONDITIONS & ANALYSIS

2.1 PHYSIOGRAPHIC SETTING

2.1.1 Ecological Setting

The Stillwater Lake Project is located within the U.S. Environmental Protection Agency's (USEPA) Northern Sandstone Ridges Level IV Ecoregion and the Ridge and Valley Level III Ecoregion. The Northern Sandstone Ridges Ecoregion is composed of long forested ridges with steep slopes ranging in elevation from roughly 1,000 to 4,300 feet. Stillwater Lake is located in the northernmost extent of this ecoregion, where it abuts both the Anthracite Subregion and the Northeastern Uplands Ecoregion.

2.1.2 Climate

Stillwater 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 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

Susquehanna County is situated in mountainous northeastern PA. Stillwater Lake is located in the extreme southeast of the county, at the head of a long valley. The Lackawanna River flows through the valley downstream of the dam between two roughly parallel ranges, while upstream of the lake, the valley is less pronounced. Stillwater Lake lies almost precisely at the boundary between the Ridge and Valley and Appalachian Plateaus physiographic provinces, where the geological character transitions from the Glaciated Low Plateau section to the northernmost region of the Anthracite Valley section (Pennsylvania Department of Conservation and Natural Resources (PADCNR) n.d.).

Soils surrounding Stillwater Lake are primarily mapped as belonging to the Wyalusing silt loam complex (Wy), Chenango gravelly silt loam, 3 to 12 percent slopes, moderately eroded (CnB2), Cut and fill land (Cu), Mixed alluvial land (Mn), and Morris flaggy silt loam, 8 to 15 percent slopes, eroded (MrC2).

A variety of other soil types exist within the project boundary but mainly consist of silt loams with moderate to steep slopes. A large number of soil complexes exist that possess rocky or bouldery characteristics, including Lackawanna very stony silt loam, 30 to 50 percent slopes, very stony (LgF), Wellsboro channery silt loam, 8 to 25 percent slopes, very stony (WsD), Morris channery silt loam, 0 to 8 percent slopes, extremely stony (MsB), and Morris channery silt loam, 8 to 25 percent slopes, extremely stony (MsD) as the most dominant soil with rocky and bouldery characteristics in the project area (see Table 2-1; USDA - NRCS 2024).

Of the soils within the project, 138.5 acres are considered PA Farmland of Statewide Importance including Morris flaggy silt loam, 8 to 15 percent slopes, eroded (MrC2), Lackawanna channery silt loam, 3 to 12 percent slopes, eroded (LaB2), and Wellsboro

channery silt loam, 8 to 15 percent slopes, eroded (WeC2). Additionally, 114.9 acres are categorized as Prime Farmland including Chenango gravelly silt loam, 3 to 12 percent slopes, moderately eroded (CnB2), Wellsboro flaggy silt loam, 3 to 8 percent slopes, eroded (WlB2), and Chenango gravelly silt loam, 0 to 3 percent slopes (CnA). Thus, 37.5 percent of the project area is considered Farmland of Statewide Importance or Prime Farmland (USDA-NRCS 2024). Figure 2-1 shows the distribution of soils at the Stillwater Lake Project.

Table 2-1. Soils at Stillwater Lake

Map Unit Symbol	Map Unit Name	Acres in Project Area	Percent of Project Area	Prime/Unique Farmland Status
Ba	Barbour fine sandy loam	3.7	0.6%	All areas are prime farmland
Bc	Basher silt loam	9.2	1.4%	All areas are prime farmland
BeB2	Bath channery loam, 3 to 12 percent slopes, moderately eroded	0.2	0.0%	All areas are prime farmland
BeC2	Bath channery loam, 12 to 20 percent slopes, moderately eroded	1.2	0.2%	Farmland of statewide importance
CnA	Chenango gravelly silt loam, 0 to 3 percent slopes	18.9	2.8%	All areas are prime farmland
CnB2	Chenango gravelly silt loam, 3 to 12 percent slopes, moderately eroded	41.5	6.1%	All areas are prime farmland
CnC2	Chenango gravelly silt loam, 12 to 20 percent slopes, moderately eroded	14.6	2.2%	Farmland of statewide importance
Cu	Cut and fill land	39.4	5.8%	Not prime farmland
DAM	Dams	16.5	2.4%	Not prime farmland
Hw	Holly silt loam	13.2	2.0%	Not prime farmland
LaB2	Lackawanna channery silt loam, 3 to 12 percent slopes, eroded	20.9	3.1%	Farmland of statewide importance
LaC2	Lackawanna channery silt loam, 12 to 20 percent slopes, eroded	9.1	1.3%	Farmland of statewide importance
LfB	Lackawanna flaggy silt loam, 3 to 12 percent slopes	2.7	0.4%	Farmland of statewide importance
LfC2	Lackawanna flaggy silt loam, 12 to 20 percent slopes, eroded	2.3	0.3%	Farmland of statewide importance

Map Unit Symbol	Map Unit Name	Acres in Project Area	Percent of Project Area	Prime/Unique Farmland Status
LfD2	Lackawanna flaggy silt loam, 20 to 30 percent slopes, eroded	7.2	1.1%	Not prime farmland
LgD	Lackawanna very stony silt loam, 12 to 30 percent slopes, very stony	2.7	0.4%	Not prime farmland
LgF	Lackawanna very stony silt loam, 30 to 50 percent slopes, very stony	27.3	4.0%	Not prime farmland
LoD	Lordstown, Oquaga, and Bath soils, 12 to 25 percent slopes	5.3	0.8%	Farmland of statewide importance
LoE	Lordstown, Oquaga, and Cadosia soils, 15 to 35 percent slopes	5.3	0.8%	Not prime farmland
LsD	Lordstown, Oquaga, and Cadosia soils, 15 to 25 percent slopes, extremely bouldery	6.8	1.0%	Not prime farmland
LsF	Lordstown, Oquaga, and Cadosia soils, 25 to 60 percent slopes, extremely bouldery	5.5	0.8%	Not prime farmland
LxB	Lordstown channery loam, 3 to 8 percent slopes, rubbly	0.0	0.0%	Not prime farmland
MgB	Mardin channery silt loam, 0 to 8 percent slopes, very stony	2.7	0.4%	Not prime farmland
MgF	Mardin channery silt loam, 25 to 50 percent slopes, very stony	1.2	0.2%	Not prime farmland
Mn	Mixed alluvial land	37.1	5.5%	Not prime farmland
MoA	Morris channery silt loam, 0 to 3 percent slopes	0.3	0.0%	Farmland of statewide importance
MoB2	Morris channery silt loam, 3 to 8 percent slopes, eroded	18.6	2.7%	Farmland of statewide importance
MrB2	Morris flaggy silt loam, 3 to 8 percent slopes, eroded	0.2	0.0%	Farmland of statewide importance

Map Unit Symbol	Map Unit Name	Acres in Project Area	Percent of Project Area	Prime/Unique Farmland Status
MrC2	Morris flaggy silt loam, 8 to 15 percent slopes, eroded	36.6	5.4%	Farmland of statewide importance
MsB	Morris channery silt loam, 0 to 8 percent slopes, extremely stony	17.1	2.5%	Not prime farmland
MsD	Morris channery silt loam, 8 to 25 percent slopes, extremely stony	13.9	2.1%	Not prime farmland
OyF	Oquaga and Lordstown channery loams, 25 to 70 percent slopes, rubbly	5.1	0.8%	Not prime farmland
Te	Terrace escarpments	5.7	0.8%	Not prime farmland
W	Water	89.7	13.2%	Not prime farmland
WeB2	Wellsboro channery silt loam, 3 to 8 percent slopes, eroded	18.0	2.7%	All areas are prime farmland
WeC2	Wellsboro channery silt loam, 8 to 15 percent slopes, eroded	20.7	3.1%	Farmland of statewide importance
WeD2	Wellsboro channery silt loam, 15 to 25 percent slopes, eroded	5.8	0.9%	Not prime farmland
WlB2	Wellsboro flaggy silt loam, 3 to 8 percent slopes, eroded	23.4	3.5%	All areas are prime farmland
WlC2	Wellsboro flaggy silt loam, 8 to 15 percent slopes, eroded	6.0	0.9%	Farmland of statewide importance
WlD2	Wellsboro flaggy silt loam, 15 to 25 percent slopes, eroded	12.4	1.8%	Not prime farmland
WsB	Wellsboro channery silt loam, 0 to 8 percent slopes, very stony	3.4	0.5%	Not prime farmland
WsD	Wellsboro channery silt loam, 8 to 25 percent slopes, very stony	19.0	2.8%	Not prime farmland
WsF	Wellsboro channery silt loam, 25 to 50 percent slopes, very stony	2.8	0.4%	Not prime farmland
Wy	Wyalusing silt loam	84.1	12.4%	Not prime farmland

Source: NRCS, 2024

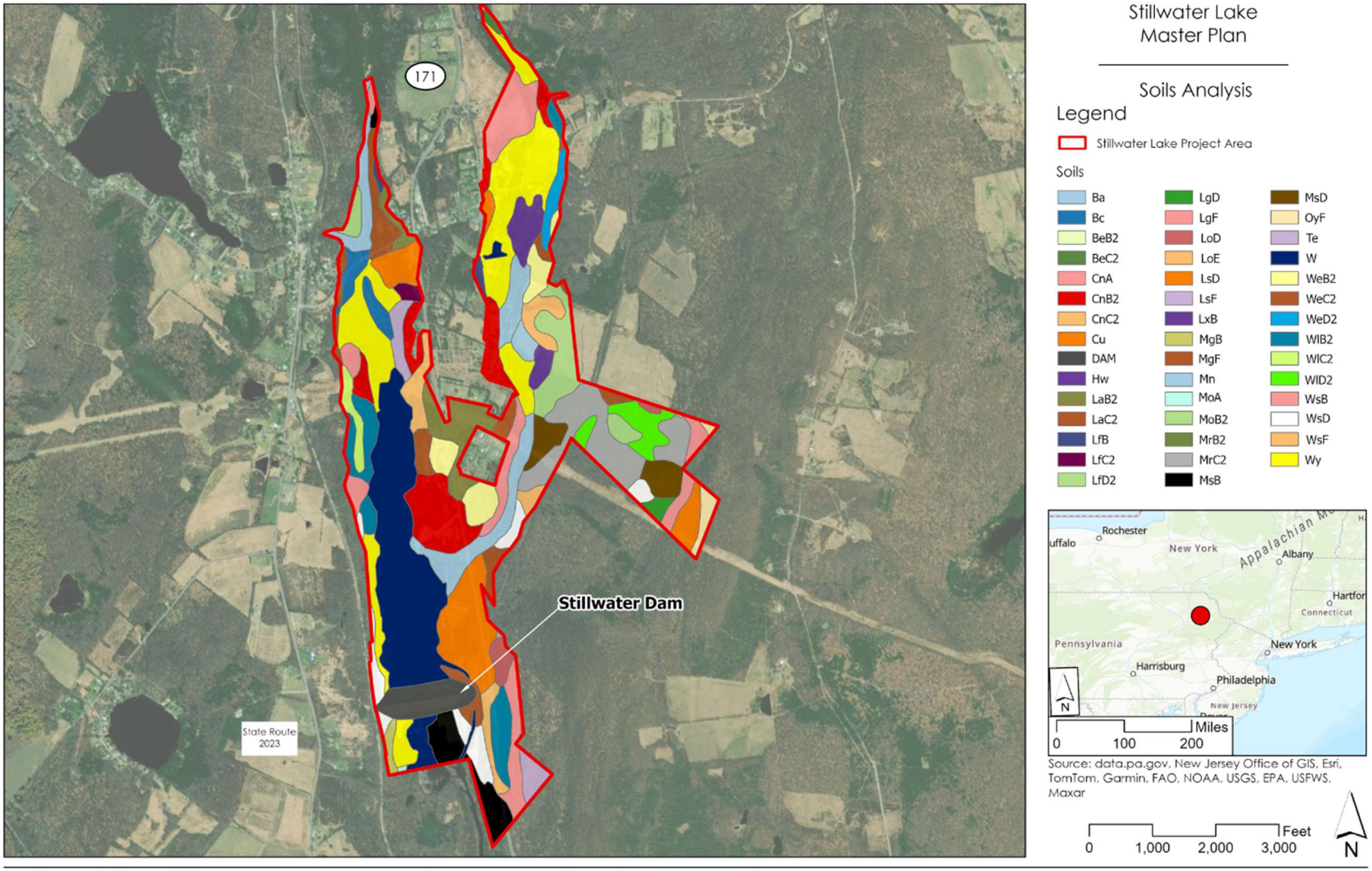


Figure 2-1. Soils Map

Note: map is for display purposes only and does not reflect surveyed boundaries

2.1.4 Hydrology and Groundwater

Stillwater Lake is a reservoir of the Lackawanna River which, in turn, is a tributary of the Susquehanna River. The Stillwater Lake drainage area totals 36.8 square miles at the dam site. The drainage basin is a kidney shaped basin about 11.5 miles long and about 4 miles wide at the widest part. The main stream pattern is fan-shaped with two branches of the main stream dividing the upper reaches of the drainage area into two minor areas, both of which contain numerous swamps and small lakes (USACE 1959). The longest channel extends 14.2 miles above the dam and has an average slope of 34 feet per mile (USACE 2001). Upstream of the dam, the valley has a comparatively mild slope (average slope 26 feet per mile) when generally the hillsides are steep. Downstream of Stillwater Lake, the watershed is characterized by short, flashy tributaries that flow through steep, narrow valleys (USACE 2001). For the 4 miles downstream of Stillwater Dam, the slope is gradual at about 4 feet per mile, then between Forest City and Archbald, PA, the average slope increases greatly to 40 feet per mile, and downstream of Archbald to the mouth of Lackawanna River is somewhat uniform at about 27 feet per mile. The dam is located within the Upper Susquehanna-Lackawanna Watershed (HUC 02050107). The Aylesworth Creek Lake Project, a nearby USACE owned and operated facility, is not operationally connected to Stillwater 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

Stillwater Lake supports many habitat types including wetlands, grassy areas, fields, edges, and forest, which contain diverse vegetative species. 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 Stillwater Lake (PADCNR 2024a).

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).

2.2.2 Wetlands

Wetlands found in the project area are generally located near the reservoir's peripheries and its tributaries. According to the United States Fish & Wildlife Service (USFWS) National Wetlands Inventory (NWI) Mapper, there are seven mapped freshwater emergent wetlands, five freshwater forested/scrub wetlands, four freshwater ponds, and two riverine (stream/river) systems located completely within the Stillwater Lake project area, totaling approximately 44.25 acres, or 8.7 percent of the project's land area (Table 2-2; USFWS 2024a).

Table 2-2. Wetland areas within the Stillwater Project Area

Wetland Type	Acres	Percent of Project Area
Freshwater Emergent Wetland	7.16	1.4%
Freshwater Forested/ Shrub Wetland	33.02	6.5%
Freshwater Pond	2	0.4%
Riverine	2.07	0.4%
Total	**44.25**	**8.7%**
Project Area	492.0	

Source: USFWS 2024a

Additionally, two wetland systems are partially located within the project area. A large freshwater emergent wetland totaling 31.95 acres is located immediately downstream of the dam and is partially included within the southern extremes of the project lands. A long and narrow freshwater forested/shrub wetland system totaling 4.80 acres is located upstream of the lake on the East Branch of the Lackawanna River and lies partially within the northeast reaches of the project boundary.

2.2.3 Fish and Wildlife

Stillwater Lake 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 in the project vicinity 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.

Eastern Wild Turkey

Stillwater Lake and the East and West Branches of the Lackawanna River host many fish species. A 2018 trap net survey conducted at the lake by the PFBC captured the following fish species: black crappie (*Pomoxis nigromaculatus*); bluegill (*Lepomis macrochirus*); brown bullhead (*Ameiurus nebulosus*); chain pickerel (*Esox niger*); common carp (*Cyprinus carpio*); golden shiner (*Notemigonus crysoleucas*); largemouth bass (*Micropterus nigricans*); pumpkinseed (*Lepomis gibbosus*); rock bass (*Ambloplites rupestris*); walleye (*Sander vitreus*); white sucker (*Catostomus commersonii*); yellow bullhead (*Ameiurus natalis*); and yellow perch (*Perca flavescens*) (PFBC 2018). The PFBC also captured smallmouth bass (*Micropterus dolomieu*) in a 2022 black bass survey (PFBC 2022).

2.2.4 Threatened and Endangered Species

2.2.4.1 *Federally listed species*

As of 2025, one proposed threatened species is known to potentially occur within the project area: the Monarch butterfly (*Danaus plexippus*) (USFWS 2025). No critical habitat has been designated for this species. The species list generated from the USFWS Information for Planning and Consutlation (IPaC) online system is located in Appendix H.


Monarch Butterfly

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 syriaca*) 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 of time. 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 State Threatened & Endangered Species*

USACE consulted the PA Natural Diversity Index (PNDI) Conservation Explorer website 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 The final PNDI report is located in Appendix H (PADCNR 2024c).

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 IPaC online system. No bald eagle nests are mapped in the vicinity of the project area (USFWS 2024b), although one nest was sited near the project boundary several hundred yards northwest of the project.

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 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.

2.2.6.1 *Plants*

Most of the project lands, except those used for project operations and for recreation at the Stillwater Lake Project 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. Invasive plant species may exist at the project site, but none are actively managed by dam staff.

2.2.6.2 *Insects*

Northeastern PA currently 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 Fairmarie*), for example, was destructive for many years before the host species' (*Fraxinus spp.*) populations became too low to support emerald ash borer populations. Another potential invasive insect of

Emerald Ash Borer Beetle

concern could be the hemlock wooly adelgid (*Adelges tsugae*). The adelgid's 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 quality of the water flowing into Stillwater Lake is very good. However, the Lackawanna River becomes degraded downstream of the dam due to acid mine drainage, urban runoff, and hydromodification. Stillwater Lake typically exhibits mesotrophic conditions (USACE 2022).

There are no special objectives for improvement of water quality at Stillwater Lake since outflow from the lake already has higher water quality than the inflow. Minimum flows are maintained for aquatic habitats below the dam. In July 2022, water quality samples were taken at two inflow points and one outflow point. Water temperature, specific conductivity (SpCond), dissolved oxygen (DO), and the potential for hydrogen (pH) were recorded at each sample location. Alkalinity, acidity, phosphate, ammonia, and nitrate were measured from the collected point samples. The water quality was determined to be high, and all analytes measured except phosphate met EPA standards. One inflow station and the outflow station had a higher phosphate reading than the EPA maximum standard, but the outflow was within the limits. All nutrient levels were within the expected range at all stations with the exception of a high nitrate reading at the outflow.

There are two large sewage treatment plants within the watershed. One has been cited for biochemical oxygen demand (BOD), fecal coliform, and total suspended solids over the past three years, and the other just for fecal coliform (USACE 2022).

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 Stillwater Dam. These include:

- 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 Act, 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
- 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 16, 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 initial wave of European individuals into the region were fur traders who traveled primarily along the Susquehanna River and larger tributaries. In 1681, the British crown granted William Penn title to colonial holdings that extended north to the 42nd parallel, an allotment which included the northeastern portions of what would become PA (Leary, Goodwin, and Seiter 2012). At that time, much of the region consisted of vast tracts of dense forests and was considered at least partially under the control of the Iroquois moieties of southern New York.

The initial colonial settlers to PA concentrated around the growing city Philadelphia in the seventeenth and early eighteenth century. It was not until after the British victory in the French and Indian war that the region of what was to be northeast PA began to see an increase in settlers (Leary, Goodwin, and Seiter 2012). It was at this time, during and after the American Revolutionary War, that disputes began to break out concerning overlapping colonial claims between Connecticut and PA that dated back to the original Crown land grants of the 1680s. These overlapping grants, based on an insufficient understanding of the geography of the region, led to boundary disputes and eventually to the Yankee-Pennamite Wars between

1769 and 1783. The wars involved settlers coming west from Connecticut, Massachusetts, and Rhode Island, who clashed in northeastern PA with those coming north from Philadelphia. The conflict ended in 1783 with the Trenton Decision, which settled the competing claims in favor of William Penn's heirs. With this decision and the end of the Revolutionary War, settlers flowed into northeastern PA (Munsell 1880). These settlers made residence in the towns of Great Bend, Montrose, and Friendsville.

