Almond Lake
Master Plan

December 2024

Almond Lake
Master Plan
Steuben County, New York

December 2024

For:
Almond Lake
Almond Dam Access Road
Hornellsville, NY 14843

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

This page intentionally left blank.

ALMOND LAKE
MASTER PLAN

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

FINDING OF NO SIGNIFICANT IMPACT

Environmental Assessment for the Almond Lake 2024 Master Plan

Steuben County, New York

In accordance with the National Environmental Policy Act of 1969 (NEPA), including guidelines in 33 Code of Federal Regulations (CFR), Part 230 (Procedures for Implementing NEPA), the Baltimore District of the U.S. Army Corps of Engineers (USACE), has assessed the potential environmental and social impacts of the 2024 Almond Lake Master Plan (hereafter, "2024 Master Plan"). The Almond Dam (hereafter "Almond Lake Project", "Almond Lake", or "Project") was first authorized by the Flood Control Act of June 22, 1936, Public Law #738, 74th Congress, as amended by the Flood Control Act of June 28, 1938, Public Law #761, 75th Congress, 3rd Session, and further described in House Document #702, 77th Congress, 2nd Session. The project was included in the Definite Project for Flood Protection, Upper Susquehanna River Basin and approved by the Chief of Engineers on October 13, 1939. Sometime later, the location and design of the dam and appurtenances were established, and construction of the dam, spillway, and outlet started in June 1946 and was completed in June 1949. The total project cost was $5,760,000. The original Almond Lake Master Plan was approved in September 1964 and an environmental assessment of the project area was completed in March 1974. A subsequent master plan, dated April 1977, was prepared in accordance with the requirements of Engineer Regulation (ER) 1120-2-400, dated November 1, 1971. The 1977 Master Plan Update (1977 Master Plan) superseded and supplemented the master plan of 1964.

The Almond Lake Project was authorized and constructed for the primary purpose of flood risk management for the downstream reach of the Canisteo River, Canacadea Creek, the Tioga River between the confluence of Canisteo River and its confluence with the Cohocton River, and the Chemung River. The secondary purpose of the project is to provide a resource base for outdoor recreational pursuits. Implementation of the 2024 Master Plan and proposed land use changes must recognize and be compatible with the primary project mission of flood risk management and the secondary purpose of recreation.

The 2024 Master Plan will provide guidance for stewardship of natural resources and management for long-term public access to, and use of, the natural resources at Almond Lake, including the land classification of the USACE-managed lands. Land classifications are established in the 2024 Master Plan and are fundamental to project land management. Land classifications (see Table S-1) provide for development and resource management consistent with authorized purposes and other federal laws. The 2024 Master Plan provides a comprehensive description of Almond Lake, a discussion of factors influencing resource management and development, new resource management objectives, a synopsis of public involvement, and input into the planning process, descriptions of existing development, and considerations of future development activities.

Under the No Action Alternative, USACE would take no action and continue the operation and management of the project as outlined in the 1977 Master Plan. No new resource analysis or land reclassifications would occur.

The Proposed Action includes adopting the 2024 Master Plan to reflect changes in land management classifications, land uses, USACE regulations and guidance that have occurred since the 1977 Master Plan, and coordination with the public. The 2024 Master Plan refines land classifications to meet authorized project purposes and current 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, recognize outdoor recreation trends, and are responsive to public comment. The purpose of the action is to update the Almond Lake Master Plan. The action is needed as required by ER 1130-2-550 and Engineering Pamphlet (EP) 1130-2-550. The 2024 Master Plan is intended to serve as a comprehensive land and recreation management plan for the next 15 to 25 years and is needed to update the Almond Lake Master Plan in accordance with January 2013 updates to ER and EP 1130-2-550.

Table S-1 identifies the required land and water surface classification changes associated with the Proposed Action.

Table S-0-1: Proposed Land Classifications at Almond Lake

Classification	2024 Master Plan (acres)	Description
Project Operations	107.2[1]	This classification category includes all project land required for the structure, operation, administration, or maintenance of the project and which all must be maintained to carry out the authorized purpose of flood risk management.
High Density Recreation	39.6	Lands are currently developed for intensive recreational activities for the visiting public and include boat launches, day-use areas, and campgrounds. This land classification has been developed to support concentrated visitation and use of the recreational facilities they host. The High-Density recreation area at Almond Lake is Kanakadea Park operated by Steuben County.
Multiple Resource Management Land		
Low Density Recreation	382.1	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 such as bank fishing, hunting, hiking, wildlife viewing, and for access to the shoreline. Hunting may also be allowed in select areas that are a reasonable and safe distance from High Density Recreational areas, dam operations, and adjacent residential properties. The new land classification criteria exclude vegetation and wildlife management areas, leaving only areas with minimal development to support passive recreation use (i.e., primitive camping, hunting, trails, wildlife viewing, etc.).

Classification	2024 Master Plan (acres)	Description
Agriculture[2]	26.1	Land classified as agriculture is outleased to a private citizen for agriculture use. In the 1977 Master Plan, "lands available for outlease" is utilized as a land classification. According to the 1977 Master Plan, the lands available for outlease are those parcels obtained for project operations but outleased for grazing or other agricultural purposes. According to USACE regulation EP 1130-2-550, Chapter 3, agriculture, or grazing use of project land may be an interim use to meet management objectives. USACE continues to outlease a portion of Almond Lake Project for agricultural purposes; therefore, this Master Plan update includes lands designated for agriculture. There are no future plans to expand or terminate the agriculture lease; however, if the lease were to be terminated, these lands would most likely be used as Low-Density Recreation.
Water Surface		
Restricted	0.3	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 Almond Lake includes a small area around the dam and intake tower. This area is normally marked with standard USCG regulatory buoys, but other physical barriers may also be placed on the water in the future.
Open Recreation	134.7	Open Recreation area includes all water surface areas available for year-round or seasonal water-based recreational use. This area includes all water surface area other than "Restricted."
Total	690[3]	

[1]*Of the 107.2 acres classified under the land classification Project Operations, 17.6 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]*This is not a Master Plan Land Classification as described in EP 1130-2-550 but due to its inclusion in the 1977 Master Plan, it is also included in this Master Plan. Per EP 1130-2-550, agriculture or grazing use of project land may be an interim use to meet management objectives.*

[3]*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 acreages.*

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

USACE used 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 assessment of environmental, social, and economic factors that are relevant to the recommended alternative considered in this assessment. Based on the EA, it was determined that no impacts would occur to the following resources: air quality, greenhouse gases and climate, noise, geology, cultural resources, groundwater, utilities, socioeconomics and environmental justice, and traffic and transportation (see Section 3.6 of the EA). None/negligible impacts are anticipated on land use and recreation, water, soil, and biological resources from the implementation of the Proposed Action. Future projects at Almond Lake could result in minor impacts and/or beneficial impacts and any impacts would be analyzed in future NEPA documentation associated with those individual actions. In the future, efforts would be made to reduce adverse impacts by using standard construction best management practices (BMPs) to reduce disturbance, soil erosion, and sedimentation into nearby surface waters and wetlands. Construction and operations of future master planning projects would use BMPs associated with prevention of impacts to sensitive species. These recommendations would occur during the time future projects are proposed and would include environmental reviews of each project.

Conclusion

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

PERA.FRANCIS.BALAYE.1029339330

Digitally signed by PERA.FRANCIS.BALAYE.1029339330
Date: 2024.12.06 15:30:51 -05'00'

06 December 2024

Date

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

This page intentionally left blank.

1 INTRODUCTION

1.1 PROJECT AUTHORIZATION

The Almond Dam Project (hereafter "Almond Lake Project" or "Project") was first authorized by the Flood Control Act of June 22, 1936, Public Law #738, 74th Congress, as amended by the Flood Control Act of June 28, 1938, Public Law #761, 75th Congress, 3rd Session, and further described in House Document #702, 77th Congress, 2nd Session. The project was included in the Definite Project for Flood Protection, Upper Susquehanna River Basin and approved by the Chief of Engineers on October 13, 1939. Sometime later, the location and design of the dam and appurtenances were established, and construction of the dam, spillway, and outlet started in June 1946 and was completed in June 1949. The total project cost was $5,760,000. The original Almond Lake Master Plan was approved in September 1964.

The Almond 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 Almond Lake Project, are federally-owned and administered by USACE.

1.2 PROJECT PURPOSE

The Almond Lake Project was authorized and constructed for the primary purpose of flood risk management for the downstream reach of the Canisteo River, the Canacadea Creek, the Tioga River between the confluence of Canisteo River and its confluence with the Cohocton River, and the Chemung River. The dam also serves as one of thirteen major control reservoirs in providing flood protection along the main streams in the North Branch Susquehanna River Basin. By impounding and controlling flood waters and excessive runoff, Almond Lake provides immediate flood protection for the city of Hornell and villages of

Almond Dam and Reservoir

Canisteo and Addison, New York (USACE, 1977). The secondary purpose of the project is to provide a resource base for outdoor recreation. Originally, Almond Lake was designed and constructed as a dry reservoir with no provision for a recreation lake. At the request of local agencies, to meet local recreation needs, a conservation pool was established in 1965 and development of a water-oriented recreation area was initiated. Project lands not used for operation and maintenance of the Dam are leased to Steuben County for the operation of Kanakadea Park.

1.3 PURPOSE AND SCOPE OF MASTER PLAN

The purpose of this document is to update the Almond Lake Master Plan ("Master Plan" or "MP") written originally in September 1964 and an environmental assessment completed in March 1974, superseded, and supplemented by the "Almond Lake Master Plan Update" in 1977 ("1977 Master Plan"). The Master Plan is the strategic land use management document that guides the comprehensive management and development of the recreational, natural, and cultural resources throughout the life of the project. It is the basic document guiding USACE responsibilities pursuant to federal laws to preserve, conserve, restore, maintain, and develop the project lands, waters, and associated resources.

Almond Dam Control Tower

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

This document presents an evaluation of the assets, needs, and potential uses of the Almond 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 46 years since the previous master plan was published. It provides a management framework that balances the stewardship of natural resources and provision of high-quality recreation activities with the primary project purpose of flood risk management. This Master Plan addresses expressed public interest in the overall stewardship and management of all project resources and includes graphics showing the most desirable and feasible enhancements to existing facilities, as well as locations and types of new facilities needed to meet the identified needs. Any recreational improvements will be reviewed by USACE (including NEPA) but will be funded by Steuben County and its partners.

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

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 (2024-2049). It is a dynamic and flexible tool designed to address changing conditions. The Master Plan focuses on carefully crafted, resource-specific goals and objectives.

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

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

- Regional and ecosystem needs,
- Project resource capabilities and suitability,
- Expressed public interests that are compatible with the Almond 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; Council on Environmental Quality (CEQ) regulations for implementing NEPA including the *Update to the Regulations Implementing the Procedural Provisions of the National Environmental Policy Act,* dated July 2020, for 40 Code of Federal Regulations (CFR) Parts 1500-1508, and the *National Environmental Policy Act implementing Regulation Revisions,* dated May 2022, which amended 40 CFR Parts 1502, 1507, and 1508; and USACE regulations, including ER 200-2-2: Procedures for Implementing NEPA. 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

Almond Lake is located in Hornellsville, Steuben County, New York. The Town of Hornell, and the confluence of Canacadea Creek and the Canisteo River, is located approximately 3.5 miles southeast and downstream of the dam. Almond Lake is also located on Canacadea Creek, which is a tributary to the Canisteo River, which flows into the Chemung River, which in turn, flows into the North Branch Susquehanna River. The confluence of the Chemung River and the North Branch Susquehanna River is located approximately 90 miles downstream of Almond Lake, in Greens Landing, Pennsylvania (Figure1-1).

All elevations cited in this plan, unless otherwise noted, are referenced to the original Project Construction Datum (PCD). In previous versions of the Master Manual for Reservoir Regulation Almond Lake and Arkport Dam (January 2006), elevations were referenced as the National Geodetic Vertical Datum of 1929 (NGVD 29). In 2009, USACE began a Comprehensive Evaluation of Project Datums (CEPD). The CEPD effort was specifically intended to ensure that project elevations and datums are properly and accurately referenced to nationwide spatial reference systems used by other USACE Districts as well as federal, state, and local agencies. To that end, a new project benchmark was established and linked to the 1988 North American Vertical Datum (NAVD 88). To convert PCD elevation for Almond Dam and its physical components to NAVD 88, subtract 0.14 feet from the PCD elevation.

Almond Lake and Reservoir

The Almond Lake Project maintains a conservation pool of approximately 135 acres (at an elevation of 1,260 feet PCD) and stores approximately 840 acre-feet of water. At the full flood control pool (spillway crest at elevation 1,300 PCD), the lake covers 492 acres and stores 13,397 acre-feet of water. The reservoir is 2.2 river miles long during normal operations and approximately 9 river miles long at the spillway crest elevation. The area surrounding the project is characterized by gently rolling hillsides and numerous valleys. The Canacadea Creek Valley is broad and flat and rises gently from the valley floor. Areas upstream of the dam are primarily used for agriculture and dairy farming. The steeper slopes near the headwaters are primarily wooded or used for grazing. The lake and surrounding project lands are popular for boating, fishing, hunting, camping, and other outdoor recreation activities. Figure 1-2 shows a site map of the Almond Lake project area.

The Canacadea Creek basin above the dam is fan-shaped and drains an area of 56 square miles, which is about 36 percent of the Canisteo River drainage area above Hornell and 94 percent of the drainage area of the Canacadea Creek. The longest channel extends 11.3 miles above the dam with an average slope of approximately 80 feet per mile. The Canacadea Creek Watershed is a subset of the greater Chemung River Watershed, which covers approximately 2,600 square miles between southern New York and Pennsylvania. The Chemung Watershed represents about one-eighth of the larger Susquehanna River Basin (NYSDEC, 2023b)

Figure 1-1. Regional Vicinity

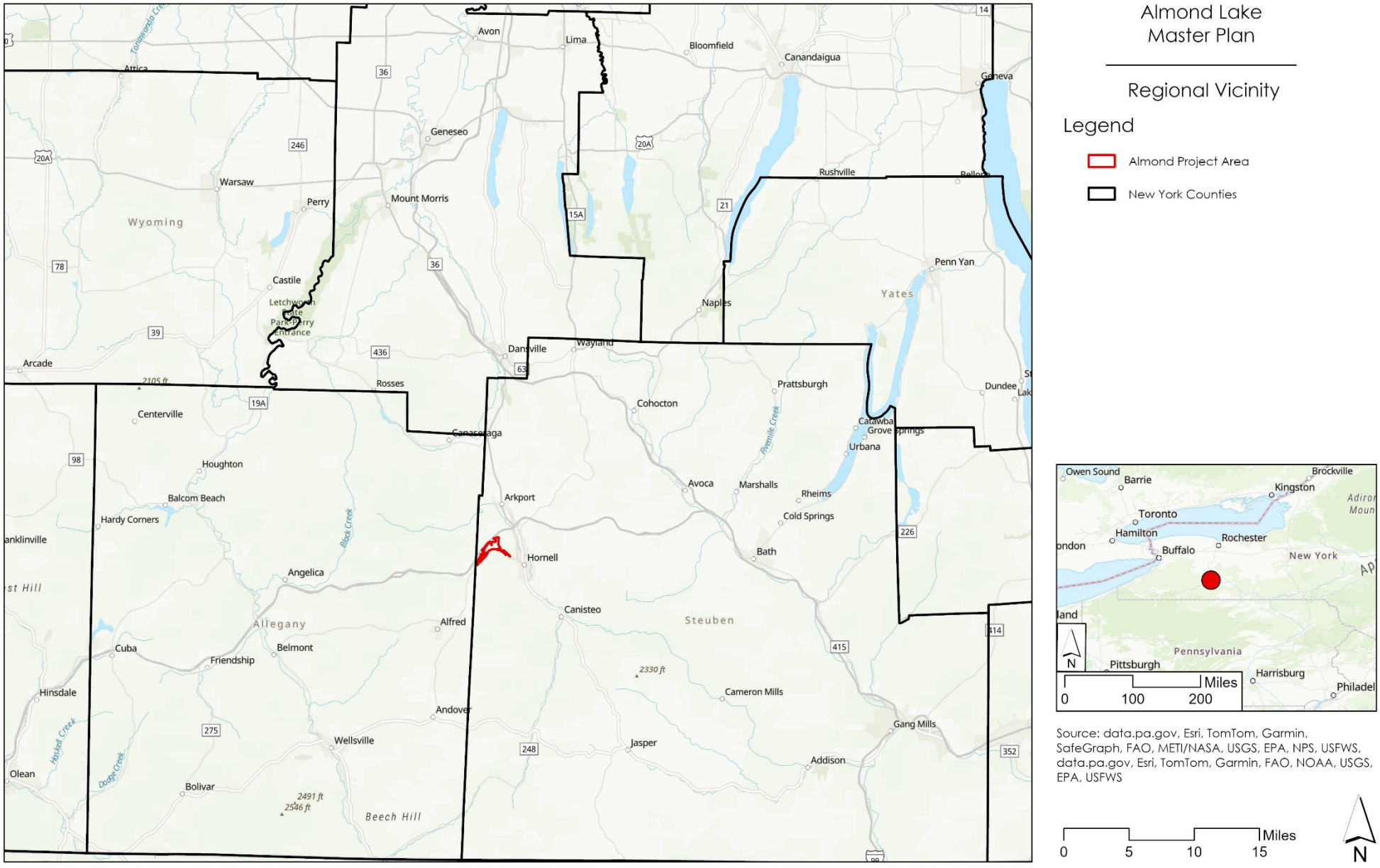
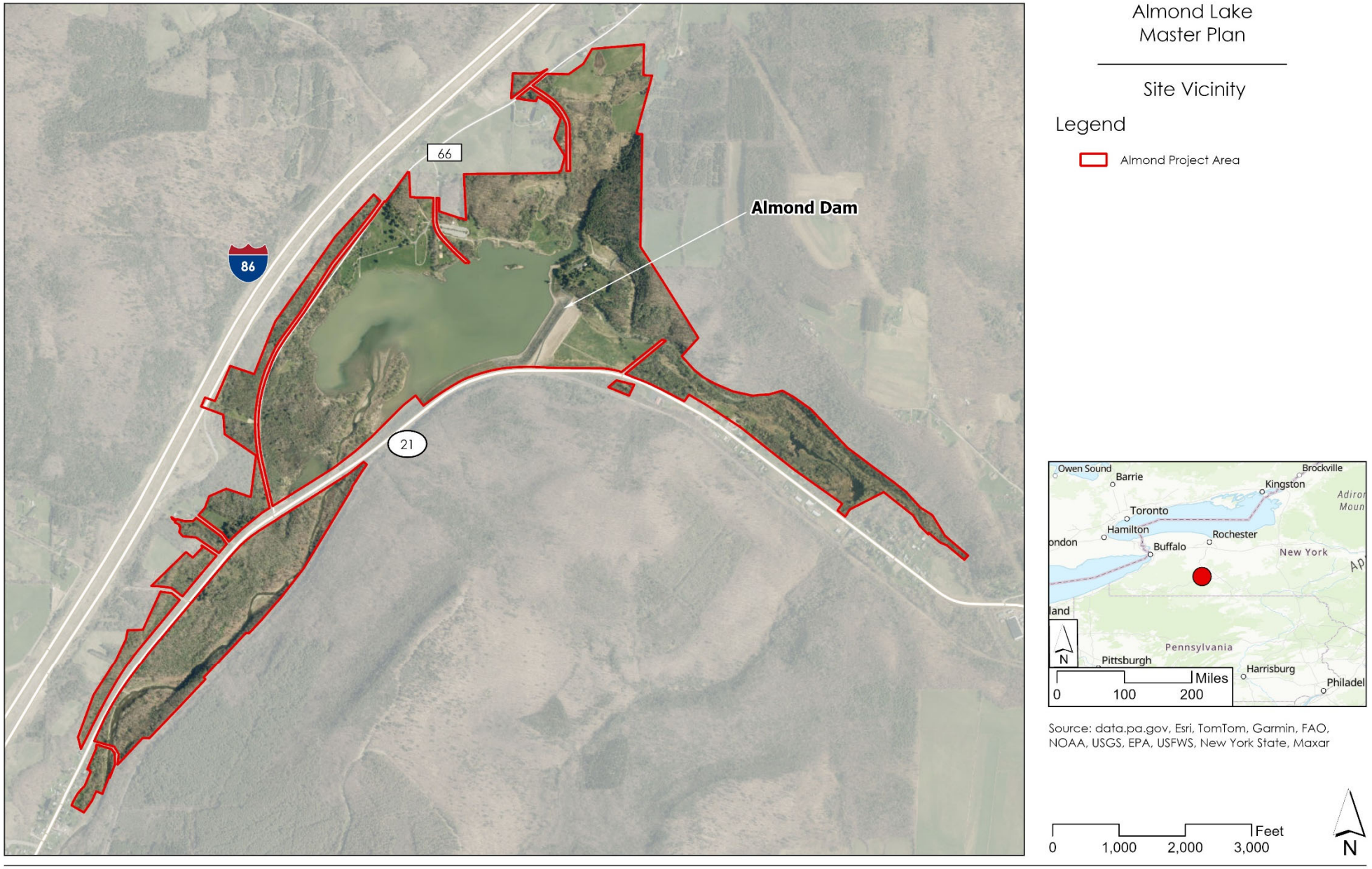


Figure 1-2. Site Vicinity



1.5 DESCRIPTION OF THE RESERVOIR AND PROJECT STRUCTURES

The Almond Dam forms Almond Lake/Reservoir. The Almond Lake Project maintains a conservation pool of approximately 135 acres (at an elevation of 1,260 feet PCD) and stores approximately 840 acre-feet of water. At the full flood control pool (spillway crest at elevation 1,300 PCD), the lake covers 492 acres and stores 13,397 acre-feet of water.

Almond Lake and Reservoir

1.5.1 Embankment/Dam

Almond Dam consists of a rolled, earth-filled embankment having a maximum height of 90 feet with a top elevation of 1,320 PCD and a top width of 25 feet. The main embankment is 1,260 feet long and connects on the right bank with a dike extending 2,600 feet along the relocated Erie Railroad (USACE, 2021).

1.5.2 Spillway

The spillway is located about 750 feet east of the dam in a natural saddle beyond the left abutment and includes a concrete ogee weir with a crest length of 285 feet at elevation 1,300 PCD. At spillway level, the lake covers approximately 492 acres and has a capacity of 13,397 acre-feet. The spillway capacity is 54,000 cubic feet per second (cfs) at the design surcharge elevation of 1,314.5 PCD. To date, spillway flow has not occurred. The maximum pool elevation reached to date was 1,298.58 PCD on June 23, 1972 (Hurricane Agnes).

1.5.3 Flood Control Outlet Works

The outlet works consists of three control gates (5-feet by 10-feet each) located in the intake control tower; a horseshoe-shaped reinforced concrete conduit, 13 feet in diameter and located under the left abutment; three emergency spill gates; and a stilling basin. The total length of the outlet works is about 1,000 feet. The gates have a total discharge capacity of

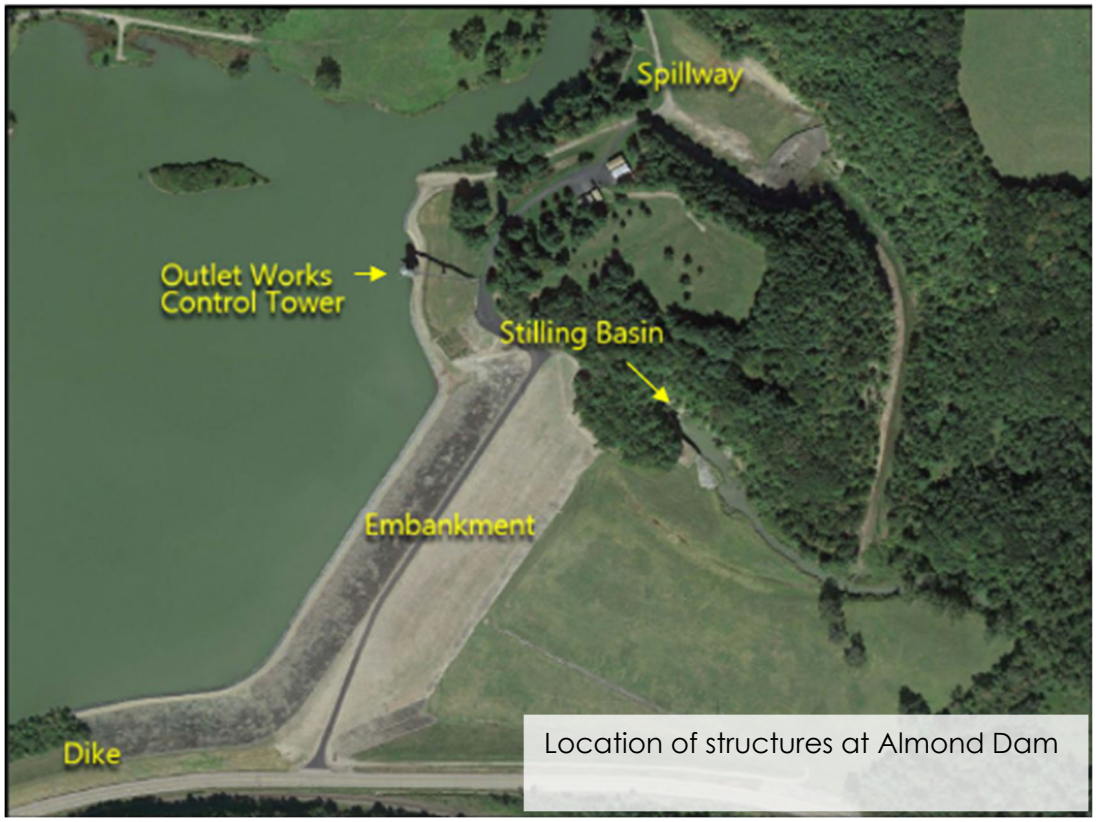
about 6,250 cfs with the lake filled to spillway crest. The outlet works includes a tunnel in the left abutment which discharges into a stilling basin.

1.5.4 Flood Control Outlet Works Stilling Basin and Discharge Channel

This structure is located at the downstream end of the tunnel to prevent damage to the tunnel by erosion and to provide a transition from the outlet tunnel to the outlet channel. The structure consists of an anchored concrete wall lining and floor slab placed against a rock surface. The anchorage method is steel dowel bars grouted into drill holes in the rock.

Almond Dam Stilling Basin and Discharge Channel

The diverted flow of the river as well as the water released from the reservoir flows from the outlet structure through an outlet channel and is discharged into the natural river channel downstream from the dam. The tunnel and channel were designed so that the flow enters the river at a sufficient distance down-stream from the toe of the dam to prevent scouring. The outlet channel was excavated in rock and overburden.



Location of structures at Almond Dam

1.6 PROJECT ACCESS

Project access is State Route 21 (Rural Ave), which runs between Almond Lake on the north and Canacadea State Forest south of the roadway. Interstate 86 passes within 3-miles of North Hornell and provides ready access to the area from the east and west. Additional access routes include State Route 36, which runs west of Canisteo River. State Route 36 connects the town of Canisteo to the town of Hornell, New York.

1.7 PERTINENT PRIOR REPORTS AND RELATED STUDIES

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

- Almond Dam Operation and Maintenance Manual, Dated May 1973
- Almond Lake Master Plan Update, Dated October 1977
- Master Manual for Reservoir Regulation Almond Lake and Arkport Dam, Susquehanna River Basin, Canacadea River, Upper Basin, Appendix C, Dated January 2006
- Almond Dam Emergency Action Plan, Dated July 2021

1.8 PERTINENT PROJECT INFORMATION

Table 1-1 provides pertinent information regarding existing storage capacity.

