Beltzville Lake Master Plan

Delaware River Basin

Carbon County, Pennsylvania

January 2026

DRAFT REPORT

The Beltzville Lake Master Plan was produced by the U.S. Army Corps of Engineers Southwestern Division (SWD) Regional Planning and Environmental Center (RPEC) for the Philadelphia District (NAP).

EXECUTIVE SUMMARY

Beltzville Lake Master Plan
U.S. Army Corps of Engineers
Prepared by the Southwestern Division
Regional Planning and Environmental Center (RPEC)
January 2026

ES.1 PURPOSE

The Beltzville Lake Master Plan (hereafter Plan or Master Plan) is a complete revision of the 1971 *Beltzville Lake Master Plan* and its supplements. The revision is a framework built collaboratively to guide appropriate stewardship of U.S. Army Corps of Engineers (USACE) administered resources at Beltzville Lake over the next 25 years. The 1971 Master Plan has served well past its intended 25-year planning horizon and does not reflect the growing population around the lake and regional recreation needs.

Beltzville Lake was authorized in 1962 for flood control, water supply and low flow augmentation. Secondary purposes are recreation and water quality control. In addition to these primary missions, the USACE has an inherent mission for environmental stewardship of project lands while working closely with stakeholders and partners to provide regionally important outdoor recreation opportunities.

During the 2026 Master Plan revision, Geographic Information System (GIS) mapping technology was utilized to digitize the maps to show the acres of all fee lands from the 1971 Master Plan as a basis for the 2026 Beltzville Lake Master Plan. Due to this more precise measurement technology, discrepancies between the acreages documented in the 1971 plan and the recalculated acres were found. The 2026 Beltzville Lake Master Plan revision reflects the recalculated acres throughout the document. The acres in both the 1971 and the 2026 Master Plans may differ from the acres on record with the USACE Philadelphia District Real Estate Office or those documented within the Water Control Manual for the Beltzville Lake, which is maintained by the USACE Philadelphia District. Any water control management and real estate studies or transactions should be coordinated with the appropriate USACE offices.

The Master Plan and supporting documentation provide an inventory and analysis of goals, objectives, and recommendations for USACE lands and waters at Beltzville Lake with input from the public, stakeholders, and subject matter experts. The Master Plan is primarily a land use and outdoor recreation strategic plan that does not address the specific authorized purposes of flood risk management or water supply. Although water management is addressed in the 2015 (revised) USACE Water Control Manual for Beltzville Lake, the Master Plan acknowledges that fluctuating water level for flood risk management and water supply can have a dramatic effect on outdoor recreation, especially at boat ramps and swim beaches.