The first documented settlement of Susquehanna County occurred when John Nicholson, a Philadelphia landholder, settled forty families near Brooklyn and three families settled at Great Bend in 1787 (SCHS 2010). A pioneer homestead was also reported along the east bend of the Susquehanna River in Harmony Township in November of 1787 (Blackman 1873). After 1787, farmsteads steadily increased throughout the county. Susquehanna County was formed on February 21, 1810, from portions of several larger eighteenth-century counties and included the townships of New Milford, Harford, and Nicholson (subsequently Lenox), with an initial population of over 2,000 citizens (Blackman 1873). The county was named for the river which enters PA within the county limits. The county seat, Montrose, was established in 1811 and quickly became an early center of activity for the region (Leary, Goodwin, and Seiter 2012). The Montrose community became an early center of the Abolitionist movement and was considered one of the key stops on the Underground Railroad. Between 1813 and 1815, seven new townships were created as population increased throughout the county. By 1820, Susquehanna County had a population of 9,958 residents (Blackman 1873). The largest communities within the county, both historically and in the modern era, include Montrose, Great Bend, and Susquehanna Depot.

The earliest settlers of Susquehanna County were farmers who grew a variety of crops and raised livestock. The soil and climate of the county made it an excellent location to grow winter wheat, potatoes, flax, Indian corn, apples, pears, peaches, and plums (Blackman 1873). By 1830, dairying also became an important industry in the area. The soils and climate were also well suited for growing hay for dairy cows and livestock feed (PHMC 2012). Early settlers also found the county abundant with streams and springs allowing for construction of dams and mills to assist in the refining of crops and in milling lumber (Padamonsky and Peltier 2015).

Early transportation networks in the county were focused on Indian paths and trails that traversed the area. The earliest road in the county, which was used for general travel, was constructed in 1789 and began on the western branch of the Delaware River and ran westward, terminating at the mouth of Cascade Creek (Blackman 1873). A second road was cut in 1791 that ran from the Delaware River to the town of Great Bend on the Susquehanna River. Subsequently, other roads were cut connecting Great Bend with Tunkhannock and Wyalusing. The County's first toll road, completed in 1811, was the Newburgh Turnpike which connected Great Bend with Newburgh on the Hudson River. Susquehanna County owes much of its early growth to this road (Blackman 1873).

The construction of several railroads in the 1840s and 1850s, including the Erie Railway and the Lackawanna and Western Railroad, significantly changed the landscape across northern Susquehanna County, and especially the Susquehanna River Watershed (Leary, Goodwin,

and Seiter 2012). In 1848, the Erie Railroad Company constructed one of their primary mechanical headquarters in Harmony Township. These rail yards were the chief industry in the region, employing more than 3,000 machinists and engineers during the late nineteenth century through the mid-twentieth century. Other minor rail connections included the Lehigh Valley, the Delaware and Hudson, and the Montrose Railroads (SCHS 2010). The growth of settlements in Susquehanna County corresponded closely to the routes of major railroads, as well as the course of the Susquehanna River. Communities along railroads benefitted the most from population increases, while more rural areas experienced more modest increases.

Thanks to the growing railroad industry in the county, other industries were able to flourish during this time period. These industries included timber and the quarrying of PA Bluestone, a naturally occurring layered sandstone which outcrops across the northern portions of the county (Blackman 1873). By the middle part of the nineteenth century, at least six commercial quarries were actively supplying bluestone to both local and national consumers (Leary, Goodwin, and Seiter 2012). The PA Bluestone Association indicates that bluestone from the region has been used in the sidewalks, curbs, banks, churches, and residences along the eastern seaboard including New York, Philadelphia, and Albany. Another major industry in Susquehanna County began with the discovery of high-quality coal deposits in the southeastern part of the county. As demand for coal increased, additional railroads were constructed to ship the coal to urban markets. By the mid-to-late nineteenth century, companies including the New York and Erie Railroad, the Delaware, Lackawanna, and Western Company, and the Lehigh Valley Railroad carried coal and freight via several connections throughout the county (Blackman 1873).

By 1914, the eastern perimeter of Susquehanna County had been traversed by additional rail service that led to the growth of Forest City Borough, Uniondale Borough, and Thomson Borough (Pennsylvania Department of Highways 1914). The Jefferson Division of the Erie Railroad extended south from Lanesboro through Thomson, Uniondale, and Forest City. The Scranton Division of the New York, Ontario and Western Railroad looped through Susquehanna County at Forest City and ran north through Uniondale before turning northeast into Wayne County.

In 1914, Susquehanna County had no paved roads and only a few state-aided roads (Pennsylvania Department of Highways 1914). The county's extensive network of roads consisted of local routes that connected farms and homes to a few principal routes developed from nineteenth century turnpikes. Early twentieth century topographic maps depict few changes to the local road networks (White 2015). By 1935, the first federally aided road, United States Route 11, was constructed, which runs north-south through the center portion of the county. By 1941, state-aided road projects had restructured the road networks through the addition of several paved roads that served as major routes across the county and connected population centers such as Great Bend and Lanesboro to points north and south.

After World War II, major and minor road improvements continued throughout Susquehanna County including the construction of Interstate 81 (White 2015). The most notable change to the county after the war; however, was the abandonment of some of the rail lines. The

Montrose Branch of the Delaware, Lackawanna, and Western Railroad (DL/WRR) was the first to be dismantled. By 1969, the Scranton Division of the New York, Ontario and Western Railroad had also been dismantled. The Erie Railroad and the DL/WRR were absorbed by Conrail in 1976 and continued as active rail lines. The Jefferson Division of the Erie Railroad became property of the Delaware/Hudson Railway Company, which continued to operate until its bankruptcy in 1988 (Bridge Line Historical Society 2007). This rail line, which runs along the western side of Stillwater Lake, is now operated as the Delaware and Hudson Rail-Trail, a recreational use trail that is part of the Lackawanna River Heritage Trail System.

The Stillwater Lake Project was completed in 1960 at a total cost of $5,750,000, which entailed the damming of the southwest-flowing Lackawanna River at the confluence between its east and west branches. Stillwater Lake is a unit of the comprehensive flood control plan for the protection of communities along the Lackawanna River and the Susquehanna River. It was authorized by the Flood Control Act of August 18, 1941, as described in Public Law No. 228, 77th Congress. The Stillwater Dam has prevented approximately $254 million in flood damages (USACE 2023).

2.3.3 Previous Cultural Investigations at Stillwater Lake

Four cultural resources surveys have been conducted within the project area (Table 2-3). Three were associated with multi-county pipeline corridor routes, while the fourth was associated with a multi-county baseline survey documenting underrepresented above-ground resources.

Table 2-3. Previous Cultural Resources Investigations at Stillwater Lake

Survey Name	Survey No.	Author/Year	Description
Phase I Cultural Resources Survey of a 7.63 Mile Gas Pipeline Corridor (Section 3) for Tennessee Gas Pipeline Company's Proposed Con Ed Expansion Project, Susquehanna and Wayne Counties, PA	1994SR00257	Perkins, Gary and Doershuk, John (3D/Environmental), 1994	Pedestrian survey and shovel testing of 63.79 acres for a proposed natural gas pipeline corridor. No archaeological sites were identified.
Final Phase I/II Archaeological Investigation Results of Cultural Resource Survey for the Proposed 300 Line Project, PA	2010SR00108	Petyk, Richard et al. (Gray & Pape, Inc.), 2010	Pedestrian survey, shovel testing, unit excavation, and architectural survey of 3,853 acres for a proposed pipeline corridor, compressor stations, access roads, and pipe yards. No historic properties were identified within the Stillwater Lake Project area.
Negative Survey Form, 300 Line Project, Loop 321 Cathode Bed, Union Dale Borough, Susquehanna County	2011SR00075	Snyder, Dane (Gray & Pape, Inc.), 2011	Pedestrian survey and shovel testing of 0.77 acres for a cathodic protection area associated with the 300 Line Project. No archaeological sites were identified.
Pennsylvania Baseline Survey, Year 1, Contract B - Lackawanna, Susquehanna, and Wyoming Counties	2021SR00262	Markosky Engineering Group, Inc., 2021	A baseline survey of Lackawanna County documenting underrepresented above-ground resources within the county. No cultural resources were documented within the Stillwater Lake Project area.

2.3.4 Recorded Cultural Resources

Four cultural resources have been identified within the project area (Table 2-4). None of the resources have been determined eligible for the NRHP; however, two of them have not been formally evaluated for the NRHP.

Table 2-4. Previously Identified Cultural Resources at Stillwater Lake

Resource Name	PHMC No.	NRHP Eligibility	Resource Type	Description
Stillwater Dam Complex	N/A	Not evaluated	Above-ground district	An earthen embankment and appurtenant features constructed for flood risk management
SUS-03	36SQ0123	Not evaluated	Archaeological site	Multi-component industrial site containing precontact and historic materials.
N/A	2004RE03161	Not eligible	Above-ground structure	30-foot-long steel stringer bridge constructed in 1920.
New York, Ontario, and Western Railway: Scranton Branch	2010RE00086	Not eligible	Above-ground district	Late nineteenth century railroad running between Oswego, NY and Jersey City, NJ.

2.3.5 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 Stillwater Dam.

- Identify and inventory historic properties within the project area as funds permit; and,
- Increase public awareness and education of the history of the Stillwater Dam, 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 Stillwater Lake Project consists of seven counties in PA and New York (NY). The lake lies within Susquehanna County and the surrounding counties include Bradford, Broome (NY), Lackawanna, Tioga (NY), Wayne, and Wyoming.

2.4.2 Population

According to the 2022 American Community Survey (ACS) 5-year population estimate, the total population in the ZOI is 637,221, down from 659,238 in 2010 as shown in Table 2-5. The population in the ZOI is approximately 4.9 percent of the total PA population (12,989,208 people). From 2022 through 2030, the population in the ZOI is expected to decrease by 17,274, which corresponds to an annual growth rate of -2.71 percent. Of the ZOI counties, only Lackawanna County has a positive growth rate of 0.78 percent. Every other county in the ZOI has a negative projected growth rate.

The distribution of the population among gender, according to the 2022 ACS, is approximately 50 percent female and 50 percent male in the ZOI, and approximately 51 percent female and 49 percent male for PA as a whole. Most counties (6 out of 7) within the ZOI have nearly equal male and female populations (+/- 1 percent); however, Wayne County, PA has a relatively large difference in gender population with an approximately 53.3 percent male to 46.7 percent female population as shown in Table 2-6 (USCB 2024).

The median ages in Susquehanna County and PA are 48.5 years and 40.8 years, respectively, with ZOI median ages ranging from 39.9 years in Broome County to 48.8 years in Wayne County. Age distribution across the ZOI is shown in Figure 2-2 (USCB 2024).

The overwhelming majority of the ZOI population is white, with minority races making up 12.4 percent of the total population. Approximately 5.4 percent of the ZOI population identified as Hispanic or Latino (of any race), and 0.1 percent identified as American Indian of the Cherokee, Chippewa, Navajo, or Sioux tribal groupings, as shown in Figure 2-3 (USCB 2024).

2.4.3 Education and Employment

In the ZOI, approximately 63.9 percent of the population aged 25 and older has obtained a high school diploma or equivalent, including those with higher degrees, while approximately 25.8 percent of the population received no further education beyond a high school diploma or equivalent. Approximately 11.6 percent have some college education but no degree, 7.7 percent have an Associate's degree, 11.0 percent have a Bachelor's degree, 7.8 percent

have a Graduate degree or professional certification, 4.4 percent have a 9th to 12th grade education, and 1.7 percent have less than a 9th grade education (USCB 2024).

The largest employment industries in the ZOI include educational services and health care and social assistance at approximately 27.7 percent, followed by retail trade at 12.3 percent, manufacturing at 10.6 percent, and arts, entertainment, recreation, and accommodation and food services at 8.5 percent. All other industries make up 40.5 percent of employment. The civilian labor force unemployment rate within the ZOI is 3.3 percent, similar to the 3.4 percent unemployment rate for all of PA (USCB 2024).

2.4.4 Households and Income

There are approximately 260,084 households in the ZOI, 5,193,727 in PA, and 7,715,172 in NY. The median household income in the ZOI ($63,472) is lower than PA ($73,824) and NY ($82,085) overall. Of the ZOI counties, Broome County, NY has the lowest household income at $58,317, and Tioga County, NY has the highest household income at $70,427 (USCB 2024).

Approximately 14.3 percent of persons living within the ZOI are below the poverty level, the same percent as NY overall and higher than the 11.8 percent below the poverty level in PA overall. Broome County, NY has the highest percentage of persons below the poverty level at 19.1 percent and Wayne County, PA has the lowest percentage at 11.0 percent (USCB 2024).

Table 2-5. Population Estimates and 2030 Projections

County	2010 Estimate		2022 Estimate		2030 Estimate		Growth rate
	Number	% of ZOI	Number	% of ZOI	Number	% of ZOI	
Pennsylvania	12,702,379	-	12,989,208	-	13,185,540	-	1.5%
Bradford County, PA	62,622	9.5%	60,159	9.4%	59,009	9.5%	-1.9%
Broome County, NY	200,600	30.4%	198,365	31.0%	186,950	30.2%	-6.1%
Lackawanna County, PA	214,437	32.5%	215,672	33.8%	217,307	35.0%	0.75 %
Susquehanna County, PA	43,356	6.6%	38,540	6.1%	36,845	5.9%	-4.4%
Tioga County, NY	51,125	7.8%	48,344	7.6%	45,090	7.3%	-6.7%
Wayne County, PA	58,822	8.9%	51,227	8.0%	49,332	8.0%	-3.7%
Wyoming County, PA	28,276	4.3%	26,219	4.1%	25,414	4.1%	-3.1%
ZOI Total	**659,238**	**-**	**638,526**	**-**	**619,947**	**-**	**-3.0%**

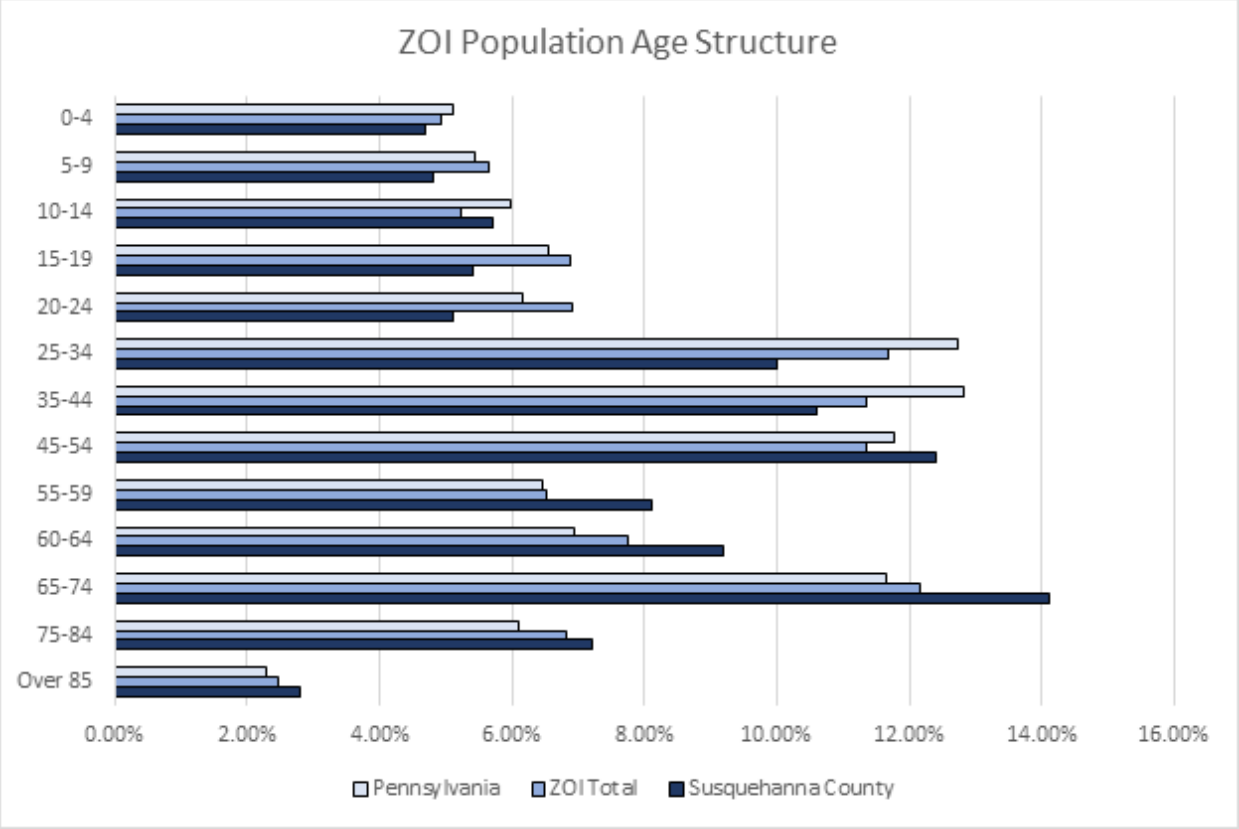
Source: USCB 2024; Pennsylvania State Data Center for the Center for Rural Pennsylvania 2024 (2030 Estimates); Cornell Program on Applied Demographics, County Projections Explorer 2024.

Table 2-6. Population Estimates by Gender

County/State	Population	
	Female	Male
Pennsylvania	6,572,178	6,399,830
Bradford County, PA	30,003	30,156
Broome County, NY	100,340	98,025
Lackawanna County, PA	108,785	106,830
Susquehanna County, PA	19,018	19,522
Tioga County, NY	24,151	24,193
Wayne County, PA	23,938	27,289
Wyoming County, PA	12,965	13,254
Zone of Influence Total*	319,200	319,269

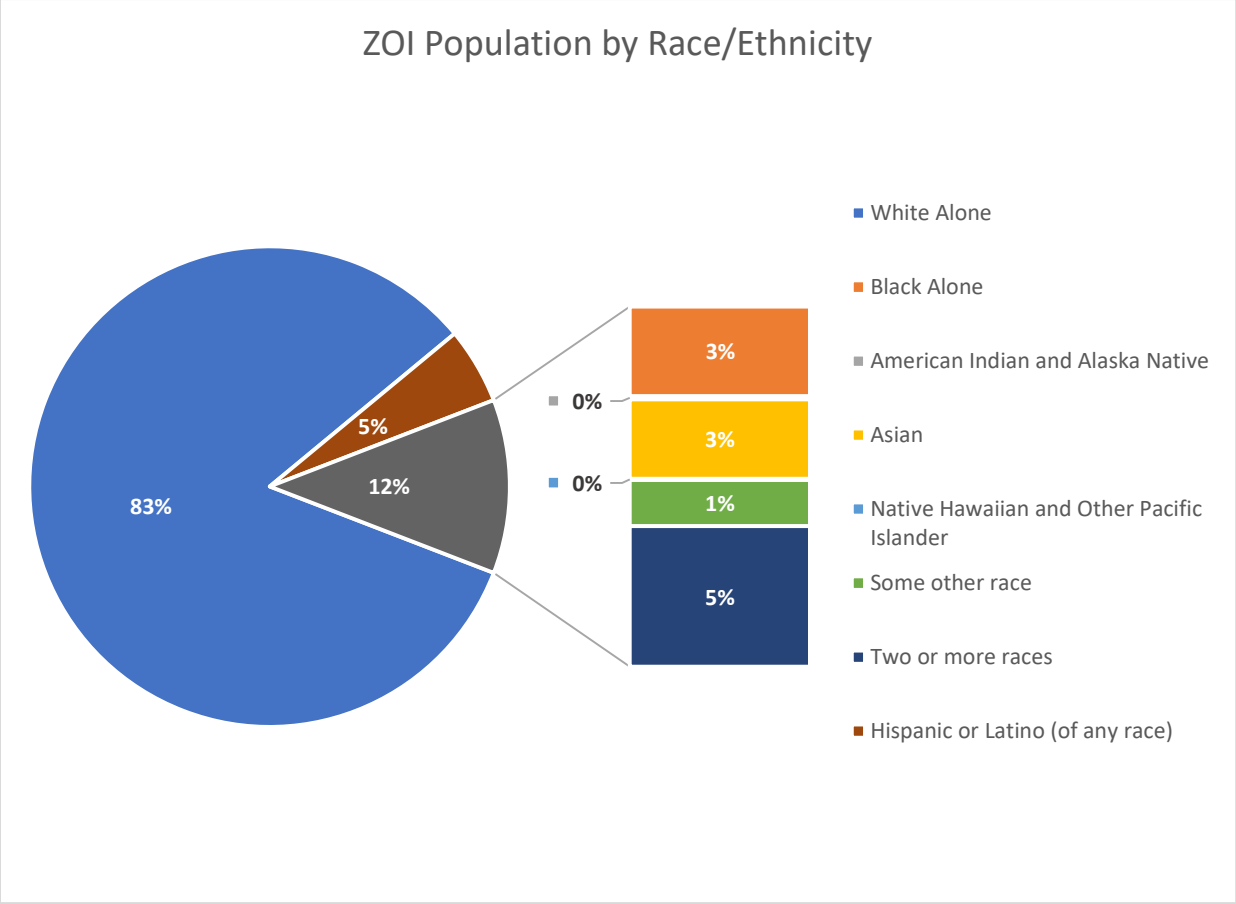
Source: USCB, 2024.