Table 1-1. Almond Lake Pertinent Data Table
Pertinent data

Drainage Area	**Sq. mi**
Canacadea Creek at Almond Dam	55.8
Canacadea Creek at mouth	58.8
Canacadea Creek at West Cameron	340
Elevations (feet above mean sea level)	**Elevation (feet PCD)**
Top of dam	1,320.0
Maximum pool (design surcharge)	1,314.5
Full flood control (spillway crest)	1,300.0
Conservation pool	1,260.0
Dam	**Description**
Type	Rolled Earth Filled Embankment
Length	1,260.0 feet with 2,600.0 feet dike along railroad
Crest Width	25 feet
Maximum height above streambed	90 feet
Spillway	**Description**
Type	Saddle with ogee weir
Crest Length	285 feet
Maximum capacity	54,000.0 cubic feet per second (cfs) (at 1,314.5 feet PCD)
Outlet works	**Description**
Type	Gate-controlled tunnel with stilling basin
Control	Gate operated
Size	13-foot diameter horseshoe shaped tunnel
Tunnel Length	772 feet
Maximum discharge capacity	6,250 cfs (at 1,300.0 feet PCD)

Source: Master Manual for Reservoir Regulation Almond Lake and Arkport Dam, Susquehanna River Basin, Canacadea River, Upper Basin, Appendix C January 2006 and United States Army Corps of Engineers, Baltimore District (USACE), 2021.

Table 1-2 shows proposed land classifications and associated acreages for Almond 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 Almond Lake

Land Classification	Acres
Project Operations	107.2[1]
High Density Recreation	39.6
Multiple Resource Management	
Low Density Recreation	382.1
Agriculture[2]	26.1
Water Surface	
Restricted	0.3
Open Recreation	134.7
Total	**690**[3]

[1]*Of the 107.2 acres classified under the land classification Project Operations, 17.6 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]*This is not a Master Plan Land Classification as described in EP 1130-2-550 but due to its inclusion in the 1977 Master Plan, it is also included in this Master Plan. Per EP 1130-2-550, agriculture or grazing use of project land may be an interim use to meet management objectives.*

[3]*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 acreages.*

2 EXISTING CONDITIONS & ANALYSIS

2.1 PHYSIOGRAPHIC SETTING

2.1.1 Ecological Setting

The Almond Lake Project is located within the U.S. Environmental Protection Agency's (USEPA) Northern Allegheny Plateau level IV ecoregion and the Glaciated Low Allegheny Plateau level III ecoregion. The Northern Allegheny Plateau covers southern New York, reaching from Lake Erie in the western part of the state to near the Hudson River in eastern New York. The ecoregion consists of horizontally bedded, erodible shales and siltstones. The region contains rolling hills, open valleys, and low mountains covered by till from Wisconsinan Age glaciation. The landscape is a mosaic of cropland, pastureland, and woodland.

2.1.2 Climate

Almond Lake falls within the National Oceanic and Atmospheric Administration (NOAA) Climate Division 30-01 (NOAA, n.d.). This area is characterized by a temperate climate, with average annual temperatures between 33 and 54 degrees Fahrenheit and an average annual precipitation of 37.36 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 55 inches of snowfall a year (U.S. Climate Data, n.d.).

2.1.3 Topography, geology, and soils

The glaciated Allegheny Plateau is the most extensive province in New York State. This area varies in elevation from 500 to 600 feet in the north to more than 2,000 feet in the south. Numerous valleys and troughs are found within this province, with some containing large lakes, and others containing small ponds or streams. The plateau is underlain by a very thick layer of interbedded shales, siltstones, and soft sandstones, with the exception of limestone areas in the northern province boundaries, and patches of conglomerate in the southwest corner of the state (NYSDOT, 2013). There are no unique geological features within the vicinity of the project area (NYSDEC, 2023c).

The terrain within the project is generally sloping with a rolling character. Half of the project's lands contain slopes between 2 and 8 percent and can be subject to inundation. Twenty-six percent of the project's lands contain slopes between 15 and 30 percent, while only 6 percent of the lands have greater than a 30 percent slope. These lands make up most of the hillsides along the shoreline and upper slopes. A small portion of the project's lands may be suitable for some limited development (USACE, 1977).

In the areas adjacent to Almond Lake, soils are primarily mapped as belonging to the Chenango channery silt loam (Ch), Fluvaquents and Ochrepts (FL), Alton gravelly fine sandy loam (AlA), Howard-Dunkirk complex (HpD), Middlebury silt loam (Mp), and Howard-Madrid complex, 20 to 30 percent slopes (HrD).

A variety of other soil types exist within the project boundary but mainly consist of sandy loam and silt loams with minor slopes. Some soil complexes exist that possess rocky or gravelly characteristics on very steep to steep slopes, including Lordstown-Arnot complex, very steep, very rocky (LRF), and Howard and Alton gravelly soils, 20 to 30 percent slopes (HtE) (See Table 2-1; USDA-NRCS, 2023).

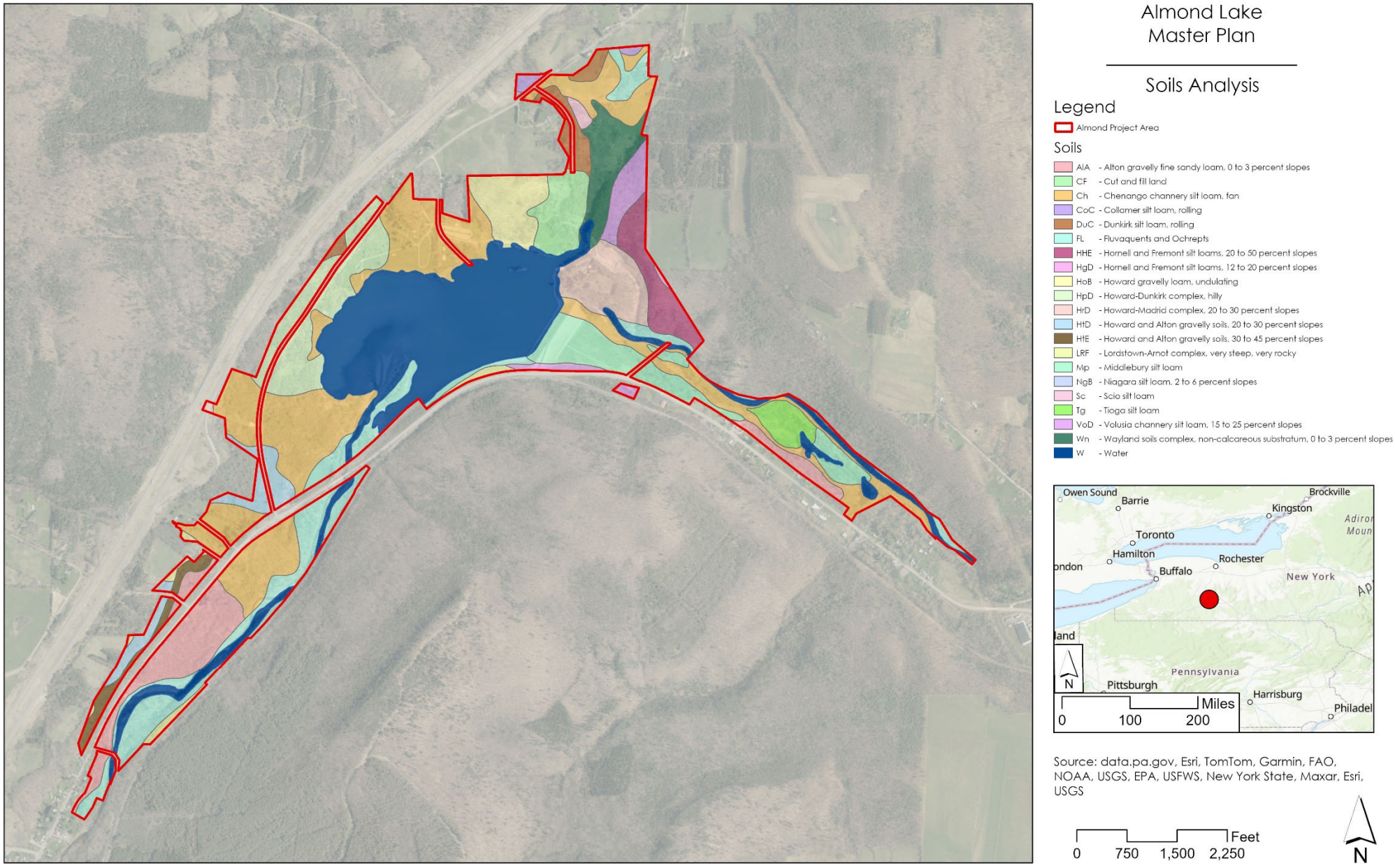
Table 2-1. Soils at Almond Lake

Map Unit Symbol	Map Unit Name	Acres in Project Area	Percent of Project of Area	Prime/Unique Farmland Status
AlA	Alton gravelly fine sandy loam, 0 to 3 percent slopes	42.9	6.2%	All areas are prime farmland
CF	Cut and fill land	18.5	2.7%	Not prime farmland
Ch	Chenango channery silt loam, fan	165.9	24.0%	All areas are prime farmland
CoC	Collamer silt loam, rolling	2.6	0.4%	Farmland of statewide importance
DuC	Dunkirk silt loam, rolling	12.2	1.8%	Farmland of statewide importance
FL	Fluvaquents and Ochrepts	66.2	9.6%	Not prime farmland
HgD	Hornell and Fremont silt loams, 12 to 20 percent slopes	0.5	0.1%	Not prime farmland
HHE	Hornell and Fremont silt loams, 20 to 50 percent slopes	19.5	2.8%	Not prime farmland
HoB	Howard gravelly loam, undulating	23.3	3.4%	All areas are prime farmland
HpD	Howard-Dunkirk complex, hilly	41.9	6.1%	Not prime farmland
HrD	Howard-Madrid complex, 20 to 30 percent slopes	26.6	3.9%	Not prime farmland
HtD	Howard and Alton gravelly soils, 20 to 30 percent slopes	17.4	2.5%	Not prime farmland
HtE	Howard and Alton gravelly soils, 30 to 45 percent slopes	8.5	1.2%	Not prime farmland
LRF	Lordstown-Arnot complex, very steep, very rocky	4.7	0.7%	Not prime farmland
Mp	Middlebury silt loam	36.8	5.3%	All areas are prime farmland
NgB	Niagara silt loam, 2 to 6 percent slopes	0.2	0.0%	Prime farmland if drained
Sc	Scio silt loam	2.0	0.3%	All areas are prime farmland
Tg	Tioga silt loam	9.9	1.4%	All areas are prime farmland
VoD	Volusia channery silt loam, 15 to 25 percent slopes	14.7	2.1%	Not prime farmland
W	Water	154.0	22.3%	Not prime farmland
Wn	Wayland soils complex, non-calcareous substratum, 0 to 3 percent slopes, frequently flooded	21.6	3.1%	Not prime farmland

Source: USDA-NRCS, 2023

Of the soils within the project area, 2.2 percent are considered New York Farmland of Statewide importance, including Collamer silt loam (CoC) and Dunkirk silt loam (DuC). Additionally, 40.6 percent of soils in the area are categorized as Prime Farmland, including Alton gravelly fine sandy loam, 0 to 3 percent slopes (AlA), Chenango channery silt loam (Ch), Howard gravelly loam, undulating (HoB), Middlebury silt loam (Mp), Scio silt loam (Sc) and Tioga silt loam (Tg) (USDA-NRCS, 2023).

Figure 2-1. Soils Map



2.1.4 Hydrology and Groundwater

The Almond Lake is located on Canacadea Creek, approximately 90 miles upstream of where the Chemung River meets the North Branch Susquehanna River in Greens Landing, Pennsylvania. The Canisteo River and Canacadea Creek are tributaries of the Chemung River. Almond Lake controls approximately 56 square miles, or 95 percent of the Canacadea Creek Watershed. The primary tributaries of Canacadea Creek include McHenry Valley Creek and Karr Valley Creek.

2.2 ECOREGION AND NATURAL RESOURCES ANALYSIS

2.2.1 Vegetation

Almond Lake supports many habitat types including wetlands, grassy areas, fields, edges, and a variety of forest types, which attract a variety of wildlife. According to the U.S. Forest Service (USFS), Steuben County is in the Southwest Highlands of New York, which is characterized by more forest than any other vegetative cover type (USDA Forest Service, 2020). Most of the forests in the Southwest Highlands of New York consist of red maple (*Acer rubrum*), sugar maple (*Acer saccharinum*), white ash (*Fraxinus americana*) and black cherry (*Prunus serotina*). Table 2-2 provides the volume of common tree species located within the Southwest Highlands region of New York.

Table 2-2. Forest Cover in the Southwest Highlands Region of New York

Species (Common Name)	Species (Latin Name)	Volume in Region (million feet^3) (2017)	Volume as a % of region (2017)	% Change in volume, 2007-2017
Red Maple	*Acer rubrum*	745	18	22.0
Sugar Maple	*Acer saccharinum*	633	15	2.0
White Ash	*Fraxinus americana*	428	10	13.7
Black Cherry	*Prunus serotina*	311	7	20.8
Eastern Hemlock	*Tsuga canadensis*	300	7	10.3
Northern Red Oak	*Quercus rubra*	280	7	8.2
Eastern White Pine	*Pinus strobus*	235	6	14.9
Quaking Aspen	*Populus tremuloides*	185	4	1.0
American Beech	*Fagus americana*	182	4	0.8
American Basswood	*Tilia americana*	104	2	-5.1
Regional Total		**4,159**	**100**	**10.4**

Source: USDA Forest Service (2020).

Between 2012 and 2017, forests in New York have gained approximately 250,000 acres, but lost approximately 390,000 acres, mainly due to agriculture, for a net decrease of forest acres of 0.3 percent (USDA Forest Service, 2020). The surrounding area of the Almond Lake Project has seen little change of forest gain or loss. In 2019, New York had an estimated total of 18,622,212 acres of forest land with 73.5 percent being owned privately (USDA Forest Service, 2019). Federal and State-owned forests account for 26.5 percent of New York forests and

some that are located within the Southwest Highlands are the Klipnocky, Bully Hill, and Cancacadea State Forests which are in close proximity of the Almond Lake.

2.2.2 Wetlands

Approximately 4,086 miles of freshwater rivers and streams exist within the Chemung River Watershed along with 23 significant freshwater lakes, ponds, and reservoirs totaling approximately 2,904 acres. Almond Lake is the third largest reservoir within the watershed followed by Waneta Lake and Lamoka Lake/Mill Pond (NYSDEC, 2023b). According to the United States Fish & Wildlife Service (USFWS) National Wetlands Inventory (NWI) Mapper, within the Almond Lake project area, there are a total of three freshwater emergent wetlands, along with twelve freshwater forested/scrub wetlands, one freshwater pond, twelve riverine (stream/river) systems, and five lacustrine (lake) systems totaling approximately 171.3 acres, or 24.9 percent of the project's land area (Table 2-3; USFWS, 2023).

Table 2-3. Wetland areas at Almond Lake

Wetland Type	Acres	Percent of Project Area
Freshwater Emergent Wetland	3.6	0.5
Freshwater Forested/Shrub Wetland	31.0	4.5
Freshwater Pond	0.5	0.1
Riverine	30.2	4.4
Lake	106.0	15.4
Total	**171.3**	**24.9**
Project Area	690	

Source: USFWS, 2023

2.2.3 Fish and Wildlife Resources

Almond 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 found on project lands include black bear (*Ursus americanus*), white-tailed deer (*Odocoileus virginianus*), grey squirrel (*Sciurus carolinensis*), eastern wild turkey (*Meleagris gallopavo)* and groundhog (*Marmota monax*). Common avian species include a variety of waterfowl and wading birds, woodpeckers, and songbirds, as well as common game species.

Almond Lake hosts many fish species including largemouth bass (*Micropterus salmoides*), black crappie (*Pomoxis nigromaculatus*), brown bullhead (*Ameiurus nebulosus*), common carp (*Cyprinus carpio*), golden shiner (*Notemigonus crysoleucas*), pumpkinseed (*Lepomis gibbosus*), spottail shiner (*Notropis hudsonius*), white sucker (*Catostomus commersonii*), and yellow perch (*Perca flavescens*). The main fishery in Almond Lake consists of black crappie, common carp, largemouth bass, and yellow perch. Largemouth bass can range in size from 15 to 20 inches.

2.2.4 Threatened and Endangered Species

2.2.4.1 *Federally listed species*

As of 2024, the Northern long-eared bat (*Myotis septentironalis*) is the only federally listed threatened or endangered species that is known to exist within the project area (Appendix G). The Northern long-eared bat is listed as endangered. The Monarch butterfly (*Danaus plexippus*) was the only candidate species identified within the project area (Appendix G). The project area does not contain any critical habitat of either species.

Northern long-eared bats are medium sized bats (about 3-4 inches in length) associated with mature, interior forest environments. Unlike most other bats, Northern long-eared bats forage along wooded hillsides and ridgelines instead of above valley-bottom streams and riparian forest edges. Populations at Northern long-eared bat hibernation sites (e.g., caves and mines) have declined by 99 percent since the discovery of white-nose syndrome and it is now listed as endangered throughout its range. Forest fragmentation and conversion are also major threats to the species due to its association with large blocks of mature forest (USFWS, n.d. - b)

The Monarch Butterfly is a candidate species and is not yet listed or proposed for listing. Consultation with USFWS under Section 7 of the Endangered Species Act is not required for candidate 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. Multiple generations of monarchs are 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 3,000 km and last for over two months. In early spring (February-March), surviving monarchs break diapause and mate at the overwintering sites before dispersing. The same individuals that undertook the initial southward migration begin flying back through the breeding grounds and their offspring start the cycle of generational migration over again (USFWS n.d. - a).

Myotis septentironalis, Northern long-eared bat

Danaus plexippus, Monarch butterfly

2.2.4.2 *New York State Threatened & Endangered Species*

According to the NYSDEC screening tool, the Environmental Assessment Form (EAF) Mapper and the Nature Explorer, there are no records of rare, threatened, or endangered species in the project area (NYSDEC, 2023c; NYSDEC, 2023d).

2.2.5 Other Protected Species

Bald eagles (*Haliaeetus leucocephalus*) were removed from the endangered species list in August 2007 but still retain a threatened status in the state of New York. This species is protected under the Bald and Golden Eagle Protection Act. According to the Cornell Lab of Ornithology's Ebird.org (n.d.) and USACE staff, both immature and adult bald eagles were observed at Almond Lake throughout 2022 and 2023. During the site visit in 2022, both immature and adult bald eagles were sighted at Almond Lake by USACE staff.

2.2.6 Invasive Species

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

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

2.2.6.1 *Plants*

The only non-native invasive plant species observed within the project vicinity includes Japanese knotweed (*Polygonum cuspidatum*), which is actively managed with mowing and spraying by the Kanakadea park staff. Most of the project lands are open, maintained grassy areas or recreational areas which minimizes the occurrence of invasive plant species.

2.2.6.2 *Insects*

Currently, the project area has few problems with invasive insect pests; however invasive insects have caused damage in the past and are likely to cause damage in the future. In the summer of 2021, elevated populations of Spongy moth (*Lymantria dispar dispar*) (formerly gypsy moth) caterpillars caused notable leaf damage across several New York counties, including Steuben. In New York, spongy moth caterpillars are known to feed on the leaves of a large variety of trees such as oak, maple, apple, crabapple, hickory, basswood, aspen, willow, birch, pine, spruce, hemlock, and more. Oak is their preferred species. Spongy moths have "naturalized" in New York's forest communities, meaning they will always be present. Spongy moth populations are cyclical and fall into a 10–15 year pattern of rising and falling populations and are typically driven by predator-prey interactions (NYSDEC, 2023e). Other invasive insects found in surrounding regions that may affect the project area in the future include the hemlock woolly adelgid (*Adelges tsugae*) and the spotted lanternfly (*Lycorma delicatula*).

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.

2.2.7 Water Quality

Water quality of the Canacadea Creek is considered fair to good. The water is alkaline and carries a moderate nutrient load due to dairy farming activities in the basin. Occasionally, algae blooms occur in the reservoir which in turn inhibits light to penetrate below the surface, decreasing productivity. Water quality samples are collected one to two times per year by USACE staff. Most samples are collected in the summer and are usually collected at three stations, including one in the lake at the control tower, one at the inflow to the reservoir, and one at the outflow from the reservoir. The samples are tested for pH, temperature, dissolved oxygen, conductance, phosphate, nitrate, and ammonia. The data is analyzed and utilized by USACE staff for real time reservoir operations and long-term assessments. Generally, there are no public health concerns as it pertains to water quality at the reservoir.

Sediment transport and accumulation at Almond Lake historically posed the most challenges to its operation. The high sediment yield of the basin is due to the highly erodible nature of the glacial till material in the region. Even moderate storms can generate sizeable sediment loads to the reservoir. The watershed receives about 35 inches of precipitation annually. The

average yearly snowfall varies from about 54 inches at the dam to nearly 180 inches just west of the watershed due to lake-effect snow from the Great Lakes. The NYSDEC lists Canacadea Creek and its upper tributaries as "stressed" for aquatic life and recreation.

Aquatic life in the upper portions of Canacadea Creek is known to experience minor impacts due to siltation. There are some indications of nutrient enrichments as well. Coliform bacteria sampling was conducted by the Allegany County Health Department and Alfred University in the early 2000s. Although there did not appear to be an overall bacteria problem, there were occasional "spikes" especially near the Alfred Sewage Treatment Plant (STP), which is located approximately 8 miles directly southwest of Almond Lake, along Canacadea Creek. However, since the early 2000s, the STP underwent an upgrade to add denitrification and a UV disinfection system. The STP is currently meeting New York State Pollutant Discharge Elimination System (SPDES) effluent discharge limits and there are no reports of impacts related to the facility.

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 prehistoric 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: embodiment of the distinctive characteristics of a type, period, or method of construction, or that represents the work of a master, or that possesses high artistic value, or that represents a substantial or distinguishable entity whose components may lack individual distinction; or,
- Criterion D: have yielded, or may be likely to yield, information important in prehistory or history.

A historic property must also possess enough integrity to portray its significance. A resource that retains integrity will embody several, and usually most, of the seven aspects of integrity:

- Location: the place where the historic property was constructed or the place where the historic event occurred.
- Design: the combination of elements that create the form, plan, space, structure, and style of a property.
- Setting: the physical environment of a historic property.
- Materials: the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.
- Workmanship: the physical evidence of the crafts of a particular culture or people during a given period in prehistory or history.
- Feeling: the property's expression of aesthetic or historic sense of a particular period of time.
- Association: the direct link between an important historic event or person and a historic property.

Several laws, regulations, and Executive Orders direct the cultural resources program at Almond Lake. These include, but are not limited to:

- Section 106 of the NHPA
- Section 110 of the NHPA
- Archaeological Resources Protection Act
- American Indian Religious Freedom Act
- Native American Graves Protection and Repatriation Act
- Executive Order 13007 Indian Sacred Sites Act
- Executive Order 13175 Consultation and Coordination with Indian Tribal Governments
- Presidential Memorandum on Tribal Consultation
- USACE Tribal Policy Principles
- USACE Tribal Consultation Policy
- Department of Defense American Indian and Alaska Native Policy
- ER 1130-2-540 Environmental Stewardship and Operations and Maintenance Policies
- EP 1130-2-540 Environmental Stewardship and Maintenance Guidance and Procedures

2.3.1 Precontact

Precontact history in New York 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 CE 1600). Both the Archaic and Woodland Periods are sub-divided into Early, Middle, and Late sub-periods.

The Paleoindian Period featured a highly mobile settlement pattern among inhabitants who practiced seasonal migrations and foraging strategies. Extant Paleoindian cultural material typically follow major river systems as fertile valleys and coastal plains were seen as attractive subsistence areas for early populations.

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. After the Archaic Period there is what is referred to as the Transitional Period (1,500 to 1,000 BCE) that is characterized by the use of soapstone bowls, the precursors to fired ceramics used during the subsequent Woodland Period.

The Woodland Period is further divided into three sub-periods: 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 Woodland Period is characterized by the use of clay-fired ceramics and an increasing reliance on horticulture and agriculture through time. As noted by Ritchie 1994, the two main cultures associated with the Late Woodland in western New York were the Owasco (CE 1000 to 1300) and the Iroquois (CE 1300 to Present). Sites associated with the Owasco are primarily found in the upland regions of drainage basins and waterways. Iroquois sites are characterized by fortified settlements and longhouse structures along high terraces overlooking waterways.

2.3.2 Historic

Although Steuben County was formed in the last decade of the eighteenth century, its establishment and settlement by Americans is rooted in the results of the American Revolution

and subsequent land speculations. As Britain faced defeat, they ceded their land claims and territory in western New York, and those lands already inhabited by their Haudenosaunee allies. New York and Massachusetts claimed the territory, but ultimately agreed to a settlement in 1786 through the Treaty of Hartford. This stipulated that New York gained sovereignty and jurisdiction over the territory, but Massachusetts retained the pre-emptive right to buy Tribal lands or sell this right to a third party (American Ancestors, 2000).

In 1788, Oliver Phelps, Nathaniel Gorham, and their associates purchased Massachusetts's preemptive right to approximately six million acres of land subject to Tribal land title. They proceeded to negotiate with Seneca representatives for a clear land title of the entire tract; however, they were only able to purchase approximately two million acres east of the Genesee River where the modern-day Almond Lake is located. Over the next three years, Gorham and Phelps defaulted on their remaining payments and sold their preemptive right to lands west of the Genesee River, but their original purchase and negotiations with Haudenosaunee allowed for the settlement of Steuben County (American Ancestors 2000; McKelvey, 1939).

Steuben County was established in 1796 from land previously within Ontario County. Steuben County was named after Friedrich Wilhelm Augustin, Baron von Steuben, a German-Prussian general who served under George Washington during the American Revolution. County histories note that early American settlement was routed from Pennsylvania along the Susquehanna and Chemung Rivers. Demonstrating rapid population growth, Steuben County featured a population of 1,788 in 1800 and 62,965 by 1855 (French, 1860). Roberts (1891) notes that the completion of the New York & Erie Railroad in 1850 helped spur population growth, especially in Hornellsville where the company routed the railroad's corridor.

Prior to construction of the Almond Lake, the landscape west of Hornell was largely rural with agricultural lands situated between the forested hills and Canacadea Creek. A review of historic maps and atlases show multiple dwellings within the vicinity of the Almond Lake, including those belonging to "J. Withey," "C. Lincoln," "T. Major," and "B. Covill" to name a few (Levy et al., 1857; Beers, 1873). Dwellings such as these are an indication of the continuous and advantageous settlement along and use of Canacadea Creek.

Following a record flood in 1935, Congress included dam authorizations in the landmark Flood Control Act of 1936 (Public Law 74-738, 74th Congress, 2nd Session), as amended by the Flood Control Act of 1938. The specific local purpose of the project authorization was to construct flood control measures for the protection of Hornell, Canisteo, and Addison as well as reducing flood heights at other localities on the Canisteo and Chemung Rivers.

Although USACE designed the dam and its components, they established contracts for the building process. By 1936, the Massachusetts-based firm Bianchi started work in the area; however, work was delayed due to the higher priority Arkport Dam and World War II (Democrat and Chronicle, 1949). Work on the Almond Lake Project continued after World War II with the relocation of roadways and approximately 80 households. The Almond Lake Project was operationally complete in 1949 at a federal expense of $5,760,000 (Democrat and Chronicle, 1949; USACE, n.d.).

The potential for unidentified cultural resources within the project area remains moderate to high in undisturbed, low to moderately sloped areas within the Kanakadea Recreation Area

or elsewhere within the Canacadea Creek floodplain. Almond Lake's location suggests the possibility for smaller precontact sites such as resource processing or procurement areas, or features associated with the historic dwellings that once dotted the landscape. There have not been any archaeological resources identified within the Almond Lake project area; however, this may be due to the lack of a systematic and controlled survey rather than an actual absence of resources.

2.3.3 Previous Investigations at the Lake

Two cultural resources surveys have been conducted within the Almond Lake project area. These include surveys for the Baron Winds Project and a survey of the Almond Dam complex. Both investigations were focused on historic architectural resources.

For the Baron Winds Project (Survey Number 17SR00306), Environmental Design & Research, on behalf of Baron Winds, LLC, conducted a historic architectural resources survey for a proposed wind power project located within the Towns of Cohocton, Dansville, Fremont, Hornell, and Wayland in Steuben County. Surveyed portions for this project are included in the east and northeastern extent of the Almond Lake project area. No resources were identified within the Almond Lake Project.

In 2021, USACE cultural resources staff conducted a survey of the Almond Dam complex and prepared a determination of eligibility assessment in accordance with Section 110 of the NHPA. The Almond Dam is a mid-twentieth century complex (constructed in 1949) consisting of four structures and three buildings that operate to maintain the dam's flood control mission under the 1936 Flood Control Act. The complex was determined eligible for the NHPA.