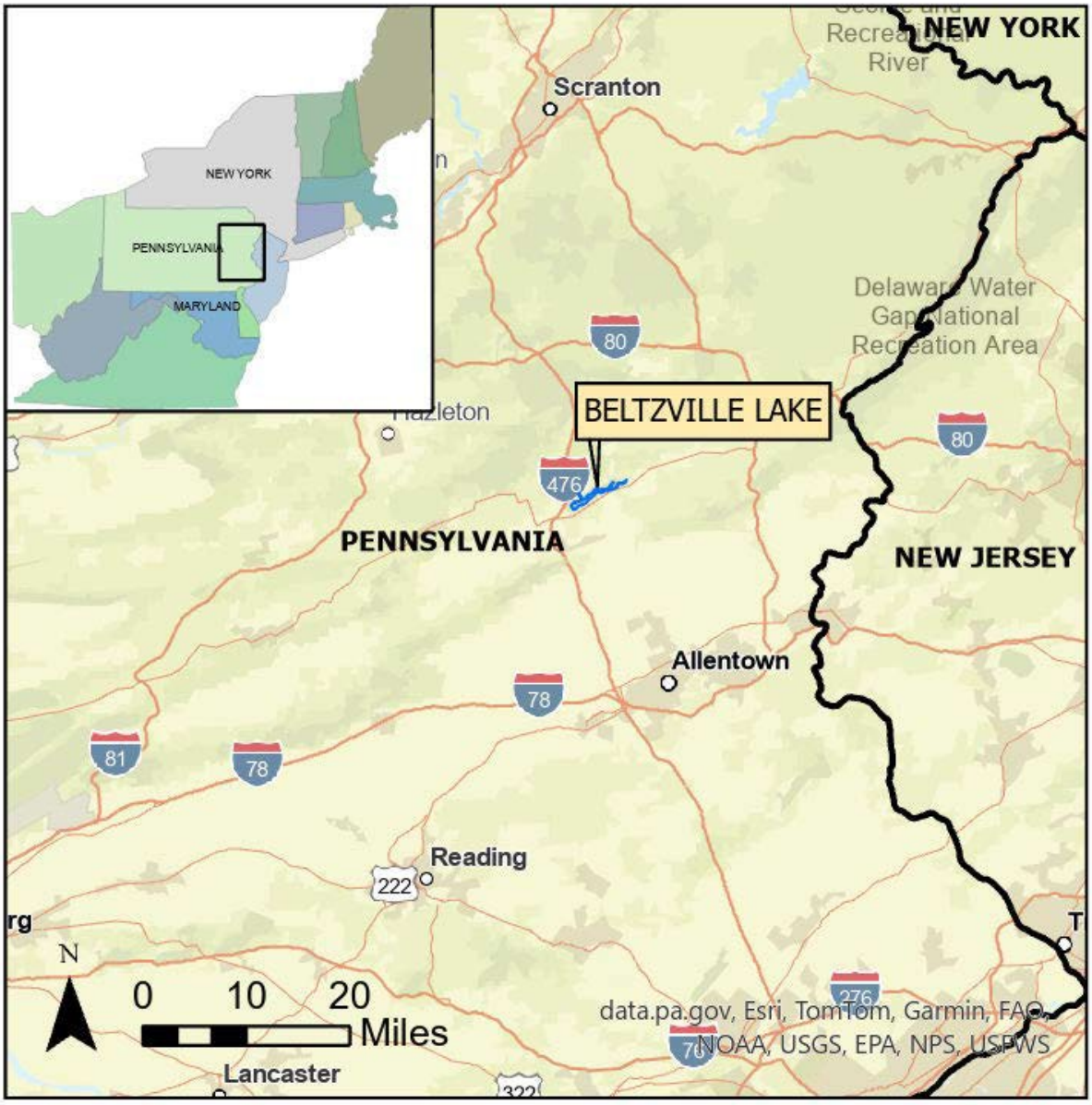

Figure ES.0.1 Vicinity Map of Beltzville Lake

The mapping used for this Master Plan revision uses modern satellite imagery and Geographic Information System (GIS) mapping, resulting in different acreage calculations than that of the 1971 Master Plan. Using GIS measurements, Beltzville Lake has a water surface of 972 acres at the normal recreation pool of 628 feet NGVD29, a shoreline of approximately 21 miles at the top of the conservation pool, and approximately 2,638 acres of federal land above the conservation pool. All elevations in this document are NGVD29 unless noted otherwise.

ES.2 PUBLIC INPUT

To ensure a balance between operational, environmental, and recreational outcomes, USACE obtained both public and agency input toward the Master Plan. An Environmental Assessment (EA) was completed in conjunction with the Master Plan to evaluate the impacts of alternatives and can be found in Appendix B.

On October 10, 2024, a public open house was held at the Towamensing Township Volunteer Fire Company, 105 Firehouse Road, Palmerton, Pennsylvania to inform the public of the intent to revise the Master Plan. The public input period remained open for 30 days from October 10, 2024 to November 9, 2024. At the public information meeting a presentation was given that included the following topics:

- What is a Master Plan?
- What a Master Plan is Not
- Why Revise a Master Plan?
- Overview of the National Environmental Policy Act (NEPA) process
- Master Planning Process
- Instructions for submitting comments

USACE received total of 22 comments for Beltzville Lake. These comments and the USACE response can be found in Appendix E.