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



Source: USCB, 2024.

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



Source: USCB, 2024.

2.5 RECREATION FACILITIES, ACTIVITIES, AND NEEDS

2.5.1 Zone of Influence

The zone of influence for the Stillwater Lake Project consists of seven counties in PA and NY, including Susquehanna County and the surrounding jurisdictions of Bradford, Broome (NY), Lackawanna, Tioga (NY), Wayne, and Wyoming Counties.

2.5.2 Visitation Profile

Visitation data is not maintained by USACE in the Visitor Estimation and Reporting System (VERS). During the summer months, there is usually 1 or 2 boats observed per day. Stillwater Lake does not have camping; therefore, all users are considered day use visitors.

2.5.3 Recreation Facilities

The Stillwater Lake recreation area features a boat launch, a parking area, and portable restroom. The PFBC have a license to operate and maintain an approximate 35-acre area (that includes the above facilities); and to enforce its regulations and manage public fishing and boating on the entire Stillwater Lake Project. The recreational area is open year-round. Additionally, the Stillwater Lake Scenic Overlook adjacent to the dam is used by the public for nature watching.

2.5.3.1 *Day Use Area*

All the above recreational facilities are day use areas. A gravel parking area is offered near the boat launch with portable restroom access. The boat launch is a concrete launching plank that leads into Stillwater Lake that was completed in October 2000. The PFBC regulates and manages boating activities at the Stillwater Lake Project. Due to the use as a water supply downstream of the Stillwater Lake Project, there are restrictions to allowed activities on the lake, including (1) no combustion boat engines may be used on the lake, only electric engines or self-propelled (paddle); and (2) no swimming or wading at the Stillwater Lake Project. Additional prohibited activities include camping and open fires.

Stillwater Lake Parking Area

Stillwater Lake Boat Launch

2.5.3.2 *Fishing*

Fishing is permitted in Stillwater Lake. The PFBC regulates and manages the public fishing and the fish population at Stillwater Lake. The fish species managed for at Stillwater Lake include Largemouth Bass, Bluegill, Black Crappie, Chain Pickerel, Yellow Perch and bullheads.

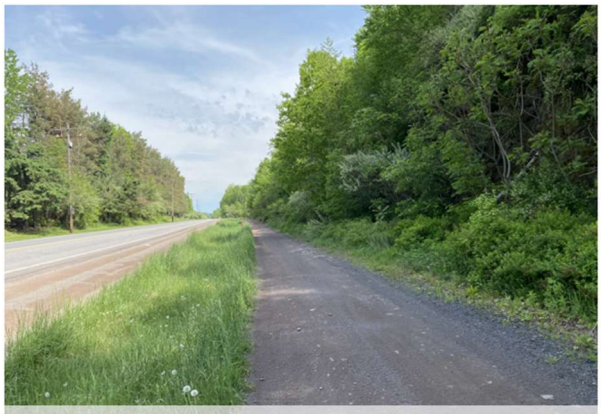
2.5.3.3 *Overlook*

The Stillwater Lake Scenic Overlook, adjacent to the dam, allows for temporary parking by the public for nature watching.

Stillwater Lake Overlook Area

2.5.3.4 *Trails*

The O&W Rail Trail (formerly the New York, Ontario, and Western Railroad) begins in Simpson, PA and continues to Hancock, NY. The O&W Rail Trail has three owners, which each have a different segment they control. The midsection of the trail is privately owned and allows ATVs/Snowmobiles with trail passes, which is the portion that runs through the Stillwater Lake Project. The N.E.P. Snow Trails, Inc. has a license to construct, operate, and maintain the O&W Rail Trail that runs through the Stillwater Lake Project. This license is for the approximate 4.1 acres on the east side of the Stillwater Lake Project that the O&W Rail Trail runs through, all to the east of Route 171.



O&W Trail

Another local trail nearby, but not on the Stillwater Lake Project, is the Delaware and Hudson Railroad Trail (D&H Rail Trail) that parallels the dam embankment on the right (west) abutment where the railroad grade falls below the top-of-dam elevation. The D&H Rail Trail is 38 miles total and runs from the Simpson Viaduct at Route 171 to the NY State border, generally following the eastern border of Susquehanna County (RTC 2024). The D&H Rail Trail allows for running, hiking, and biking, but does not allow motorized vehicles (unlike a portion of the O&W Rail Trail). See Figure 2-4 for Segment 3 of the Rail to Trail Council of Northeast PA's Guidebook for both trail location's proximity to the Stillwater Lake Project.

O&W Trail

D&H Trail (left) and Stillwater Dam (right)

Segment #3
Lackawanna River Bridge #1 to Union Dale
3.0 miles

General Trail Condition:
Good, smooth and wide, stone dust surface.

Access & Parking:
Access this segment from Union Dale or Forest City Trailhead.
Access the D&H or O&W at Route 171 overpass at "yellow gate", but there is limited parking (do not park in front of gate).
Access O&W across from Stillwater Dam, Rte 171. Stillwater Dam has an overlook and parking area.

Linkages:
Just past the first railroad bridge crossing the Lackawanna River and before the Rte 171 underpass is a path on the right that leads up to the O&W Trail (yellow gate). You can access SR171 here, get on the O&W and head north or south. (12 mile loop trip possible from Simpson O&W, to D&H at 'crossover', north on D&H, to O&W at Rte 171 underpass and back to Simpson via O&W).

O&W South – rough in places, but suitable for a mountain bike. Leads to Browndale, crosses Rte 247 (turn right to get back to FC Trailhead). Continue south to go back to Simpson. You'll cross one unimproved RR bridge; dismount bikes.

O&W North runs along Rte 171 for ½ mile then the railbed continues –see snowmobile signs. The railbed was taken in part to build part of this road. Use caution on Rte 171.

You can also link from the D&H to the O&W in Herrick Center (see loop in Segment 4)

Points of Interest:
The upper reaches of the Lackawanna River can be seen. The US Geological Survey maintains a river level gage just north of the bridge crossing.

Old Stillwater Dam remnants can be seen.

Great views of Stillwater Lake, Stillwater Dam and Reservoir. Good lookouts for water fowl. The PA Fish Commission has a boat access to Stillwater Lake off of Route 171.

Stillwater Dam was built by the Army Corp of Engineers in 1960 as a flood control dam for the Lackawanna River valley.

The O&W North to Poyntelle is open for ATV use with a trail pass. Northern Wayne Outdoor Recreation Club
(PO Box 290, Lakewood, PA 18439 570-727-2097
www.nworc.org)

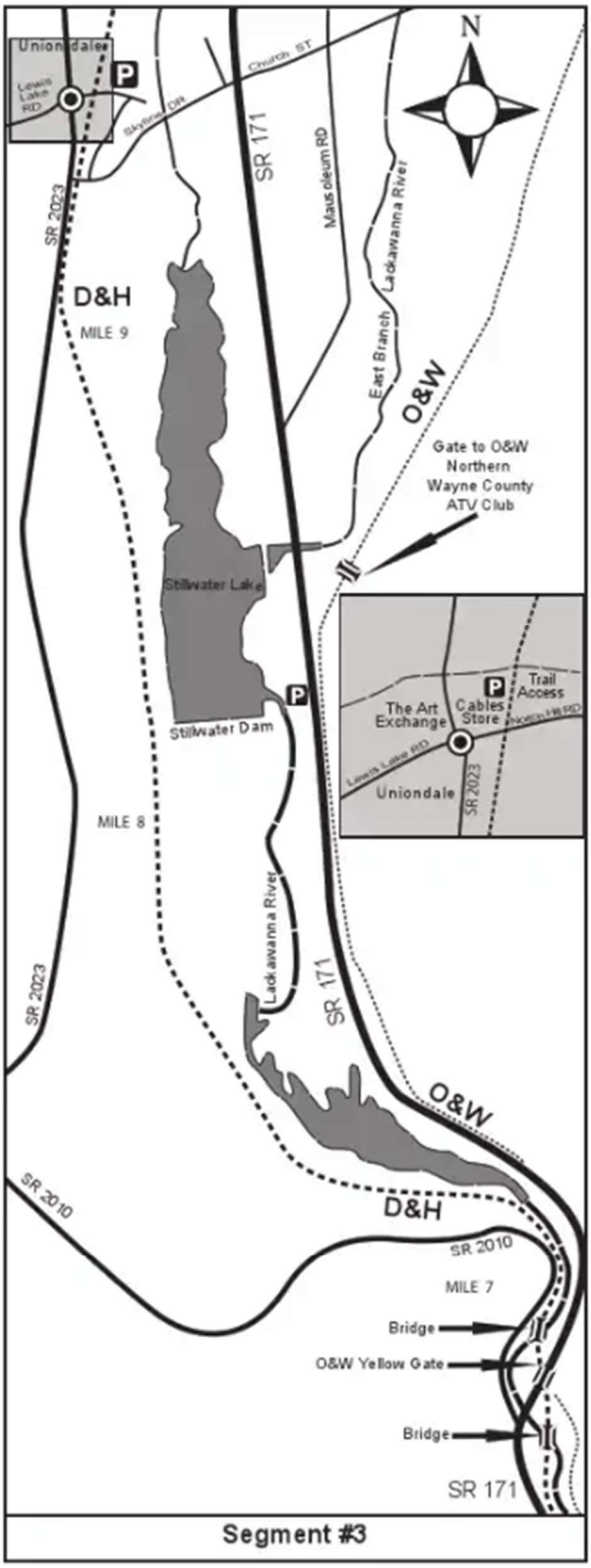


Figure 2-4. D&H and O&W Rail Trail Map Segment near Stillwater Lake

2.5.4 Recreation Analysis

The Stillwater Lake Project is beneficial to the local economy through indirect job creation and local spending by visitors. By providing opportunities for active recreation, the USACE-owned lake and the recreation areas mainly licensed to PFBC helps promote physical activity, provides recreational programs, and increases awareness of the environment. Visitation is not tracked at the Stillwater Lake Project, thus in-depth analysis is not available.

2.5.5 Recreation 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 mainly managed by PFBC. However, use of the Stillwater 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. Use of the Stillwater Lake Project by boaters, anglers, and nature watchers 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

The real estate acquisition for the Stillwater Lake Project totals 678 acres. The acreage includes approximately 492 acres owned in fee and 186 acres in flowage easement (See Figure 4-1 and 4-2). Fee title acres mean 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.

A few notable outgrants include the PAWC that utilizes Stillwater Lake as a source of water supply for the Forest City Water Purification Plant, which is located downstream of the Stillwater Lake Project on the Lackawanna River. The PFBC has a license to operate and maintain approximately 35 acres of the Stillwater Lake Project for public parking and facilities; and enforces its regulations and manages public fishing and boating on the entire Stillwater Lake Project. Additionally, N.E.P. Snow Trails, Inc. operates approximately 4.1 acres to maintain their portion of the O&W Rail Trail for the purpose of ATV and Snowmobile use (with passes) that runs through the east side of the Stillwater Lake Project (east of Route 171). Additional outgrants include utility lines, roads, driveways, and rights of way access.

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 EPA 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 in the area of 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 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, climate change, 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 guideline 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, 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 the Stillwater Lake Project. 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 Stillwater Lake recreation area 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 are based upon time, manpower, and budget. The objectives provide high levels of stewardship to USACE-owned 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 PFBC to provide a realistic approach to the management of the resources present.

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 above 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 nation's problems that also protect and enhance the environment.


Stillwater Lake

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/or 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 the Stillwater Lake Project to the greatest extent possible.

3.3.1 Project-Wide Objectives

- Mitigate potential flood damage to downstream communities including Carbondale, Olyphant, and Scranton, PA, the Lackawanna River, and the Susquehanna River.
- Additional uses of the Project are water quality, water supply, recreation, and environmental stewardship of natural and cultural resources.

3.3.2 Recreation Area Objectives

The Stillwater Lake Project provides recreational opportunities to the local region. There are numerous passive recreational benefits such as boating, fishing, hiking, ATV/snowmobiling on the O&W Rail Trail, and wildlife viewing. In addition, the PFBC have a license to operate and maintain approximately 35 acres of the Stillwater Lake Project for public parking and facilities; and enforce its regulations and manage public fishing and boating on the entire Stillwater Lake Project. The recreational area, managed by PFBC, are primarily used for boating and fishing. The PFBC plans to maintain current facilities (boat ramp, parking area, portable restroom) with no expansions or improvements to recreational facilities in the foreseeable future.

Additionally, the N.E.P. Snow Trails, Inc. has a license to construct, operate, and maintain the O&W Rail Trail that runs through the Stillwater Lake Project. This license is for the approximate 4.1 acres on the east side of the Stillwater Project that the O&W Rail Trail runs through, all to the east of Route 171. The N.E.P. Snow Trails, Inc. will continue trail maintenance into the foreseeable future.

4 LAND CLASSIFICATIONS

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 the USACE regulations (EP 1130-2-550), Chapter 3, including: Operations, Recreation, Fish and Wildlife, and Mitigation. The Stillwater Lake Project was established for flood risk management for downstream communities including Carbondale, Olyphant, and Scranton, the Lackawanna River, and the Susquehanna River. The Stillwater Lake Master Plan was completed as Design Memorandum Number 10 in 1959. The 1959 Stillwater Lake Master Plan (1959 Master Plan) included lands for (1) project operations; (2) recreation, in the form of a wayside park due accessibility/usability, and for keeping the water quality high for downstream water supply purposes; and (3) fish and wildlife management.

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 Master 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 was originally constructed. However, the 1959 Stillwater Lake Master Plan did not include designated land classifications. The 1959 Master Plan does include recommendations regarding future land use at the Stillwater Lake Project. The 1959 Master Plan recommended lands for project operations and a wayside recreational park that would not contaminate the lake for the purposes of downstream water supply. Since no formal land classifications were presented in the 1959 Master Plan, no further discussion of prior land classifications is included in this updated Master Plan.

4.2.2 Proposed Land Classifications

Land classification indicates the primary use for which project lands are managed. There are six 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 Stillwater Lake and Table 4-1 expresses the acreage per land classification.

Proposed land classifications were determined by referencing land use discussions in the 1959 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 Summary

Proposed Land Classification	Acres
Project Operations	64.3[1]
High Density Recreation	2.3
Multiple Resource Management	
Low Density Recreation	359.1
Water Surface	
Restricted	0.5[2]
Open Recreation	65.5
Total	**492.0**[2]

[1]*Of the 64.3 acres classified under the land classification Project Operations; all 64.3 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.*

[2]*Mapping 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 classification and water surface acreages. Minor discrepancies also exist within this table due to rounding. This total acreage only includes lands owned in fee simple. Flowage easement acreage is excluded from this total. The total with flowage easements is 678 acres (flowage easements are 186 acres).*