2.3.4 Recorded Cultural Resources

One cultural resource has been previously identified within the Almond Lake project area: The Almond Dam complex (USN 10117.000050). The Almond Dam complex is a mid-twentieth century (constructed in 1949) group of above-ground resources consisting of four structures and three buildings that operate to maintain the dam's flood control mission under the 1936 Flood Control Act. In 2021, The Almond Dam complex was determined eligible for the NRHP under Criteria A and C (Boggs, 2021).

2.3.5 Long-Term Objectives for Cultural Resources

The objectives below are listed to provide goals for complying with Section 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 project projects such as Almond Lake.

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

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 Almond Lake Project consists of Steuben County and Allegheny County, New York. The Almond Lake Project is in Steuben County but is located less than 0.1 miles from the eastern border of Allegany County. Therefore, both Steuben County and Allegany County are included in the ZOI for Almond Lake Project.

2.4.2 Population

According to the 2020 American Community Survey (ACS) 5-year population estimate projections, the total population for the ZOI in 2020 was 142,147 down from 147,829 in 2010. The population in the ZOI is approximately 0.7 percent of the total population of New York (19,514,849) in 2020. From 2010 to 2030, the population in the ZOI is expected to decrease to 136,212, an annual growth rate decrease of -0.46 percent per year. Table 2-5 exhibits the population estimates and projections for the ZOI. The distribution of the population among gender, as shown in Table 2-6, is approximately 50.2 percent female and 49.8 percent male within the ZOI, compared to 51.5 percent female and 48.5 percent male in all of New York.

Figure 2-2 represents the population age structure in Steuben County, the ZOI and New York, The median ages in Steuben County and New York is 42.9 years and 39 years respectfully. The age structure is somewhat inverted for all three geographical areas (e.g., low birth rate and aging population), suggesting contraction of the population.

As shown in Figure 2-3, the overwhelming majority of the ZOI population is white, with non-white races making up only 10.5 percent of the total population. Approximately 2 percent of the ZOI population identified as Hispanic or Latino (of any race), and 0.2 percent identified as American Indian (U.S. Census Bureau, 2023).

Table 2-4. Population Estimates and 2030 Projections

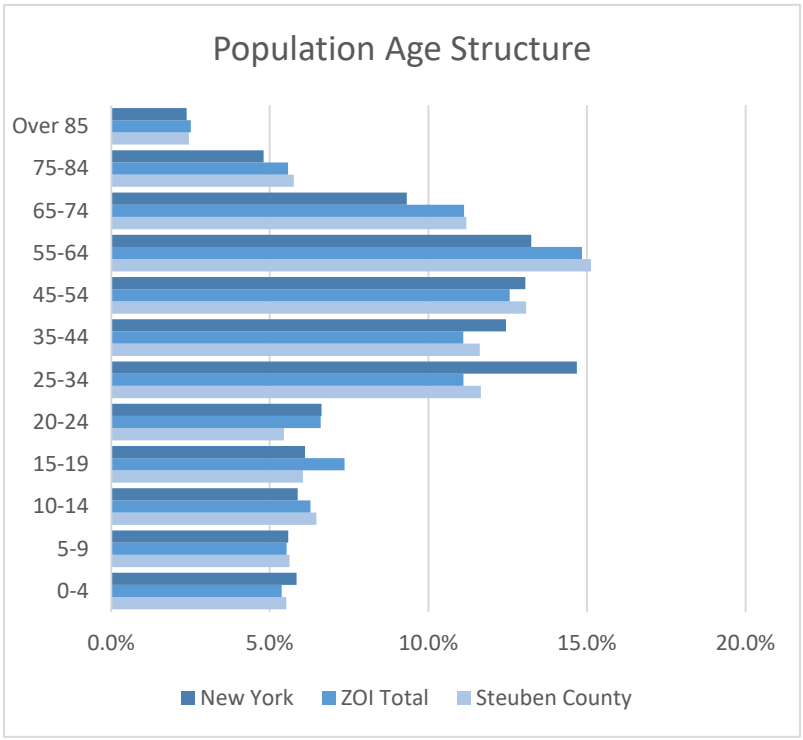
County/State	2010 Estimate		2020 Estimate		2030 Estimate		Growth rate
	Number	% of ZOI	Number	% of ZOI	Number	% of ZOI	
New York	19,229,752	-	19,514,849	-	20,604,030	-	0.36%
Steuben	98,724	50.0%	95,843	50.0%	91,632	50.0%	-0.36%
Allegany	49,105	50.0%	46,304	50.0%	44,580	50.0%	-0.46%
ZOI Total*	147,829		142,147		136,212		-0.39%

*Steuben and Allegany Counties Only
Sources: US Census Bureau, 2023 (2010 and 2020 Estimates); Cornell University Program and Applied Demographics, n.d. (2030 Estimates)

Table 2-5. Population Estimates by Gender

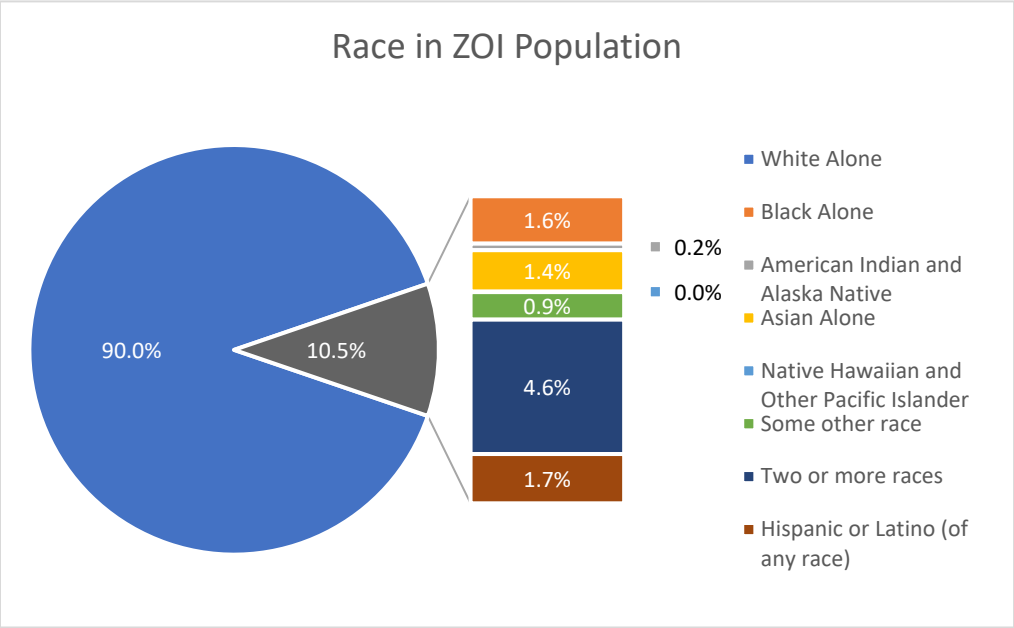
County/State	Population	
	Female	**Male**
New York	10,040,665	9,474,184
Steuben	48,035	47,808
Allegany	22,947	23,357
ZOI Total*	70,982	71,165
*Steuben and Allegany Counties Only Source: US Census Bureau, 2023 (2020 Estimates)		

Figure 2-2. 2022 Percent of Population by Age Group in Steuben County, ZOI and State



Source: (U.S. Census Bureau, 2023)

Figure 2-3. 2022 Population Percentages by Race in ZOI



Source: (U.S. Census Bureau, 2023)

2.4.3 Education and Employment

In the ZOI, 35.4 percent of the population has obtained a high school diploma or equivalent. Approximately 17.4 percent have some college education but no degree, 14.4 percent have an associate degree, 12.3 percent have a bachelor's degree, 11.8 percent have a graduate degree or professional certification, 5.7 percent have a 9th to 12th grade education, and 3.0 percent have less than a 9th grade education.

The largest employment industries in the ZOI are educational services, health care and social assistance at approximately 28.3 percent, followed by 17.4 percent in manufacturing, 11.0 percent in retail, and 8.0 percent in arts, entertainment, and recreation, and accommodation and food services. All other industries make up 35.3 percent of employment. The civilian labor force unemployment rate within the ZOI is 5.2 percent, similar to the 5.7 percent unemployment rate for all of New York.

2.4.4 Households and Income

There are approximately 58,127 households in the ZOI and 7,417,224 in New York. The median household income in the ZOI ($53,288 USD) is lower than the statewide median household income ($71,117 USD). Approximately, 13.9 percent of people living in the ZOI are below the poverty level, compared to 13.6 percent statewide.

2.5 RECREATION FACILITIES, ACTIVITIES, AND NEEDS

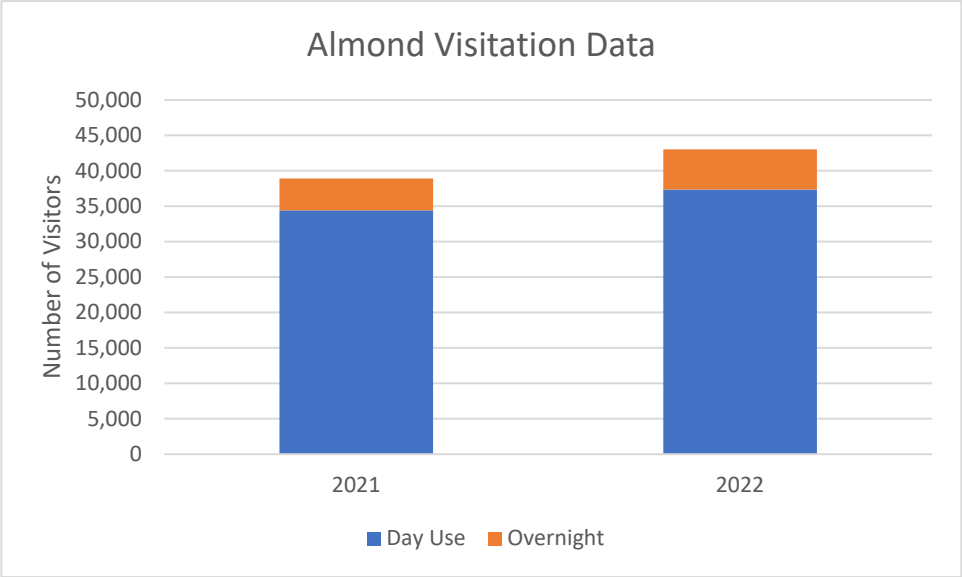
2.5.1 Zone of Influence

The zone of influence for the recreation use analysis for the Almond Lake Project consists of two New York counties. Almond Lake lies within Steuben County and is located less than 0.1 miles from the eastern border of Allegany County.

2.5.2 Visitation Profile

Visitation data is maintained by USACE in the Visitor Estimation and Reporting System (VERS). During the period between October 2017 and September 2020, there were over 300,000 visitors to the Almond Lake property, with its heaviest visitation during early summer and early fall months. Almond Lake saw a steady decline in visitors from October 2017 to September 2021. From Fiscal Year (FY) 2021 to FY 2022, there was an increase in visitors (Figure 2-4). Day users are the primary use type, but Almond Lake, specifically Kanakadea Park, does have substantial use of overnight camping areas in the spring and summer months.

Figure 2-4. Visitation at Almond Lake for FY 2021 and 2022

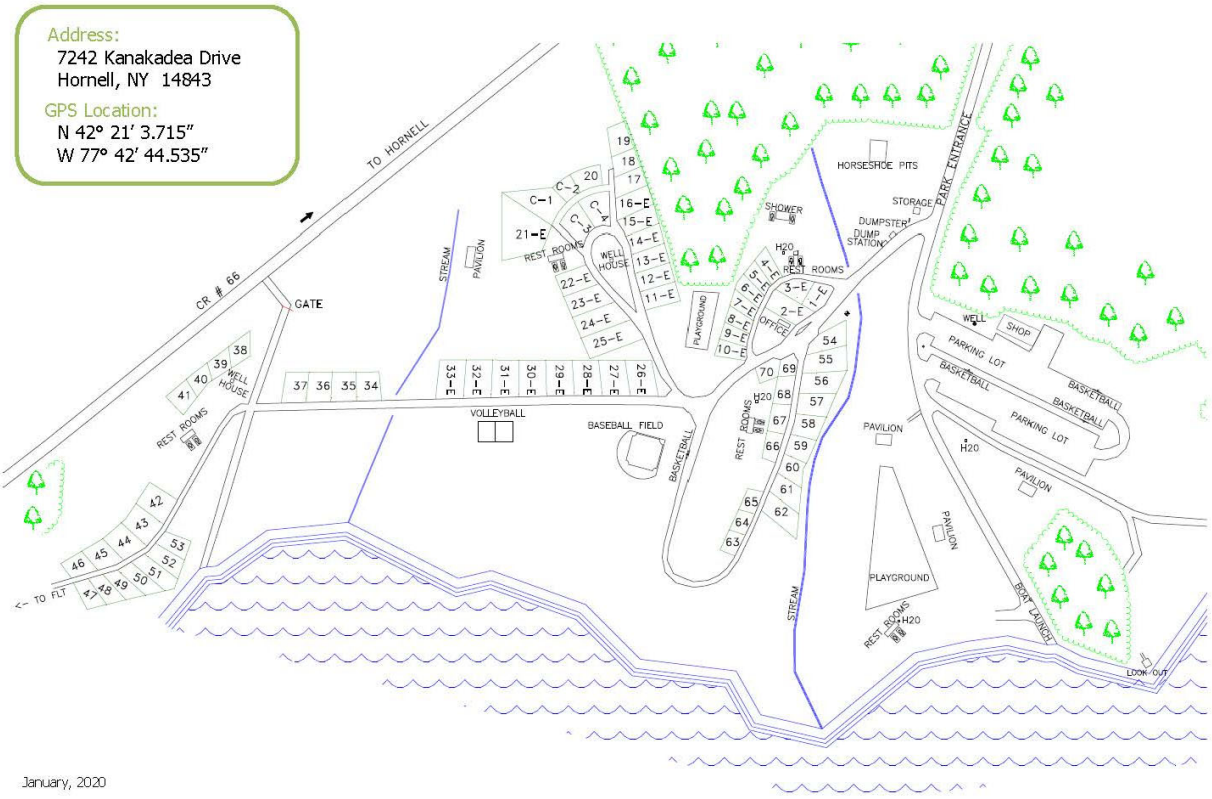


Source: USACE Visitation & Estimation Reporting System (2021-2022)

2.5.3 Recreation Facilities

Almond Lake Project lands not used for operation and maintenance of the Dam are leased to Steuben County, specifically the Department of Public Works, for the operation of Kanakadea Park. The park features include various camping options with fire rings, grills, and hot showers. Additionally, the recreation area has hiking trails, a baseball/softball field, a sand volleyball court, a basketball court, playgrounds, horseshoe pits, pavilions, picnic sites with tables, a parking area, a boat launch for motorless boats, fishing areas, and a lake overlook area. Most of the recreation area is open year-round except camping which is from April through December and water access which is from April to October (Steuben County, 2023). Additionally, the entirety of the USACE owned property, excluding restricted areas around the Dam, is used by the public for a variety of passive recreation such as hiking, hunting and trapping, and nature watching.

Figure 2-5. Kanakadea Park Map



Source: Steuben County, 2023

2.5.3.1 *Parking Areas*

The main parking area is in the east of the park near the park entrance. Each camp site has parking, and parking is available in other areas of the USACE owned property. There is a separate parking area to the south off of County Road 66 that connects to the Finger Lakes Trails to the west.

2.5.3.2 *Boat Launch Area & Overlook*

The boat launch area is located near the playground, several pavilions, and rest rooms. There is one boat ramp for motorless boats. Adjacent to the boat launch is a lake overlook area. There is no swimming and no gas-powered motorboats allowed at the lake. The lake is open from April 15 through October 15.

Kanakadea Park Boat Launch

2.5.3.3 *Fishing, Hunting, and Trapping*

Almond Lake is not stocked. The bulk of the fishery in Almond Lake consists of black crappie, common carp, largemouth bass, and yellow perch. Largemouth bass in the 15 to 20-inch size range are found in the reservoir (NYSDEC, 2023a). Black crappie are abundant in vegetated areas of the reservoir and

around natural structures such as submerged trees. Ice fishing opportunities exist during most winters. Sedimentation is a limiting factor for fish species in Almond Lake. Canacadea Creek, which meanders through the USACE owned property, is also a popular fishing location. Portions of Canacadea Creek are stocked with brown trout and rainbow trout by NYSDEC and these species, along with other species such as largemouth bass, are common throughout the waterway.

Hunting and trapping occur throughout the property. Trapping is most popular in the low-lying regions near the south end of the lake and adjacent to Canacadea Creek where beaver and muskrat are mostly found. Hunters utilize the densely wooded regions of the property and are restricted from the area around the dam operations.

2.5.3.4 *Picnic/Day Use Area*

The day use area is primarily located in the southeast region of the park and extends to the boat launch. Four pavilions are located throughout the recreation area with rest room facilities near each pavilion. The pavilion areas include picnic tables and charcoal grills. A large playground is in the center of two pavilions and restrooms are located north of the boat launch and just south of the parking area. Additionally, there are picnic tables with fire rings throughout the park. A sand volleyball court and a softball/baseball field are located to the east of the boat launch area near several campsites. Another playground, horseshoe pits, and showers are located near the park entrance to the north. Other large open fields are located throughout the recreation area for various activities and sports. The park is also pet-friendly.

Kanakadea Park Day Use Area

2.5.3.5 *Camping Area*


Kanakadea Park Cabin

Steuben County Parks Division within the Steuben County Department of Public Works manages over 70 campsites ranging from sites with electric and charcoal grills to sites that provide a more primitive camping experience. In addition, there are two cabins with electricity available for rent. Most camp sites are located in the central portion of the park near the park amenities such as the sports fields, playground, and restrooms. However, some camp sites are spread further east and located closer to the lake's edge. Camping season is from April 15 through December 1.

2.5.3.6 *Hiking*

Kanakadea Park has over one mile of trails and pathways located within the park boundaries. The trail winds through the recreation area before heading southwest along Route 66, crosses under Interstate 86, and continues east into Allegany County. South of the Kanakadea recreation area there is a small parking lot at the trail head before it crosses under Interstate 86. The trail is part of the Finger Lakes Trail managed and maintained by the Finger Lakes Trail Conference (Finger Lakes Trail, n.d.)

2.5.3.7 *Special Events*

Two special events are held annually at Kanakadea Park. In June, there is the Father's Day Car Show, and, in the fall, there is the Southern Tier Float Fly event. The car show utilizes the day use area and typically includes outside vendors while the float fly mainly uses the immediate lake area. Both events attract visitors and campers to the park.

2.5.4 Recreation Analysis

The Almond Lake project is beneficial to the local economy through indirect job creation and local spending by visitors. In FY 2022, data was collected highlighting the social and economic benefits of the Almond Lake Project (USACE, 2022). By providing opportunities for active recreation, the USACE-owned lake and the recreation areas primarily leased to Steuben County help promote physical activity, provide recreational programs, and increase awareness of the environment.

The money spent by visitors to USACE projects on trip expenses adds to the local and national economies by supporting jobs and generating income. Visitor spending represents a sizable component of the economy in many communities around the project. In FY 2022, Almond Lake had 43,000 visits (person-trips) and USACE estimated that for the area within 30 miles of the project, visitations resulted in $2,297,956 in visitor spending. The economic benefits fluctuate with park attendance observed from year to year. Almond Lake also provides significant social and environmental benefits so the net benefit of Almond Lake to the community is greater than the economic benefits alone.

2.5.5 Recreational Carrying Capacity

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

Recreational carrying capacity was not studied in-depth for this master plan, since recreation on USACE lands is managed by Steuben County. However, use of the Almond Lake Project and surrounding lands is limited by the recreational area's resource capacity. For example, overnight use is limited by the number of campsites available, including overflow campsite areas. Day use is limited by the number of parking facilities and does not require permits or reservations. The use of Almond Lake by boaters is limited by parking facilities (day users), and/or the number of campsites (overnight users). At this time there are no plans of actively limiting uses, and there is no evidence of facilities or natural resources being negatively impacted by overuse or overcrowding.

2.6 REAL ESTATE AND ACQUISITION POLICY

Real Estate acquisition in the reservoir area includes approximately 690 acres acquired in fee title, thus, USACE owns the complete rights and legal privileges over the land. Easement lands include all lands for which USACE holds an easement interest but not fee title. These could describe a situation in which USACE agreed to easement rights on fee title property or pursued easement rights on land outside the original fee simple purchase. Flowage easements are easements purchased by USACE giving the right to temporarily flood private land during flood risk management operations. The Almond Lake Project holds flowage easement interests on approximately 31 acres of land.

2.7 PERTINENT PUBLIC LAWS

2.7.1 Federal Laws

Public Law 59-209, Antiquities Act, 1906. The first federal law established to protect what are now known as "cultural resources" on public lands. It provides a permit procedure for investigating "antiquities" and consists of two parts: An act for the Preservation of American Antiquities and Uniform Rules and Regulations.

Public Law 74-292 Historic Sites Act, 1935. Declares it to be a national policy to preserve for (in contrast to protecting from) the public, historic (including prehistoric) sites, buildings, and objects of national significance. This act provides both authorization and a directive for the Secretary of the Interior, through the National Park Service, to assume a position of national leadership in the field of protection, recovery, and interpretation of national archeological historic resources. It also establishes an "Advisory Board on National Parks; Historic Sites, Buildings, and Monuments, a committee of eleven experts appointed by the Secretary to recommend policies to the Department of the Interior".

Bald and Golden Eagles Act (16 U.S.C. 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 89-272, Solid Waste Disposal Act, as amended by Public Law 94-580, dated October 1976. This act authorized a research and development program with respect to solid waste disposal.

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 National Register of Historic Places.

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 91-611, River and Harbor and Flood Control Act, 1970. Section 234 provides that persons designated by the Chief of Engineers shall have authority to issue a citation for violations of regulations and rules of the Secretary of the Army, published in the Code of Federal Regulations.

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 92-463, Federal Advisory Committee Act. The Federal Advisory Committee Act became law in 1972 and is the legal foundation defining how federal advisory committees operate. The law has special emphasis on open meetings, chartering, public involvement, and reporting.

Public Law 92-500, Federal Water Pollution Control Act Amendments, 1972. The Federal Water Pollution Control Act of 1948 (PL 845, 80th Congress), as amended in 1956, 1961, 1965 and 1970 (PL 91 - 224), established the basic tenet of uniform State standards for water quality. Public Law 92-500 strongly affirms the federal interest in this area. "The objective of this act is to restore and maintain the chemical, physical and biological integrity of the Nation's waters."

Public Law 92-516, Federal Environmental Pesticide Control Act, 1972. This act completely revises the Federal Insecticide, Fungicide and Rodenticide Act. It provides for complete regulation of pesticides to include regulation, restrictions on use, actions within a single State, and strengthened enforcement.

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

Public Law 93-81, Collection of Fees for Use of Certain Outdoor Recreation Facilities, 1978. This act amends Section 4 of the Land and Water Conservation Act of 1965, as amended to require each federal agency to collect special recreation use fees for the use of sites, facilities, equipment, or services furnished at federal expense.

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

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

Public Law 93-291, Archeological Conservation Act, 1974. The Secretary of the Interior shall coordinate all federal survey and recovery activities authorized under this expansion of the 1960 act. The Federal construction agency may transfer up to one percent of project funds to the Secretary with such transferred funds considered non-reimbursable project costs.

Public Law 93-303, Recreation Use Fees, 1974. This act amends Section 4 of the Land and Water Conservation Act of 1965, as amended, to establish less restricted criteria under which federal agencies may charge fees for the use of campgrounds developed and operated at federal areas under their control.

Public Law 93-523, Safe Drinking Water Act, 1974. The act assures that water supply systems serving the public meet minimum national standards for protection of public health. The act (1) authorizes the Environmental Protection Agency to establish federal standards for protection from all harmful contaminants, which standards would be applicable to all public water systems, and (2) establishes a joint federal-state system for assuring compliance with these standards and for protecting underground sources of drinking water.

Public Law 94-422, Amendment of the Land and Water Conservation Fund Act, 1965. Expands the role of the Advisory Council on Historic Preservation. Title 2 - Section 102a amends Section 106 of the Historical Preservation Act of 1966 to say that the Council can comment on activities which will have an adverse effect on sites either included in or eligible for inclusion in the NRHP.

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

generated by fission reactions) or naturally occurring radioactive materials (e.g., radon gas, uranium ore).

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

Public Law 95-217, Clean Water Act of 1977, as amended. This Act amends the Federal Water Pollution Control Act of 1970 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 the nation's navigable waters. The Clean Water Act of 1977 has been amended by the Water Quality Act of 1987, Public Law 100-4.

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 U.S. C. 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 U.S.C. 4201, 1539-1549). 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 U.S. C 12, 101- 12, 213). The purpose of the Act was to extend the rights, privileges, and protection that had been made available to the disabled on federal projects for many years prior to the ADA, to the private sector.

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

2.7.2 Executive Orders (EO)

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

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

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

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

EO 12898, Environmental Justice – This EO directs federal agencies to achieve environmental justice to the greatest extent practicable and permitted by law, and consistent with the principles set forth in the report on the National Performance Review. Agencies are required to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.

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.

EO 14008, Tackling the Climate Crisis at Home and Abroad – This EO has three overarching objectives 1) promote safe global temperature, 2) increase climate resilience, and 3) support financial a pathway toward low greenhouse gas emissions and climate-resilient development.

EO 14091, Further Advancing Racial Equity and Support for Underserved Communities Through the Federal Government – This EO addresses specific barriers still faced by underserved communities by requiring federal agencies to integrate equity into planning and decision-making. The EO builds upon other executive orders and directives concerning equity and environmental justice. The EO outlines a multi-pronged approach to advancing equity through the federal government, further defines equity-related terms, including equitable development, community wealth building, equitable data, and algorithmic discrimination.

EO 14096, Environmental Justice – This EO builds on EO 12898 by making clear that the pursuit of environmental justice is a duty of all executive branch agencies and should be incorporated into their missions. Agencies are required to consider measures to address and prevent disproportionate and adverse environmental and health impacts on communities, including the cumulative impacts of pollution and other burdens like climate change. It directs agencies to actively facilitate meaningful public participation and just treatment of all people in agency decision-making. This EO uses the term "disproportionate and adverse" as a simpler, modernized version of the phrase "disproportionately high and adverse" used in EO 12898.

2.7.3 State Laws

State of New York, Environmental Conservation Law (ECL). This law established the New York State Department of Environmental Conservation (NYSDEC) and authorizes all of its programs.

State of New York, ECL, Article 6, State Smart Growth Public Infrastructure Policy Act. This article supports maximizing the social, economic, and environmental benefits from public infrastructure development through minimizing unnecessary costs of sprawl development.

State of New York, ECL, Articles 11 & 13, Fish and Wildlife Law. This act prohibits the taking, wounding, killing, selling, or buying of any protected fish or other wildlife species.

State of New York, ECL, Article 16, Flood Control. This article declares that the state participates in the federal flood control program.

State of New York, ECL, Article 17, Water Pollution Control Act. This article safeguards the waters of the state from pollution by preventing any new pollution and abating pre-existing pollution.

State of New York, ECL, Article 49, Protection of Natural and Man-made Beauty. This article gives NYSDEC the power to develop, assist, and encourage policies and programs that preserve and enhance the natural and man-made beauty of the state.

2.7.4 State Management Plans

New York State Statewide Comprehensive Outdoor Recreation Plan (SCORP), 2020-2025. The 2020 – 2025 outdoor recreation plan is New York's strategic plan for how outdoor recreation should meet the needs of the state's residents and visitors. A State's outdoor recreation plan must be updated every five years for states to remain eligible for the Federal Land and Water Conservation Fund. The 2020 – 2025 plan includes several goals, all of which center around a framework of five priorities, including health and wellness, recreation for all, sustainable systems, funding and economic development, and technology.

3 RESOURCE OBJECTIVES

3.1 INTRODUCTION

The purpose of the Master Plan is to establish the guidelines for sustainable stewardship of natural and recreational resources managed directly and indirectly on USACE owned lands. The resource objectives and goals are consistent with the authorized project purposes, federal laws and directives, regional needs, and resource capabilities, and take public input into consideration. The New York 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 Almond Lake. The resource objectives specify task-oriented actions necessary to achieve the plan goals.