A public open house will be held for the Beltzville Lake Draft Master Plan revision. The purpose of this open house will be to provide attendees with information regarding the proposed Master Plan revision as well as to provide them with the opportunity to provide comments on the proposed Beltzville Lake Draft Master Plan. The open house will cover the same topics as the initial public open house. The open house will begin a 30-day comment period where the public and stakeholders can provide comments on the Draft Master Plan. These comments will be reviewed and addressed as the USACE revises a final version of the Master Plan.

ES.3 RECOMMENDATIONS

The following land and water classification changes (detailed in Chapter 8) were a result of the inventory, analysis, synthesis of data, documents, and public and agency input. In general, all USACE land at Beltzville Lake was reclassified either by a change in nomenclature required by regulation or changes needed to identify actual and projected use. Table ES.0.1 illustrates the prior and revised land and water classifications, which includes slight decreases in Project Operations and Wildlife Management. Recreation Lands, a 1971 Master Plan land classification, was eliminated and lands within the Beltzville State Park Lease were reclassified to either Low Density Recreation or High Density Recreation.

Table ES.0.1 Change from 1971 Land and Water Surface Classifications to 2026 Proposed Land and Water Surface Classifications

Prior Land Classifications (1971)	Acres	Proposed Land Classifications (2026)	Acres	Net Difference
Project Operations	340	Project Operations (PO)	282	(58)
Recreation Lands	1,771	High Density Recreation (HDR)	250	(1521)
-	-	Multiple Resource Management Lands (MRML)	0	0
-	-	Low Density Recreation (MRML-LDR)	1,597	1,597
Wildlife Management (MRML-WM)	486	Wildlife Management (MRML-WM)	509	23
Environmentally Sensitive Area (ESA)	-	Environmentally Sensitive Area (ESA)	0	0
LAND TOTAL	**2,597**	**LAND TOTAL**	**2,638**	**41**
Prior Water Surface Classifications (1971)	**Acres**	**Proposed Water Surface Classifications (2026)**	**Acres**	**Net Difference**
Open Recreation	998	Open Recreation	776	(222)
		Restricted	5	5
		No-Wake	191	191
WATER TOTAL	**998**	**WATER TOTAL**	**972**	**(26)**
TOTAL FEE	**3,595**	**TOTAL FEE**	**3,610**	**15**

Acres are approximate based on digitizing the 1971 land and water classification map. Total fee acreage differences from the 1971 totals to the 2026 totals are due to improvements in measurement technology, deposition/siltation, and erosion. Totals also differ due to rounding while adding parcels.

The acreages of the conservation pool and USACE land lying above the conservation pool were measured using satellite imagery and Geographical Information System (GIS) technology. The GIS software allows for more finely tuned measurements and, thus, stated acres may vary from official land acquisition records and acreage figures published in the 1971 Master Plan. Some changes may also be due to erosion and siltation. A more detailed summary of changes and rationale can be found in Chapter 8.

ES.4 PLAN ORGANIZATION

Chapter 1 of the Master Plan presents an overall introduction to Beltzville Lake. Chapter 2 consists of an inventory and analysis of Beltzville Lake and associated land resources. Chapters 3 and 4 lay out management goals, resource objectives, and land classifications. Chapter 5 is the resource management plan that identifies how project lands will be managed for each land use classification. This includes current and

projected overall park facility needs, an analysis of existing and anticipated resource use, and anticipated influences on overall project operation and management. Chapter 6 details special topics that are unique to Beltzville Lake. Chapter 7 identifies the public involvement efforts and stakeholder input gathered for the development of the Master Plan, and Chapter 8 gives a summary of the changes in land classification from the previous Master Plan to the present one. Finally, the appendices include information and supporting documents for this Master Plan revision, including Land Classification and Park Plate Maps (Appendix A).

An Environmental Assessment (EA) was developed with the Master Plan. USACE NEPA Guidance issued 30 June 2026 noted any actions which were ongoing as of this date would continue to use the NEPA guidance at the time the action was started. The EA analyzed alternative management scenarios for Beltzville Lake, in accordance with federal regulations including the National Environmental Policy Act of 1969, as amended (NEPA); regulations of the Council on Environmental Quality and USACE Engineer Regulation 200-2-2: Procedures for Implementing NEPA. The EA is a separate document that informs this Master Plan and can be found in its entirety in Appendix B.