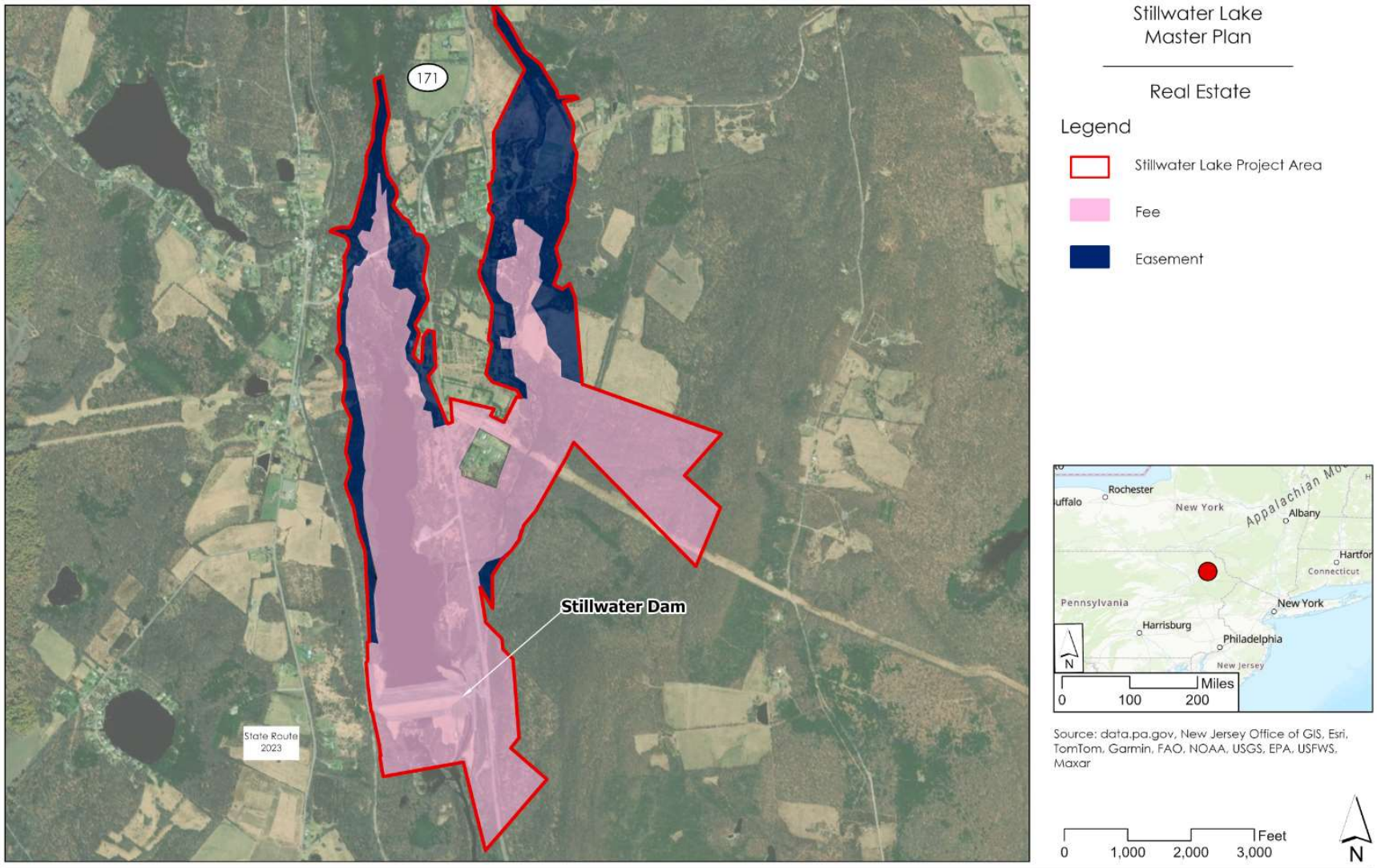


Figure 4-1. Real Estate Map

Note: map is for display purposes only and does not reflect surveyed boundaries

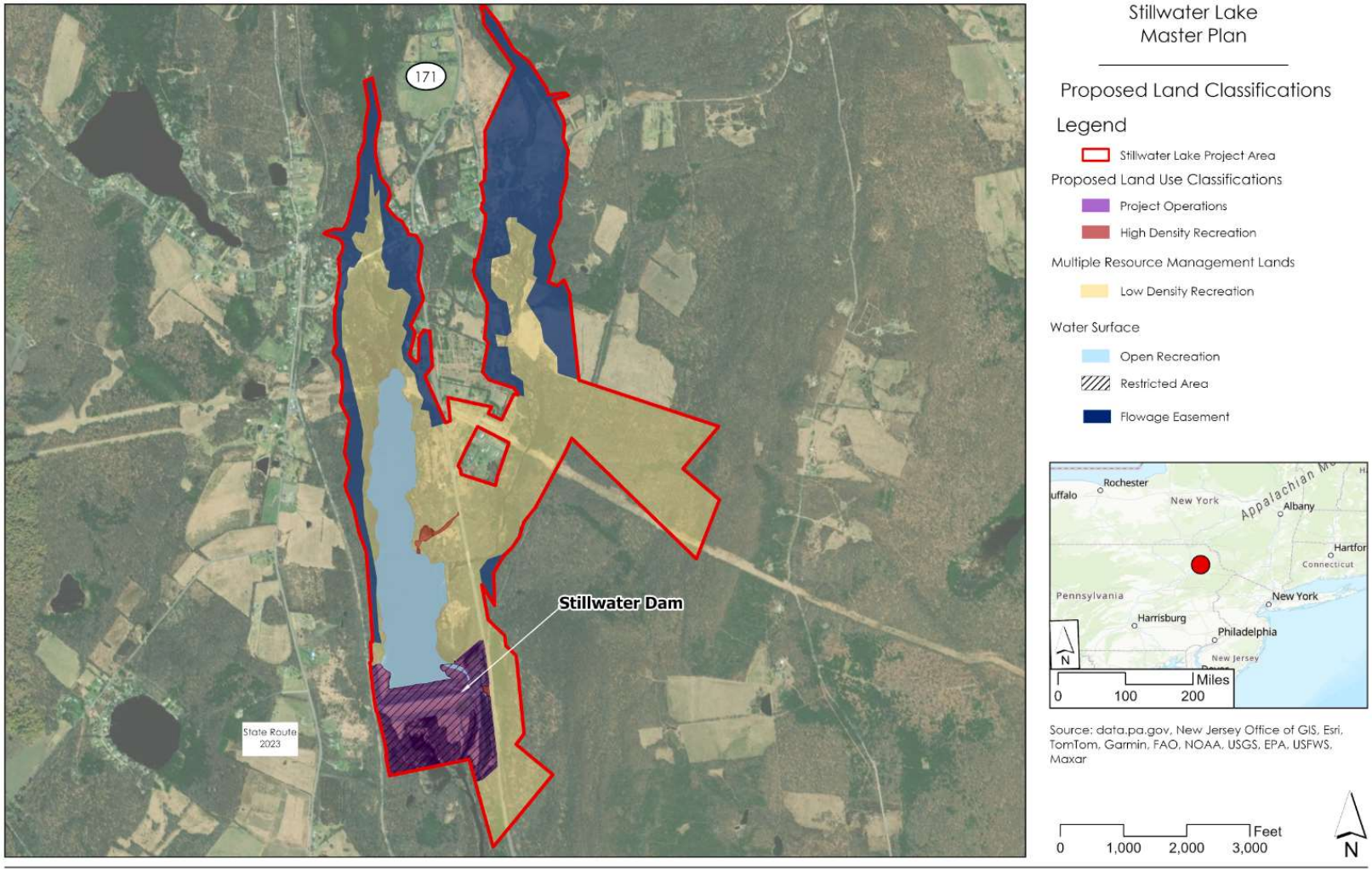


Figure 4-2. Proposed Land Classification Map

Note: map is for display purposes only and does not reflect surveyed boundaries

4.2.2.1 *Project Operations*

This classification category includes the project land required for the structure, operation, administration, or maintenance of the project and must be maintained to carry out the authorized purpose of flood risk management. There are 64.3 acres at the Stillwater Lake Project allocated to project operations including the dam, spillway, control tower, operations offices, and maintenance facilities. There is signage and barriers to prevent unauthorized personnel to access the restricted Project Operations areas. 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 scenic overlook, boat launch, restroom, and parking area. This category includes 2.3 acres of land at the Stillwater Lake Project, 2.0 acres of which is operated and managed by the PFBC. The other 0.3 acres is the USACE operated Stillwater Lake Scenic Overlook just east of the dam.

4.2.2.3 *Multiple Resource Management*

This classification category identifies the predominant use of an area with the understanding that the 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 Recreation. A given tract of land may be classified using one or more of these sub-classifications. There are 359.1 acres of land at the Stillwater Lake Project that are under this classification. The proposed land classification map (Figure 4-2) reflects the predominant sub-classification. Section 4.2.2.3.1 identifies the acreage in each sub-classification within the Multiple Resource Management Lands category.

4.2.2.4 *Low Density Recreation*

The Low Density Recreation sub-classification covers lands with minimal development or infrastructure that support passive public recreation use like fishing, hunting, wildlife viewing, or hiking. There are 359.1 acres characterized as Low Density Recreation on Project lands including all federally owned lands not designated as Project Operations, High Density Recreation, or Water Surface. The PFBC operates and maintains approximately 33 acres of this Low Density Recreation classification. N.E.P. Snow Trails, Inc. operates approximately 4.1 acres of this land classification to maintain their portion of the O&W Rail Trail that runs through the east side of the Stillwater Lake Project (east of Route 171) for the purpose of ATV and snowmobile use (with passes).

4.2.2.5 *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, and Open Recreation. At the Stillwater Lake Project, only the Restricted and Open Recreation Water Surface sub-classifications are present.

4.2.2.5.1 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 Stillwater Lake includes a small area around the intake channel. The total acreage of Restricted water surface is 0.5 acres.

4.2.2.5.2 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 65.5 acres at Stillwater Lake is designated as Open Recreation. No combustion boat engines may be used on the lake, and no swimming or wading is allowed at the Stillwater Lake Project.

4.3 PROJECT EASEMENTS

As discussed in Section 2.6, the real estate acquisition for the Stillwater Lake Project totals 678 acres. The acreage includes approximately 492 acres owned in fee and 186 acres for flowage easements. 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. Flowage easements were acquired to elevation 1,626 PCD, which represents five feet above the spillway crest height at the Stillwater Dam. There are 186 acres of flowage easement lands located at the Stillwater Lake Project. See Figures 4-1 and 4-2 to reference the locations of the flowage easements at the Stillwater Lake Project.

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 Stillwater 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 For:	
• Low Density Recreation	A, B, C, E
Water Surface:	
• Restricted Area	A, E
• Open Recreation	A, C, E

5.2 PROJECT OPERATIONS AND MAINTENANCE

This land is associated with the dam and spillway structures that are operated and maintained for the purpose of the flood risk management mission of Stillwater Lake Dam. There are 64.3 acres of lands under this classification, all of which are managed by USACE.

There are several recently completed and upcoming planned improvements in Project Operation lands that are part of routine operation and maintenance of a flood risk management dam. Future projects associated with this land classification include maintaining, updating, and enhancing existing infrastructure.

Recently completed projects include:

- Built new office buildings at the old scenic overlook, formerly located on the top of the dam. The Dam Operators moved their office to the new buildings. The new office buildings (and old scenic overlook) are about a tenth of a mile north of the Stillwater Dam on PA Route 171.
- Moved Stillwater Lake Scenic Overlook to parking area adjacent to dam (as shown on Figure 5-1).
- Installed additional restricted signage around the restricted areas around the Project Operations lands, particularly immediately adjacent to the dam.
- Rehab of electrical connections located by the dam.

Old Stillwater Dam Operator Office

New Stillwater Dam Operator Office

Upcoming improvements include:

- Apply annual herbicide to the dam to maintain structural integrity.
- Maintain fence separating the dam from the D&H Trail that runs adjacent to (but not on) the east edge of the Stillwater Lake Project Lands.
- Add security fencing around new office buildings.
- Remove old office buildings from top of dam but leave foundation of building.
- Replace gate in the dam. It would function the same way but would meet updated standards.

Fence between D&H Trail and Stillwater Dam

5.3 HIGH DENSITY RECREATION

Lands classified for High Density Recreation are currently developed for intensive recreational activities. The Stillwater 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 a boat launch, parking area, and portable restroom. These areas have been developed to support concentrated visitation and use of the recreational facilities.

There are 2.3 acres of High Density Recreation within project lands; 2.0 acres of the High Density Recreation area is operated and managed by the PFBC. 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 PFBC to ensure that the recreation areas are managed and operated in accordance with the goals and objectives prescribed in Chapter 3.

The PFBC plans to maintain current facilities (boat ramp, parking area, portable restroom) including signage, with no expansions or improvements to recreational facilities in the foreseeable future. General maintenance consists of mowing, weed control by spraying and trimming, debris removal, and general road repairs.

The other 0.3 acres of High Density Recreation area is the USACE operated Stillwater Lake Scenic Overlook adjacent to the Stillwater Lake Dam. USACE plans to maintain parking lot and signage.

Figure 5-1 illustrates all existing recreational interests, including the High Density Recreation amenities stated above and the Low Density Recreation 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 fall under multiple sub-classifications). The following paragraphs describe the various sub-classifications of these lands at the Stillwater 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. Hunting is allowed in select areas that are a reasonable and safe distance from high density recreational areas, dam operations, and adjacent residential properties. There are 359.1 acres of Low Density Recreation on Stillwater Lake Project Lands. The PFBC operates and maintains approximately 33 acres of this Low Density Recreation classification. N.E.P. Snow Trails, Inc. operates approximately 4.1 acres of this land classification to maintain their portion of the O&W Rail Trail that runs through the east side of the Stillwater Lake Project (east of Route 171) for the purpose of ATV and snowmobile use (with passes). Generally, all federally owned lands not designated as Project Operations, High Density Recreation, or Water Surface at the Stillwater Lake Project have this classification.

5.5 WATER SURFACE

Per USACE policy set forth in EP 1130-2-550, the water surface of the lake at the recreation pool elevation may be classified as Restricted, No-Wake, or Open Recreation. At the Stillwater Lake Project, only Restricted and Open Recreation Water Surface sub-classifications are present. The Stillwater Lake Project maintains a conservation pool of 66 acres in surface area (at elevation of 1,572 feet PCD) and stores approximately 247 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 Stillwater Lake includes a small area around the intake channel. The total acreage of Restricted water surface is 0.5 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 65.5 acres at Stillwater Lake is designated as Open Recreation.

A "No Wake" designation is available under the guidelines in EP 1130-2-550; however, Stillwater Lake is unique in that it is a small lake and the water from the Stillwater Lake flowing downstream is used for water supply. Thus, limiting the types of recreation and vessels able to access the water. There is a boat launch which allows for boats with electric engines or self-propelled (paddle). No combustion boat engines may be used on the lake, and no swimming or wading is allowed at the Stillwater Lake Project. Small electric or non-motorized vessels 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 186 acres of flowage easement lands at the Stillwater Lake Project 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

Note: map is for display purposes only and does not reflect surveyed boundaries

6 SPECIAL TOPICS, ISSUES, CONSIDERATIONS

6.1 COMPETING INTERESTS ON NATURAL RESOURCES

The Stillwater Lake Project's authorized purposes of flood risk management and additional uses of water quality, water supply, recreation, and environmental stewardship of natural and cultural resources, accommodate the needs of federal, state, and municipal users that have developed over time. The benefits provided 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 all 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 Master 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 Stillwater Lake Project includes civil outgrants for electric and TV cable lines as well as water and gas pipelines. The Pennsylvania Department of Transportation maintains an easement for multiple public roads. Finally, there are a few right of way easements with local residents or businesses.

6.3 RECREATIONAL EVENTS

The PFBC occasionally hosts fishing events. Prior to those events, PFBC coordinates event permits through USACE. USACE reviews the requests to ensure compliance with applicable laws and regulations for proposed activities.

7 PUBLIC AND AGENCY COORDINATION OVERVIEW

USACE policy guidance in ER 1130-2-550, Change 7, January 30, 2013, and EP 1130-2-550, Change 5, 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 Stillwater Lake Master Plan.

- May 21, 2024 - The USACE planning team visited the Stillwater Lake Project where initial introductions, site orientation, a site tour, and concept discussions took place.
- September 3, 2024 - USACE published a Notice of Intent to develop a Master Plan and Environmental Assessment (EA).
- 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 July 2, 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 Stillwater Lake Master Plan follows the USACE master planning guidance in ER 1130-2-550 and EP 1130-2-550, both dated January 13, 2013. Three major requirements set forth in the new guidance include: (1) the preparation of contemporary Resource Objectives, (2) classification of the project lands using the newly approved classification standards, and (3) the preparation of a Resource Plan describing in broad terms how the land in each of the land classifications 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 Stillwater 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 Stillwater Lake.

8.2 LAND CLASSIFICATION

During development of the 2025 Stillwater Lake Master Plan, there was no previous land classification mapping at Stillwater 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 the Stillwater Lake Project

Classification	2025 Master Plan (acres)	Description
Project Operations	64.3[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	2.3	Lands that are currently developed for intensive recreational activities for the visiting public and includes a scenic overlook, a boat ramp, gravel parking area, and portable restroom. This land classification has been developed to support concentrated visitation and use of the recreational facilities they host. The High Density Recreation area is located within a small area on the east shore of Stillwater Lake and the scenic overlook just east of the dam.
Multiple Resource Management Land		
Low Density Recreation	359.1	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. The new land classification criteria exclude vegetation and wildlife management areas, leaving only areas with minimal development to support passive recreation use.
Water Surface		
Restricted	0.5[2]	Areas where recreational boating is prohibited or restricted for project operations, safety, and security purposes. The Restricted water at Stillwater Lake includes the intake channel.
Open Recreation	65.5	Water surface areas available for year-round or seasonal water-based recreational use. This area includes all water surface area other than restricted waters.
Total	492.0[2]	

[1]*Of the 64.3 acres classified under the land classification Project Operations; all 64.3 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.*

[2]*Mapping 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 classification and water surface acreages. Minor discrepancies also exist within this table due to rounding. This total acreage only includes lands owned in fee simple. Flowage easement acreage is excluded from this total. The total with flowage easements is 678 acres (flowage easements are 186 acres).*

9 APPENDIX

APPENDIX A: ACRONYMS

ac	Acres
ACS	American Community Survey
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
cfs	Cubic Feet Per Second
EA	Environmental Assessment
EO	Executive Order
EOPs	Environmental Operating Principles
EP	Engineer Pamphlet
ER	Engineer Regulation
EIS	Environmental Impact Statement
ft	Feet
FY	Fiscal Year
GIS	Geographic Information System
IPaC	Information for Planning and Consultation
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
NHPA	National Historic Preservation Act

NGVD 29	National Geodetic Vertical Datum 1929
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
PAWC	Pennsylvania American Water Company
PCD	Project Construction Datum
PFBC	Pennsylvania Fish and Boat Commission
PNDI	Pennsylvania Natural Diversity Index
PHMC	Pennsylvania Historical and Museum Commission
SCORP	Statewide Comprehensive Outdoor Recreation Plan
URDC	Urban Research and Development Corporation
USACE	United States Army Corps of Engineers
USCB	United States Census Bureau
USDA APHIS	United States Department of Agriculture, Animal & Plant Health Inspection Service
USDA NRCS	United States Department of Agriculture, Natural Resources Conservation Service
USDA USFS	United States Department of Agriculture, United States Forest Service
USFWS	United States Fish and Wildlife Service
ZOI	Zone of Interest

APPENDIX B: REFERENCES

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APPENDIX C: SITE VISIT MEETING MINUTES

Stillwater Lake Site Visit Notes – May 21, 2024 at Stillwater Dam

Attendees:

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

1. (Toured Dam, Dam Operator Offices, and Near By Trails; Took Pictures)
2. Dam
    a. Highest Lake Pool Level still below Spillway Crest
        i. ~1617 PCD in 1993 was highest pool
        ii. Spillway Crest 1621 PCD
    b. Normal Lake Pool
        i. Goal to maintain 1572 PCD year round to allow for storage during storm events
        ii. Normally keep pool between 1572 to 1574 under normal conditions
        iii. Mainly the water is allowed for free flow, but can adjust flow by closing or opening gate.
3. Dam Operator Offices
    a. Dam offices in process of moving from top of dam to the old overlook. Old office will be removed minus the foundation to store Geotech material.
    b. The parking lot east side of dam will become the new overlook.
4. Hydropower
    a. No exploration done since 1950s
5. Trails on or nearby Stillwater Lake Project
    a. D&H Trail
        i. Not on site, immediately west of dam, separated by a fence
        ii. No ATV's
        iii. Allows Biking, walking, etc.
        iv. Gravel trail material
    b. O&W Trail
        i. Licensed to N.E.P. Snow Trails, Inc. for segment running through east side of Stillwater Lake Project, east of 171
        ii. Snowmobiles in cooler months, when snow on the ground; groomed for snowmobiling,
        iii. ATVs in warmer months
        iv. Trail passes required
6. Project Operation Lands Restricted Access

a. Restricted signs are posted around restricted portion of dam
b. Can park near dam (east side) in parking lot, will be public overlook
c. In water, channel leading to intake is restricted
d. Water along dam not restricted, but the dam itself is restricted.

7. Environmental
    a. No known water quality issues
    b. No known sediment filling in issues
8. Upcoming Dam Operator Projects
    i. Move Stillwater Lake Scenic Overlook to parking area adjacent to dam (as shown on Figure 5-1).
    ii. Install additional restricted signage around the restricted areas around the Project Operations lands, particularly immediately adjacent to the dam.
    iii. Electrical rehab of electrical connections by Stillwater Lake Dam
    iv. Apply annual herbicide to the dam to maintain structural integrity
    v. Maintain fence separating the dam from the D&H Trail that runs adjacent to (but not on) the east edge of the Stillwater Lake Project Lands.
    vi. Add security fencing around new office buildings
    vii. Remove old office buildings from top of dam but leave foundation of building.
    viii. Replace gate in the dam. It would function the same way but would follow updated standards.

Stillwater Lake Site Visit Notes – May 21, 2024 at Stillwater Lake Recreation Area by Boat Launch

Attendees:

- Melanie Mathesz – Planning, Civil Project Development Branch
- Lauren (McDonald) Southern – Planning, Civil Project Development Branch
- Nate Slingerland – Operations, Flood Risk Management
- Andy Hofmann – Operations, Flood Risk Management
- Josh Herzog – Dam Operator
- Vinny Burney – Dam Operator
- Cheryl Janiszewski – Real Estate
- Captain Emit Kyler-Pennsylvania Fish and Boat Commission
- Terry Meehan- Pennsylvania Fish and Boat Commission

1. PFBC operates and maintains an approximate 35-acre area and boat launch to enforce its regulations and manage public fishing and boating on the entire reservoir. Swimming and gasoline powered boat motors are prohibited in the lake.
2. Fishing allowed all times of year. Ice fishing popular when lake freezes over.
3. Enforcement
   a) Can enforce any law minus traffic
   b) Minimal needed
4. Recently installed new signs by boat ramp due to damage
5. No plans for new facility upgrades. No planned pavilions
6. Maintenance of site includes:
   a) Mowing in summer
   b) Plowing snow in winter
   c) Keep stones by boat ramp in good condition
7. Park Users
   a) Low use, about 1 to 2 boats observed per day
8. Special events: If have one, then coordinate permits through USACE, like educational programs.