Overarching USACE management goals and environmental operating principles (EOPs) are presented in the following sections. Specific project wide and Kanakadea recreational 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 is based upon time, workload, and budget. The objectives provided in this chapter are established to provide high levels of stewardship to USACE managed lands and resources, while still providing a high level of public service. These goals will be pursued using a variety of mechanisms such as: assistance from volunteer efforts, hired labor, contract labor, permit conditions, remediation, and special lease conditions. It is the intention of USACE and Almond Lake staff to provide a realistic approach to the management of all resources.

Project Management Goals:

- **Goal A** – Provide the best management practices to respond to regional needs, resource capabilities and capacities, and expressed public interests consistent with authorized project purposes.

- **Goal B** – Protect and manage project natural and cultural resources through sustainable environmental stewardship programs.

- **Goal C** – Provide public outdoor recreation opportunities that support project purposes and public interests while sustaining project natural resources.

- **Goal D** – Recognize the unique qualities, characteristics, and potentials of the Project.

- **Goal E** – Provide consistency and compatibility with national objectives and other state and regional goals and programs.

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

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

3.3 RESOURCE OBJECTIVES

Resource objectives are defined as clearly written statements that respond to identified issues and that specify measurable and attainable activities for resource development and management of the lands and waters under USACE jurisdiction. The objectives stated in this master plan support the project management goals, USACE EOPs, and applicable national performance measures. They are consistent with authorized project purposes, federal laws and directives, regional needs, resource capabilities, and they take public input into consideration.

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

3.3.1 Project-Wide Objectives

- Mitigate potential flood damage to the city of Hornell and villages of Canisteo and Addison in New York due flooding of the Canisteo River.
- Execute environmental stewardship activities on project lands to sustain natural and cultural resources.
- Maintain a stable lake level throughout the prime recreation season to support both in-lake and shoreline use.

3.3.2 Recreation Area Objectives

Almond Lake provides for a variety of recreational opportunities to the local region. There are numerous passive recreational benefits such as hiking, wildlife viewing, and hunting and trapping of large and small game species. In addition, Kanakadea Park, leased and operated by Steuben County, is available for additional outdoor recreation opportunities such as camping, picnicking, playing on the playground and other outdoor sports. The lake

also provides boating and fishing opportunities. Currently, there are no plans for expansion of Kanakadea Park. There is no charge to enter the Park and rental rates are intentionally maintained at a reasonable and fair rate to provide opportunities for anyone to access the parks amenities. The recreation area objective for Kanakdadea is to continue to provide equitable access to diverse recreational opportunities for the local region.

Almond Dam, facing north

4 LAND CLASSIFICATION

4.1 LAND ALLOCATION

All project lands, for USACE water resource development projects, are allocated by USACE into one of four categories, in accordance with the congressionally authorized purpose for which the project lands were acquired. The four possible categories of allocation identified in USACE regulation EP 1130-2-550, Chapter 3, are: Operations, Recreation, Fish and Wildlife, and Mitigation. When Almond Lake was established, the Operations and Recreation land allocation categories applied to the project.

4.2 LAND CLASSIFICATION

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

Land classifications were 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

Land classification was completed when the project was originally constructed. The 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.

The 1977 Almond Lake Master Plan Update (1977 Master Plan) superseded the 1964 Master Plan. In the 1977 Master Plan, three land classifications were utilized: project operations lands, recreation lands, and lands available for outlease. Project operation lands were described as those lands acquired and specifically allocated to provide safe, efficient operation of the project for its primary authorized purpose of flood risk management. Those lands included the area around the dam and its appurtenances, the dam operator's residence, and the maintenance complex. The recreational lands included the areas acquired for project operations but developed for public recreational activities. This land classification encompasses the Kanakadea Recreation Area. The lands available for outlease are those parcels obtained for project operations but leased for grazing or other agricultural purposes.

Despite the available descriptions of prior land classifications, due to digitization errors, the land classification maps from the 1977 Master Plan are not available. Therefore, it is impossible to determine the boundaries of prior land classifications and no further discussion of prior land classifications will be included in this updated Master Plan document.

Figure 4-1. Real Estate Map

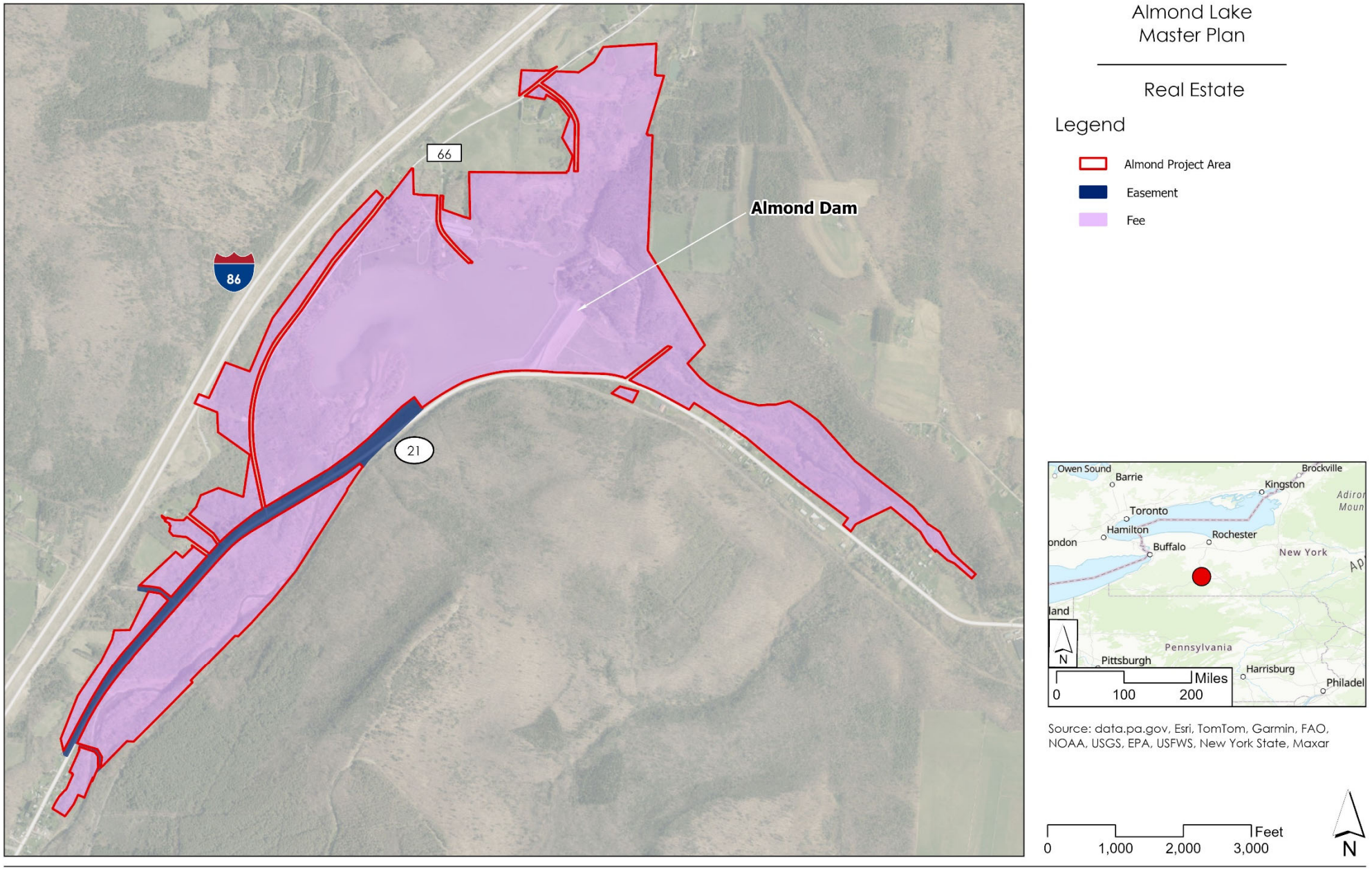
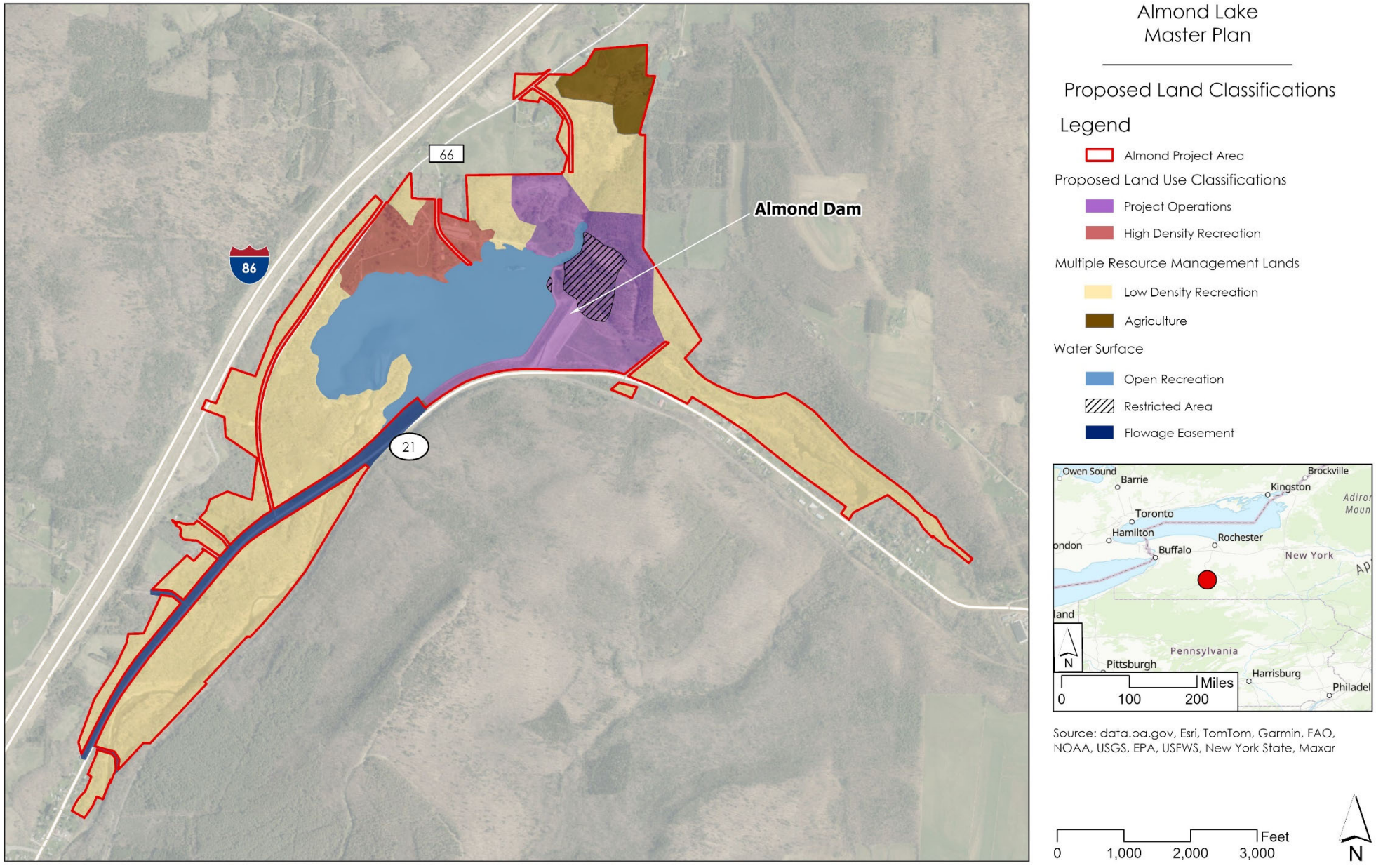


Figure 4-2. Proposed Land Classifications



4.2.2 Proposed Land Classifications

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

Proposed land classifications were determined by referencing the prior land classifications discussed in the 1977 Master Plan, evaluating the current primary use the lands are managed for, and identifying the land classification that would apply to those areas.

Table 4-1. Proposed Land Classification Acreage

Proposed Land Classifications	Acres
Project Operations	107.2[1]
High Density Recreation	39.6
Multiple Resource Management	
Low Density Recreation	382.1
Agriculture[2]	26.1
Water Surface	
Restricted	0.3
Open Recreation	134.7
Total	**690**[3]

[1]*Of the 107.2 acres classified under the land classification Project Operations, 17.6 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]*This is not a Master Plan Land Classification as described in EP 1130-2-550 but due to its inclusion in the 1977 Master Plan, it is also included in this Master Plan. Per EP 1130-2-550, agriculture or grazing use of project land may be an interim use to meet management objectives.*

[3]*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 acreages.*

4.2.2.1 *Project Operations*

This classification category includes all project land required for the structure, operation, administration, or maintenance of the project and that must be maintained to carry out the authorized purpose of flood risk management. Approximately 107.2 acres at the Almond Lake Project are allocated to project operations, including the dam, control tower, operations offices, and maintenance facilities. Other operational units include the spillway, restricted

access roads, and utility rights of way. Within the 107.2 acres classified as Project Operations, 17.6 acres include a restricted area. The restricted area surrounds the operations office and includes signage and barriers to prevent unauthorized personnel. Figure 4-2 shows the restricted area overlayed on the Project Operations area.

4.2.2.2 *High Density Recreation*

The High Density Recreation category includes lands developed for intensive recreational activities for the visiting public. At the Almond Lake Project, these lands include all areas of Kanakadea Park. This category includes approximately 39.6 acres of land.

4.2.2.3 *Multiple Resource Management*

This classification category identifies the predominant use of an area with the understanding that other compatible uses can occur within the area. This classification is divided into four sub-classifications identified as: Low Density Recreation, Vegetative Management, Wildlife Management, and Future or Inactive Recreation. A given tract of land may be classified using one or more of these sub-classifications. There are 408.2 acres of land at the Almond Lake Project under this classification. The proposed land classification map (Figure 4-2) reflects the predominant sub-classifications. Sections 4.2.2.3.1 and 4.2.2.3.2 identify the amount contained in each sub-classification under Multiple Resource Management Lands.

4.2.2.3.1 Low Density Recreation

The Low Density Recreation sub-classification covers lands with minimal development or infrastructure that support passive public recreation use including fishing, hunting, wildlife viewing, and hiking. There are 382.1 acres of low density recreation areas on Project lands which includes all federally owned lands not designated as Project Operations, High Density Recreation, or Water Surface.

4.2.2.3.2 Agriculture

In the 1977 Master Plan, "lands available for outlease" is utilized as a land classification. According to the 1977 Master Plan, the lands available for outlease are those parcels obtained for project operations but outleased for grazing or other agricultural purposes. According to USACE regulation EP 1130-2-550, Chapter 3, agriculture, or grazing use of project land may be an interim use to meet management objectives. USACE continues to outlease a portion of the Almond Lake Project for agricultural purposes; therefore, this Master Plan update includes lands designated for agriculture. There are approximately 26.1 acres at Almond Lake designated for Agriculture. If the agriculture lease were terminated, these lands would continue to be used under one of the Multiple Resource Management classifications, most likely the Low Density Recreation sub-classification.

4.2.2.4 *Water Surface*

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

4.2.2.4.1 Restricted

Restricted water surface includes those areas where recreational boating is prohibited or restricted for project operations, safety, and security purposes. The Restricted water surface at Almond Lake includes a small area around the dam and intake tower. The total acreage of Restricted water surface is approximately 0.3 acres. The restricted area is marked with standard United States Coast Guard (USCG) regulatory buoys.

4.2.2.4.2 Open Recreation

Open Recreation includes all water surface areas available for year-round or seasonal water-based recreational use. There is no beach area at Almond Lake and there is no swimming permitted at the lake. No gas-powered motorboats are allowed on the lake, but other boats are permitted. Apart from the Restricted area described above in Section 4.2.2.4.1, the remaining water surface of approximately 134.7 acres at Almond Lake is designated as Open Recreation.

4.3 PROJECT EASEMENT LANDS

As discussed in Section 2.6, real estate acquisition in the reservoir area includes approximately 690 acres acquired in fees and flowage easement interests on approximately 31 acres of land. Figure 4-1 shows the locations of the flowage easements at Almond Lake. Outlease are a real estate instrument that authorize a private or public entity, that is not the USACE, to access Federally controlled property for non-mission related purposes. The Almond Lake Project has several outlease throughout the property. The two most notable outlease are to Stueben County for the operation of Kanakadea Park, and to a private citizen for agriculture purposes. Table 4-2 below lists the outlease at Almond Lake Project.

Table 4-2. Almond Lake Outlease in 2022

Grantee	Description
National Fuel Gas Distribution Corp	Pipelines
National Fuel Gas Distribution Corp	Pipelines
New York State Electric and Gas Corp	Electric Lines
Local Resident	Road
Local Resident	Agriculture
Steuben County	Recreation Area
Steuben County	Electric Lines
Finger Lakes Trail Conference	Trail Maintenance
Army National Guard	Training
City of Hornell	Gravel Removal
Town of Almond	Gravel Removal

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 Almond Lake Project.

Table 5-1. Land Classification & Applicable Management Goals

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

**This is not a Master Plan Land Classification as described in USACE regulation EP 1130-2-550 but due to its inclusion in the 1977 Master Plan, it is also included in this Master Plan. Per EP 1130-2-550, agriculture or grazing use of project land may be an interim use to meet management objectives.*

5.2 PROJECT OPERATIONS

This land is associated with the dam and spillway structures that are operated and maintained for the purpose of fulfilling the flood risk management mission of Almond Lake.

Additionally, this land is used as spoil area for maintenance activities associated with dam operation and the land is regularly maintained by USACE staff. There are 107.2 acres of lands under this classification, all of which are managed by USACE. Future projects associated with this land classification include maintaining, updating, and enhancing existing infrastructure. Such projects may include lead abatement and repainting, concrete repairs, and soil and debris removal. Additionally, stoplogs are being designed for Almond Lake near the intake tower for a potential future project.

5.3 HIGH DENSITY RECREATION

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

There are 39.6 acres of High Density Recreation within project lands, all of which are leased and managed by the Steuben County Department of Public Works for the operation of Kanakadea Park. Thus, USACE does not provide direct maintenance within these areas, but does review requests and ensures compliance with applicable laws and regulations for proposed activities. USACE works with Steuben County to ensure that the recreation areas are managed and operated in accordance with the goals and objectives prescribed in Chapter 3. Currently, there are no plans for expansion of Kanakadea Park. The Park will continue to provide equitable access to diverse recreational opportunities for the local region.

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

5.4 MULTIPLE RESOURCE MANAGEMENT LANDS

Multiple Resource Management Lands (MRML) are lands that serve multiple purposes but are sub-classified and managed for a predominant use. The following paragraphs describe the various sub-classifications of these lands at Almond Lake, 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 a safe distance from high density recreational areas, dam operations, and adjacent residential properties. There are currently 382.1 acres of Low Density Recreation at Almond Lake.

5.4.2 Agriculture

Land classified as agriculture is outleased to a private citizen for agriculture use. Although the acreage has varied, project lands have been outleased for grazing and other agricultural purposes since the Project's inception. Although agriculture is not an official land classification in EP 1130-2-550, agriculture is the current use of these lands and there are no plans to change the use. Therefore, agriculture is being used as an interim use to meet management objectives for this Master Plan update. There are approximately 26.1 acres at Almond Lake designated for Agriculture. Agriculture reasonably falls under the Multiple Resource Management Lands category because if agriculture were to cease, the lands would revert to USACE and be utilized under one of the other project purposes. Since there are no plans to expand project operations and the majority of Almond Lake is used as Low Density Recreation, these lands would likely be used as Low Density Recreation if the agriculture use were to cease.

5.5 WATER SURFACE

Per USACE policy set forth in EP 1130-2-550, the water surface of the lake at the conservation pool elevation may be classified as Restricted, No-Wake, Fish and Wildlife Sanctuary, or Open Recreation. At the Almond Lake Project, only Restricted and Open Recreation Water Surface sub-classifications are present. The Almond Lake Project maintains a conservation pool of approximately 135 acres (at an elevation of 1,260 feet PCD) and stores approximately 840 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 Almond Lake includes a small area around the dam and intake tower. The total acreage of Restricted water surface is approximately 0.3 acres.

5.5.2 Open Recreation

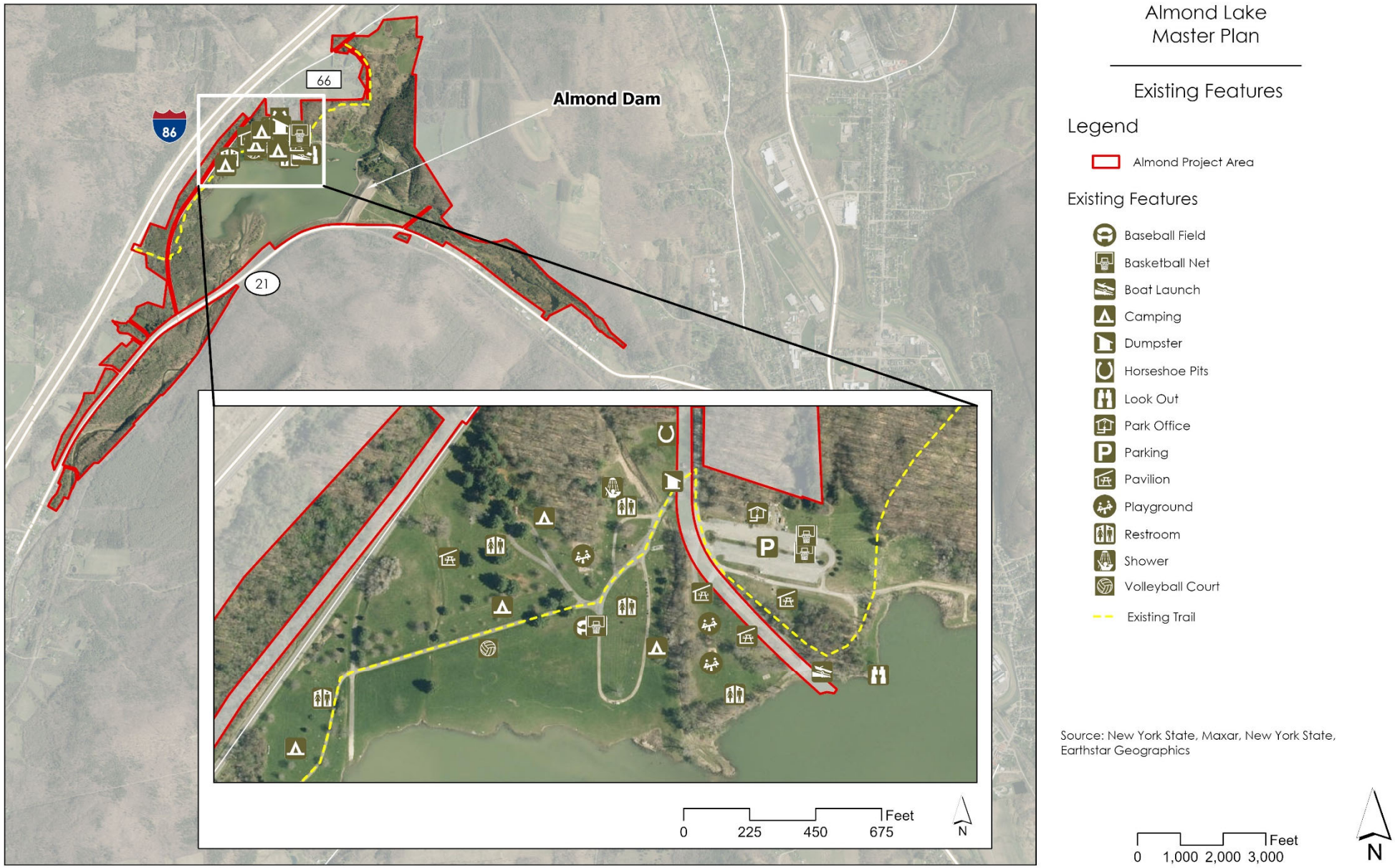
Open Recreation includes all water surface areas available for year-round or seasonal water-based recreational use. There is no beach area at Almond Lake and there is no swimming permitted at the lake. No gas-powered motorboats are allowed on the lake, but other boats are permitted. Except for the areas designated as Restricted, described in Section 5.5.1, the remaining water surface of approximately 134.7 acres at Almond Lake is designated as Open Recreation.

A "No Wake" designation is available under the guidelines in EP 1130-2-550; however, Almond Lake is unique in that only electric or non-motorized vessels are permitted for use. Electric-powered vessels, kayaks, canoes, and other 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 approximate 31 acres of flowage easement lands includes routine inspection of these areas to ensure that the Government's rights specified in the easement deeds are protected. Placement of any structure that may interfere with the USACE flood risk management mission may be prohibited.

Figure 5-1. Existing Features Map



6 SPECIAL TOPICS, ISSUES, CONSIDERATIONS

6.1 COMPETING INTERESTS ON NATURAL RESOURCES

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

6.2 UTILITIES AND RIGHTS OF WAY

Almond Lake Project includes civil outlease for electric lines as well as oil and gas pipelines. Transmission lines of the New York State Electric and Gas Corps are suspended above the project. These lines carry power to the intake tower and project operations office. Steuben County also maintains a right of way on project lands for electric lines. Oil and gas pipelines owned by National Fuel Gas Distribution Corp are located under portions of the project area. A local resident also has a right of way on project lands for a private road.

6.3 GRAVEL REMOVAL

The City of Hornell and the Town of Almond have outlease agreements, as mentioned in Section 4.3, for gravel removal. Both municipalities remove gravel from the streams located on the USACE property.

6.4 UNITED STATES GEOLOGICAL SURVEY (USGS) STATION

The Almond Lake Project property contains a USGS water gauge. Site 01523000 (Almond Lake Near Almond NY), installed in 1949, is located within the reservoir, upstream of the dam embankment and reports water surface elevations on a 15 minute interval (USGS, 2023).

6.5 FINGER LAKES TRAIL

The Finger Lakes Trails are a network of trails throughout New York that are administered by the Finger Lakes Trail Conference, a non-profit organization. One section of a Finger Lakes Trail winds through the Almond Lake Project property before connecting to a larger trail segment on the western side of Interstate 86. The trail enters the northern portion of the Almond Lake Project property and follows the western property boundary into the Kanakadea Park area. The trail continues southwest through the recreation area and along Route 66 before crossing under Interstate 86 and continuing southwest into Allegany County. There is an outlease between USACE and the Finger Lakes Trail Conference for management and maintenance of the trail on the Almond Lake Project property.

6.6 SPECIAL EVENTS

Kanakadea Park hosts two special recreational events annually. In June, there is the Father's Day Car Show that utilizes the day use area and typically includes outside vendors. In the fall, there is the Southern Tier Float Fly event that uses the immediate lake area. In the past, Kanakadea Park and Almond Lake have hosted other special events such as Army National Guard training. In 2022, the Army National Guard utilized project lands for a variety of training activities.

7 PUBLIC AND AGENCY COORDINATION

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

- June 21, 2022 - The USACE planning team visited Almond Lake where initial introductions, site orientation, a site tour, and concept discussions took place.
- July 15, 2024, Draft Master Plan and Notice of Availability for the draft EA Submittal (Public Review).
- December 6, 2024, Final Master Plan and EA Submittal (FONSI Signed).

Agency coordination was conducted by USACE with the USFWS through the Information, Planning, and Consultation online system (IPaC) to ensure compliance with Section 7 of the Endangered Species Act (ESA). The most recent IPaC report was provided on February 12, 2024. Review was also performed by USACE staff using NYSDEC online tools including the Environmental Assessment Form (EAF) Mapper and Nature Explorer. Consultation letters under Section 106 of the NHPA were sent to the State Historic Preservation Office and tribal nations on March 5, 2024. Coordination correspondence is included in Appendix A of the EA.

Information on the progress of the Master Plan and instructions on participating in the public comment process were published on the USACE's web page: https://www.nab.usace.army.mil/Missions/Dams-Recreation/Almond-Lake/Almond-Lake-Master-Plan-Revision/.

The 2024 Master Plan and EA were made available for public review for a period of 30 days beginning on July 15, 2024, and ending on August 14, 2024. The public comments received were addressed by USACE and are included in Appendix E of the Master Plan.