The EA evaluated two alternatives as follows: 1) No Action Alternative, which would continue the use of the 1971 Master Plan, and 2) Proposed Action, the adoption and implementation of this Master Plan. The EA analyzed the potential impact these alternatives would have on the natural, cultural, and human environments. The Master Plan is conceptual and broad in nature, and any action proposed in the Plan that would result in significant disturbance to natural resources or result in significant public interest would require additional NEPA documentation at the time the action takes place.

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CHAPTER 1 – INTRODUCTION

1.1 GENERAL OVERVIEW

Beltzville Lake is located on the Pohopoco Creek, a tributary of the Lehigh River, approximately 5.2 miles above the confluence with the Lehigh River in Carbon and Monroe counties in northeastern Pennsylvania and 3.5 miles east of Weissport, Pennsylvania. The project location is shown on Figure 1.1. The Pohopoco Creek flows into the Lehigh River at approximately river mile 41.1 as established by the United States Geological Survey for the Delaware River Basin Commission. The U.S. Army Corps of Engineers' (USACE) Philadelphia District built Beltzville Dam and continues to operate the project.

The Master Plan is intended to serve as a comprehensive land and recreation management guide with an effective life of approximately 25 years. The focus of the plan is to guide the stewardship of natural and cultural resources and make provision for outdoor recreation facilities and opportunities on federal land associated with Beltzville Lake. The Master Plan identifies conceptual types and levels of activities, but does not include designs, project sites, or estimated costs. All actions carried out by the USACE, other agencies, and individuals granted leases to USACE lands must be consistent with the Master Plan. The Master Plan does not address the flood risk management or water supply purposes of Beltzville Lake. The Philadelphia District first created a Master Plan for the reservoir in 1971. According to the naming convention of the time, the authors named this document Master Plan Design Memorandum No. 18. The 1971 Master Plan has served past its intended planning horizon of 25 years.

National USACE missions associated with water resource development projects may include flood risk management, water supply, water quality, navigation, recreation, environmental stewardship, low flow augmentation, and hydroelectric power generation. Most of these missions serve to protect the built environment and natural resources of a region from the climate extremes of drought and floods. This helps to create a more resilient and sustainable region for the health, welfare, and energy security of its citizens. Mitigation, while not a formal mission at USACE lakes, may be implemented to achieve the stewardship and recreation missions. Maintaining a healthy vegetative cover and native tree cover where ecologically appropriate on Federal lands within the constraints imposed by primary project purposes helps reduce stormwater runoff and soil erosion, mitigates air pollution, and moderates temperatures.