APPENDIX D: PUBLIC NOTICES AND PERTINENT NEWSPAPER ARTICLES

APPENDIX E: SUMMARY OF PUBLIC COMMENTS AND USACE RESPONSE TO PUBLIC COMMENTS

APPENDIX F: LAND CLASSIFICATION AND RECREATIONAL ASSET MAPS

Stillwater Lake Master Plan

Proposed Land Classifications

Legend

Stillwater Lake Project Area

Proposed Land Use Classifications

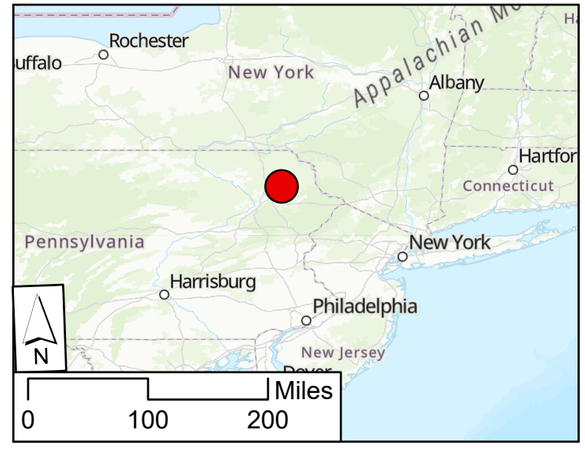
- Project Operations
- High Density Recreation

Multiple Resource Management Lands

- Low Density Recreation

Water Surface

- Open Recreation
- Restricted Area
- Flowage Easement



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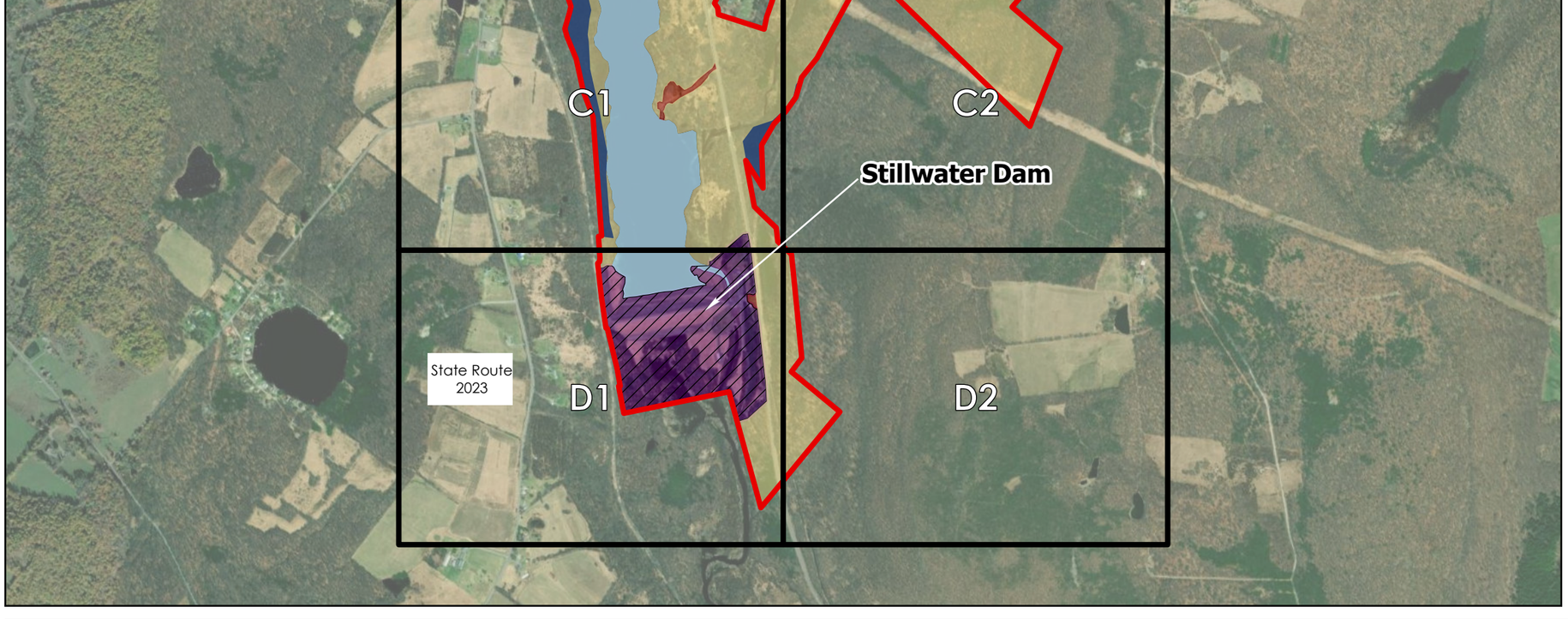

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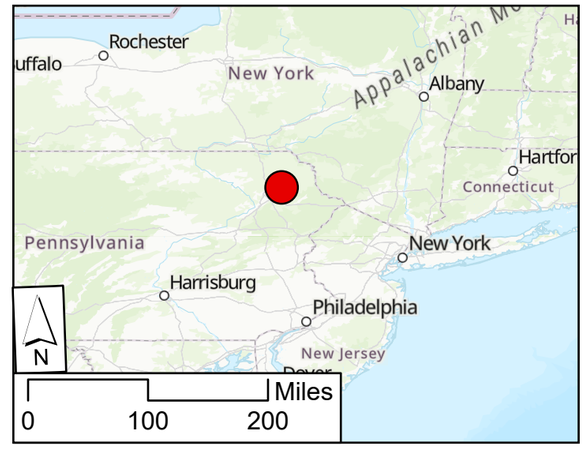

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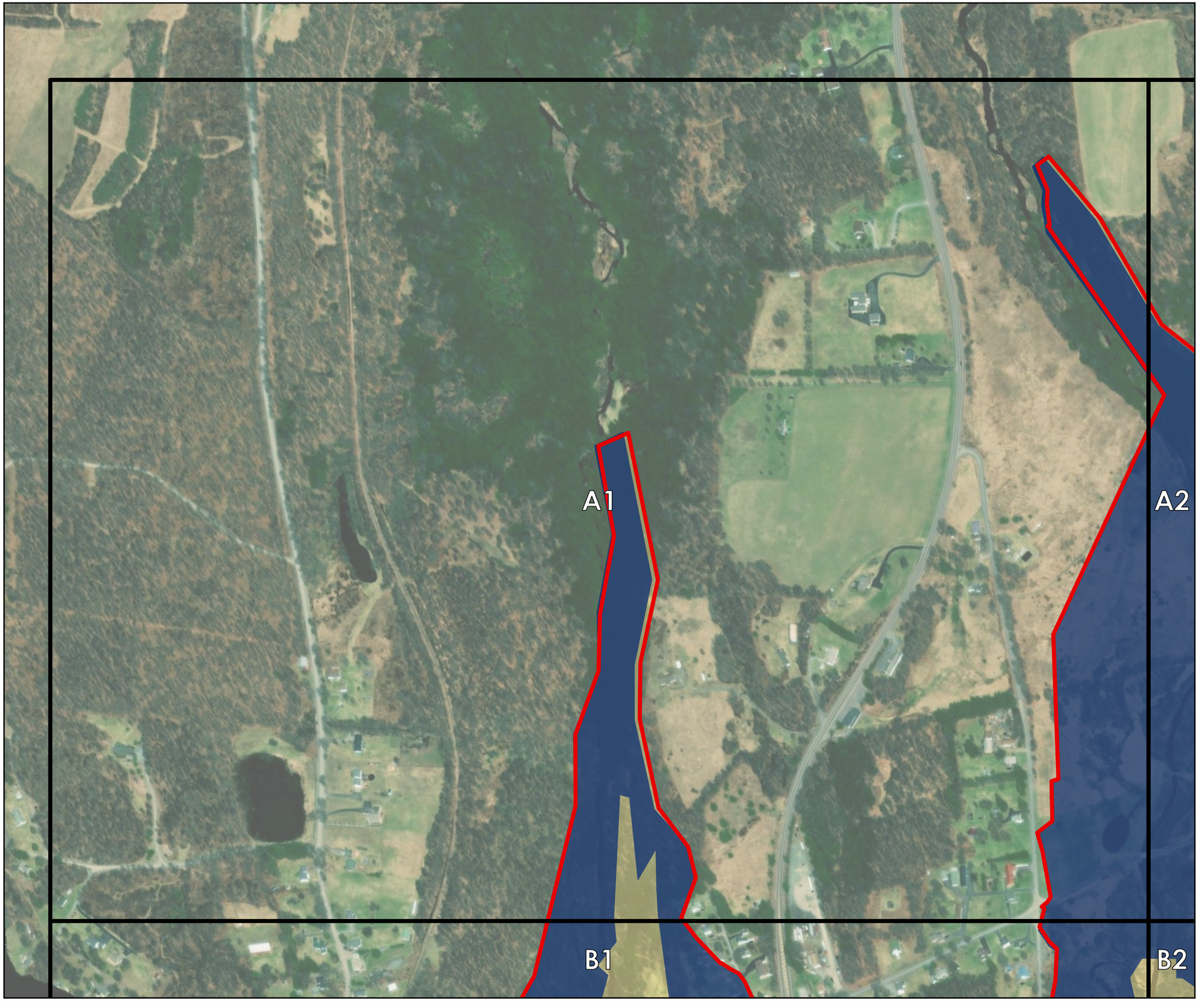

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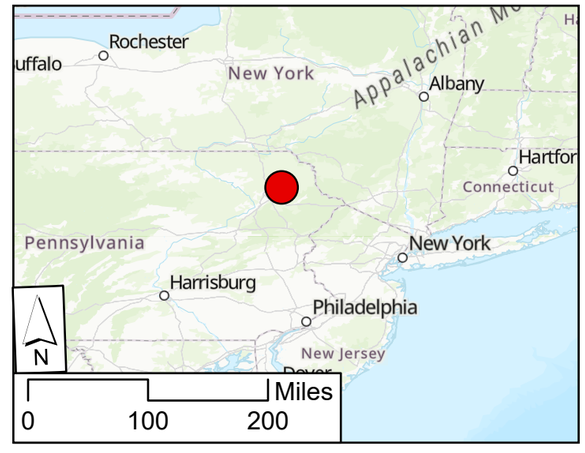

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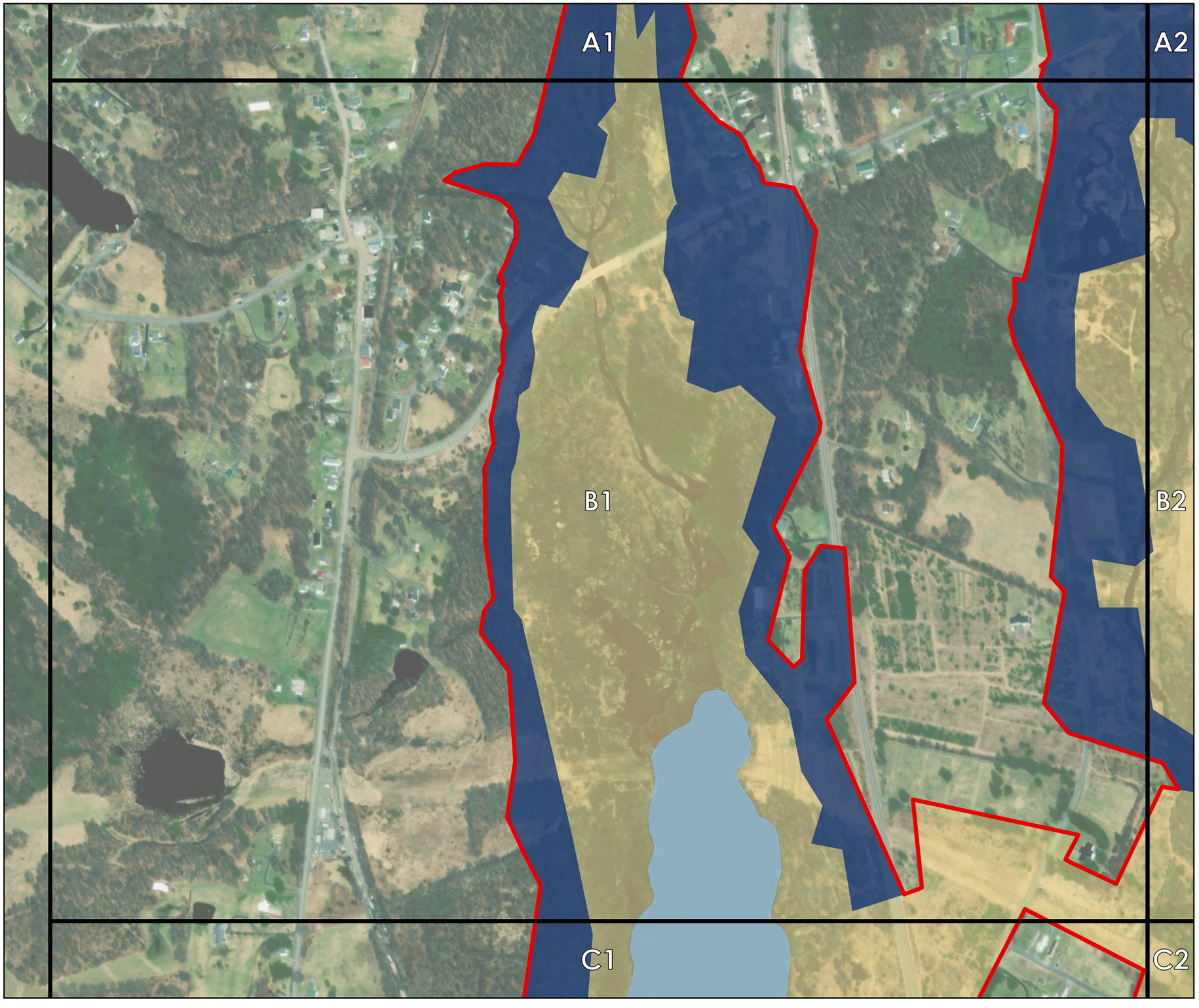

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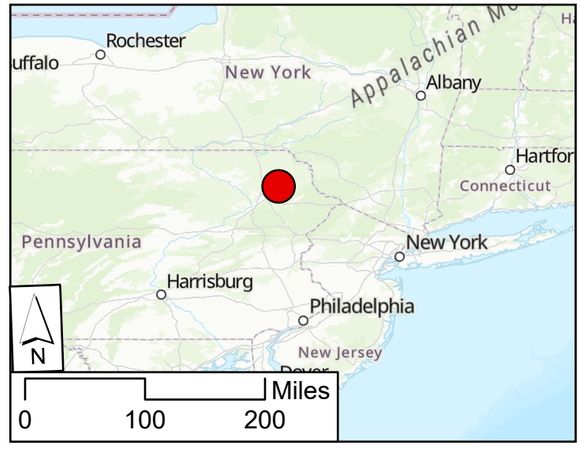

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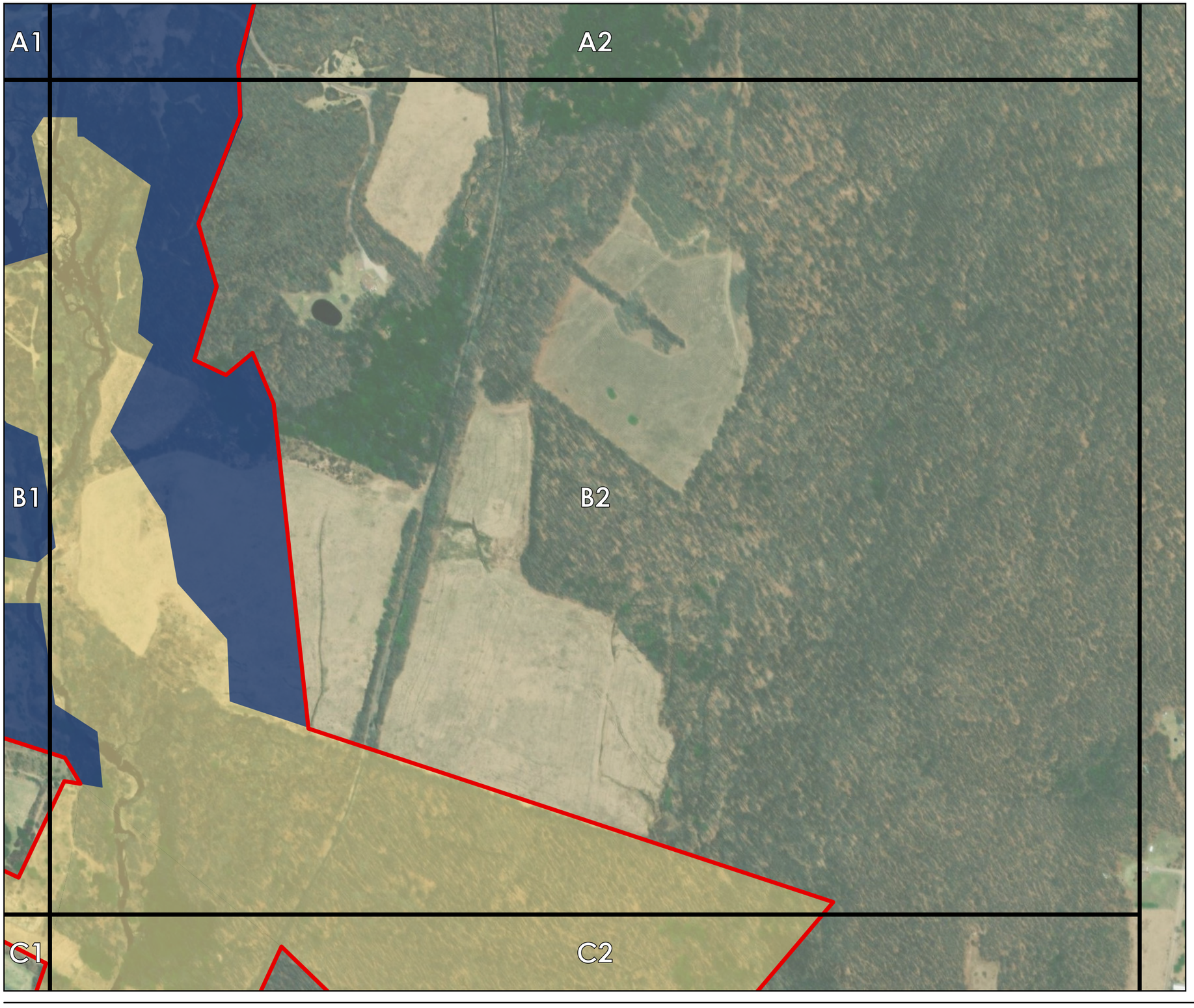

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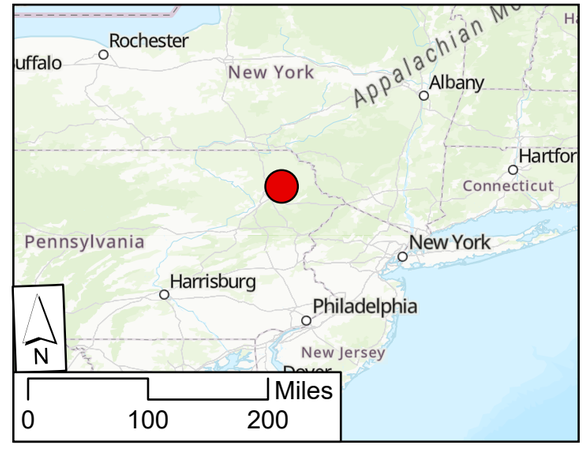

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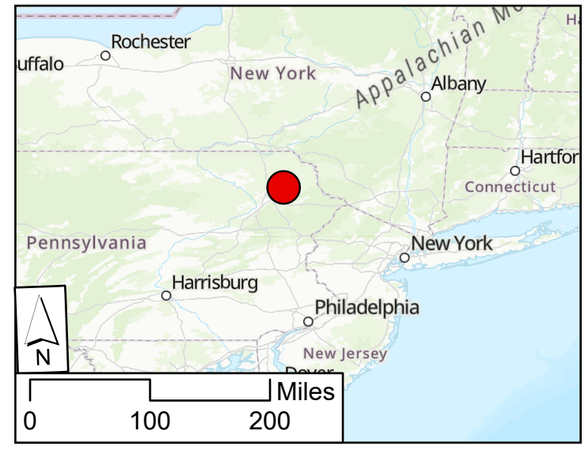