8 SUMMARY OF RECOMMENDATIONS

8.1 SUMMARY OVERVIEW

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

8.2 LAND CLASSIFICATION

During development of the 2024 Almond Lake Master Plan, there was no previous land classification mapping at Almond 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 and Justifications

Classification	2024 Master Plan (acres)	Description
Project Operations	107.2[1]	This classification category includes all project land required for the structure, operation, administration, or maintenance of the project and which all must be maintained to carry out the authorized purposes of flood risk management.
High Density Recreation	39.6	Lands are currently developed for intensive recreational activities for the visiting public and include boat launches, day-use areas, and campgrounds. This land classification has been developed to support concentrated visitation and use of the recreational facilities they host. The High Density recreation area at Almond Lake is Kanakadea Park operated by Steuben County.
Multiple Resource Management Land		
Low Density Recreation	382.1	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 such as bank fishing, hunting, hiking, wildlife viewing, and

Classification	2024 Master Plan (acres)	Description
		for access to the shoreline. Hunting may also be allowed in select areas that are a reasonable and safe distance from High Density Recreational areas, dam operations, and adjacent residential properties. The new land classification criteria exclude vegetation and wildlife management areas, leaving only areas with minimal development to support passive recreation use (i.e., primitive camping, hunting, trails, wildlife viewing, etc.).
Agriculture[2]	26.1	Land classified as agriculture is outleased to a private citizen for agriculture use. In the 1977 Master Plan, "lands available for outlease" is utilized as a land classification. According to the 1977 Master Plan, the lands available for outlease are those parcels obtained for project operations but outleased for grazing or other agricultural purposes. According to USACE regulation EP 1130-2-550, Chapter 3, agriculture, or grazing use of project land may be an interim use to meet management objectives. USACE continues to outlease a portion of Almond Lake Project for agricultural purposes, therefore, this Master Plan update includes lands designated for agriculture. There are no future plans to expand or terminate the agriculture lease; however, if the lease were to be terminated, these lands would most likely be used as Low Density Recreation.
Water Surface		
Restricted	0.3	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 Almond Lake includes a small area around the dam and intake tower. This area is normally marked with standard USCG regulatory buoys, but other physical barriers may also be in placed on the water in the future.
Open Recreation	134.7	Open Recreation area includes all water surface areas available for year-round or seasonal water-based recreational use. This area includes all water surface area other than "Restricted."
Total	690[3]	

[1]*Of the 107.2 acres classified under the land classification Project Operations, 17.6 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]*This is not a Master Plan Land Classification as described in EP 1130-2-550 but due to its inclusion in the 1977 Master Plan, it is also included in this Master Plan. Per EP 1130-2-550, agriculture or grazing use of project land may be an interim use to meet management objectives.*

[3]*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 acreages.*

9 APPENDIX

APPENDIX A: ACRONYMS AND ABBREVIATIONS

ACS	American Community Service
BMPs	Best Management Practices
CEPD	Comprehensive Evaluation of Project Datums
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
EA	Environmental Assessment
EO	Executive Order
EOP	Environmental Operating Principles
EP	Engineering Pamphlet
ER	Engineering Regulation
FY	Fiscal Year
GIS	Geographic Information Systems
MP	Master Plan
MRML	Multiple Resource Management Lands
NAVD 88	1988 North American Vertical Datum
NEPA	National Environmental Policy Act
NGVD 29	National Geodetic Vertical Datum of 1929
NHPA	National Historic Preservation Act
NOAA	National Oceanic and Atmospheric Administration
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NYSDEC	New York State Department of Environmental Conservation
NYSDOT	New York State Department of Transportation
NWI	National Wetland Inventory
PCD	Project Construction Datum

Project	Almond Lake Project
SCORP	Statewide Comprehensive Outdoor Recreation Plan
SPDES	State Pollination Discharge Elimination System
TMDL	Total Maximum Daily Load
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
USGS	United States Coast Guard
VERS	Visitor Estimation and Reporting System
ZOI	Zone of Interest

APPENDIX B: REFERENCES

American Ancestors. (2000). "The Phelps-Gorham Purchase." New England Historic Genealogical Society." Retrieved October 11, 2022, from http://www.americanancestors.org/the-phelps-gorham-purchase/.

Beers, D.G. (1873). Atlas of Steuben County, New York. Lionel Pincus and Princess Firyal Map Division, The New York Public Library. Retrieved October 11, 2022, from https://digitalcollections.nypl.org/items/510d47e3-b05a-a3d9-e040-e00a18064a99.

Boggs, Daniel. (2021). Resource Evaluation: Almond Dam Complex." New York State Department of Parks, Recreation, and Historic Preservation.

Cornell Lab of Ornithology. (n.d). Almond Lake, Steuben County, New York. Retrieved September 26, 2023, from https://ebird.org/hotspot/L268790

Cornell Program on Applied Demographics. (n.d). Steuben County, Allegany County, and New York. Retrieved October 3, 2023, from https://pad.human.cornell.edu/counties/projections.cfm

Democrat and Chronicle (1949). "Earthen Dam to Rein Creek in Flood Time." July 21, 1949.

Finger Lakes Trail. (n.d.) Western Finer Lakes Region Map. Retrieved August 8, 2023, from https://fingerlakestrail.org/FLTC/Interactive/Seg_WestFL.php?center=42.347587,-77.720449&zoom=15

Levy, M., C.E, John E Gillette, and Robert Pearsall Smith. A topographical map of Steuben Co., New York: from actual surveys. [Philad'a Philadelphia: J.E. Gillette, Publisher, 1857] Map. https://www.loc.gov/item/2013593234/.

McKelvey, Blake. (1989, January). "Historic Aspects of the Phelps and Gorham Treaty of July 4-8, 1788." Rochester History 1, no. 1: 1–24. https://www.libraryweb.org/~rochhist/v1_1939/v1i1.pdf.

National Oceanic and Atmospheric Administration (NOAA) National Centers for Environmental Information. (n.d.). U.S. Climate Divisions. Retrieved July 12, 2023, from https://www.ncdc.noaa.gov/monitoring-references/maps/us-climate-divisions.php

New York State Department of Environmental Conservation (NYSDEC). (2023a). Almond Reservoir. Retrieved August 8, 2023, from https://www.dec.ny.gov/outdoor/88045.html

NYSDEC. (2023b). Chemung River Watershed. Retrieved August 23, 2023, from https://www.dec.ny.gov/lands/48373.html

NYSDEC. (2023c). New York Environmental Assessment Form (EAF) Mapper. Retrieved September 19, 2023, from https://gisservices.dec.ny.gov/eafmapper/

NYSDEC. (2023d). New York Nature Explorer. Retrieved December 13, 2023, from https://extapps.dec.ny.gov/natureexplorer/app/

NYSDEC. (2023e). Spongy Moth. Retrieved August 23, 2023, from https://www.dec.ny.gov/animals/83118.html

New York State Department of Transportation (NYSDOT). (2013, July 12). Geotechnical Design Manual, Chapter 3, Geology of New York State. https://www.dot.ny.gov/divisions/engineering/technical-services/geotechnical-engineering-bureau/geotech-eng-repository/GDM_Ch-3_Geology_of_NY.pdf

Steuben County. (2023). Kanakadea Park. Retrieved August 16, 2023 from https://www.steubencountyny.gov/Facilities/Facility/Details/Kanakadea-Park-1

United States Army Corps of Engineers (USACE), Baltimore District. (1973). *Almond Lake and Arkport Dam Operation and Maintenance (O&M) Manual.* PDF.

USACE, Baltimore District . (1977). Almond Lake Master Plan Update. PDF.

USACE, Baltimore District. (2006). *Master Manual for Reservoir Regulation Almond Lake and Arkport Dam.* PDF.

USACE, Baltimore District. (2019). Water Quality Program Annual Report. PDF.

USACE, Baltimore District. (2021). *Almond Dam (NY00740) Emergency Action Plan (EAP).* PDF.

USACE, Baltimore District. (2022). Value to the Nation Fast Facts, Lake Level Report Almond Lake. PDF.

United States Department of Agriculture, Animal & Plan Health Inspection Service Wildlife Services (USDA APHIS). (2017). European Starlings. Wildlife Damage Management Technical Series. Retrieved August 23, 2023, from https://www.aphis.usda.gov/wildlife_damage/reports/Wildlife%20Damage%20Management%20Technical%20Series/European-Starlings-WDM-Technical-Series.pdf

United States Department of Agriculture (USDA), Forest Service. (2019). Forests of New York, 2019. Retrieved July 12, 2023, from https://www.fs.usda.gov/nrs/pubs/ru/ru_fs250.pdf

USDA, Forest Service. (2020, September). New York Forests 2017. Retrieved July 12, 2023, from https://www.fs.usda.gov/nrs/pubs/rb/rb_nrs121.pdf

United States Department of Agriculture, Natural Resources Conservation Service (NRCS) (2023). Web Soil Survey. Retrieved September 26, 2023, from https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx

United States Census Bureau. (n.d.). *American Community Survey 5-year Estimates, Steuben County, Allegany County, and New York*. Retrieved October 3, 2023, from https://data.census.gov

United States Climate Data. (n.d.). Retrieved August 8, 2023, from Climate Dansville New York: https://www.usclimatedata.com/climate/dansville/new-york/united-states/usny0363

United States Fish & Wildlife Service (USFWS). (n.d. - a). *Monarchs*. Retrieved August 8, 2023, from https://fws.gov/initiative/pollinators/monarchs

USFWS. (n.d. - b). Northern Long-eared Bat. Retrieved August 8, 2023, from https://www.fws.gov/species/northern-long-eared-bat-myotis-septentrionalis

USFWS. (2023). National Wetlands Inventory (NWI). Retrieved September 26, 2023, from https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/.

United States Geological Survey (USGS). (2023). National Water Information System. Retrieved September 26, 2023, from https://waterdata.usgs.gov/nwis/inventory?agency_code=USGS&site_no=01523000

Urban Research and Development Corporation (URDC). 1980. Recreation Carrying Capacity Handbook: Methods and Techniques for Planning, Design, and Management. Instruction Report R-B0-1. Retrieved October 6, 2023, from https://ntrl.ntis.gov/NTRL/dashboard/searchResults/titleDetail/ADA096 446.xhtml.

APPENDIX C: MEETING NOTES

Almond Lake Site Visit Notes – June 22, 2022

Dam Notes:

- Bald eagles nest at the top of Almond Dam
- Water levels average elevation is 1,260'
- Currently releasing 17 CFS, can get up to 6000 CFS during storm events
    - If water levels reach four feet high in Hornell, gates must be shut.
- Spillway was last cleaned out in 2013, gets cleaned out every 5 years, trees of 6" or greater are removed as needed.
- Dams receive infrastructure funds to clean out spillways/dams.
- Three flood gates, three emergency spill gates.
- Restricted areas exist in front of the Dam
- No tribal interest areas, no ESA areas, no culturally sensitive areas (according to Joe Hess, June 2022).
- New electric and conduit was installed in the Tower in 2020.

Dam office notes:

- Next to office there are two sheds
    - Sandbag shed that houses up to 90,000 sand bags for state and county use
    - Maintenance shed for lawn equipment, tools

Recreation/Reservoir Notes:

- Car shows are hosted annually, model plane events, bass fishing events
- Piezometer wells are scattered across property
- Hunting only occurs near the bridge, ON STATE LAND ONLY (need to reach out to recreation office to confirm)
- National Guard occasionally hosts events.
- Reservoir is 30' deep in front of the dam, 10' feet deep everywhere else
- No fish stocking occurs at the reservoir
- No swimming in reservoir
- Typically the recreation area receives small groups or day campers, very rarely do they get a big public crowds.
- 4 pavilions, 3 in use. First come first serve on picnic areas.
- 34 electric camp sites, 37 non-electric camp sites
- 2 cabins with potential for 4.
- 1 boat ramp
- Well houses supplies bathrooms
- Dumping station for RVs
- No reservation system
- May need to do some repaving in the future

Meeting with Dam Operator – July 27, 2023

a. Events – What events are held at the park besides the annual car show and southern tier float fly event? Site visit notes say there are occasional bass fishing events, is that true? Any others?

Confirmed both events occur annually. They are only current annual events.

b. National Guard – The site visit notes say the national guard hosts events occasionally. Is this true? If so, what area of the property is used?

Confirmed the National Guard has done training activities on the property. They set up camp near the spoil area where it is mowed. They use the woods for their exercises.

c. Leased Land for Agriculture – Do we still lease the northern portion of the Almond property for agriculture use?

Yes. It is an active lease for agriculture use.

d. Park Expansion – Are there any plans to expand the recreation area?

Need to contact park supervisor, Bryan Bailey (607-769-0720) with Steuben County

e. Fishing – Fishing is allowed at the lake, except in restricted areas. Is fishing also allowed on the portions of Canacadea Creek that run through the property to the south and east of the lake?

Fishing is allowed throughout the Almond property. People fish all the way up to the dam and people may even fish to the south in Canacadea Creek. However, the land located east of State Road 21 near the state lands is very swampy and probably not used much.

f. Hunting – Where is this allowed? The site visit notes say state land only, but is it allowed on USACE land?

Hunting is allowed on the USACE property, except in restricted areas near the program operations station/headquarters and spillway. Trapping also occurs throughout the property. Muskrat trappers are often found to the east of the lake in the pond/wetland areas around Canacadea Creek and to the south of the lake. Trapping is popular on the property.

g. Trails – Are all trails public on the property? There is also a parking area for a trail head that goes under Rt 86 and connects to the Finger Lake Trails. Is there a tunnel under I-86? Confirm this is all correct.

Confirmed. The Finger Lakes Trail goes through the property. It starts in the north and follows the western property boundary, down past the spoil area, and then continues through the day use area of the park. It then follows the road, Rt 66, down to a little cleared area to the east and then to the parking lot on the west side of Rt 66. It then goes under the interstate, I-86, and connects to the Finger Lakes Trail on the other side.

h. Invasive Species Management – Is there any on the property either by USACE staff or other entities? This includes vegetation management, terrestrial species, and aquatic species in the lake.

USACE staff and park staff conduct routine vegetation management in areas where required for dam or park operations such as around the spoil area and near the toe side of the dam. This includes invasive species management for both vegetation and rodents. No concern of invasive species I the lake.

i. Restricted Areas – Where are the restricted areas of the property, specifically around the project operations area and within the lake itself?

The only restricted area of the lake is around the intake tower. The spillway is restricted area. In general, the area around the project operations station/headquarters is restricted.

APPENDIX D: PUBLIC NOTICES AND PERTINENT NEWSPAPER ARTICLES

US Army Corps of Engineers
Baltimore District

Planning Division

Notice of Availability

Almond Lake 2024 Master Plan and Environmental Assessment 15 July 2024

In accordance with the National Environmental Policy Act (NEPA) of 1969, as amended, the U.S. Army Corps of Engineers, Baltimore District (USACE) has prepared a draft environmental assessment (EA) to assess the impact of the implementation of the Almond Lake 2024 Master Plan ("2024 Master Plan"). The Almond Lake project is located in Steuben County, New York on the Canacadea Creek; a tributary of the Canisteo River, which flows into the Chemung River, which in turn, flows into the Susquehanna River.

The Proposed Action includes implementation of the 2024 Master Plan to reflect changes in land management classifications, land uses, and USACE regulations and guidance that have occurred since the original Almond Lake Master Plan was approved in September 1964 and the subsequent 1977 Master Plan Update (1977 Master Plan). In compliance with NEPA, USACE has prepared a draft Master Plan and EA and evaluated potential effects of the 2024 Master Plan on the natural, cultural, and human environment. The EA determined negligible impacts would occur to the following resources: air quality, greenhouse gases and climate, noise, geology, cultural resources, groundwater, utilities, socioeconomics and environmental justice, and traffic and transportation. No impacts are anticipated on water and biological resources from implementation of the 2024 Master Plan. Minor impacts could occur to water resources, and minor to moderate impacts could occur to soils and biological resources during construction of future master planning projects. Implementation of the 2024 Master Plan would result in beneficial impacts to land use and recreation through the use of high density and low-density recreation land classifications as well as the restricted land classification. The land classifications identify recreation as the primary land use in the high density and low-density recreation areas. The classifications allow for future high-and low-density recreational development as appropriate in these land classification areas. Based on the preliminary findings in the draft EA, USACE anticipates issuing a Finding of No Significant Impact (FONSI).

Projects that may be proposed at the Almond Lake project in the future will be evaluated in compliance with this master plan; NEPA; USACE regulations; and other federal, state, and local policies and regulations.

USACE requests comments regarding the draft Master Plan and EA within thirty (30) days of the date of this notice. USACE will consider all comments received within the 30-day comment period in the preparation of the Final Master Plan and EA. A copy of the draft Master Plan and EA is available at the Almond Public Library (Almond, New York) and the Hornell Public Library (Hornell, New York). Additionally, the Draft Master Plan and EA can be found on the USACE Almond Lake website at: https://www.nab.usace.army.mil/Missions/Dams-Recreation/Almond-Lake/Almond-Lake-Master-Plan-Revision/

If you would like to request a public meeting to discuss the 2024 Master Plan and the associated environmental assessment or if you have any questions, please contact Lauren McDonald at (443) 990-6291 or at Lauren.N.McDonald@usace.army.mil.

Individuals wishing to provide comments or request additional information may contact Ms. McDonald at the email address above. Additionally, questions and/or comments can be submitted at the USACE Almond Lake website above or mailed to U.S. Army Corps of Engineers, Planning Division, Subject: Almond Lake, 2 Hopkins Plaza, Baltimore, MD 21201.

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

DEPARTMENT OF THE ARMY
U.S. Army Engineer District, Baltimore
Planning Division
2 Hopkins Plaza
Baltimore, Maryland 21201

Official Business

APPENDIX E: PUBLIC COMMENTS AND USACE RESPONSE

APPENDIX E: PUBLIC COMMENTS AND USACE RESPONSE

1. **Public Comment:** It is of concern that the area has no(sic) been dredged. I understand that the percentage of capacity has only changed by a few percent, but living through Hurricane Agnes in 1972, every percent of capacity was necessary. Water was exiting out the spillway if I recall. With the greater capacity of modern storms to produce extremely large volumes of water, it seems prudent to not only return the Dam to its former holding capacity and better yet, dredge it deeper to encourage better recreation and allow swimming in the future.

   USACE Response: Thank you for your comment. The US Army Corps of Engineers (USACE) has a bathymetric survey planned in the next few years to determine the extent of sedimentation and existing storage capacity at Almond Lake. Results of the survey will determine future USACE actions and if future projects, such as dredging, are necessary. While fishing is permitted in specific locations within the reservoir, swimming is not permitted and is not planned to be permitted in the future.

2. **Public Comment:** I am a sportsman (sic) fish many of the fingerlakes in the surrounding area the dam needs to be dredged badly watee (sic) levels have continued to drop over the last 10+ years at the inflow of the lake fishing and water clarity has suffered. It was a nice place to fish but it continues to decline and less people seem to utilize the area.

   USACE Response: Thank you for your comment. The US Army Corps of Engineers (USACE) has a bathymetric survey planned in the next few years to determine the extent of sedimentation and existing storage capacity at Almond Lake. Results of the survey will determine future USACE actions and if future projects, such as dredging, are necessary. Additionally, USACE annually monitors water quality at three locations including one at the inflow of the reservoir, one in the lake at the control tower, and one at the outflow of the reservoir. Water quality samples are tested for pH, temperature, dissolved oxygen, specific conductance, alkalinity, acidity, phosphate, nitrate, and ammonia. The data is analyzed and utilized by USACE staff for short and long-term trend assessments. Generally, there are no public health concerns as it pertains to water quality at the lake.

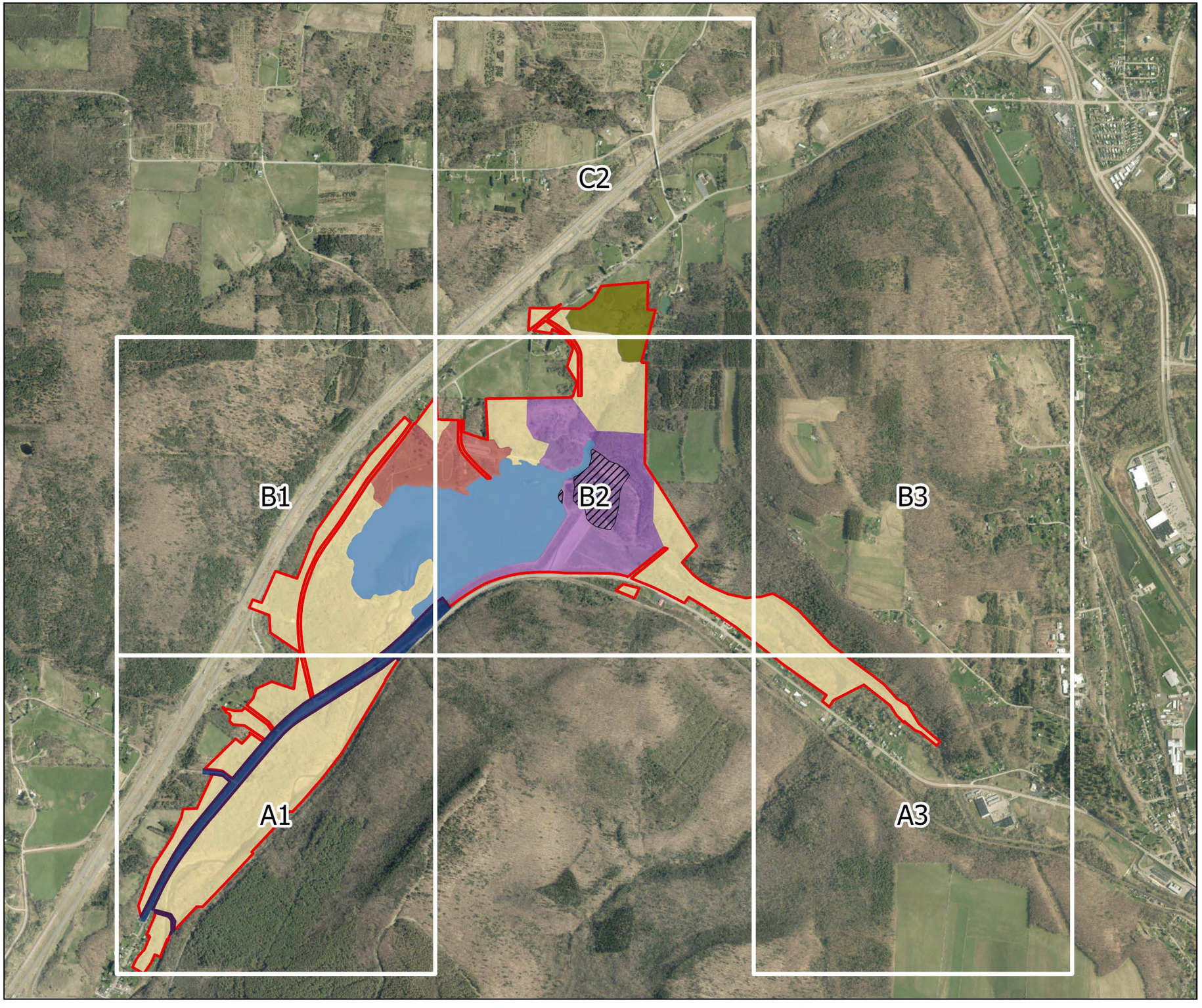
3. **Public Comment:** So what are the plans on making almond dam in Ny a safer place? I know there are plenty of people who would volunteer. we all know they need dredging. I can walk across it. I'm a fishing person. there is so much debre (sic) trees metal probably a car or more. its a big factor for safety of are (sic) towns which canisteo flooded 2 days ago. safe a (sic) clean environment is important. Thanks.

   USACE Response: Thank you for your comment. The US Army Corps of Engineers (USACE) has a bathymetric survey planned in the next few years to determine the extent of sedimentation and existing storage capacity at Almond Lake. Results of the survey will determine future USACE actions and if future projects, such as dredging, are necessary. Additionally, Almond Lake staff regularly monitor the lake conditions to ensure proper function of the flood risk management project and they will continue to do so in the future.

APPENDIX F: LAND CLASSIFICATION AND RECREATIONAL ASSET MAPS

Almond Lake Master Plan

Land Classifications | Grid View



Legend

- Almond Study Area

Land Classification

- Project Operations
- High Density Recreation
- Low Density Recreation
- Agriculture
- Open Recreation
- Restricted

Other Land Use

- Flowage Easement

*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 acreages.