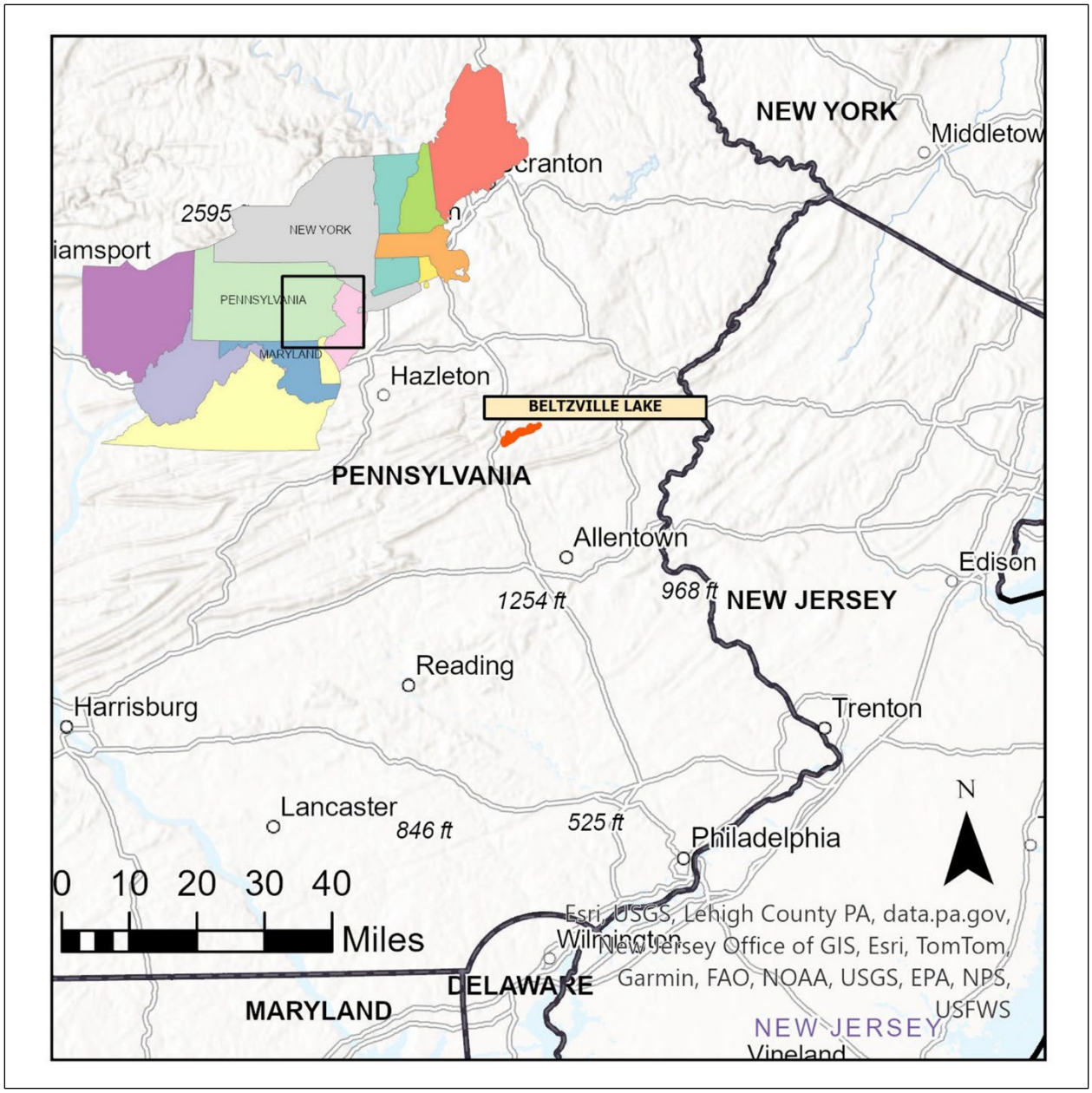

Figure 1.1 Beltzville Lake Vicinity Map

1.2 PROJECT AUTHORIZATION

The Flood Control Act of 1962, Public Law 87-874, United Sates 87th Congress authorized the project for the comprehensive development of the Delaware River Basin in New York, New Jersey, Pennsylvania, and Delaware Beltzville Lake as a unit of the comprehensive plan for development of water resources of the Delaware River Basin as set forth in House Document No. 522, 87th Congress, 2d Session.

1.3 PROJECT PURPOSE

Beltzville Lake was constructed by the U.S. Army Corps of Engineers in 1971. The multi-purpose project was authorized by Congress primarily for flood risk management, water supply, and low flow augmentation; and authorized secondarily for water quality and recreation purposes. The Pennsylvania Department of Conservation & Natural Resources manages the 3,002-acre Beltzville State Park surrounding the lake, which attracts numerous visitors each year. The dam is located on Pohopoco Creek 5.2 miles from its confluence with the Lehigh River and 3.5 miles east of Weissport, Pennsylvania. Beltzville Dam operates as a system in conjunction with Francis E. Walter Dam, located in White Haven, to reduce flooding in the downstream communities along the Lehigh River. Since its construction in 1971, the dam has prevented more than $77 million in flood damages.

In addition to these missions, the USACE has an inherent mission for environmental stewardship of project lands while working closely with stakeholders and partners to provide regionally important outdoor recreation opportunities. Other laws, including but not limited to Public Law 91-190, National Environmental Policy Act of 1969 (NEPA) and Public Law 86-717, Forest Cover Act, place emphasis on the environmental stewardship of Federal lands and USACE-administered Federal lands, respectively.