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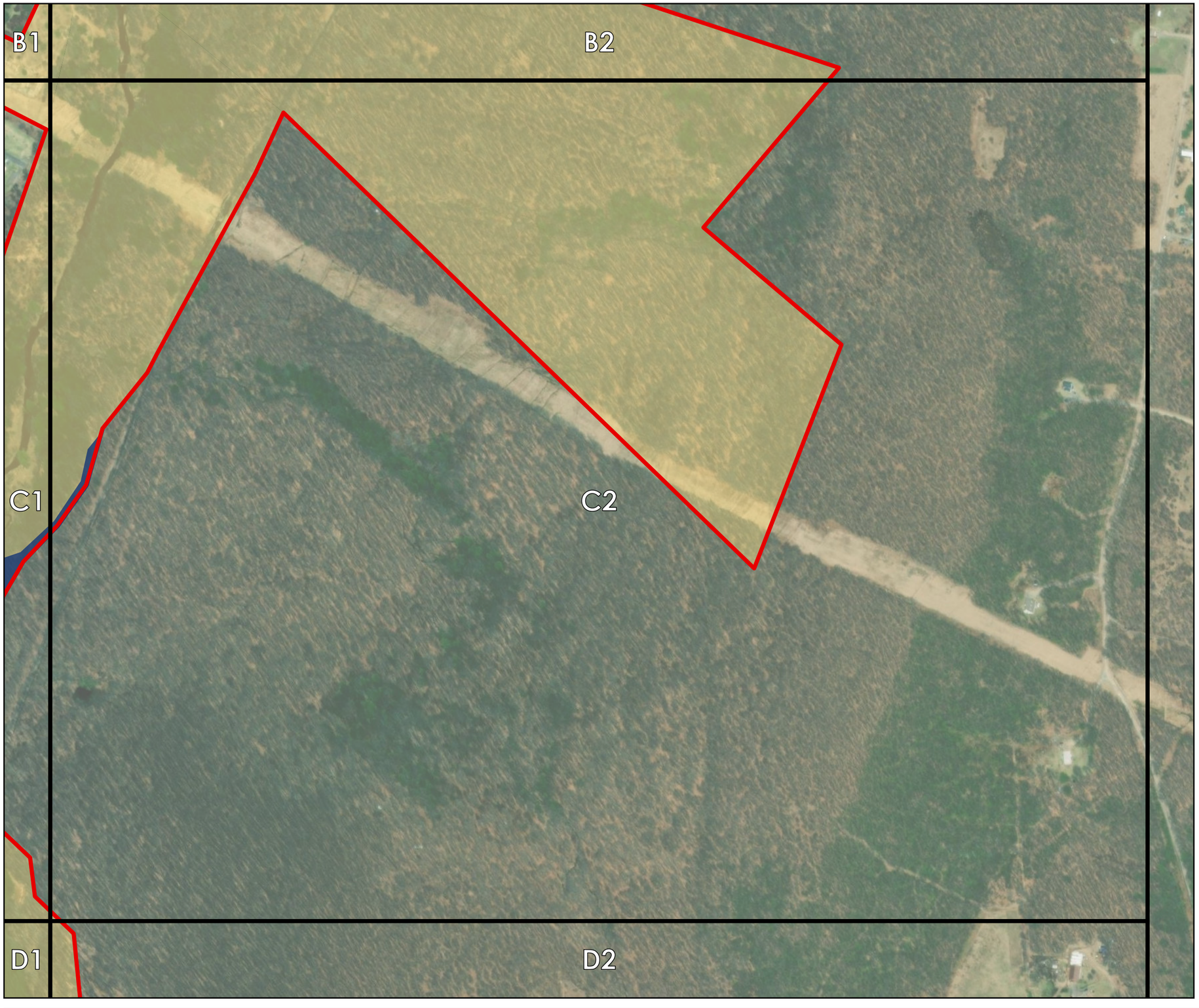

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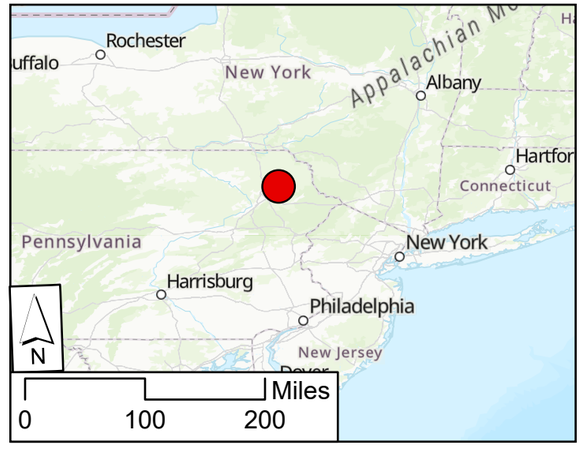

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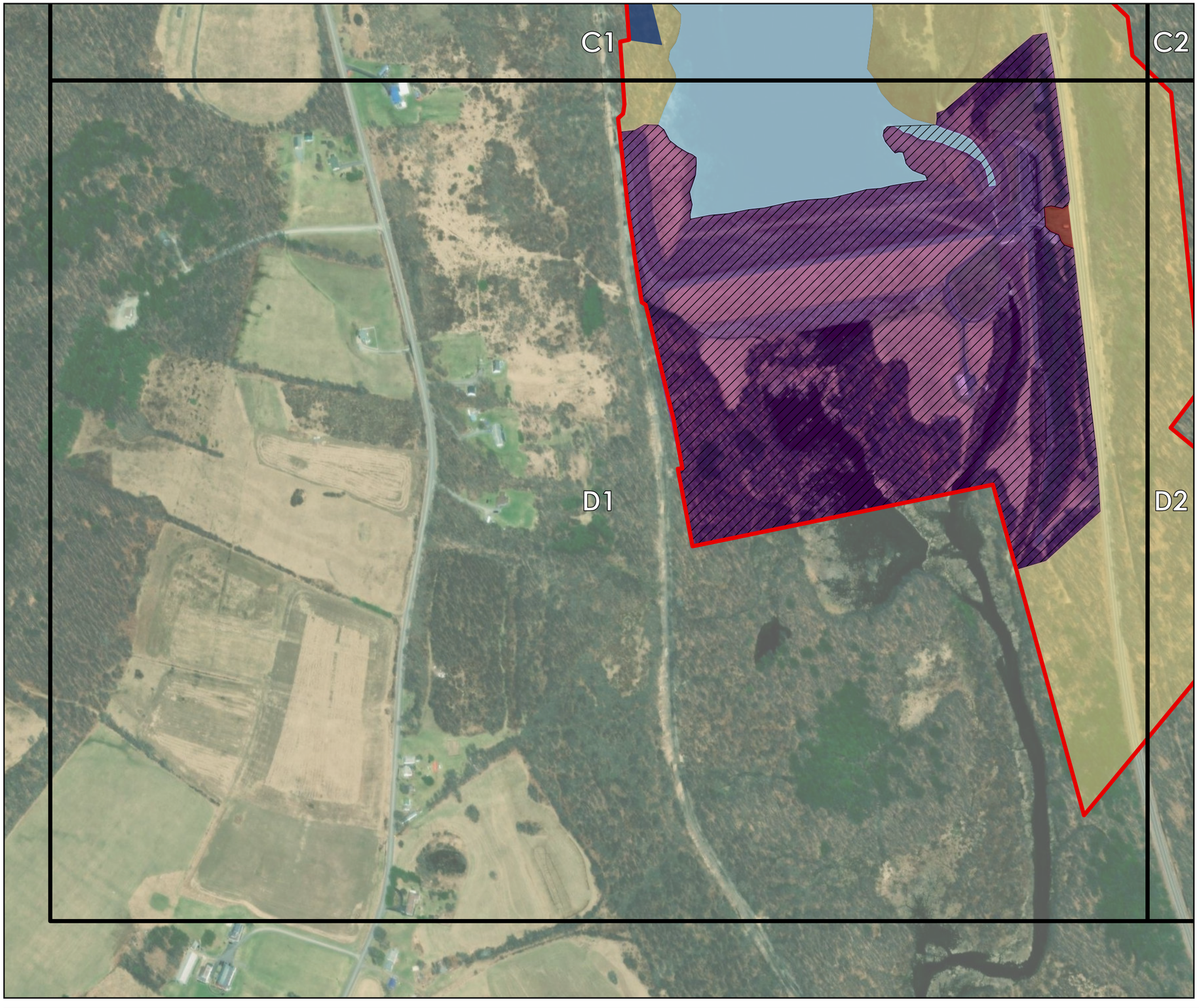

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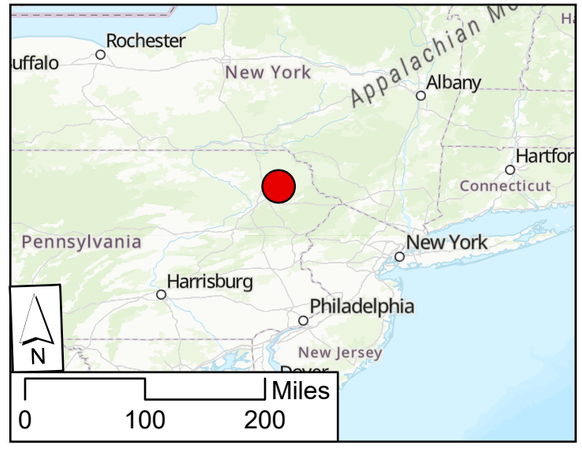

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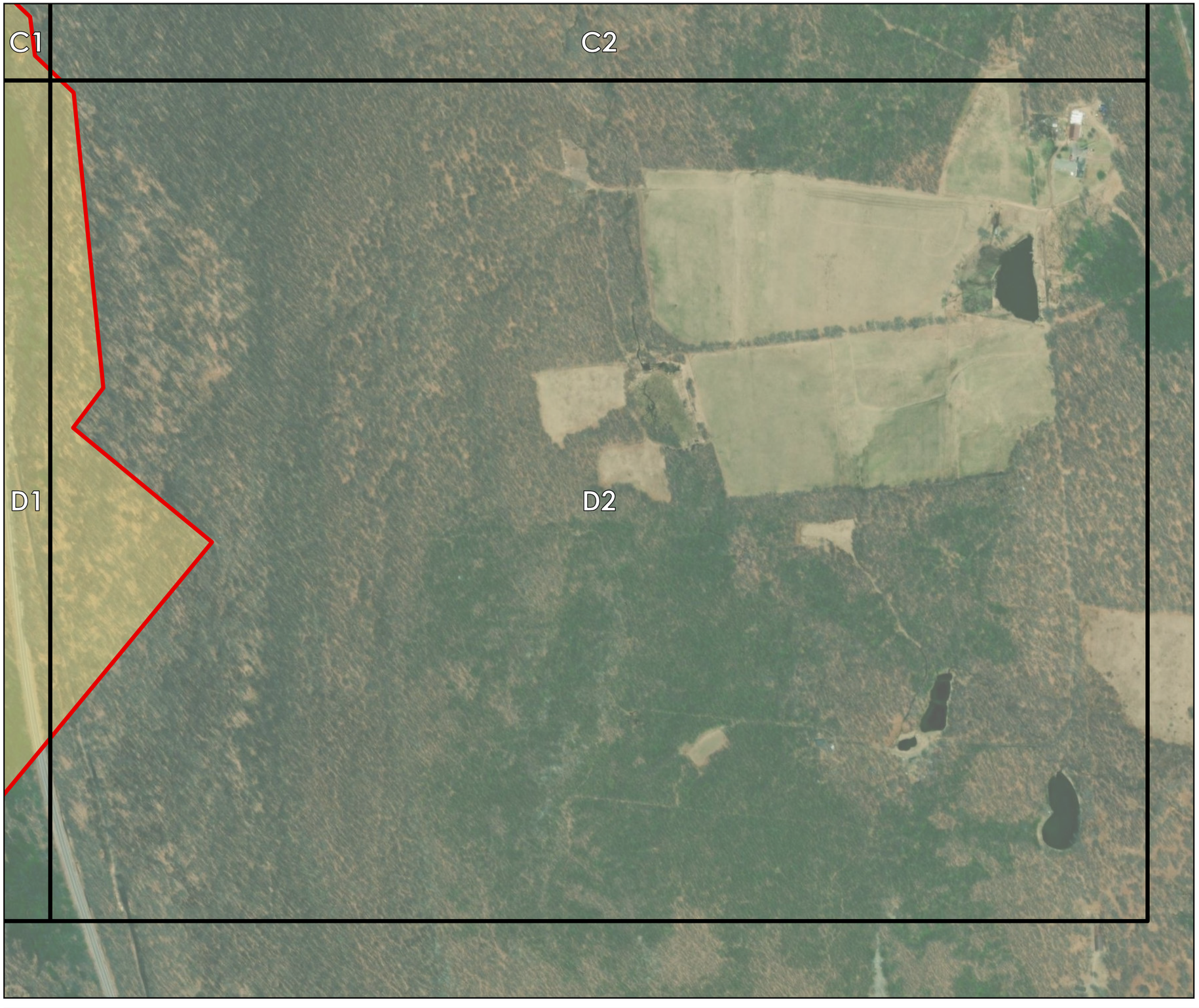

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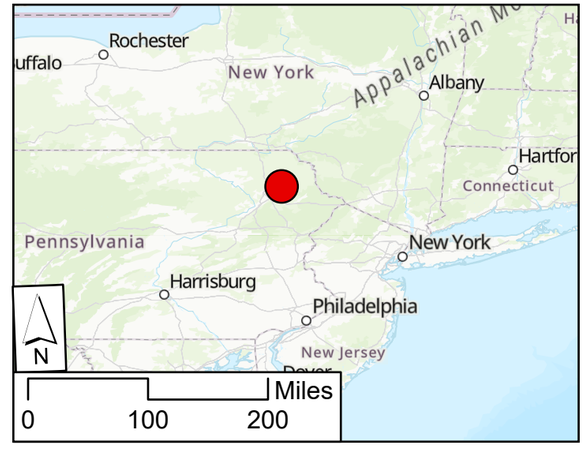

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APPENDIX G: NEPA DOCUMENTATION

US Army Corps
of Engineers
Baltimore District

Appendix G
DRAFT FINDING OF NO SIGNIFICANT IMPACT AND ENVIRONMENTAL ASSESSMENT FOR STILLWATER LAKE 2025 MASTER PLAN

STILLWATER LAKE
SUSQUEHANNA COUNTY, PENNSYLVANIA

July 2025

This Environmental Assessment follows the National Environmental Policy Act and 53 Fed. Reg. 3120-3137.

Prepared by: **U.S. Army Corps of Engineers, Baltimore District**
2 Hopkins Plaza
Baltimore, Maryland 21201

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FINDING OF NO SIGNIFICANT IMPACT

Environmental Assessment for the Stillwater Lake 2025 Master Plan

Susquehanna County, Pennsylvania

In accordance with the National Environmental Policy Act of 1969, as amended (NEPA), and 53 Fed. Reg. 3120-3137 (Feb. 3, 1988), the U.S. Army Corps of Engineers (USACE), Baltimore District has assessed the potential environmental, cultural, and social effects of updating the Stillwater Lake Master Plan. The Stillwater Dam and Reservoir Project (hereafter "Stillwater Lake Project", "Stillwater Lake", or "Project") was authorized by the Flood Control Act of August 18, 1941, Public Law 77-228, as a modification of the flood control project in southern New York and eastern Pennsylvania that was authorized by the Flood Control Act of June 22, 1936, Public Law 74-738, and described in House Document No. 702, 77th Congress, 2nd Session. The Stillwater 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 Stillwater Lake Project, are federally owned, operated, and maintained by USACE. The project was operationally complete in December 1960.

The Stillwater 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 Carbondale, Olyphant, and Scranton, Pennsylvania (PA), as well as at the confluence of the Lackawanna River with the Susquehanna River. Additional uses of the Project are water quality, water supply, recreation, and environmental stewardship of natural and cultural resources. Implementation of the 2025 Stillwater Master Plan (hereafter "2025 Master Plan") and proposed land use changes must recognize and be compatible with the project purpose of flood risk management and the additional uses of water quality, water supply, 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 Stillwater Lake. The 2025 Master Plan updates the 1959 Master Plan and establishes land and water surface classifications, which are fundamental to project land management. The 1959 Master Plan did not include designated land or water surface classifications and was written prior to recreation lease agreements between USACE and the Pennsylvania Fish and Boat Commission (PFBC). Land and water surface classifications (see Table S-1) provide for development and resource management consistent with the Stillwater Lake Project's authorized purposes and USACE regulations and policy. The 2025 Master Plan also provides a comprehensive description of the Stillwater 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 Stillwater Lake Project and would continue to operate and manage the project as outlined in the 1959 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 Stillwater 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 1959 Stillwater 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 Use Classifications at Stillwater Lake

Classification	2025 Master Plan (acres)	Description
Project Operations	64.3[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	2.3	Lands that are currently developed for intensive recreational activities for the visiting public and includes a scenic overlook, a boat ramp, gravel parking area, and portable restroom. This land classification has been developed to support concentrated visitation and use of the recreational facilities they host. The High Density Recreation area is located within a small area on the east shore of Stillwater Lake and the scenic overlook just east of the dam.
Multiple Resource Management Land		
Low Density Recreation	359.1	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. The new land classification criteria exclude vegetation and wildlife management areas, leaving only areas with minimal development to support passive recreation use.
Water Surface		
Restricted	0.5[2]	Areas where recreational boating is prohibited or restricted for project operations, safety, and security purposes. The Restricted water at Stillwater Lake includes the intake channel.
Open Recreation	65.5	Water surface areas available for year-round or seasonal water-based recreational use. This area includes all water surface area other than restricted waters.
Total	492.0[2]	

[1]*Of the 64.3 acres classified under the land classification Project Operations; all 64.3 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.*

[2]*Mapping 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 classification and water surface acreages. Minor discrepancies also exist within this table due to rounding. This total acreage only includes lands owned in fee simple. Flowage easement acreage is excluded from this total. The total with flowage easements is 678 acres (flowage easements are 186 acres).*

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, social, and economic 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 Stillwater 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 also use BMPs associated with prevention of effects to sensitive species. These recommendations would be implemented at the time in which future projects are proposed and would include separate environmental reviews.

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

LIST OF FIGURES

LIST OF TABLES

ACRONYMS

Acronym	Definition
2025 Master Plan	2025 Stillwater Lake Master Plan
APHIS	Animal & Plan Health Inspection Service Wildlife Services
BMPs	Best Management Practices
EA	Environmental Assessment
EAF	Environmental Assessment Form
EO	Executive Order
EP	Engineer Pamphlet
ER	Engineer Regulation
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
GIS	Geographic Information System
IPaC	Information for 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
PADEP	Pennsylvania Department of Environmental Protection
PA-SHARE	Pennsylvania State Historic and Archaeological Resource Exchang
PCD	Project Construction Datum
PHMC	Pennsylvania Historical and Museum Commission
Project	Stillwater 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 Stillwater Lake Project (hereafter "Stillwater Lake Project," "Stillwater Lake," or "Project") was first authorized by the Flood Control Act of August 18, 1941, Public Law 77-228, as a modification of the flood control project in southern New York and eastern Pennsylvania authorized by the Flood Control Act of June 22, 1936, Public Law 74-738, and described in House Document No. 702, 77th Congress, 2nd Session. The project was authorized and constructed for the primary purposes of flood risk management for the downstream reach of the Lackawanna River at the communities of Carbondale, Olyphant, and Scranton, Pennsylvania (PA) as well as at the downstream confluence of the Lackawanna and Susquehanna Rivers. Additional uses include water quality, water supply, recreation, and environmental stewardship of natural and cultural resources. The Stillwater Lake Project is owned and operated by the United States Army Corps of Engineers (USACE), Baltimore. The Master Plan for the project is the strategic land use management document that is a guide for 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 use classifications must recognize and be compatible with the primary project purpose of flood risk management and the additional project uses including water quality, water supply, recreation, and environmental stewardship of natural and cultural resources.

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 resources, resource management objectives, land classifications, resource use plans for each land 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 Engineer 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 other federal Laws.

The USACE is proposing to adopt an updated Master Plan for the Stillwater Lake Project to reflect changes that have occurred to the project, in the region, in recreation trends, and in USACE policy since the original 1959 Master Plan (hereafter "1959 Master Plan") was published. This Environmental Assessment (EA) considers the potential effects to the human environment from implementation of the 2025 Stillwater Lake Master Plan (hereafter "2025 Master Plan").

1.1.1 Project Location and Setting

The Stillwater Lake Project is located on at the confluence of the East and West Branches of the Lackawanna River, approximately 4 miles upstream from Forest City, 30 miles upstream from Scranton, and 39.4 miles above the confluence of the Lackawanna and Susquehanna

Rivers. The northern portion of the project is located in the borough of Union Dale and the southern portion is located in Clifford Township in the far southeast of Susquehanna County, PA. The north-south running PA Route 171 bisects the project lands. The Lackawanna River is a tributary of the Susquehanna River. Stillwater Lake is located within the Hydrologic Unit Code (HUC) 8-digit Upper Susquehanna-Lackawanna Watershed (HUC 02050107).

All elevations cited in this EA, unless otherwise noted, are referenced to the original Project Construction Datum (PCD). The Stillwater Lake Project maintains a conservation pool with a surface area of approximately 66 acres (at an elevation of 1,572 feet PCD) and stores approximately 247 acre-feet of water. At the full flood control pool (spillway crest at elevation 1,621 PCD), the lake covers 416 acres and stores 11,558 acre-feet of water.