Source: New York State, ᴺ HERE, Garmin, FAO, NOAA, Garmin, FAO, NOAA, USCe, Earthstar Geographics, Esri,

0 1,000 2,000 3,000 Feet

N

Almond Lake Master Plan

Land Classifications | Grid View

B1

B2

A1

Legend

- Almond Study Area
- Project Operations
- High Density Recreation
- Low Density Recreation
- Agriculture
- Open Recreation
- Restricted
- Flowage Easement

Source: New York State, Maxar, data.pa.gov, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, New York State, Earthstar Geographics, Esri, USGS

0 450 900 1,350 Feet

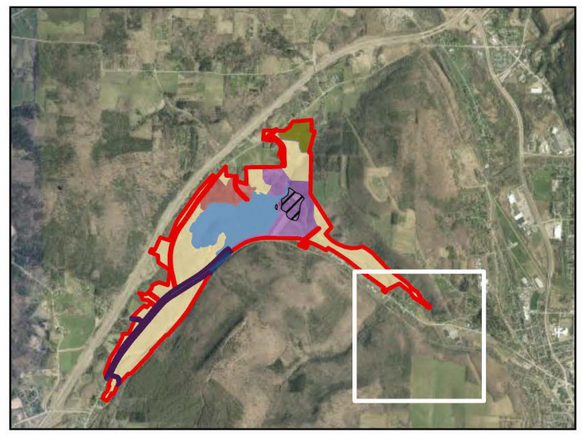
N

Almond Lake Master Plan

Land Classifications | Grid View

Legend

- Almond Study Area
- Project Operations
- High Density Recreation
- Low Density Recreation
- Agriculture
- Open Recreation
- Restricted
- Flowage Easement



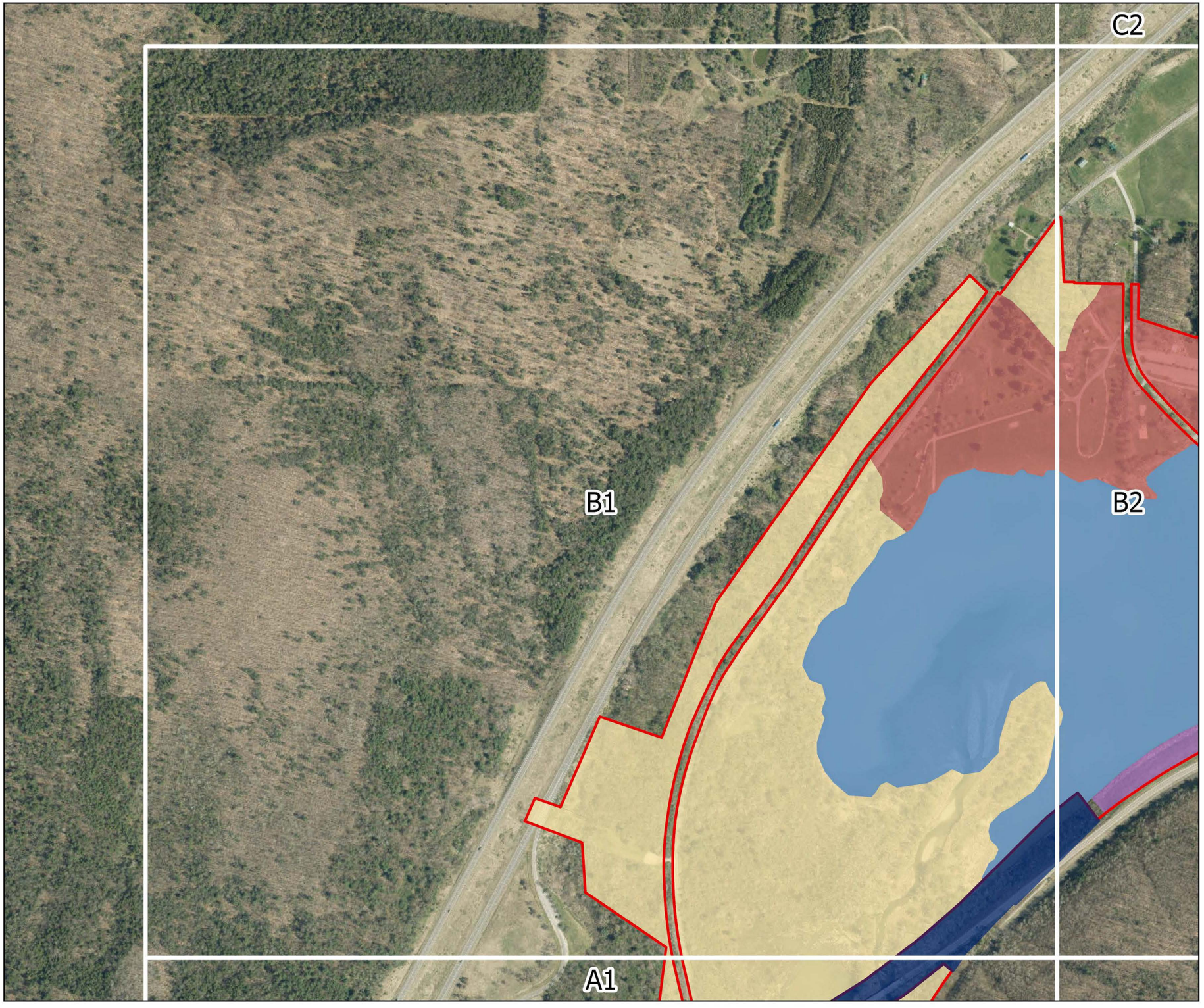
Source: New York State, Maxar, data.pa.gov, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, New York State, Earthstar Geographics, Esri, USGS

0 450 900 1,350 Feet

N

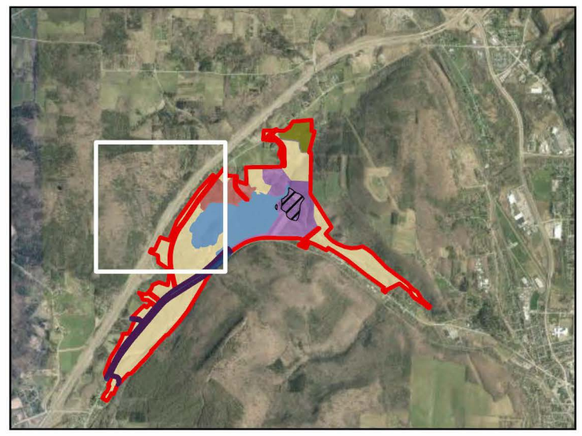
Almond Lake Master Plan

Land Classifications | Grid View



Legend

- Almond Study Area
- Project Operations
- High Density Recreation
- Low Density Recreation
- Agriculture
- Open Recreation
- Restricted
- Flowage Easement



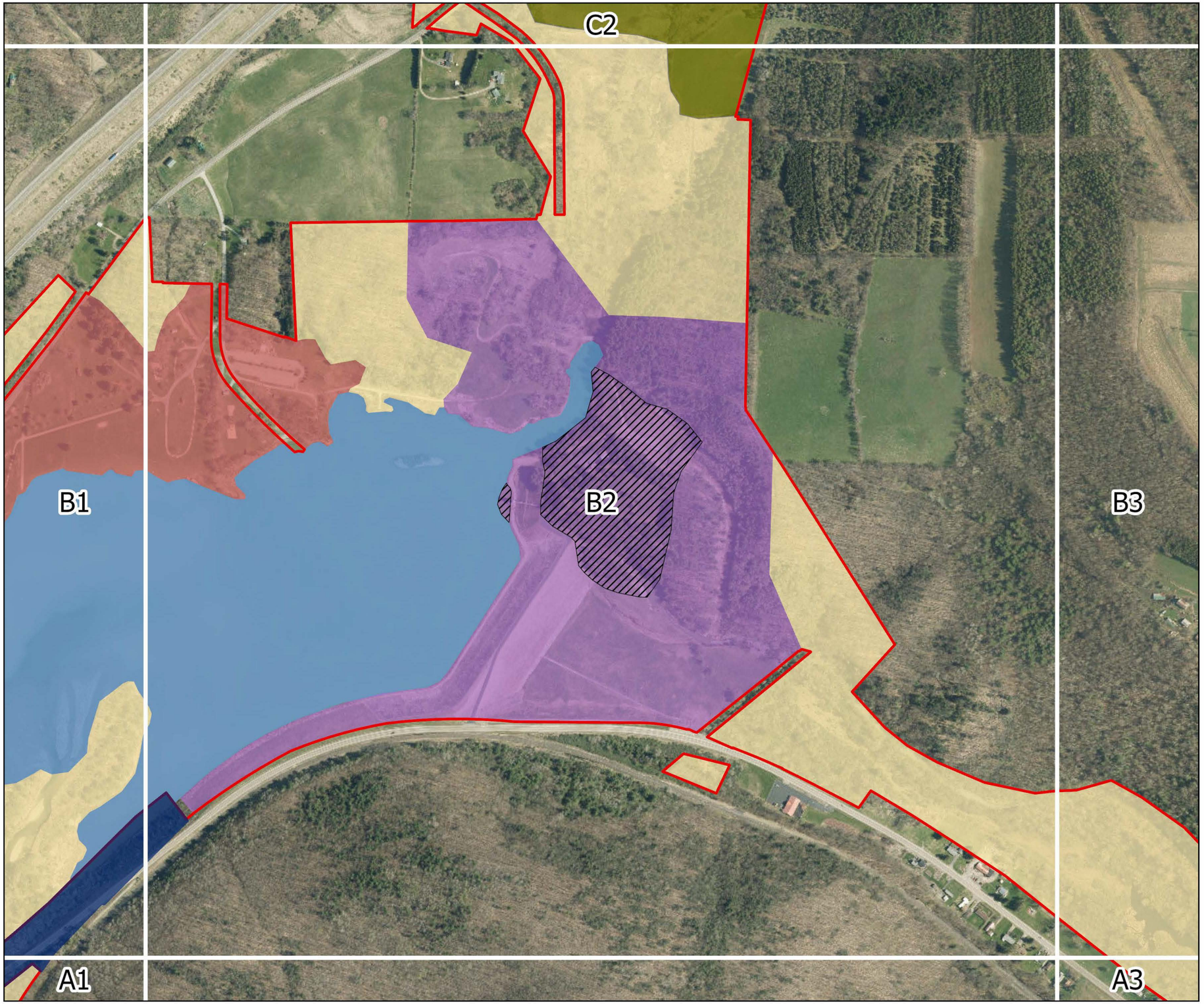
Source: New York State, Nphics, New York State, Maxar, Garmin, FAO, NOAA, USGarmin, FAO, NOAA, USGS, Earthstar Geographics, Es

0 450 900 1,350 Feet

N

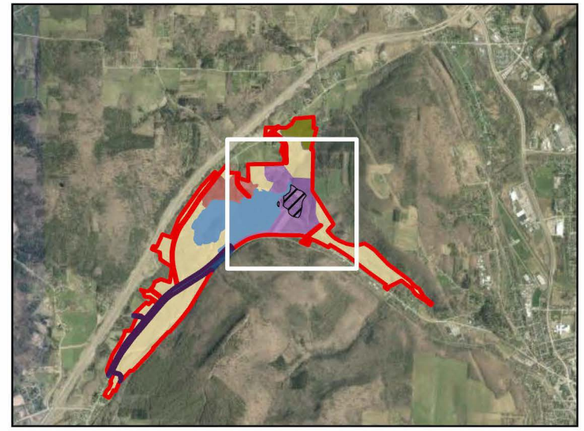
Almond Lake Master Plan

Land Classifications | Grid View



Legend

- Almond Study Area
- Project Operations
- High Density Recreation
- Low Density Recreation
- Agriculture
- Open Recreation
- Restricted
- Flowage Easement



Source: New York State, Maxar, data.pa.gov, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, New York State, Earthstar Geographics, Esri, USGS

0 450 900 1,350 Feet

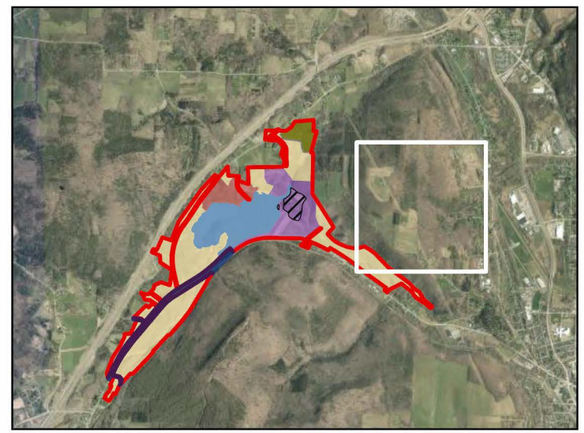
N

Almond Lake Master Plan

Land Classifications | Grid View

Legend

- Almond Study Area
- Project Operations
- High Density Recreation
- Low Density Recreation
- Agriculture
- Open Recreation
- Restricted
- Flowage Easement



Source: New York State, Maxar, data.pa.gov, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, New York State, Earthstar Geographics, Esri, USGS

0 450 900 1,350 Feet

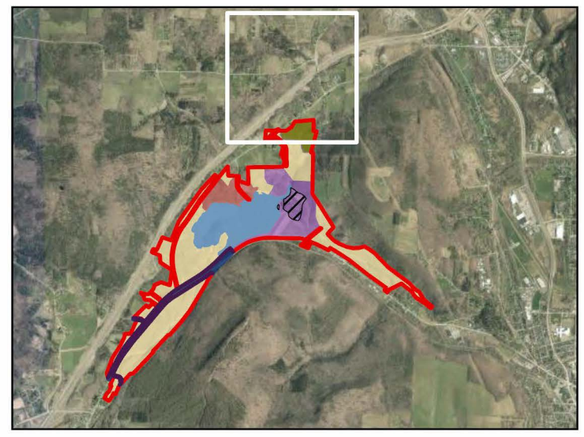
N

Almond Lake
Master Plan

Land Classifications | Grid View

Legend

- Almond Study Area
- Project Operations
- High Density Recreation
- Low Density Recreation
- Agriculture
- Open Recreation
- Restricted
- Flowage Easement



Source: New York State, Maxar, data.pa.gov, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, New York State, Earthstar Geographics, Esri, USGS

0 450 900 1,350 Feet

N

APPENDIX G: NEPA DOCUMENTATION

US Army Corps
of Engineers
Baltimore District

FINDING OF NO SIGNIFICANT IMPACT AND ENVIRONMENTAL ASSESSMENT FOR ALMOND LAKE 2024 MASTER PLAN

ALMOND LAKE
STEUBEN COUNTY, NEW YORK

December 2024

This Environmental Assessment follows the Update to the Regulations Implementing the Procedural Provisions of the National Environmental Policy Act dated July 2020 for 40 Code of Federal Regulations (CFR) Parts 1500-1508, and the National Environmental Policy Act implementing Regulation Revisions dated May 2022, which amended 40 CFR Parts 1502, 1507, and 1508.

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

THIS PAGE INTENTIONALLY BLANK

FINDING OF NO SIGNIFICANT IMPACT

Environmental Assessment for the Almond Lake 2024 Master Plan

Steuben County, New York

In accordance with the National Environmental Policy Act of 1969 (NEPA), including guidelines in 33 Code of Federal Regulations (CFR), Part 230 (Procedures for Implementing NEPA), the Baltimore District of the U.S. Army Corps of Engineers (USACE), has assessed the potential environmental and social impacts of the 2024 Almond Lake Master Plan (hereafter, "2024 Master Plan"). The Almond Dam (hereafter "Almond Lake Project", "Almond Lake", or "Project") was first authorized by the Flood Control Act of June 22, 1936, Public Law #738, 74th Congress, as amended by the Flood Control Act of June 28, 1938, Public Law #761, 75th Congress, 3rd Session, and further described in House Document #702, 77th Congress, 2nd Session. The project was included in the Definite Project for Flood Protection, Upper Susquehanna River Basin and approved by the Chief of Engineers on October 13, 1939. Sometime later, the location and design of the dam and appurtenances were established, and construction of the dam, spillway, and outlet started in June 1946 and was completed in June 1949. The total project cost was $5,760,000. The original Almond Lake Master Plan was approved in September 1964 and an environmental assessment of the project area was completed in March 1974. A subsequent master plan, dated April 1977, was prepared in accordance with the requirements of Engineer Regulation (ER) 1120-2-400, dated November 1, 1971. The 1977 Master Plan Update (1977 Master Plan) superseded and supplemented the master plan of 1964.

The Almond Lake Project was authorized and constructed for the primary purpose of flood risk management for the downstream reach of the Canisteo River, Canacadea Creek, the Tioga River between the confluence of Canisteo River and its confluence with the Cohocton River, and the Chemung River. The secondary purpose of the project is to provide a resource base for outdoor recreational pursuits. Implementation of the 2024 Master Plan and proposed land use changes must recognize and be compatible with the primary project mission of flood risk management and the secondary purpose of recreation.

The 2024 Master Plan will provide guidance for stewardship of natural resources and management for long-term public access to, and use of, the natural resources at Almond Lake, including the land classification of the USACE-managed lands. Land classifications are established in the 2024 Master Plan and are fundamental to project land management. Land classifications (see Table S-1) provide for development and resource management consistent with authorized purposes and other federal laws. The 2024 Master Plan provides a comprehensive description of Almond Lake, a discussion of factors influencing resource management and development, new resource management objectives, a synopsis of public involvement, and input into the planning process, descriptions of existing development, and considerations of future development activities.

Under the No Action Alternative, USACE would take no action and continue the operation and management of the project as outlined in the 1977 Master Plan. No new resource analysis or land reclassifications would occur.

The Proposed Action includes adopting the 2024 Master Plan to reflect changes in land management classifications, land uses, USACE regulations and guidance that have occurred since the 1977 Master Plan, and coordination with the public. The 2024 Master Plan refines land classifications to meet authorized project purposes and current 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, recognize outdoor recreation trends, and are responsive to public comment. The Proposed Action is an administrative update and does not involve the construction of any physical projects. All future projects would be subject to further NEPA analysis once funding is available and detailed project planning and design occur. The purpose of the action is to update the Almond Lake Master Plan. The action is needed as required by ER 1130-2-550 and Engineering Pamphlet (EP) 1130-2-550. The 2024 Master Plan is intended to serve as a comprehensive land and recreation management plan for the next 15 to 25 years and is needed to update the Almond Lake Master Plan in accordance with January 2013 updates to ER and EP 1130-2-550.

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

Table S-0-1: Proposed Land Classifications at Almond Lake

Classification	2024 Master Plan (acres)	Description
Project Operations	107.2[1]	This classification category includes all project land required for the structure, operation, administration, or maintenance of the project and which all must be maintained to carry out the authorized purpose of flood risk management.
High Density Recreation	39.6	Lands are currently developed for intensive recreational activities for the visiting public and include boat launches, day-use areas, and campgrounds. This land classification has been developed to support concentrated visitation and use of the recreational facilities they host. The High-Density recreation area at Almond Lake is Kanakadea Park operated by Steuben County.
Multiple Resource Management Land		
Low Density Recreation	382.1	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 such as bank fishing, hunting, hiking, wildlife viewing, and for access to the shoreline. Hunting may also be allowed in select areas that are a reasonable and safe distance from High Density Recreational areas, dam operations, and adjacent residential properties. The new land classification criteria exclude vegetation and wildlife management areas, leaving only areas with minimal development to support passive recreation use (i.e., primitive camping, hunting, trails, wildlife viewing, etc.).

Classification	2024 Master Plan (acres)	Description
Agriculture[2]	26.1	Land classified as agriculture is outleased to a private citizen for agriculture use. In the 1977 Master Plan, "lands available for outlease" is utilized as a land classification. According to the 1977 Master Plan, the lands available for outlease are those parcels obtained for project operations but outleased for grazing or other agricultural purposes. According to USACE regulation EP 1130-2-550, Chapter 3, agriculture, or grazing use of project land may be an interim use to meet management objectives. USACE continues to outlease a portion of Almond Lake Project for agricultural purposes; therefore, this Master Plan update includes lands designated for agriculture. There are no future plans to expand or terminate the agriculture lease; however, if the lease were to be terminated, these lands would most likely be used as Low-Density Recreation.
Water Surface		
Restricted	0.3	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 Almond Lake includes a small area around the dam and intake tower. This area is normally marked with standard USCG regulatory buoys but other physical barriers may also be placed on the water in the future.
Open Recreation	134.7	Open Recreation area includes all water surface areas available for year-round or seasonal water-based recreational use. This area includes all water surface area other than "Restricted."
Total	690[3]	

[1]*Of the 107.2 acres classified under the land classification Project Operations, 17.6 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]*This is not a Master Plan Land Classification as described in EP 1130-2-550 but due to its inclusion in the 1977 Master Plan, it is also included in this Master Plan. Per EP 1130-2-550, agriculture or grazing use of project land may be an interim use to meet management objectives.*

[3]*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 acreages.*

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

USACE used 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 assessment of environmental, social, and economic factors that are relevant to the recommended alternative considered in this assessment. Based on the EA, it was determined that no impacts would occur to the following resources: air quality, greenhouse gases and climate, noise, geology, cultural resources, groundwater, utilities, socioeconomics and environmental justice, and traffic and transportation (see Section 3.6 of the EA). None/negligible impacts are anticipated on land use and recreation, water, soil, and biological resources from the implementation of the Proposed Action. Future projects at Almond Lake could result in minor impacts and/or beneficial impacts and any impacts would be analyzed in future NEPA documentation associated with those individual actions. In the future, efforts would be made to reduce adverse impacts by using standard construction best management practices (BMPs) to reduce disturbance, soil erosion, and sedimentation into nearby surface waters and wetlands. Construction and operations of future master planning projects would use BMPs associated with prevention of impacts to sensitive species. These recommendations would occur during the time future projects are proposed and would include environmental reviews of each project.

Conclusion

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

PERA.FRANCIS.BALAYE.1029339330

Digitally signed by PERA.FRANCIS.BALAYE.1029339330
Date: 2024.12.06 15:30:51 -05'00'

06 December 2024

Date

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

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

ACRONYMS AND ABBREVIATIONS

Acronym	Definition
2024 Master Plan	2024 Almond Lake Master Plan
BMPs	Best Management Practices
BOD	Biological Oxygen Demand
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
EA	Environmental Assessment
EAF	Environmental Assessment Form
EO	Executive Order
EP	Engineering Pamphlet
ER	Engineer Regulation
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
GIS	Geographical Information System
IPaC	Information, Planning, and Consultation
MP	Master Plan
NEPA	National Environmental Policy Act
NFIP	National Flood Insurance Program
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollution Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NYSDEC	New York State Department of Environmental Conservation
NYSDOT	New York State Department of Transportation
NWI	National Wetlands Inventory
PCD	Project Construction Datum
Project	Almond Lake Project
ROI	Region of Influence
SME	Subject Matter Expert
SPDES	State Pollution Discharge Elimination System
STP	Sewage Treatment Plant
USACE	United States Army Corps of Engineers
USCG	United States Coast Guard
USEPA	United States Environmental Protection Agency
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
VERS	Visitor Estimation and Reporting System

1 INTRODUCTION

1.1 PROJECT BACKGROUND

The Almond Dam Project (hereafter "Almond Lake Project" or "Project") was authorized and constructed under the Flood Control Act of June 22, 1936, as amended by the Flood Control Act of June 28, 1938 for the purpose of flood risk management for the downstream reach of the Canisteo River, the Canacadea Creek, the Tioga River between the confluence of Canisteo River and its confluence with the Cohocton River, and the Chemung River. The secondary purpose of the project is to provide a resource base for outdoor recreational pursuits. Almond Lake is operated by the United States Army Corps of Engineers (USACE), Baltimore District and associated infrastructure, as well as all land acquired for the dam and reservoir, are federally owned and are administered by USACE (USACE, 2021).

The Master Plan for the project is the strategic land use management document that guides the comprehensive management and development actions related to project recreational, natural, and cultural resources throughout the life of the project. Implementation of the Master Plan and proposed land use changes must recognize and be compatible with the primary project mission of flood risk management.

The USACE produces and uses the Master Plan to guide the responsible stewardship of USACE-administered lands and resources for the benefit of present and future generations. The Master Plan presents an inventory and analysis of land 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 Engineering Pamphlet (EP) 1130-2-550 "Recreation Operations and Maintenance Guidance and Procedures." Per guidance, USACE land classifications provide for development and resource management consistent with authorized purposes and other federal Laws.

USACE is proposing adoption of a Master Plan at Almond Lake Project to reflect changes that have occurred to the project, in the region, in recreation trends, and in USACE policy since the original 1964 Master Plan and the subsequent Almond Lake Master Plan Update in 1977 (hereafter "1977 Master Plan") were published. This Environmental Assessment (EA) considers the potential impacts to the natural and human environment from the implementation of the 2024 Almond Lake Master Plan (hereafter "2024 Master Plan").

1.1.1 Project Location and Setting

Almond Lake is located in Hornellsville, Steuben County, New York. The Town of Hornell, and the confluence of Canacadea Creek and Canisteo River is located approximately 3.5 miles southeast and downstream of the dam. Almond Lake is also located on Canacadea Creek, which is a tributary to Canisteo River, which flows into Chemung River, which in turn, flows into the Susquehanna River. The confluence of the Chemung River and the Susquehanna River is

located approximately 90 miles downstream of Almond Lake, in Greens Landing, Pennsylvania.

All elevations cited in this EA, unless otherwise noted, are referenced to the original Project Construction Datum (PCD). The Almond Lake Project maintains a conservation pool at of approximately 135 acres (at an elevation of 1,260 feet PCD) and stores approximately 840 acre-feet of water. At the full flood control pool (spillway crest at elevation 1,300 PCD), the lake covers 492 acres and stores 13,397 acre-feet of water.

The area surrounding the project is characterized by gently rolling hillsides and numerous valleys. The Canacadea Creek Valley is broad and flat and rises gently from the valley floor. Areas upstream of the dam are primarily used for agriculture and dairy farming. The steeper slopes near the headwaters are primarily wooded or used for grazing. The lake and surrounding project lands are popular for boating, fishing, hunting, camping, and other outdoor recreation activities. A total of 690 acres of land were acquired in fee for the Almond Lake project. Permanent flowage easements were obtained on an additional 31 acres to allow for flood control storage.

1.1.2 Project History

The Almond Lake Project was first authorized by the Flood Control Act of June 22, 1936, Public Law #738, 74th Congress, as amended by the Flood Control Act of June 28, 1938, Public Law #761, 75th Congress, 3rd Session, and further described in House Document #702, 77th Congress, 2nd Session. The project was included in the Definite Project for Flood Protection, Upper Susquehanna River Basin and approved by the Chief of Engineers on October 13, 1939. Sometime later, the location and design of the dam and appurtenances were established, and construction of the dam, spillway, and outlet started in June 1946 and was completed in June 1949. The total project cost was $5,760,211. The original Almond Lake Master Plan was approved in September 1964 and environmental assessment of the project area was completed in March 1974. The 1964 Master Plan was superseded and supplemented by the "Almond Lake Master Plan Update" in 1977 (1977 Master Plan). Almond Lake is a multipurpose water resources project constructed and operated by USACE, Baltimore District. The primary purpose is flood risk management, and the secondary purpose of the project is to provide a resource base for outdoor recreational activity.

The dam is constructed of rolled earth fill with a concrete-lined conduit, a concrete ogee weir and a natural rock saddle spillway. The main embankment of the dam has a top length of 1,260 feet with a crest width of 25 feet. A low dike section, extending 2,600 feet upstream from the main embankment, protects a railroad line and New York State Highway 21. The dike is constructed primarily of compacted impervious clay covered by large quarry stone. Outlet works consist of an intake structure, horseshoe-shaped conduit, stilling basin and outlet channel. Flow through the outlet works is controlled by three vertical slide gates. At spillway crest, elevation 1,300 feet PCD, the reservoir has a capacity of 13,397 acre-feet of water and covers 492 acres. The Canacadea Creek basin above the dam is fan-shaped and drains an area of 56 miles, which is about 36 percent of the Canisteo River drainage area above Hornell and 94 percent of the drainage of the Canacadea Creek (USACE, 1977).

1.2 PURPOSE AND NEED FOR THE ACTION

The purpose of the action is to update the Almond Lake Master Plan. The action is needed as required by ER and EP 1130-2-550. The 2024 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 (NEPA), Council on Environmental Quality (CEQ) regulations for implementing NEPA including the *Update to the Regulations Implementing the Procedural Provisions of the National Environmental Policy Act* dated July 2020 for 40 Code of Federal Regulations (CFR) Parts 1500-1508, and the *National Environmental Policy Act implementing Regulation Revisions* dated May 2022, which amended 40 CFR Parts 1502, 1507, and 1508; and the USACE implementing regulations, Policy and Procedures for Implementing NEPA, ER 200-2-2 (USACE 1988) to evaluate existing conditions and potential impacts of implementing the 2024 Master Plan. 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.

Alternatives considered within this EA focus on the proposed land classifications as presented in the 2024 Master Plan and the types of future development projects that could occur within the land classifications. This action is an administrative update and does not involve the construction of any physical projects. The EA does not consider implementation of specific projects identified within the 2024 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 2024 Master Plan once funding is available and detailed project planning and design occur.

1.4 COORDINATION AND PUBLIC REVIEW

USACE coordinated with agencies, organizations, and members of the public with a potential interest in the Proposed Action during the development of the 2024 Master Plan and during preparation of this EA. Additionally, Appendix D and E of the Master Plan provide a record of coordination for the overall Master Plan, with this EA, and with project stakeholders, agencies, and the public.

Agency coordination was conducted by USACE with the USFWS through the Information, Planning, and Consultation online system (IPaC) to ensure compliance with Section 7 of the Endangered Species Act (ESA). The most recent IPaC report was provided on February 12, 2024. Review was also performed by USACE staff using NYSDEC online tools including the Environmental Assessment Form (EAF) Mapper and Nature Explorer. Consultation letters under Section 106 of the NHPA were sent to the State Historic Preservation Office (SHPO) and tribal nations on March 5, 2024. Coordination correspondence is included in Appendix A of the EA.

Information on the progress of the Master Plan and instructions on participating in the public comment process were published on the USACE's web page:
https://www.nab.usace.army.mil/Missions/Dams-Recreation/Almond-Lake/Almond-Lake-Master-Plan-Revision/.

The 2024 Master Plan and EA were made available for public review for a period of 30 days beginning on July 15, 2024, and ending on August 14, 2024. The public comments received were addressed in Appendix E of the Master Plan.

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 Chapter 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 impacts 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 2024 Master Plan establishes the following management goals for the Almond Lake:

- **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 mission 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 2024 Master Plan and continue the operation and management of the project as outlined in the 1977 Master Plan. No new land classifications would be designated. The No Action alternative would not meet the purpose and need for the action and would not be in compliance 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 2024 Master Plan and associated changes in land management designations in compliance with USACE regulations and guidance. This alternative would revise the land classifications to updated USACE standards and include resource objectives that reflect current and projected needs compatible with regional goals. Required changes associated with the Proposed Action include reclassifications of land, classification of the water surface, and adoption of new resource management and recreation objectives. Figure 2-1 depicts the proposed new land classifications within the 2024 Master Plan. Table 2-1 quantifies the proposed land and water surface reclassifications and provides a description of the land classification along with types of future projects that could occur within each land classification, as applicable. This alternative is an administrative update and does not involve the construction of any physical projects. All future projects would be subject to further NEPA analysis once funding is available and detailed project planning and design occur. The Proposed Action would update the 2024 Master Plan to be compliant with ER and EP 1130-2-550 and would meet the goals and objectives outlined in the 2024 Master Plan. Therefore, this alternative is the Preferred Alternative and will be carried forward as the Proposed Action.