1.4 PURPOSE AND SCOPE OF MASTER PLAN

In accordance with Engineering Regulation (ER) 1130-2-550, Recreation Operations and Maintenance Policies, Change 07, dated 30 January 2013 and Engineering Pamphlet (EP) 1130-2-550, Recreation Operations and Maintenance Guidance and Procedures, Change 05, dated 30 January 2013, most USACE water resources development projects having a federally owned land base require a Master Plan. The Master Plan works in tandem with the Operational Management Plan (OMP), which is the task-oriented implementation tool for the resource objectives and development needs identified in the Master Plan. This revision of the Master Plan aims to bring the Master Plan up to date to reflect current ecological, socio-demographic, and outdoor recreation trends that are impacting the lake, as well as those anticipated to occur within the next 25 years.

The Beltzville Lake Master Plan (hereafter Master Plan) is the strategic land use management document that guides the efficient, cost-effective, comprehensive management, development, and use of recreation, natural resources, and cultural resources throughout the life of the Beltzville Lake project. It is a vital tool for responsible stewardship and sustainability of the project's natural and cultural resources for the benefit of present and future generations. The Master Plan guides and articulates USACE responsibilities pursuant to federal laws to preserve, conserve, restore, maintain, manage, and develop the land, water, and associated resources. It is a dynamic and flexible tool designed to address changing conditions. The Master Plan focuses on carefully crafted resource-specific goals and objectives. It ensures that equal

attention is given to the economy, quality, and needs in the management of resources and facilities, and that goals and objectives are accomplished at an appropriate scale.

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. With a generalized conceptual framework, the process focuses on the following four primary components:

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

It is important to note what the Master Plan does not address. The Master Plan does not address details of design, management and administration, and implementation. In addition, the Master Plan does not address the specifics of regional water quality, shoreline management (a term used to describe primarily vegetation modification or permits by neighboring landowners), or water level management, nor does it address the operation and maintenance of prime project operations facilities such as the dam embankment, gate control outlet, and spillway. Additionally, the Master Plan does not address the flood control, water supply, and low flow augmentation purposes of Beltzville Lake with respect to management of the water level in the lake.

The previous Master Plan was sufficient for prior land use planning and management but changes in outdoor recreation trends, regional land use, population, current legislative requirements, and USACE management policy have occurred over the past decades. Additionally, factors such as increasing fragmentation of wildlife habitat, national policies related to land management, regional changes in climate, and growing demand for recreational access and protection of natural and cultural resources affect Beltzville Lake and the region in general. In response to these escalating pressures and trends, USACE is implementing and adopting a full revision of the 1971 Beltzville Lake Master Plan. The Master Plan revision will update land classifications and include new resource management goals and objectives.

1.5 BRIEF WATERSHED AND PROJECT DESCRIPTION

The watershed boundary above the Beltzville Lake and Dam Project contains a drainage area of 96.3 square miles. The controlled drainage area above the damsite, exclusive of the area controlled by the Bethlehem water supply reservoirs, is 74.1 square miles. The Pohopoco Creek drains 111 square miles of the 1,370 square miles drained by the Lehigh River Basin. The watershed above the dam is approximately 8.4 miles wide and 15.4 miles long. The slope of the Pohopoco Creek varies throughout its reach from above 310 feet per mile to about 5 feet per mile. The watershed streambed elevation ranges from more than 2,000

ft. NGVD29 at the headwaters to 430 ft. NGVD29 near the mouth. The watershed includes all land classification types from rolling farmland to sheer rock faces. The floodplain in the reservoir area has been developed as a recreational and farming area.

The dam is an earthfill embankment 4,560 feet long, a maximum of about 170 feet high and approximately a quarter of a mile wide at the widest point. The embankment consists of essentially five different types of material. The central core is composed of an impervious fill which extends into the embankment foundation. A section of semi-impervious random fill is placed on both sides of the impervious core. Adjacent to the downstream side of this semi-impervious random fill and along the foundation is a thin section of pervious select fill. A protective layer of riprap is placed along the entire upstream face of the dam. The downstream toe of the embankment is composed of rock. The top of the dam is 30 feet wide at elevation 672.0 ft. NGVD29.