1.1.2 Project History

The Stillwater Lake Project was first authorized by the Flood Control Act of August 18, 1941, Public Law 77-228, as a modification of the flood control project in southern New York and eastern Pennsylvania authorized by the Flood Control Act of June 22, 1936, Public Law 74-738, and is described in House Document No. 702, 77th Congress, 2nd Session. The project was operationally complete in December 1960. The original Stillwater Lake Master Plan was approved in July 1959. The Stillwater 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 Stillwater Lake Project, are federally owned, operated, and maintained by USACE.

The Stillwater Dam consists of a rolled earthfill embankment, which is 1,700 feet long, has a width at its top of 25 feet, and rises about 77 feet above the streambed. The top of the dam elevation is 1,637 feet PCD (USACE 2001). The uncontrolled side channel spillway is 264 feet long and has a crest elevation of 1,621 feet PCD. The design discharge capacity of the spillway is 39,600 cubic feet per second (cfs) under a total surcharge of 11.1 feet (USACE 2001). To date, spillway flow has not occurred.

1.2 PURPOSE AND NEED FOR THE ACTION

The purpose of the action is to update the Stillwater 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), and 53 Fed. Reg. 3120-3137 (Feb. 3, 1988). 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. The Proposed Action is an administrative update, and the EA does

not analyze the 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, E, and H 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 for Planning and Consultation (IPaC) online system to ensure compliance with Section 7 of the Endangered Species Act (ESA). The most recent IPaC report was provided on July 2, 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 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/stillwater-lake/stillwater-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 Stillwater 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 1959 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 land classifications within the 2025 Master Plan. Table 2-1 quantifies the proposed land and water use classifications and provides a description of the land and water use classifications along with types of future projects that could occur within each classification, as applicable. This

alternative consists of an administrative action and does not analyze any specific projects, which 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 1959 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.

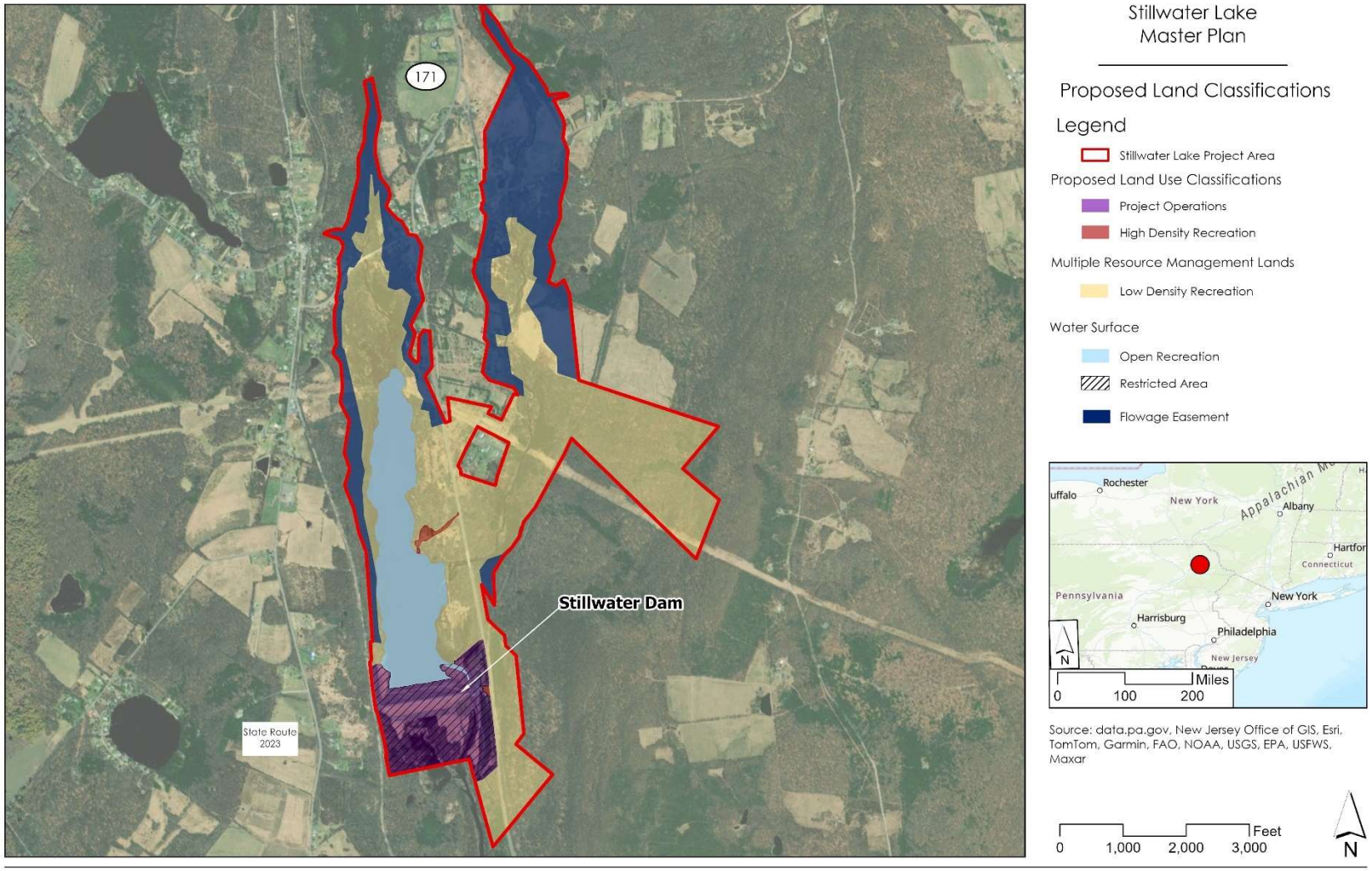

Figure 2-1. Proposed Land and Water Use Classifications at Stillwater Lake

Table 2-1. Proposed Land and Water Use Classifications at Stillwater Lake

Classification	2025 Master Plan (acres)	Description
Project Operations	64.3[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	2.3	Lands that are currently developed for intensive recreational activities for the visiting public and includes a scenic overlook, a boat ramp, gravel parking area, and portable restroom. This land classification has been developed to support concentrated visitation and use of the recreational facilities they host. The High Density Recreation area is located within a small area on the east shore of Stillwater Lake and the scenic overlook just east of the dam.
Multiple Resource Management Land		
Low Density Recreation	359.1	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. The new land classification criteria exclude vegetation and wildlife management areas, leaving only areas with minimal development to support passive recreation use.
Water Surface		
Restricted	0.5[2]	Areas where recreational boating is prohibited or restricted for project operations, safety, and security purposes. The Restricted water at Stillwater Lake includes the intake channel.
Open Recreation	65.5	Water surface areas available for year-round or seasonal water-based recreational use. This area includes all water surface area other than restricted waters.
Total	492.0[2]	

[1]*Of the 64.3 acres classified under the land classification Project Operations; all 64.3 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.*

[2]*Mapping 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 classification and water surface acreages. Minor discrepancies also exist within this table due to rounding. This total acreage only includes lands owned in fee simple. Flowage easement acreage is excluded from this total. The total with flowage easements is 678 acres (flowage easements are 186 acres).*

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 the 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:

- Geographic 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), 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, 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, and not on the execution of any specific 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 Stillwater 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 Stillwater Lake and USACE lands would continue as outlined in the 1959 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

The East and West Branches of the Lackawanna River both flow into Stillwater Lake, and the Lackawanna River is, in turn, a tributary of the Susquehanna River. The drainage area above the site is located in a kidney shaped basin of the Lackawanna River and totals 36.8 square miles. The reservoir area is fan-shaped and extends upstream from the dam.

Wetlands found in the project area are generally located near the reservoir's peripheries and its tributaries. According to the USFWS NWI Mapper, there are a total of seven freshwater emergent wetlands, five freshwater forested/scrub wetlands, four freshwater ponds, and two riverine (stream/river) systems totaling approximately 44.25 acres, or 8.7 percent of the Stillwater Lake project's land area (Table 3-1; USFWS 2024a).

Table 3-1. Wetland Systems within the Stillwater Lake Project Area

Wetland Type	Acres	Percent of Project Area
Freshwater Emergent Wetland	7.16	1.4%
Freshwater Forested/ Shrub Wetland	33.02	6.5%
Freshwater Pond	2	0.4%
Riverine	2.07	0.4%
Total	**44.25**	**8.7%**
Project Area	492.0	

Additionally, two wetland systems are partially located within the project area. A large freshwater emergent wetland totaling 31.95 acres is located immediately downstream of the dam and is partially included within the southern extremes of the project lands. A long and narrow freshwater forested/shrub wetland system totaling 4.80 acres is located upstream of the lake on the East Branch of the Lackawanna River and lies partially within the northeast reaches of the project boundary.

3.2.2 Water Quality

The quality of the water flowing into Stillwater Lake is very good. However, the Lackawanna River becomes degraded downstream of the dam due to acid mine drainage, urban runoff, and hydromodification. Stillwater Lake typically exhibits mesotrophic conditions (USACE 2022).

There are no specific objectives for improvement of water quality at Stillwater Lake; outflow from the lake already has higher water quality than the inflow. Minimum flows are maintained for aquatic habitats below the dam. In July 2022, water quality samples were taken at two inflow points and one outflow point. Water temperature, specific conductivity (SpCond), dissolved oxygen (DO), and the potential for hydrogen (pH) were recorded at each sample location. Alkalinity, acidity, phosphate, ammonia, and nitrate were measured from the collected point samples. Water quality was determined to be high for all analytes measured except phosphate met EPA standards. One inflow station and the outflow station had a higher phosphate reading than the EPA maximum standard, but the outflow was within the limits. All nutrient levels were within the expected range at all stations with the exception of a high nitrate reading at the outflow.

There are two large sewage treatment plants within the watershed. One has been cited for biochemical oxygen demand (BOD), fecal coliform, and total suspended solids over the past three years and the other just for fecal coliform (USACE 2022).

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 Stillwater Lake and the wetland systems along the East and West Branches of the Lackawanna River classified under Low Density Recreation and Flowage Easement. FEMA designates these areas 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 Stillwater 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 water resources.

3.3 SOILS

In the areas around Stillwater Lake, soils are primarily mapped as belonging to the Wyalusing silt loam complex (Wy), Chenango gravelly silt loam, 3 to 12 percent slopes, moderately eroded (CnB2), Cut and fill land (Cu), Mixed alluvial land (Mn), Morris flaggy silt loam, 8 to 15 percent slopes, eroded (MrC2).

A variety of other soil types exist within the project boundary but mainly consist of silt loams with moderate to steep slopes. A large number of soil complexes exist that possess rocky or bouldery characteristics, including Lackawanna very stony silt loam, 30 to 50 percent slopes, very stony (LgF), Wellsboro channery silt loam, 8 to 25 percent slopes, very stony (WsD), Morris channery silt loam, 0 to 8 percent slopes, extremely stony (MsB), Morris channery silt loam, 8 to 25 percent slopes, extremely stony (MsD) as the most dominant in the project area (see Table 3-2; USDA - NRCS 2024).

Of the soils within the project area, 138.5 acres are considered Farmland of Statewide importance, including Morris flaggy silt loam, 8 to 15 percent slopes, eroded (MrC2), Lackawanna channery silt loam, 3 to 12 percent slopes, eroded (LaB2), and Wellsboro channery silt loam, 8 to 15 percent slopes, eroded (WeC2). Additionally, 114.9 acres are categorized as Prime Farmland, including Chenango gravelly silt loam, 3 to 12 percent slopes, moderately eroded (CnB2), Wellsboro flaggy silt loam, 3 to 8 percent slopes, eroded (WlB2),

Chenango gravelly silt loam, 0 to 3 percent slopes (CnA). Thus, 37.5 percent of the project area is considered Farmland of Statewide Importance or Prime Farmland (USDA-NRCS 2024).

Table 3-2. Soils at Stillwater Lake

Map Unit Symbol	Map Unit Name	Acres in Project Area	Percent of Project Area	Prime/Unique Farmland Status
Ba	Barbour fine sandy loam	3.7	0.6%	All areas are prime farmland
Bc	Basher silt loam	9.2	1.4%	All areas are prime farmland
BeB2	Bath channery loam, 3 to 12 percent slopes, moderately eroded	0.2	0.0%	All areas are prime farmland
BeC2	Bath channery loam, 12 to 20 percent slopes, moderately eroded	1.2	0.2%	Farmland of statewide importance
CnA	Chenango gravelly silt loam, 0 to 3 percent slopes	18.9	2.8%	All areas are prime farmland
CnB2	Chenango gravelly silt loam, 3 to 12 percent slopes, moderately eroded	41.5	6.1%	All areas are prime farmland
CnC2	Chenango gravelly silt loam, 12 to 20 percent slopes, moderately eroded	14.6	2.2%	Farmland of statewide importance
Cu	Cut and fill land	39.4	5.8%	Not prime farmland
DAM	Dams	16.5	2.4%	Not prime farmland
Hw	Holly silt loam	13.2	2.0%	Not prime farmland
LaB2	Lackawanna channery silt loam, 3 to 12 percent slopes, eroded	20.9	3.1%	Farmland of statewide importance
LaC2	Lackawanna channery silt loam, 12 to 20 percent slopes, eroded	9.1	1.3%	Farmland of statewide importance
LfB	Lackawanna flaggy silt loam, 3 to 12 percent slopes	2.7	0.4%	Farmland of statewide importance
LfC2	Lackawanna flaggy silt loam, 12 to 20 percent slopes, eroded	2.3	0.3%	Farmland of statewide importance
LfD2	Lackawanna flaggy silt loam, 20 to 30	7.2	1.1%	Not prime farmland

Map Unit Symbol	Map Unit Name	Acres in Project Area	Percent of Project Area	Prime/Unique Farmland Status
	percent slopes, eroded			
LgD	Lackawanna very stony silt loam, 12 to 30 percent slopes, very stony	2.7	0.4%	Not prime farmland
LgF	Lackawanna very stony silt loam, 30 to 50 percent slopes, very stony	27.3	4.0%	Not prime farmland
LoD	Lordstown, Oquaga, and Bath soils, 12 to 25 percent slopes	5.3	0.8%	Farmland of statewide importance
LoE	Lordstown, Oquaga, and Cadosia soils, 15 to 35 percent slopes	5.3	0.8%	Not prime farmland
LsD	Lordstown, Oquaga, and Cadosia soils, 15 to 25 percent slopes, extremely bouldery	6.8	1.0%	Not prime farmland
LsF	Lordstown, Oquaga, and Cadosia soils, 25 to 60 percent slopes, extremely bouldery	5.5	0.8%	Not prime farmland
LxB	Lordstown channery loam, 3 to 8 percent slopes, rubbly	0.0	0.0%	Not prime farmland
MgB	Mardin channery silt loam, 0 to 8 percent slopes, very stony	2.7	0.4%	Not prime farmland
MgF	Mardin channery silt loam, 25 to 50 percent slopes, very stony	1.2	0.2%	Not prime farmland
Mn	Mixed alluvial land	37.1	5.5%	Not prime farmland
MoA	Morris channery silt loam, 0 to 3 percent slopes	0.3	0.0%	Farmland of statewide importance
MoB2	Morris channery silt loam, 3 to 8 percent slopes, eroded	18.6	2.7%	Farmland of statewide importance
MrB2	Morris flaggy silt loam, 3 to 8 percent slopes, eroded	0.2	0.0%	Farmland of statewide importance
MrC2	Morris flaggy silt loam, 8 to 15 percent slopes, eroded	36.6	5.4%	Farmland of statewide importance

Map Unit Symbol	Map Unit Name	Acres in Project Area	Percent of Project Area	Prime/Unique Farmland Status
MsB	Morris channery silt loam, 0 to 8 percent slopes, extremely stony	17.1	2.5%	Not prime farmland
MsD	Morris channery silt loam, 8 to 25 percent slopes, extremely stony	13.9	2.1%	Not prime farmland
OyF	Oquaga and Lordstown channery loams, 25 to 70 percent slopes, rubbly	5.1	0.8%	Not prime farmland
Te	Terrace escarpments	5.7	0.8%	Not prime farmland
W	Water	89.7	13.2%	Not prime farmland
WeB2	Wellsboro channery silt loam, 3 to 8 percent slopes, eroded	18.0	2.7%	All areas are prime farmland
WeC2	Wellsboro channery silt loam, 8 to 15 percent slopes, eroded	20.7	3.1%	Farmland of statewide importance
WeD2	Wellsboro channery silt loam, 15 to 25 percent slopes, eroded	5.8	0.9%	Not prime farmland
WlB2	Wellsboro flaggy silt loam, 3 to 8 percent slopes, eroded	23.4	3.5%	All areas are prime farmland
WlC2	Wellsboro flaggy silt loam, 8 to 15 percent slopes, eroded	6.0	0.9%	Farmland of statewide importance
WlD2	Wellsboro flaggy silt loam, 15 to 25 percent slopes, eroded	12.4	1.8%	Not prime farmland
WsB	Wellsboro channery silt loam, 0 to 8 percent slopes, very stony	3.4	0.5%	Not prime farmland
WsD	Wellsboro channery silt loam, 8 to 25 percent slopes, very stony	19.0	2.8%	Not prime farmland
WsF	Wellsboro channery silt loam, 25 to 50	2.8	0.4%	Not prime farmland

Map Unit Symbol	Map Unit Name	Acres in Project Area	Percent of Project Area	Prime/Unique Farmland Status
	percent slopes, very stony			
Wy	Wyalusing silt loam	84.1	12.4%	Not prime farmland

Soils at the Stillwater 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 Stillwater Lake Project supports many habitat types including wetlands, grassy areas, fields, edges, and forest, which contain diverse vegetative species. 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 Stillwater Lake (PADCNR 2024a).

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).

3.4.2 Wildlife and Fisheries

Stillwater Lake 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 in the project vicinity 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.

Stillwater Lake and the East and West Branches of the Lackawanna River host many fish species. A 2018 trap net survey conducted at the lake by PFBC captured the following fish species: black crappie (*Pomoxis nigromaculatus*); bluegill (*Lepomis macrochirus*); brown bullhead (*Ameiurus nebulosus*); chain pickerel (*Esox niger*); common carp (*Cyprinus carpio*); golden shiner (*Notemigonus crysoleucas*); largemouth bass (*Micropterus nigricans*); pumpkinseed (*Lepomis gibbosus*); rock bass (*Ambloplites rupestris*); walleye (*Sander vitreus*); white sucker (*Catostomus commersonii*); yellow bullhead (*Ameiurus natalis*); and yellow perch (*Perca flavescens*) (PFBC 2018). The PFBC also captured smallmouth bass (*Micropterus dolomieu*) in a 2022 black bass survey (PFBC 2022).

3.4.3 Threatened and Endangered Species

3.4.3.1 Federally Listed Species

As of 2025, one proposed threatened species is known to potentially occur within the project area: the Monarch butterfly (*Danaus plexippus*) (USFWS 2025; Appendix H of Master Plan). No critical habitat has been designated 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. Larvae develop over a period of 9 to 18 days and then pupates 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 of time. 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).

3.4.3.2 Pennsylvania Threatened and Endangered Species

USACE consulted the PA Natural Diversity Index (PNDI) Conservation Explorer website 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. (PADCNR 2024c; Appendix H of 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 endangered species list in August 2007 and Pennsylvania'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 online system. No bald eagle nests are mapped in the vicinity of the project area, although one nest was sited near the project boundary several hundred yards northwest of the project (USFWS 2024b).

3.4.4 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.

Northeastern Pennsylvania currently 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 Fairmarie), for example, was destructive for many years before the host species' (*Fraxinus spp.*) populations became too low to support emerald ash borer populations. Another potential invasive insect of concern could be the hemlock wooly adelgid (*Adelges tsugae*). The adelgid's feed on the plants sap and 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 Pennsylvania 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 Stillwater 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

Land use within the Stillwater Lake Project is characterized by its primary function, flood risk management operations, as well as a variety of nature-based recreation opportunities, such as boating and fishing, and seasonal snow mobile and ATV trail use (with trail passes). The boat launch located on the east bank of Stillwater Lake provides boating and fishing opportunities to visitors, while disused railroad trails that cross project lands near the east boundary and run beyond the property on the west boundary provide opportunities for visitors to practice seasonal activities, primarily snowmobiling in the winter and ATV driving in the summer (with trail passes).