Figure 2-1. Proposed Land Classifications

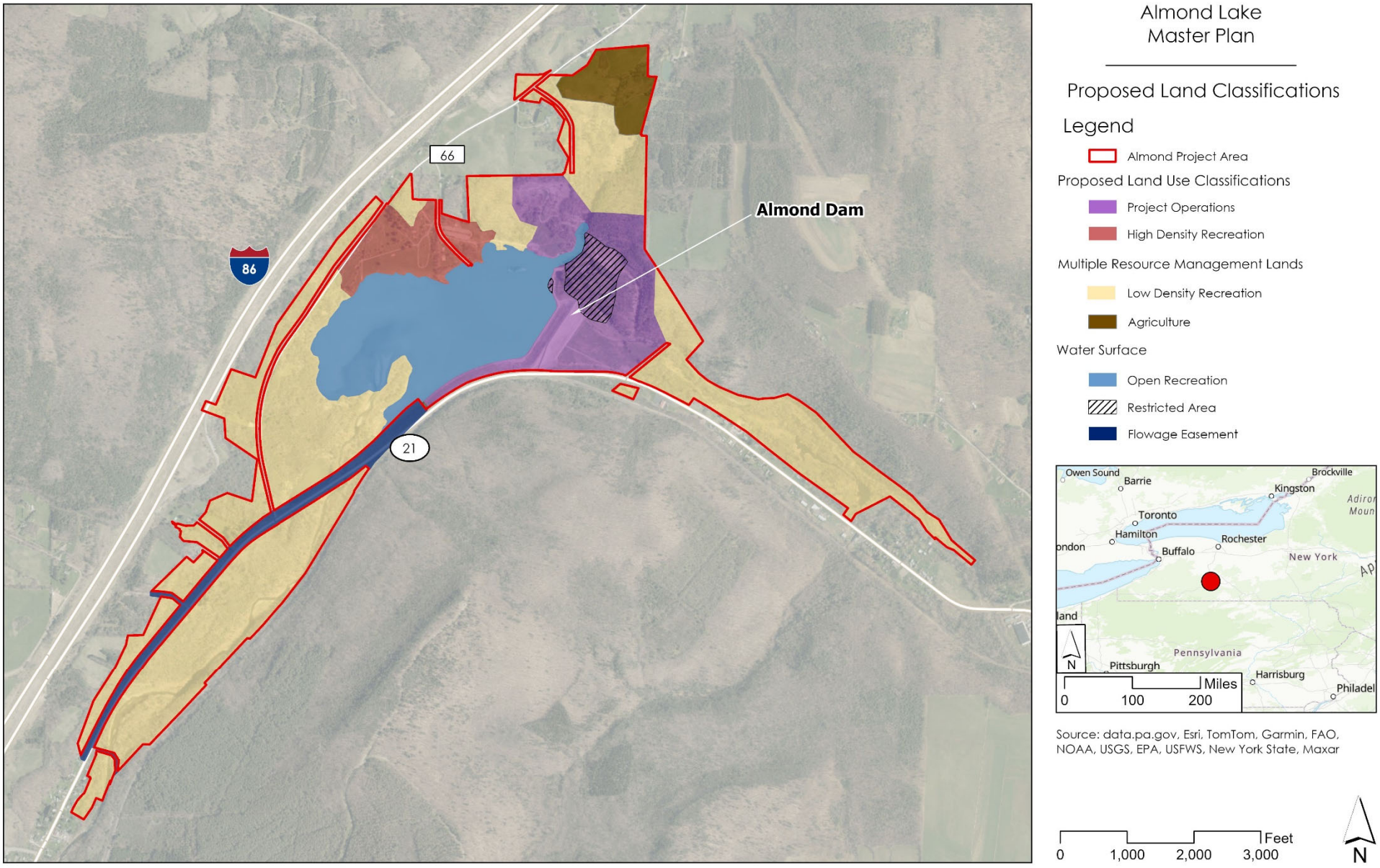


Table 2-1. Proposed Land Classifications at Almond Lake

Classification	2024 Master Plan (acres)	Description
Project Operations	107.2[1]	This classification category includes all project land required for the structure, operation, administration, or maintenance of the project and which all must be maintained to carry out the authorized purposes of flood risk management.
High Density Recreation	39.6	Lands are currently developed for intensive recreational activities for the visiting public and include boat launches, day-use areas, and campgrounds. This land classification has been developed to support concentrated visitation and use of the recreational facilities they host. The High Density recreation area at Almond Lake is Kanakadea Park operated by Steuben County.
Multiple Resource Management Land		
Low Density Recreation	382.1	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 such as bank fishing, hunting, hiking, wildlife viewing, and for access to the shoreline. Hunting may also be allowed in select areas that are a reasonable and safe distance from High Density Recreational areas, dam operations, and adjacent residential properties. The new land classification criteria exclude vegetation and wildlife management areas, leaving only areas with minimal development to support passive recreation use (i.e., primitive camping, hunting, trails, wildlife viewing, etc.).
Agriculture[2]	26.1	Land classified as agriculture is outleased to a private citizen for agriculture use. In the 1977 Master Plan, "lands available for outlease" is utilized as a land classification. According to the 1977 Master Plan, the lands available for outlease are those parcels obtained for project operations but outleased for grazing or other agricultural purposes. According to USACE regulation EP 1130-2-550, Chapter 3, agriculture, or grazing use of project land may be an interim use to meet management objectives. USACE continues to outlease a portion of Almond Lake for agricultural purposes, therefore, this Master Plan update includes lands designated for agriculture. There are no future plans to expand or terminate the agriculture lease; however, if the lease were to be terminated, these lands would most likely be used as Low Density Recreation.
Water Surface		
Restricted	0.3	Restricted water surface includes those areas where recreational boating is prohibited or restricted for project

Classification	2024 Master Plan (acres)	Description
		operations, safety, and security purposes. The Restricted water surface at Almond Lake includes a small area around the dam and intake tower. This area is normally marked with standard USCG regulatory buoys but other physical barriers may also be in placed on the water in the future.
Open Recreation	134.7	Open Recreation area includes all water surface areas available for year-round or seasonal water-based recreational use. This area includes all water surface area other than "Restricted."
Total	690[3]	

[1]*Of the 107.2 acres classified under the land classification Project Operations, 17.6 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]*This is not a Master Plan Land Classification as described in EP 1130-2-550 but due to its inclusion in the 1977 Master Plan, it is also included in this Master Plan. Per EP 1130-2-550, agriculture or grazing use of project land may be an interim use to meet management objectives.*

[3]*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 acreages.*

3 ENVIRONMENTAL SETTING AND CONSEQUENCES

3.1 INTRODUCTION

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

Several resources were determined not to be affected by the Proposed Action; therefore, a detailed analysis of these topics is not presented in this chapter. This chapter provides a discussion of resources analyzed within the EA, and a justification for those resources that were dismissed from further analysis.

3.1.1 Description of Baseline Data and Data Sources

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

- Geographical Information System (GIS), including waters and wetlands inventory, floodplain mapping, and vegetation;
- Aerial photography (ESRI, Google Earth);
- Regional and local reports: including Natural Resources Conservation Service (NRCS) Soil Surveys and previous studies conducted at the project;
- Agency databases including USFWS, the U.S. Environmental Protection Agency (USEPA), and New York resource agencies;
- Information presented within the 2024 Master Plan; and
- Agency coordination.

3.1.2 Approach for Analyzing Impacts

Impacts (consequence or effect) can either be beneficial or adverse and either directly or indirectly relate to the action. Direct effects are caused by the action and occur at the same time and place (40 CFR § 1508.1(g) (2022)). Indirect effects are caused by the action and are later in time or further removed in distance but are still reasonably foreseeable (40 CFR § 1508.1(g)(2022)). The alternatives may create temporary (less than 1 year), short-term (up to 3 years), long term (3 to 10 years), or permanent effects.

Impacts 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 impacts as beneficial, none/negligible, minor, moderate, or significant. The intensity thresholds are defined as follows:

- Beneficial – Impacts 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; and
- 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 2024 Master Plan. The Proposed Action is an administrative update and does not involve the construction of any physical projects. USACE would conduct further NEPA analysis on projects once funding is available and detailed planning and design occur.

3.1.3 Level of Resource Area Analysis

All potentially relevant resource areas were initially considered for analysis in this EA. Consistent with NEPA implementing regulations and guidance, USACE focused the analysis on topics with the greatest potential for environmental impacts. This sliding-scale approach is consistent with NEPA (40 CFR § 1502.2(b)(2022)), under which impacts, issues, and related regulatory requirements are investigated and addressed with a degree of effort commensurate with their importance. Some resource topics are not discussed in this EA due to the lack of direct, indirect, and cumulative effects from the Proposed Action on the resource or because that resource is not located within the project. For example, the Chemung River Watershed in which the Almond Lake is located does not have federally designated Wild or Scenic Rivers, so this resource is not included in the analysis.

Potential direct and indirect effects of the No Action Alternative and the Proposed Action were analyzed relative to each environmental and socioeconomic resource. The existing conditions of each resource area within the Proposed Action's region of influence (ROI) was also analyzed. Through this analysis, it was determined that, for several resource areas, negligible or no effects would occur. This included air quality, greenhouse gases and climate, noise, geology, groundwater, cultural resources, utilities, hazardous materials and waste, socioeconomics and environmental justice, and traffic and transportation. Therefore, these resources were eliminated from further analysis. Additional detail is provided in Section 3.6.

3.2 WATER RESOURCES

3.2.1 Affected Environment

3.2.1.1 Surface Waters and Wetlands

The Almond Lake is located on Canacadea Creek, approximately 90 miles upstream of where the Chemung River (a tributary of Canisteo River, which is a tributary to Canacadea Creek) meets the North Branch Susquehanna River in Greens Landing, Pennsylvania. Almond Lake controls approximately 56 square miles, or 95 percent of the Canacadea Creek Watershed. The primary tributaries of Canacadea Creek include McHenry Valley Creek and Karr Valley Creek.

Approximately 4,086 miles of freshwater rivers and streams exist within the Chemung River Watershed and 23 significant freshwater lakes, ponds, and reservoirs totaling approximately 2,904 acres. Almond Lake is the third largest reservoir within the watershed followed by Waneta Lake and Lamoka Lake/Mill Pond (NYSDEC, 2023a). According to the USFWS

National Wetlands Inventory (NWI) Mapper, a total of three freshwater emergent wetlands exists within the Almond Lake project area, along with twelve freshwater forested/scrub wetlands, one freshwater pond, twelve riverine (stream/river) systems, and five lacustrine (lake) systems totaling approximately 171.3 acres, or 24.9 percent of the project's land area (Table 3-1; USFWS, 2023).

Table 3-1. Project area wetlands

Wetland Type	Acres	Percent of Project Area
Freshwater Emergent Wetland	3.6	0.5
Freshwater Forested/ Shrub Wetland	31.0	4.5
Freshwater Pond	0.5	0.1
Riverine	30.2	4.4
Lake	106.0	15.4
Total	**171.3**	**24.9**
Project Area	690	

3.2.1.2 Water Quality

Water quality on the Canacadea Creek is considered fair to good. The water is alkaline and carries a moderate nutrient load due to dairy farming activities in the basin. Occasionally, algae blooms occur in the reservoir which in turn inhibits light to penetrate below the surface, decreasing productivity. Water quality samples are collected one to two times per year by USACE staff. Most samples are collected in the summer and are usually collected at three stations, including one in the lake at the control tower, one at the inflow to the reservoir, and one at the outflow from the reservoir. The samples are tested for pH, temperature, dissolved oxygen, conductance, phosphate, nitrate, and ammonia. The data is analyzed by USACE staff and are utilized for real time reservoir operations and long-term assessments. Generally, there are no public health concerns as it pertains to water quality at the reservoir.

Conversely, sediment transport and accumulation at Almond Lake historically posed the most challenges to its operation. The high sediment yield of the basin is due to the highly erodible nature of the glacial till material in the region. Even moderate storms can generate sizeable sediment loads to the reservoir. The watershed receives about 35 inches of precipitation annually. The average yearly snowfall varies from about 54 inches at the dam to nearly 180 inches just west of the watershed due to lake-effect snow from the Great Lakes. The New York State Department of Environmental Conservation (NYSDEC) lists Canacadea Creek and its upper tributaries as "stressed" for aquatic life and recreation.

Aquatic life in the upper portions of Canacadea Creek is known to experience minor impacts due to siltation. There are some indications of nutrient enrichments as well. Coliform bacteria sampling was conducted by the Allegany County Health Department and Alfred University in the early 2000s. Although there did not appear to be an overall bacteria problem, there were occasional "spikes" especially near the Alfred Sewage Treatment Plant (STP), which is located approximately 8 miles directly southwest of Almond Lake, along Canacadea Creek. However, since the early 2000s, the STP underwent an upgrade to add denitrification and a UV disinfection system. The STP is currently meeting New York State Pollutant Discharge Elimination System (SPDES) effluent discharge limits and there are no reports of impacts related to the facility.

3.2.1.3 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 impacts 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 NYSDEC is responsible for issuing floodplain development permits in New York.

The 100-year floodplain is primarily restricted to the immediate shores of Almond Lake and its tributaries. FEMA classifies this area as Zone AE (Steuben County, n.d.).

3.2.2 No Action – Environmental Consequences

Under the No Action Alternative, USACE would not implement the 2024 Master Plan and no new land classifications or future development projects within the proposed 2024 Master Plan would occur. The operation and management of Almond Lake and USACE lands would continue as outlined in the 1977 Master Plan. Although this alternative does not result in a 2024 Master Plan that meets current regulations and guidance, there would be no significant impacts to water resources on project lands.

3.2.3 Proposed Action – Environmental Consequences

The classifications required for the Proposed Action would result in none/negligible water resource impacts. The Proposed Action is an administrative update and does not involve the construction of any physical projects. All future projects would be subject to further NEPA analysis once funding is available and detailed project planning and design occur. Table 3-2 summarizes potential effects to surface waters and wetlands from implementation of proposed land use classifications.

Table 3-2. Potential Water Resource Impacts from Land Use Classifications

Classification	Potential for Impact
Project Operations	**None/Negligible Impact.** This land use classification would designate lands associated with the direct support for flood control operations, including dam and spillway structures. No substantial new projects are proposed within this land use.

Classification	Potential for Impact
High Density Recreation	**None/Negligible impact.** This land classification has been developed to support concentrated visitation and use of recreational facilities. Although no future projects are proposed at this time, implementation of this Proposed Action may have **beneficial impacts** if future projects arose during the lifetime of this Master Plan as future projects would occur within and adjacent to existing developed and intensively used areas, specifically to support recreation adjacent to or within water resources. Future projects could also have **minor impacts** as the recreation area is located adjacent to a small tributary as well as along the shoreline of Almond Lake itself. 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 National Pollution Discharge Elimination System (NPDES) permit for projects involving earth disturbances exceeding one acre**.** Surface waters and wetlands, if present, would be avoided or permitted through the Section 404 process. USACE would consider the presence of the 100-year floodplain in design and siting future master planning projects within floodplain areas.
Multiple Resource Management Land	
Low Density Recreation	**None/Negligible Impact**. This land use focuses on the lands with minimal development or infrastructure that support passive public recreational use, such as fishing, hunting, wildlife viewing, or hiking. There are no future projects for the existing low-density recreation lands.
Agriculture	**None/Negligible Impact**. This is an interim use of a land classification to meet management objectives and there are no plans for expansion of the existing agriculture outlease. If the outlease were to be terminated, this land would continue to occur under the Low Density Recreation land classification which also has none/negligible impacts.
Water Surface	
Restricted	**None/Negligible Impact.** None/Negligible impact to water resources would occur.
Open Recreation Area	**None/Negligible Impact.** No change in water use is expected; therefore, no none/negligible impact would occur.

3.3 SOILS

3.3.1 Affected Environment

In the areas adjacent to Almond Lake, soils are primarily mapped as belonging to the Chenango channery silt loam (Ch), Fluvaquents and Ochrepts (FL), Alton gravelly fine sandy loam (AlA), Howard-Dunkirk complex (HpD), Middlebury silt loam (Mp), and Howard-Madrid complex, 20 to 30 percent slopes (HrD).

A variety of other soil types exist within the project boundary but mainly consist of sandy loam and silt loams with minor slopes. Some soil complexes exist that possess rocky or gravelly characteristics on very steep to steep slopes, including Lordstown-Arnot complex, very steep, very rocky (LRF), and Howard and Alton gravelly soils, 20 to 30 percent slopes (HtE) (see Table 3-3; USDA-NRCS, 2023).

Of the soils within the area of interest, 2.2 percent are considered New York Farmland of Statewide importance, including Collamer silt loam (CoC) and Dunkirk silt loam (DuC). Additionally, 40.6 percent of soils in the area are categorized as Prime Farmland, including Alton gravelly fine sandy loam, 0 to 3 percent slopes (AlA), Chenango channery silt loam (Ch), Howard gravelly loam, undulating (HoB), Middlebury silt loam (Mp), Scio silt loam (Sc) and Tioga silt loam (Tg) (USDA-NRCS, 2023).

Table 3-3. Soils at Almond Lake

Map Unit Symbol	Map Unit Name	Acres in Project Area	Percent of Project Area	Prime/Unique Farmland Status
AlA	Alton gravelly fine sandy loam, 0 to 3 percent slopes	42.9	6.2%	All areas are prime farmland
CF	Cut and fill land	18.5	2.7%	Not prime farmland
Ch	Chenango channery silt loam, fan	165.9	24.0%	All areas are prime farmland
CoC	Collamer silt loam, rolling	2.6	0.4%	Farmland of statewide importance
DuC	Dunkirk silt loam, rolling	12.2	1.8%	Farmland of statewide importance
FL	Fluvaquents and Ochrepts	66.2	9.6%	Not prime farmland
HgD	Hornell and Fremont silt loams, 12 to 20 percent slopes	0.5	0.1%	Not prime farmland
HHE	Hornell and Fremont silt loams, 20 to 50 percent slopes	19.5	2.8%	Not prime farmland
HoB	Howard gravelly loam, undulating	23.3	3.4%	All areas are prime farmland
HpD	Howard-Dunkirk complex, hilly	41.9	6.1%	Not prime farmland
HrD	Howard-Madrid complex, 20 to 30 percent slopes	26.6	3.9%	Not prime farmland
HtD	Howard and Alton gravelly soils, 20 to 30 percent slopes	17.4	2.5%	Not prime farmland
HtE	Howard and Alton gravelly soils, 30 to 45 percent slopes	8.5	1.2%	Not prime farmland
LRF	Lordstown-Arnot complex, very steep, very rocky	4.7	0.7%	Not prime farmland
Mp	Middlebury silt loam	36.8	5.3%	All areas are prime farmland
NgB	Niagara silt loam, 2 to 6 percent slopes	0.2	0.0%	Prime farmland if drained
Sc	Scio silt loam	2.0	0.3%	All areas are prime farmland
Tg	Tioga silt loam	9.9	1.4%	All areas are prime farmland
VoD	Volusia channery silt loam, 15 to 25 percent slopes	14.7	2.1%	Not prime farmland
W	Water	154.0	22.3%	Not prime farmland
Wn	Wayland soils complex, non-calcareous substratum, 0 to 3 percent slopes, frequently flooded	21.6	3.1%	Not prime farmland

3.3.2 No Action – Environmental Consequences

Under the No Action Alternative, USACE would not implement the 2024 Master Plan and no new land classifications or future development projects within the proposed 2024 Master Plan would occur. The operation and management of Almond Lake and USACE lands would continue as outlined in the 1977 Master Plan. Although this alternative does not result in a 2024 Master Plan that meets current regulations and guidance, there would be no significant impacts to soil resources on project lands.

3.3.3 Proposed Action – Environmental Consequences

The classifications required for the Proposed Action would result in none/negligible soil resource impacts. The Proposed Action is an administrative update and does not involve the construction of any physical projects. All future projects would be subject to further NEPA analysis once funding is available and detailed project planning and design occur. Table 3-4 summarizes potential effects to soil resources from implementation of proposed land use classifications.

Table 3-4. Potential Soil Resource Impacts from Land Use Classifications

Classification	Potential for Impact
Project Operations	**None/Negligible Impact.** This land use classification would designate lands associated with the direct support for flood control operations, including dam and spillway structures. No substantial new projects are proposed within this land use.
High Density Recreation	**None/Negligible impact**. This land classification supports the existing use of the land and concentrates any future recreation projects into this existing developed and intensively used areas. Current and future projects could result in **minor impacts** within these areas through compaction and increased erosion potential due to recreational use and loss of soils from future development projects. However, potential impacts would be concentrated within areas already developed intensively for recreation, and therefore no new losses to areas of Prime Farmland or Farmland of Statewide Importance are anticipated. While high density recreation can impact soil resources, this land use classification encourages limiting future recreational development to this area, thus, limiting the potential area of impact elsewhere on the property. Thus, **beneficial impacts** could result from the implementation of this land classification. Construction and operations of future master planning projects would use BMPs associated with prevention of and control of erosion. USACE would consider the potential for erosion and occurrence of Prime Farmland soils in design and siting future master planning projects.
Multiple Resource Management Land	
Low Density Recreation	**None/Negligible Impact**. This land use focuses on the lands with minimal development or infrastructure that support passive public recreational use., such as fishing, hunting, wildlife viewing, or hiking. There are no future projects for the existing low-density recreation lands.
Agriculture	**None/Negligible Impact**. This is an interim use of a land classification to meet management objectives and there are no

Classification	Potential for Impact
	plans for expansion of the existing agriculture outlease. If the outlease were to be terminated, this land would continue to occur under the Low Density Recreation land classification which also has none/negligible impacts.
Water Surface	
Restricted	**None/Negligible Impact.** This land classification reflects new classification criteria and reflects the current water use practices. None/negligible impacts to soils would occur.
Open Recreation Area	**None/Negligible Impact**. This land classification reflects new classification criteria and no actual change in water use; therefore, none/negligible impact to soils would occur.

3.4 BIOLOGICAL RESOURCES

3.4.1 Affected Environment

3.4.1.1 Vegetation

Almond Reservoir supports many habitat types including wetlands, grassy areas, fields, edges, and a variety of forest types, which attract a variety of wildlife. According to the U.S. Forest Service (USFS), Steuben County is in the Southwest Highlands of New York, which is characterized by more forest than any other vegetative cover type (USDA Forest Service, 2020). Most of the forests in the Southwest Highlands of New York consist of red maple (*Acer rubrum*), sugar maple (*Acer saccharinum*), white ash (*Fraxinus americana*) and black cherry (*Prunus serotina*). See Table 3-5 for a list of common tree species located within the Southwest Highlands region of New York and the volume of each species within the region.

Table 3-5. Forest Cover Types and Volume in the Southwest Highlands Region of New York

Species (Common Name)	Species (Latin Name)	Volume in Region (million feet^3) (2017)	Volume as a % of region (2017)	% Change in volume, 2007-2017
Red Maple	*Acer rubrum*	745	18	22.0
Sugar Maple	*Acer saccharinum*	633	15	2.0
White Ash	*Fraxinus americana*	428	10	13.7
Black Cherry	*Prunus serotina*	311	7	20.8
Eastern Hemlock	*Tsuga canadensis*	300	7	10.3
Northern Red Oak	*Quercus rubra*	280	7	8.2
Eastern White Pine	*Pinus strobus*	235	6	14.9
Quaking Aspen	*Populus tremuloides*	185	4	1.0
American Beech	*Fagus americana*	182	4	0.8
American Basswood	*Tilia americana*	104	2	-5.1
Regional Total		**4,159**	**100**	**10.4**

Source: USDA Forest Service (2020)

Between 2012 and 2017, the forests of New York have gained approximately 250,000 acres, but lost approximately 390,000 acres, mainly due to agriculture, for a net decrease of 0.3 percent (USDA Forest Service, 2020). The surrounding area of Almond Lake has seen little change of forest gain or loss. In 2019, New York has an estimated total of 18,622,212 acres of forest land with 73.5 percent being owned privately (USDA Forest Service, 2019). Federal and State-owned forests account for 26.5 percent of New York forests and some that are located within the Southwest Highlands are Klipnocky, Bully Hill, and Cancacadea State Forests which are in close proximate of Almond Lake.

Three types of wetlands are present throughout the Project and include freshwater emergent, forested/shrub, and freshwater pond systems (USFWS, 2023). Each wetland classification creates a unique ecosystem for specific types of wetland plants and wildlife. In addition, wetland vegetation provides several beneficial uses, which include enhancing water quality, filtering runoff, preventing localized erosion, and providing habitat and food sources for wildlife.

3.4.1.2 Wildlife and Fisheries

Almond Reservoir and the surrounding area has a diversity of habitat types that support a variety of wildlife. Mammalian wildlife found on Reservoir lands include black bear (*Ursus americanus*), white-tailed deer (*Odocoileus virginianus*), grey squirrel (*Sciurus carolinensis*), eastern wild turkey (*Meleagris gallopavo)* and groundhog (*Marmota monax*). Common avian species include a variety of waterfowl and wading birds, woodpeckers, and songbirds, as well as common game species.

Almond Reservoir hosts many fish species including largemouth bass (*Micropterus salmoides*), black crappie (*Pomoxis nigromaculatus*), brown bullhead (*Ameiurus nebulosus*), common carp (*Cyprinus carpio*), golden shiner (*Notemigonus crysoleucas*), pumpkinseed (*Lepomis gibbosus*), spottail shiner (*Notropis hudsonius*), white sucker (*Catostomus commersonii*), and yellow perch (*Perca flavescens*). The main fishery in Almond Reservoir consists of black crappie, common carp, largemouth bass, and yellow perch. Largemouth bass can range in size from 15 to 20 inches.

3.4.1.3 Threatened and Endangered Species

3.4.1.3.1 Federally Listed Species

As of 2024, the Northern long-eared bat (*Myotis septentironalis*) is the only federally listed threatened or endangered species that is known to exist within the project area (Appendix A). The Northern long-eared bat is listed as endangered. The Monarch butterfly (*Danaus plexippus*) was the only candidate species identified within the project area (Appendix A). The project area does not contain any critical habitat of either species.

Northern long-eared bats are medium sized bats (about 3-4 inches in length) associated with mature, interior forest environments. Unlike most other bats, Northern long-eared bats forage along wooded hillsides and ridgelines instead of above valley-bottom streams and riparian forest edges. Populations at northern long-eared bat hibernation sites (e.g, caves and mines) have declined by 99 percent since the discovery of white-nose syndrome and it is now listed as endangered throughout all of its range. Forest fragmentation and conversion are also

major threats to the species due to its association with large blocks of mature forest (USFWS n.d. - b)

The Monarch Butterfly is a candidate species and is not yet listed or proposed for listing. Consultation with USFWS under Section 7 of the Endangered Species Act is not required for candidate 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 3,000 km and last for over two months. In early spring (February-March), surviving monarchs break diapause and mate at the overwintering sites before dispersing. The same individuals that undertook the initial southward migration begin flying back through the breeding grounds and their offspring start the cycle of generational migration over again. (USFWS n.d. - a).

3.4.1.3.2 New York State Threatened and Endangered Species

According to the NYSDEC screening tool, the Environmental Assessment Form (EAF) Mapper and the Nature Explorer, there are no records of rare, threatened, or endangered species in the project area (NYSDEC, 2023c; NYSDEC, 2023d).

3.4.1.3.3 Other Protected Species

Bald eagles (*Haliaeetus leucocephalus*), a previously federally and state-listed endangered species, were removed from the federal list in August 2007 but still retain a threatened status in the state of New York. This species is protected under the Bald and Golden Eagle Protection Act. According to Cornell Lab of Ornithology's Ebird.org (n.d.) and USACE staff, both immature and adult bald eagles were sighted at Almond Lake throughout 2022. During the site visit in 2022, both immature and adult bald eagles were sighted at Almond Reservoir by USACE staff.

3.4.1.4 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.

The only non-native invasive plant species observed within the project vicinity includes Japanese knotweed (*Polygonum cuspidatum*), which is actively managed with mowing and spraying by the Kanakadea park staff. Most of the project lands are open, maintained grassy areas or recreational areas which minimizes the occurrence of invasive plant species.

Currently, the project area has few problems with nonnative invasive insect pests; however invasive insects have been damaging in the past and are likely to cause damage in the

future. In the summer of 2021, elevated populations of Spongy moth (*Lymantria dispar dispar*) (formerly gypsy moth) caterpillars caused notable leaf damage across several New York counties, including Steuben. In New York, spongy moth caterpillars are known to feed on the leaves of a large variety of trees such as oak, maple, apple, crabapple, hickory, basswood, aspen, willow, birch, pine, spruce, hemlock, and more. Oak is their preferred species. Spongy moths have "naturalized" in New York's Forest communities meaning they will always be present. Spongy moth populations are cyclical and fall into a 10–15-year pattern of rising and falling populations and are typically driven by predator-prey interactions (NYSDEC, 2023c). Other invasive insect pests found in surrounding regions that may affect the project area in the future include the hemlock wooly adelgid (*Adelges tsugae*) and the spotted lanternfly (*Lycorma delicatula*).

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.