The spillway is an ungated, excavated, chute-type channel located on the reservoir rim about 320 feet upstream from the right end of the dam. The control section for the spillway is essentially a broad crested weir consisting of a concrete slab 100 feet wide by 275 feet long. The weir crest is at elevation 651.0 ft. NGVD29. The spillway chute is 275 feet wide from the spillway crest throughout its entire length. The sides of the spillway channel are excavated to slopes of two vertical to one horizontal in rock cuts, and one vertical to one and one-half horizontal in the partly weathered shale, glacial drift, and residual materials above the firm rock. The spillway outlet channel will discharge through a natural saddle into Sawmill Run and the Pohopoco Creek. Paving in the chute is provided for approximately 200 feet to protect the poor rock in the bottom of the spillway. Walls are also provided in the spillway chute where the channel bottom is not in firm rock. The spillway is designed for a maximum spillway flow of 47,000 cfs. This discharge will occur when the reservoir pool reaches elevation 667.1 ft. NGVD29 resulting in a surcharge of 16.1 feet above the spillway crest.

The outlet works are located near the left abutment and consists of an open cut intake approach channel, a concrete intake control tower and service bridge, a concrete conduit, a stilling basin and an open cut outlet channel.

Based on a 2024 capacity study conducted by the Philadelphia District, when at the top of the normal conservation pool (628.0 ft NGVD29), Beltzville Lake covers approximately 971 surface acres and has a capacity of 42,761 acre-feet. At the top of flood control pool (651.0 ft NGVD29), Beltzville Lake covers approximately 1,415 surface acres and has a capacity of 70,128 acre-feet. The lake has approximately 21 miles of shoreline.

1.6 PROJECT ACCESS

Beltzville Lake is located 5.2 miles above the mouth of the Pohopoco Creek and 3.5 miles east of Weissport, Pennsylvania. The eastern half of the project area is in Franklin Township while the western half is in Towamensing Township. Interstate 476, the Northeast Extension of the Pennsylvania Turnpike, is approximately 2 miles to the southwest of the project area entrance, while U.S. Route 209 skirts the southern boundary of the project. Beltzville Lake is approximately 60 air miles north of Philadelphia, Pennsylvania.

1.7 PRIOR DESIGN MEMORANDA AND PLANNING REPORTS

Design Memoranda (DM) and Project Reports approved and set forth design and development plans for all aspects of the project including the prime flood risk management facilities, real estate acquisition, road and utility relocations, reservoir clearing, and the master plan for recreation development and land management prior to 1999, when the use of DMs was terminated. A list of the DMs for Beltzville Lake is listed in Table 1.1 and the manuals and reports for Beltzville Lake is listed in Table 1.2.

Table 1.1 Beltzville Lake Design Memoranda

DM No.	Design Memoranda Title	Date Approved
1	Hydrology and Hydraulics	09 Jul 1964
2	Site Selection	08 Apr 1964
3	General	04 Nov 1964
3 (Supp No 1)	General	30 Jun 1966
4 A	Draft of the Preliminary Master Plan	25 Mar 1965 (1)
4	Preliminary Master Plan	25 Mar 1965
5	Real Estate	26 Jul 1965
6	Site Geology	29 Mar 1965
7	Concrete Aggregates Investigations	17 Feb 1966
8	Highway Relocation	07 Jan 1966
8 (Supp No 1)	Highway Relocations Township Road T464	05 Feb 1968
9	Utility Relocations	30 Dec 65
9 (Supp No 1)	Utility Relocations Tidewater Pipe Company Ltd.	13 Oct 67
10	Outlet Works	Revised
10 (Revised)	Outlet Works	14 Oct 66
11	Embankment and Foundations	17 May 66
11 (Supp No 1)	Embankment and Foundations	18 Apr 67
12	Spillway	25 May 66
13	Access Roads and Operational Facilities	02 Sep 66
14	Water Supply Regulation, Instrumentation and Sedimentation	18 May 67
15	Reservoir Clearing and Fish and Wildlife Facilities	17 Apr 68
16	Public Use Plan	19 Jun 69
17	Instrumentation	07 Jul 70
18	Master Plan	16 Mar 72
18 A	Recreation-Resources Management Appendices to the Master Plan	10 Jul 74

(1) Draft of Preliminary Master Plan was submitted on 30 March 1964.