Due to the limited nature of recreation use at the Stillwater Lake Project, visitor numbers are not recorded by the USACE's Visitor Estimation and Reporting System (VERS). Increased visitation 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

Stillwater Lake is located in Susquehanna County, which is in attainment for all USEPA National Ambient Air Quality Standards (NAAQS) criteria pollutants (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

Stillwater Lake falls within the National Oceanic and Atmospheric Administration (NOAA) Climate Division 3606 (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

Susquehanna County is situated in mountainous northeastern PA, and Stillwater Lake is located in the extreme southeast of the county, at the head of a long valley. The Lackawanna River flows through the valley downstream of the dam between two roughly parallel mountain ranges, while upstream of the lake, the valley is less pronounced. Stillwater Lake lies almost precisely at the boundary between the Ridge and Valley and Appalachian Plateaus physiographic provinces, where the geological character transitions from the Glaciated Low Plateau section to the northernmost region of the Anthracite Valley section. (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 Stillwater Lake drainage area totals 36.8 square miles at the dam site. The drainage basin is a kidney shaped basin about 11.5 miles long and about 4 miles wide at the widest part. The main stream pattern is fan-shaped with two branches of the main stream dividing the upper reaches of the drainage area into two minor areas, both of which contain numerous swamps and small lakes (USACE 1959). 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 effect on noise would be performed during detailed project-specific planning.

3.11 CULTURAL RESOURCES

Four cultural resources have been previously identified within the Stillwater Lake project area: two railroad sites associated with late nineteenth and early twentieth century structures (Pennsylvania Historical and Museum Commission (PHMC) No. 2004RE03161; 2010RE00086), an archaeological site containing precontact and historic materials (PHMC No. 36SQ0123), and the Stillwater Dam complex (No PHMC No.). Between 1994 and 2021, four cultural resource surveys were conducted in the project area. Three were associated with multi-county pipeline corridor routes, and one was a multi-county baseline survey which documented above-ground resources that have underrepresented historic functions, ethnic associations, or periods of construction.

The potential for unidentified cultural resources within the project area remains moderate to high in undisturbed, low to moderately sloped areas within the East and West Branch Lackawanna River floodplains and upland areas. Additionally, a comparison with PA-SHARE's statewide pre-contact probability model indicates that areas within and adjacent to these areas 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 SHPO and four tribal nations (Delaware Nation; Delaware Tribe of Indians; Onondaga Nation; and the Seneca-Cayuga Nation of Indians) on November 12, 2024. 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 USEPA's Envirofacts database, no known contaminated sites occur at the project area. Additionally, no Superfund or brownfields sites were identified within 2 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 seven counties surrounding the Stillwater Lake Project within PA and New York (NY) (The lake lies within Susquehanna County and the surrounding counties include Bradford, Broome (NY), Lackawanna, Tioga (NY), Wayne, and Wyoming) was 637,221, down from 659,238 in 2010

(USCB, 2022). The 2022 poverty rate in the region was 14.3 percent, the same as NY and 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 effect 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 located in (Susquehanna County) and its surrounding counties (Bradford, Broome (NY), Lackawanna, Tioga (NY), Wayne and Wyoming counties). The temporal scope is a 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. This EA does not consider implementation of specific projects identified within the 2025 Master Plan during the master planning process or future development opportunities as those projects are conceptual in nature. Projects identified during the master planning process within the 2025 Master Plan or future project not identified in 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 Stillwater 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 classification of land and water uses 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*		
	Beneficial	*None/ Negligible*	*Negative*
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*		
	Beneficial	*None/ Negligible*	*Negative*
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 Stillwater 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

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APPENDIX H: NEPA ENVIRONMENTAL COORDINATION

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: 07/02/2025 15:38:46 UTC
Project Code: 2025-0052814
Project Name: Stillwater Lake 2025 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: 2025-0052814
Project Name: Stillwater Lake 2025 Master Plan Update
Project Type: Land Management Plans - NWR
Project Description: USACE Stillwater 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/@41.70851155,-75.47953224282736,14z

Counties: Susquehanna County, Pennsylvania

ENDANGERED SPECIES ACT SPECIES

There is a total of 1 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 Fisheries[1], 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.

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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.

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* 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

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

1. PROJECT INFORMATION

Project Name: **Stillwater Lake Master Plan Update**
Date of Review: **4/29/2024 01:49:04 PM**
Project Category: **Recreation, Pond/lake maintenance (drawdown, plant control, dredging, dam repair)**
Project Area: **690.06 acres**
County(s): **Susquehanna**
Township/Municipality(s): **CLIFFORD TOWNSHIP; HERRICK TOWNSHIP; UNION DALE**
ZIP Code:
Quadrangle Name(s): **FOREST CITY**
Watersheds HUC 8: **Upper Susquehanna-Lackawanna**
Watersheds HUC 12: **East Branch Lackawanna River; Lees Creek-Lackawanna River; West Branch Lackawanna River**
Decimal Degrees: **41.707648, -75.482067**
Degrees Minutes Seconds: **41° 42' 27.5315" N, 75° 28' 55.4414" 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.

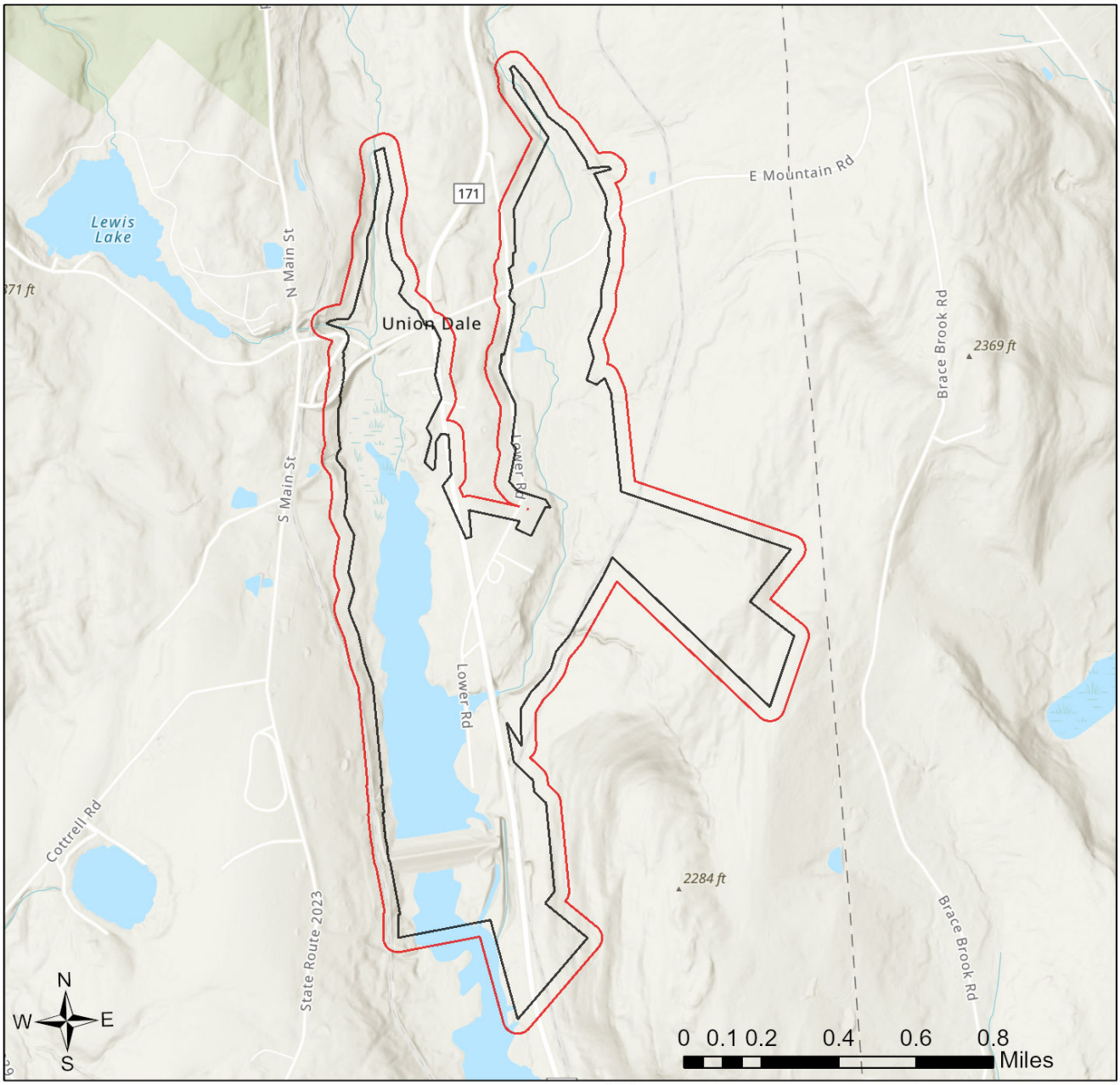
Stillwater Lake Master Plan Update

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

Stillwater Lake Master Plan Update



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

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 jursidictional 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

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

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: GRANT CUNNINGHAM
Company/Business Name: U.S. ARMY CORPS OF ENGINEERS
Address: 2 HOPKINS PLAZA
City, State, Zip: BALTIMORE, MD 21201
Phone:(____) Fax:(____)
Email: grant.m.cunningham@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

1/28/2025
date

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, Stillwater 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 Stillwater Lake Master Plan. The U.S. Army Corps of Engineers, Baltimore District (USACE) is updating the Master Plan for the Stillwater Dam in Susquehanna County, Pennsylvania (Enclosure 1). Stillwater 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,

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

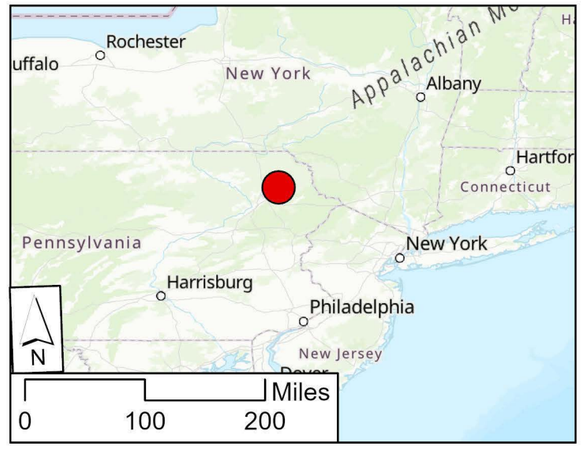
Enclosure

Stillwater Lake Master Plan

Site Vicinity

Legend

Stillwater Lake Project Area



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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 Stillwater Lake Master Plan. The U.S. Army Corps of Engineers, Baltimore District (USACE) is updating the Master Plan for the Stillwater Dam in Susquehanna County, Pennsylvania (Enclosure 1). Stillwater 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.

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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,

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

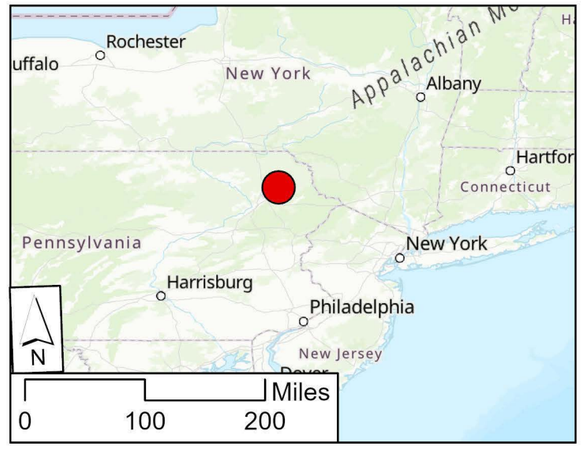
Enclosure

Stillwater Lake Master Plan

Site Vicinity

Legend

Stillwater Lake Project Area



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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 Stillwater Lake Master Plan. The U.S. Army Corps of Engineers, Baltimore District (USACE) is updating the Master Plan for the Stillwater Dam in Susquehanna County, Pennsylvania (Enclosure 1). Stillwater Dam is a multipurpose dam operated and maintained by USACE.

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

Enclosure

Stillwater Lake Master Plan

Site Vicinity

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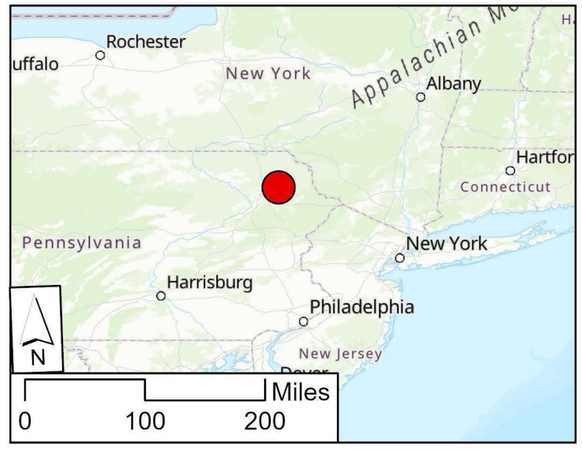
Stillwater Lake Project Area



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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 Stillwater Lake Master Plan. The U.S. Army Corps of Engineers, Baltimore District (USACE) is updating the Master Plan for the Stillwater Dam in Susquehanna County, Pennsylvania (Enclosure 1). Stillwater Dam is a multipurpose dam operated and maintained by USACE.

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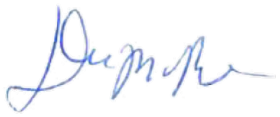

Daniel M. Bierly, P.E.
Chief, Civil Project Development Branch
Planning Division

Enclosure

Stillwater Lake Master Plan

Site Vicinity

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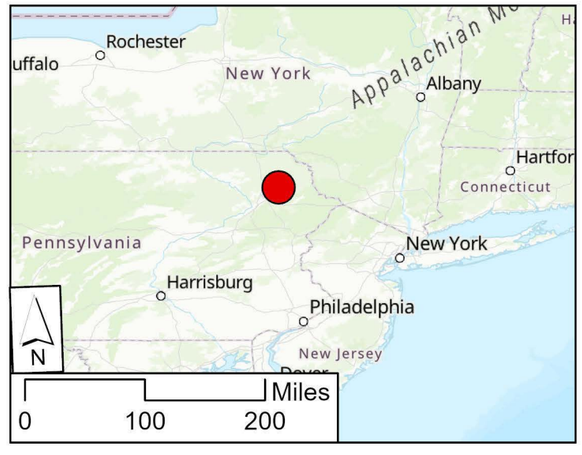
Stillwater Lake Project Area



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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 Stillwater Lake Master Plan. The U.S. Army Corps of Engineers, Baltimore District (USACE) is updating the Master Plan for the Stillwater Dam in Susquehanna County, Pennsylvania (Enclosure 1). Stillwater Dam is a multipurpose dam operated and maintained by USACE.

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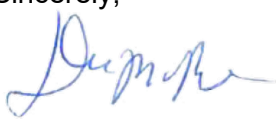


Daniel M. Bierly, P.E.
Chief, Civil Project Development Branch
Planning Division

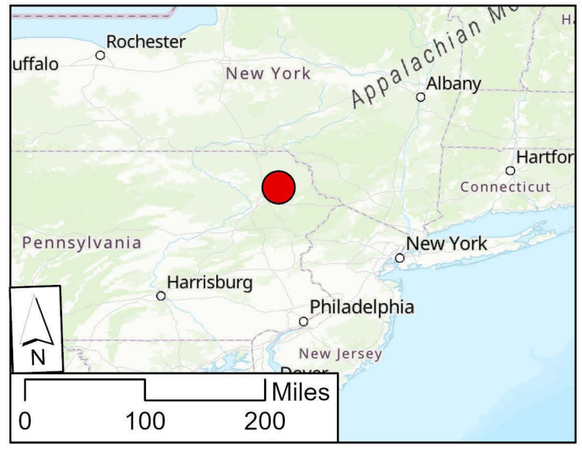
Enclosure

Stillwater Lake Master Plan

Site Vicinity

Legend

Stillwater Lake Project Area



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

0 1,000 2,000 3,000 Feet

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Pennsylvania State Historic Preservation Office
PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION

December 11, 2024

Sent Via PA-SHARE

RE: ER Project # 2024PR05279.001, Stillwater Dam Master Plan Update, Army Corps of Engineers, Clifford Township, Susquehanna 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
More Information Requested - 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 reinitiate consultation with our office using PA-SHARE.

More Information Requested - New Attachment

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 Stillwater Lake and Dam and related physical features and assessment of the significance of the resource. 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 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 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 reinitiate consultation with our office using PA-SHARE.

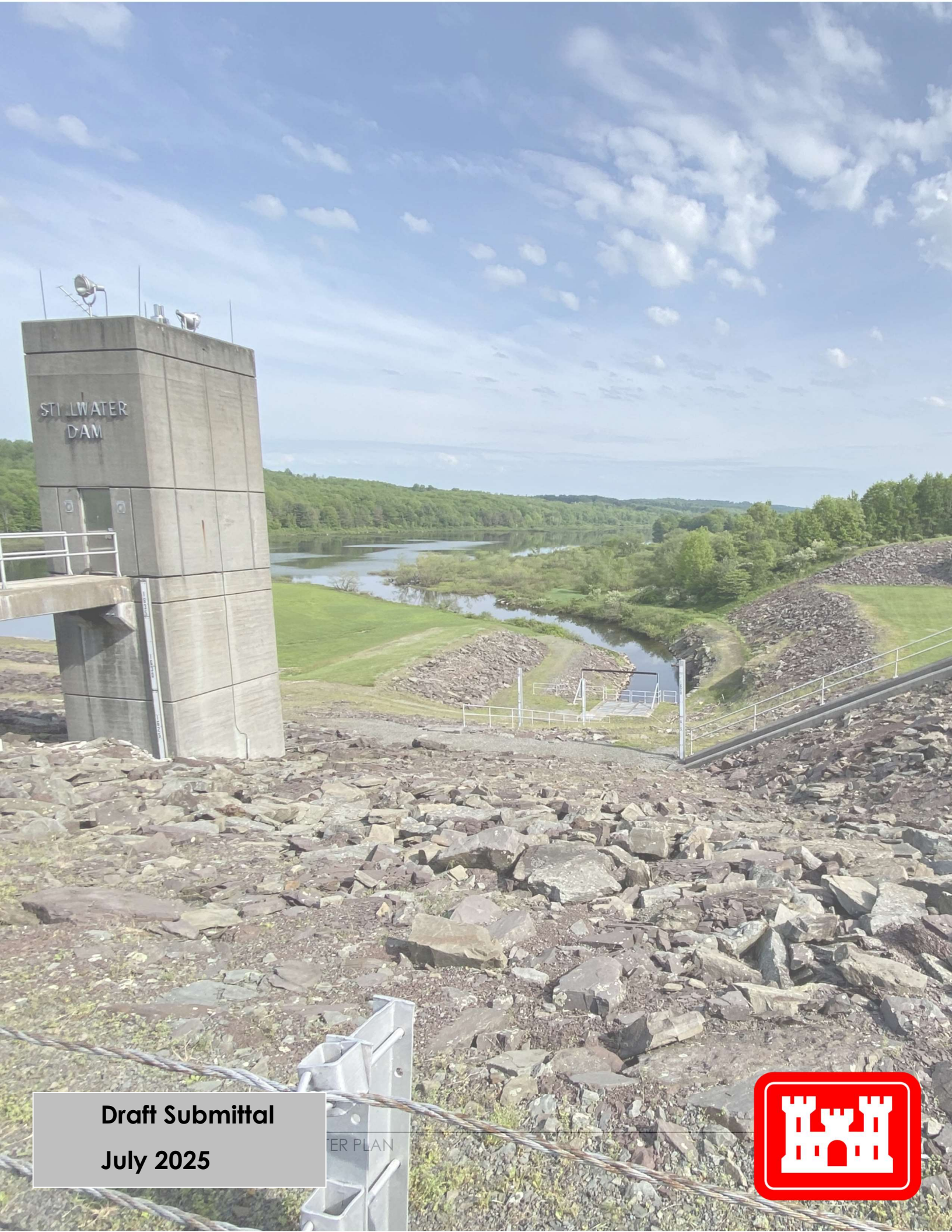
More Information Requested - New Attachment

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,

Barbara Frederick
Environmental Review Division Manager



Draft Submittal

July 2025