3.4.2 No Action – Environmental Consequences

Under the No Action Alternative, USACE would not implement the 2024 Master Plan and no new land classifications or future development projects within the proposed 2024 Master Plan would occur. The operation and management of Almond Lake and USACE lands would continue as outlined in the 1977 Master Plan. Although this alternative does not result in a 2024 Master Plan that meets current regulations and guidance, there would be no significant impacts to biological resources on project lands.

3.4.3 Proposed Action – Environmental Consequences

The classifications required for the Proposed Action would result in none/negligible resource impacts. The Proposed Action is an administrative update and does not involve the construction of any physical projects. All future projects would be subject to further NEPA analysis once funding is available and detailed project planning and design occur. Table 3-6 summarizes potential effects to biological resources based on the proposed changes to land use classifications.

Table 3-6. Potential Biological Resource Impacts from Land Use Classifications

Classification	Potential for Impact
Project Operations	**None/Negligible Impact.** This land use classification would designate lands associated with the direct support for flood control operations, including dam and spillway structures. No substantial new projects are proposed within this land use.
High Density Recreation	**None/Negligible impact.** This land classification has been developed to support concentrated visitation and use of recreational facilities. Land use within these areas could have direct, **minor impacts** to vegetation and wildlife habitat from recreational development and use. Potential impacts, however, would be concentrated within Kanakadea Park. The master plan does not propose any loss of forest due to recreational development. While intensive use may increase the potential for invasive species introduction and spread, maintaining a High Density Recreation area focuses management

Classification	Potential for Impact
	and control of invasive species in higher-use areas which would have the greater potential for presence of invasive species. There may be **beneficial impacts** if future projects are proposed in this area as this land classification encourages limiting development to the High Density Recreation areas. Construction and operations of future master planning projects would use any BMPs associated with prevention of impacts to sensitive species as recommended during future separate environmental reviews of any future projects.
Multiple Resource Management Land	
Low Density Recreation	**None/Negligible Impact**. This land use focuses on the lands with minimal development or infrastructure that support passive public recreational use, such as fishing, hunting, wildlife viewing, or hiking. There are no future projects for the existing low-density recreation lands.
Agriculture	**None/Negligible Impact**. This is an interim use of a land classification to meet management objectives and there are no plans for expansion of the existing agriculture outlease. If the outlease were to be terminated, this land would continue to occur under the Low Density Recreation land classification which also has none/negligible impacts.
Water Surface	
Restricted	**None/Negligible Impact.** This land classification reflects new classification criteria and reflects the current water use practices. None/negligible impacts to biological resources would occur.
Open Recreation Area	**None/Negligible Impact**. This land classification reflects new classification criteria and no actual change in water use; therefore, none/negligible impact to biological resources would occur.

3.5 LAND USE AND RECREATION

3.5.1 Affected Environment

Project lands not used for operation and maintenance of the Dam are leased to Steuben County, specifically the Department of Public Works, for the operation of Kanakadea Park. Kanakadea Park features various camping options with fire rings, grills, and hot showers. Additionally, the recreation area has hiking trails, a baseball/softball field, a sand volleyball court, a basketball court, playgrounds, horseshoe pits, pavilions, picnic sites with tables, a parking area, a boat launch for motorless boats, fishing areas, and a lake overlook area. Most of the recreation area is open year-round except camping which is from April through December and water access which is from April to October (Steuben County, 2023). Additionally, the entirety of the USACE owned property is used by the public for a variety of passive recreation such as hiking, hunting and trapping, and nature watching.

Currently, there are no plans for expansion of Kanakadea Park. There is no charge to enter the Park and rental rates are intentionally maintained at a reasonable and fair rate to provide opportunities for anyone to access the parks amenities. The recreation area objective for Kanakadea Park is to continue to provide equitable access to diverse recreational opportunities for the local region.

According to USACE's Visitor Estimation and Reporting Systems (VERS), during the period between October 2017 and September 2020, there were over 300,000 visitors to the Almond Lake property, with its heaviest visitation during early summer and early fall months. Almond Lake saw a steady decline in visitors from October 2017 to September 2021. From Fiscal Year 2021 to Fiscal Year 2022, there was an increase in visitors. The day users are the primary use type, but Almond Lake, specifically Kanakadea Park, does have substantial use of overnight camping areas in the spring and summer months.

3.5.2 No Action – Environmental Consequences

Under the No Action Alternative, USACE would not implement the 2024 Master Plan and no new land classifications or future development projects contained within the proposed 2024 Master Plan would occur. The operation and management of Kanakadea Park, Almond Lake, and USACE lands would continue as outlined in the 1977 Master Plan. Although this alternative does not result in a 2024 Master Plan that meets current regulations and guidance regarding land classifications, there would be no significant impacts to land use and recreation.

3.5.3 Proposed Action – Environmental Consequences

The reclassifications required for the Proposed Action would result in none/negligible impacts to land use and recreation. The Proposed Action is an administrative update and does not involve the construction of any physical projects. All future projects would be subject to further NEPA analysis once funding is available and detailed project planning and design occur. Table 3-7 summarizes potential effects to land use and recreation based on the proposed changes to land classifications.

Table 3-7. Potential Land Use and Recreation Impacts from Proposed Land Classifications

Classification	Potential for Impact
Project Operations	**None/Negligible Impact.** This land use classification would designate lands associated with the direct support for flood control operations, including dam and spillway structures. No new substantial projects are proposed within this land use.
High Density Recreation	**None/Negligible Impact.** This land classification recognizes lands currently developed for intensive recreational activities. It optimizes the siting of future High Density Recreation master planning projects and leaves other acreages available for other uses such as low density recreation which may have **beneficial impacts** and potentially increasing the range of recreation opportunities available.
Multiple Resource Management	
Low Density Recreation	**None/Negligible Impact.** This land classification focuses on areas suitable for supporting low-impact and passive recreational opportunities such as bank fishing, hiking, wildlife viewing, and for access to the shoreline. The land classification also provides a delineation between intensive recreation areas and passive recreation areas, thus, guiding future development and potentially resulting in **beneficial impacts** by preserving large portions of the property from intensive recreation.

Classification	Potential for Impact
Agriculture	**None/Negligible Impact**. This is an interim use of a land classification to meet management objectives and there are no plans for expansion of the existing agriculture outlease. If the outlease were to be terminated, this land would continue to occur under the Low Density Recreation land classification which also has beneficial impacts.
Water Surface	
Restricted	**None/Negligible Impact.** Restricted water surface includes those areas where recreational boating is prohibited or restricted for project operations, safety, and security purposes. This classification would aid in protecting recreational users on the lake, thus, resulting in potential **beneficial impacts**
Open Recreation Area	**None/Negligible Impact**. This land classification reflects new classification criteria and no actual change in water use; therefore, none/negligible impact to land use and recreation would occur.

3.6 ADDITIONAL RESOURCES NOT ANALYZED IN THIS EA

The Proposed Action is an administrative update and does not involve the construction of any physical projects. All future projects would be subject to further NEPA analysis once funding is available and detailed project planning and design occur. Impacts on the following resources were determined to be negligible; therefore, these resources were not further analyzed in this EA.

3.6.1 Air Quality

Almond Lake is in Steuben County, which meets attainment for all criteria pollutants, therefore the Clean Air Act's General Conformity Rule does not apply. *See* 40 CFR 93.153(b) (conformity determinations required only in nonattainment or maintenance areas). Changes to land classifications under the Proposed Action would not affect air quality. 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 impacts 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. As a result, this resource is not further discussed in this EA.

3.6.2 Greenhouse Gases and Climate

Almond Lake Project falls within the National Oceanic and Atmospheric Administration (NOAA) Climate Division 30-01 (NOAA, n.d.). This area is characterized by a temperate climate, with average annual temperatures between 33- and 54-degrees Fahrenheit and an average annual precipitation of 37.36 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 55 inches of snowfall a year (U.S. Climate Data 2020). Changes to land classifications under the Proposed Action would not affect greenhouse gas emissions or climate. Potential greenhouse gas emissions and climate change impacts 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. As a result, this resource is not further discussed in this EA.

3.6.3 Geology and Topography

The project falls within the glaciated Allegheny Plateau where elevations can range from 500 to 600 feet in the north to more than 2,000 ft in the south. Numerous valleys and troughs are found within this province, and the plateau is underlain by a very thick layer of interbedded shales, siltstones, and soft sandstones, with exception to limestone areas in the northern province boundaries, and patches of conglomerate in the southwest corner of the State (NYSDOT, 2013). The terrain within the project is generally sloping with a rolling character. Half of the project's lands contain slopes between 2 – 8 percent and can be subject to inundation. Twenty-six percent of the project's lands contain slopes between 15-30 percent, while only 6 percent of the lands have greater than 30 percent slope. These lands make up most of the hillsides along the shoreline and upper slopes (USACE, 1977).

Changes to land classifications under the Proposed Action would not affect geology or topography. Construction activities associated with implementation of proposed future projects will be evaluated for impacts to geology and topography in future EAs specific to individual development projects. As a result, this resource is not further discussed in this EA.

3.6.4 Groundwater

Changes to land 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. As a result, this resource is not further discussed in this EA.

3.6.5 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.). Changes to land classifications under the Proposed Action would not change the existing noise environment. Assessment of any future master planning project's impact on noise would be performed during detailed project-specific planning. As a result, this resource is not further discussed in this EA.

3.6.6 Cultural Resources

One cultural resource has been previously identified within the Almond Lake project area: the Almond Dam complex (USN 10117.000050). The Almond Dam complex is a mid-twentieth century (constructed in 1949) group of above-ground resources consisting of four structures and three buildings that operate to maintain the dam's flood control mission under the 1936 Flood Control Act. In 2021, The Almond Dam complex was determined eligible for the National Register of Historic Places (NRHP) under Criteria A and C (Boggs, 2021).

The potential for unidentified cultural resources within the project area remains moderate to high in undisturbed, low to moderately sloped areas within the Kanakadea Recreation Area or elsewhere within the Canacadea Creek floodplain. Almond Lake's location suggests the possibility for smaller precontact sites such as resource processing or procurement areas, or features associated with the historic dwellings that once dotted the landscape. There have not been any archaeological resources identified within the Almond Lake project area; however, this may be due to a lack of systematic and controlled survey rather than an actual absence of resources.

Consultation letters under Section 106 of the NHPA regarding this Master Plan update were sent to the SHPO and two tribal nations, the Seneca Nation and the Seneca-Cayuga Nation, on March 5, 2024. Coordination correspondence is included in Appendix A of the EA.

If specific project actions are proposed in the future, they will be subject to consultation and review under Section 106 of the NHPA. As a result, this resource area is not further discussed in this EA.

3.6.7 Utilities

Changes to land 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. Therefore, utilities are not further discussed in this EA.

3.6.8 Hazardous Materials and Wastes

No known contaminated sites occur at the project area. Changes to land 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. As a result, this resource area is not further discussed in this EA.

3.6.9 Socioeconomics and Environmental Justice

The Proposed Action would not result in any appreciable effects to the local or regional socioeconomic environment. The Climate and Economic Justice Screening Tool (CEQ) was evaluated, and the Almond Lake Project is not located in an environmental justice community(CEQ, n.d.). However, there are two census blocks containing environmental justice communities in the Town of Hornell located downstream of the Almond Lake Project. Additionally, the EPA' Environmental Justice Screening and Mapping Tool was referenced and there were no substantial environmental justice concerns within the census blocks for Almond Lake (EPA, n.d.). Changes to land classification would have no impact on socioeconomics or environmental justice. Impacts to socioeconomics and environmental justice associated with any future master planning projects would be performed during detailed project-specific planning. As a result, this resource area is not further discussed in this EA.

3.6.10 Traffic and Transportation

Changes to land classification would have no impact on traffic and transportation. Any temporary impacts from increased truck traffic during construction of future master planning projects would be assessed during detailed project-specific planning. As a result, this resource is not further discussed in this EA.

4 CUMULATIVE IMPACTS

As defined by CEQ, cumulative effects are those that "result from the incremental impact of the Proposed Action when added to other past, present, and reasonably foreseeable future actions, without regard to the agency (federal or non-federal) or individual who undertakes such other actions" (40 CFR § 1508.1(g) (2022)). Cumulative effects may accrue over time and/or in conjunction with other pre-existing effects from other activities in the area (40 CFR § 1508.1(g) (2022)); therefore, pre-existing impacts and multiple smaller impacts should also be considered.

NEPA regulations require the analysis of cumulative environmental effects of a Proposed Action, which may manifest only at the cumulative level. 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 (Steuben County) and its surrounding counties (Tioga, Potter, Allegany, Livingston, Ontario, Yates, Schuyler, Chemung counties). The temporal scope is 15 to 25-year timeframe.

The Proposed Action focuses solely on the implementation of the proposed land classifications presented in the 2024 Master Plan. The Proposed Action is an administrative update and does not involve the construction of any physical projects. This EA does not consider implementation of specific projects identified within the 2024 Master Plan during the master planning process, as those projects are conceptual in nature and are not reasonably foreseeable to be considered as part of this EA. Projects identified during the master planning process within the 2024 Master Plan would require separate NEPA analyses prior to construction.

4.1. CURRENT AND REASONABLY FORESEEABLE PROJECTS WITHIN THE ROI

This section identifies reasonably foreseeable projects that may have cumulative, incremental impacts in conjunction with the Proposed Action. Beyond the future master planning projects identified in the 2024 Master Plan, no other projects were identified within or near the Project area that would lead to cumulative impacts.

4.2 ANALYSIS OF CUMULATIVE IMPACTS

Impacts 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. Impacts 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 Almond Lake. No cumulative impacts from this administrative action on resources are expected when added to the impacts of activities associated with the Proposed Action or No Action Alternative or from the potential projects identified in the 2024 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 impacts 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 impacts for this project from the reclassification of land or future master planning projects centered on recreation enhancement and development would not be considered an irreversible commitment because much of the land could be converted back to prior use at a future date. An irretrievable commitment of resources is typically associated with the loss of productivity or use of a natural resource (e.g., loss of production or harvest). No irreversible or irretrievable impacts 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 impacts. Table 6-2 presents conservation measures recommended within Chapter 3.

Table 6-1. Summary of Potential Environmental Effects

Alternative	Impact Type*			Intensity of Impact		
	Beneficial	*None/ Negligible*	*Negative*	*Minor*	*Moderate*	*Significant*
Water Resources						
No Action Alternative	-	x	-	-	-	-
Proposed Action Alternative	-	x	-	x	-	-
Soil Resources						
No Action Alternative	-	x	-	-	-	-
Proposed Action Alternative	-	x	-	x	-	-
Biological Resources						
No Action Alternative	-	x	-	-	-	-
Proposed Action Alternative	-	x	-	x	-	-
Land Use and Recreation						
No Action Alternative	-	x	-	x	-	-
Proposed Action Alternative	-	x	-	-	-	-

*Impacts on resource categories are based on applicable land classifications changes. Section 3 describes anticipated impacts 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 best management practices (BMPs) associated with prevention of erosion and control of stormwater runoff. This includes obtaining a National Pollution Discharge Elimination System (NPDES) permit for projects involving earth disturbances exceeding one acre.	Water and Soil
Surface waters and wetlands, if present, would be avoided or permitted through the Section 404 process.	Water
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

Measure	Resource Protected
Construction and operations of future master planning projects would use BMPs associated with the prevention of impacts to sensitive species recommended by resource agencies during future environmental review of projects proposed in the 2024 Master Plan.	Biological
Impacts 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 Almond 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 impacts described in Section 3, there are no significant impacts from the proposed action, and a Finding of No Significant Impact (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	Full
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

Federal Statutes	Level of Compliance
Wild and Scenic Rivers Act	N/A
Executive Orders (EOs), Memoranda, etc.	
Environmental Justice (EO 14096)	Full
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
Environmental Justice in Minority and Low-Income Populations (EO 12898)	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
Tackling the Climate Crisis at Home and Abroad (EO 14008)	Full
Further Advancing Racial Equity and Support for Underserved Communities Through The Federal Government (EO 14091)	Full
Prime and Unique Farmlands (CEQ Memorandum, 11 Aug 80)	Full

7 REFERENCES

Boggs, Daniel. (2021). Resource Evaluation: Almond Dam Complex." New York State Department of Parks, Recreation, and Historic Preservation.

Cornell Lab of Ornithology. (n.d). Almond Lake, Steuben County, New York. Retrieved September 26, 2023, from https://ebird.org/hotspot/L268790

Council of Environmental Quality (CEQ). (n.d.). *Climate and Economic Justice Screening Tool*. Retrieved July 12, 2023, from https://screeningtool.geoplatform.gov

Engineering Toolbox. (n.d.). *Outdoor Ambient Sound Levels*. Retrieved August 16, 2023, from https://www.engineeringtoolbox.com/outdoor-noise-d_62.html

Environmental Protection Agency (EPA). (n.d.). *EPA's Environmental Justice Screening and Mapping Tool*. https://ejscreen.epa.gov/mapper/. Accessed July 12, 2023.

National Oceanic and Atmospheric Administration (NOAA) National Centers for Environmental Information. (n.d.). U.S. Climate Divisions. Retrieved July 12, 2023, from https://www.ncdc.noaa.gov/monitoring-references/maps/us-climate-divisions.php

New York State Department of Environmental Conservation (NYSDEC). (2023a). Chemung River Watershed. Retrieved August 23, 2023, from https://www.dec.ny.gov/lands/48373.html

NYSDEC. (2023b). New York Environmental Assessment Form (EAF) Mapper. Retrieved September 19, 2023, from https://gisservices.dec.ny.gov/eafmapper/

NYSDEC. (2023c). Spongy Moth. Retrieved August 23, 2023, from https://www.dec.ny.gov/animals/83118.html

New York State Department of Transportation (NYSDOT). (2013, July 12). Geotechnical Design Manual, Chapter 3, Geology of New York State. https://www.dot.ny.gov/divisions/engineering/technical-services/geotechnical-engineering-bureau/geotech-eng-repository/GDM_Ch-3_Geology_of_NY.pdf

Steuben County. (n.d.). Floodplains in Steuben County, New York. Retrieved August 30, 2023, from https://scnygis.maps.arcgis.com/apps/webappviewer/index.html?id=9fa3850d7e534d66af8b6959c7692513.

Steuben County. (2023). Kanakadea Park. Retrieved August 16, 2023 from https://www.steubencountyny.gov/Facilities/Facility/Details/Kanakadea-Park-1

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

United States Army Corps of Engineers, Baltimore District (USACE, Baltimore District). 1977. Almond Lake Master Plan Update. PDF.

USACE, Baltimore District. (2006). *Master Manual for Reservoir Regulation Almond Lake and Arkport Dam*. PDF.

USACE, Baltimore District. (2019). Water Quality Program Annual Report. PDF.

USACE, Baltimore District. (2021). *Almond Dam (NY00740) Emergency Action Plan (EAP)*. PDF.

United States Department of Agriculture, Animal & Plan Health Inspection Service Wildlife Services (USDA APHIS). (2017). European Starlings. Wildlife Damage Management Technical Series. Retrieved August 23, 2023, from *https://www.aphis.usda.gov/wildlife_damage/reports/Wildlife%20Damage%20Management%20Technical%20Series/European-Starlings-WDM-Technical-Series.pdf*

United States Department of Agriculture (USDA), Forest Service. (2019). Forests of New York, 2019. Retrieved July 12, 2023, from https://www.fs.usda.gov/nrs/pubs/ru/ru_fs250.pdf

USDA, Forest Service. (2020, September). New York Forests 2017. Retrieved July 12, 2023, from https://www.fs.usda.gov/nrs/pubs/rb/rb_nrs121.pdf

USDA, Natural Resources Conservation Service (NRCS) (2023). Web Soil Survey. Retrieved September 26, 2023, from https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx

United States Fish & Wildlife Service (USFWS). (n.d. - a). *Monarchs*. Retrieved August 8, 2023, from https://fws.gov/initiative/pollinators/monarchs

USFWS. (2023). National Wetlands Inventory (NWI). Retrieved September 26, 2023, from https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/.

USFWS. (n.d. - b). Northern Long-eared Bat. Retrieved August 8, 2023, from https://www.fws.gov/species/northern-long-eared-bat-myotis-septentrionalis

APPENDIX A PUBLIC AND AGENCY COORDINATION

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New York Ecological Services Field Office
3817 Luker Road
Cortland, NY 13045-9385
Phone: (607) 753-9334 Fax: (607) 753-9699
Email Address: fw5es_nyfo@fws.gov

In Reply Refer To:
Project Code: 2023-0089413
Project Name: Almond Lake Master Plan

February 12, 2024

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, intentional or unintentional, 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.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. 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

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:

New York Ecological Services Field Office
3817 Luker Road
Cortland, NY 13045-9385
(607) 753-9334

PROJECT SUMMARY

Project Code: 2023-0089413
Project Name: Almond Lake Master Plan
Project Type: Management Plans Land Management/Restoration
Project Description: The purpose of this project is to update the Master Plan and Environmental Assessment for Almond Dam and Reservoir in Steuben County, New York. The Almond Dam and Reservoir Master Plan is the strategic land use management document that guides the comprehensive management and development of all recreational, natural, and cultural resources throughout the life of the project. It is the basic document guiding the United States Army Corps of Engineers responsibilities pursuant to Federal Laws to preserve, conserve, restore, maintain, manage, and develop the project lands, waters, and associated resources.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@42.34210955,-77.71936795911274,14z

Counties: Steuben County, New York

ENDANGERED SPECIES ACT SPECIES

There is a total of 2 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.

---

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

MAMMALS

NAME	STATUS
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

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.

IPAC USER CONTACT INFORMATION

Agency: Army Corps of Engineers
Name: Lauren McDonald
Address: 2 Hopkins Plaza
City: Baltimore
State: MD
Zip: 21201
Email lauren.n.mcdonald@usace.army.mil
Phone: 4109625646

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

R. Daniel Mackay
Deputy SHPO
New York Division of Historic Preservation
P.O. Box 189
Waterford, NY 12188-0189

March 5, 2024

Dear Mr. Mackay:

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 Almond Lake Master Plan. The U.S. Army Corps of Engineers, Baltimore District (USACE) is updating the Master Plan for the Almond Lake Dam located in Steuben County, New York (Enclosure 1). The Almond Lake Dam is a multipurpose water resources project constructed and operated by USACE.

The 2024 Master Plan is intended to serve as a comprehensive land and recreation management plan for the next 15 to 25 years and is needed to update the 1977 Almond Lake Master Plan. The 2024 Master Plan will provide updated guidance for stewardship of natural resources and management for long-term public access to, and use of, the natural resources at Almond Lake, including the land classification of the USACE-managed lands. To comply with the National Environmental Policy Act, an Environmental Assessment is also being prepared as part of this update.

The Master Plan update does not include any specifically proposed actions or 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 (410) 962-2173 or ethan.a.bean@usace.army.mil.

Sincerely,

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

Enclosure

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

Joe Stahlman, THPO
Seneca Nation of Indians
90 Ohi yo' Way
Salamanca, NY 14779

March 5, 2024

Dear Mr. Stahlman:

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 Almond Dam Master Plan. The U.S. Army Corps of Engineers, Baltimore District (USACE) is updating the Master Plan for the Almond Dam in Steuben County, New York (Enclosure 1). The Almond Lake Dam is a multipurpose water resources project constructed and operated by USACE.

The 2024 Master Plan is intended to serve as a comprehensive land and recreation management plan for the next 15 to 25 years and is needed to update the 1977 Almond Lake Master Plan. The 2024 Master Plan will provide updated guidance for stewardship of natural resources and management for long-term public access to, and use of, the natural resources at Almond Lake, including the land classification of the USACE-managed lands. To comply with the National Environmental Policy Act, an Environmental Assessment is also being prepared as part of this update.

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

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

Thank you for assistance with this project. We ask that your office review the enclosed information and assist us in identifying and assessing the project's effect on historic properties. If you have any questions about the project, please contact Ethan A. Bean at (410) 962-2173 or ethan.a.bean@usace.army.mil.

Sincerely,

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

Enclosure

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

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

March 5, 2024

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 Almond Dam Master Plan. The U.S. Army Corps of Engineers, Baltimore District (USACE) is updating the Master Plan for the Almond Dam in Steuben County, New York (Enclosure 1). The Almond Lake Dam is a multipurpose water resources project constructed and operated by USACE.

The 2024 Master Plan is intended to serve as a comprehensive land and recreation management plan for the next 15 to 25 years and is needed to update the 1977 Almond Lake Master Plan. The 2024 Master Plan will provide updated guidance for stewardship of natural resources and management for long-term public access to, and use of, the natural resources at Almond Lake, including the land classification of the USACE-managed lands. To comply with the National Environmental Policy Act, an Environmental Assessment is also being prepared as part of this update.

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

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

Thank you for assistance with this project. We ask that your office review the enclosed information and assist us in identifying and assessing the project's effect on historic properties. If you have any questions about the project, please contact Ethan A. Bean at (410) 962-2173 or ethan.a.bean@usace.army.mil.

Sincerely,

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

Enclosure

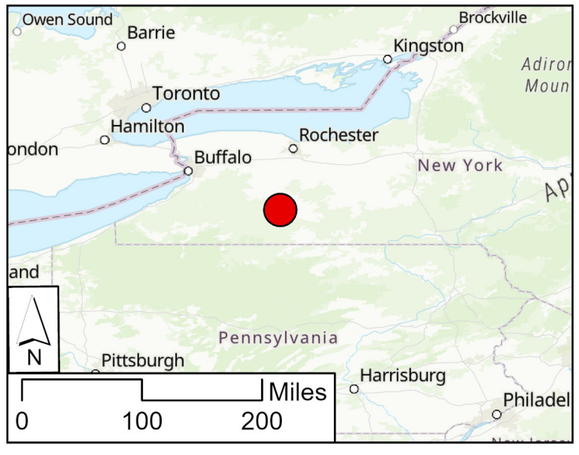
Enclosure

Almond Lake
Master Plan

Site Vicinity

Legend

Almond Study Area



Source: New York State, Maxar, data.pa.gov, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA

0 1,000 2,000 3,000 Feet

N

Mcdonald, Lauren N CIV USARMY CENAB (USA)

From: Joe Stahlman <joe.stahlman@sni.org>
Sent: Wednesday, March 27, 2024 7:49 AM
To: Bean, Ethan A CIV USARMY CENAB (USA)
Cc: Mcdonald, Lauren N CIV USARMY CENAB (USA); Jacquie Crouse
Subject: [Non-DoD Source] RE: Section 106 Review - Almond Lake Master Plan 2024 Update

Mr. Bean,
Thank you for your email. However, I can't answer your request until goes through other channels. I think it is important for you to begin this conversation with Seneca Nation leadership. I suggest an introduction letter sent to President Rickey Armstrong (rick.armstrong@sni.org) and Executive Asst. Ms. Jacquie Crouse (j.crouse@sni.org). Currently, we have over 74 departments and I believe some of those departments may have an interest in Almond Res. along with the THPO office. Next, I want to suggest you reach out to the other Federally recognized Seneca communities, if you haven't already.

Again, thank you for your time.

Joe

Dr. Joe Stahlman
Tribal Historic Preservation Office
Seneca Nation
82 W. Hetzel Street
Salamanca, NY 14779
Phone (716) 945-1760
Joe.Stahlman@sni.org

From: Bean, Ethan A CIV USARMY CENAB (USA) <ETHAN.A.BEAN@usace.army.mil>
Sent: Tuesday, March 5, 2024 1:33 PM
To: Joe Stahlman <joe.stahlman@sni.org>
Cc: Mcdonald, Lauren N CIV USARMY CENAB (USA) <Lauren.N.Mcdonald@usace.army.mil>
Subject: Section 106 Review - Almond Lake Master Plan 2024 Update

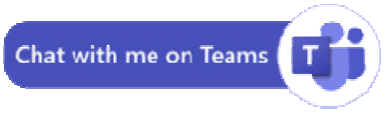
Good afternoon,

Please find attached for your review information regarding the proposed 2024 update to the Almond Lake Master Plan in Steuben County, New York. Please let me know if you have any questions or comments.

Respectfully,
Ethan Bean

Ethan A. Bean, M.S.
Cultural Resources Specialist
History Program Manager
U.S. Army Corps of Engineers
Baltimore District

Work - Desk: (410) 962-2173
Work - Cell: (443) 742-8048
Personal: (765) 716-5828 (*text preferred)*



December 2024