Table 1.2 Manuals and Reports for Beltzville Lake

Subject	Date
Water Control Manual	Feb 72
Operations and Maintenance (O&M) Manual Rev 17 Jan 76	28 Jun 72
Reservoir Regulation Manual	28 Jun 72
Water Control Manual (Revised)	Apr 85
Dam Safety Plan	Sept 89
Water Control Manual (Revised)	Jun 96
Water Control Manual (Revised)	Dec 15
Beltzville Lake Capacity Study Data	2024
Emergency Action Plan	Apr 23
Interim Risk Reduction Measures Plan	Oct 2014

1.8 PERTINENT PROJECT INFORMATION

Table 1.3 provides general pertinent information for Beltzville Lake. Table 1.4 provides pertinent data regarding key reservoir elevations and storage capacity at Beltzville Lake.

Table 1.3 General Pertinent Information for Beltzville Lake

Location	
Basin	Lehigh River
Stream	Pohopoco Creek
River Mile	5.2 miles upstream from the confluence with the Lehigh River at Parryville, PA
County	Carbon and Monroe
State	Pennsylvania
Drainage Area	
Above Dam	96.3 square miles (One inch of run-off equals 5,136 acre-feet.)
Dam	
Type	Earthfill embankment – impervious core with random fill
Length	4,560 feet
Height	170 feet
Top Width	30 feet
Spillway	
Type	Uncontrolled, open cut, partially lined, remote through right abutment with concrete still at crest

Location	
Crest Elevation	651.0 ft. NGVD29
Width	275 feet
Design Discharge	47,000 Cubic Feet per Second (CFS)
Real Estate Acquisition	
Fee Purchase	Elevation 651.0 ft NGVD29
Flowage Easement	Up to elevations 656.0 NGVD29

(Source: Beltzville Lake and Dam Water Control Manual revised December 2015)

Table 1.4 Pertinent Data for Beltzville Lake

	Elevation-Area-Capacity Data				
Reservoir Feature	**Elevation (ft. NGVD29)**	**Surface Area (acres)**	**(acre-feet)**	**(inches of runoff)**	**(billion gallons)**
Streambed	489	0	0	0	0
Top of Sediment Reserve	537	113	1,515	0.29	0.49
Top of Normal Conservation Pool	628	971	42,761	8.33	13.9
Top of Flood Control Pool (Spillway Crest)	651	1,415	70,128	13.65	22.9
Maximum Surcharge (Design Criteria)	667	1,730	95,264	18.55	31.0
Top of Dam	672.0	1,840	104,166	20.29	33.9

(Source: Beltzville Lake and Dam Capacity Study, 2024)

CHAPTER 2 – PROJECT SETTING AND FACTORS INFLUENCING MANAGEMENT AND DEVELOPMENT

2.1 HYDROLOGY

2.1.1 Surface Water

Surface waters are categorized by hydrologic units. Hydrologic units are classified by the United States Geologic Survey (USGS) using a Hydrologic Units Code (HUC) system. The units are classified from largest HUC with a two-digit region (i.e., the Mid-Atlantic Region), encompassing the largest area, to a twelve-digit sub-watershed HUC. Beltzville Lake is classified from its HUC 2 region to HUC 12 sub-watersheds as follows:

- 02 (HUC 2: Region) – Mid Atlantic Region
- 0204 (HUC 4: Sub-region) – Delaware-Mid Atlantic Coastal
- 020401 (HUC 6: Basin) – Upper Delaware
- 02040106 (HUC 8: Sub Basin) – Lehigh
- 0204010604 (HUC 10: Watershed) – Pohopoco Creek
- 020401060404 (HUC 12: Sub-Watershed) - Beltzville Lake-Pohopoco Creek
- 020401060403 (HUC 12: Sub-Watershed) – Wild Creek

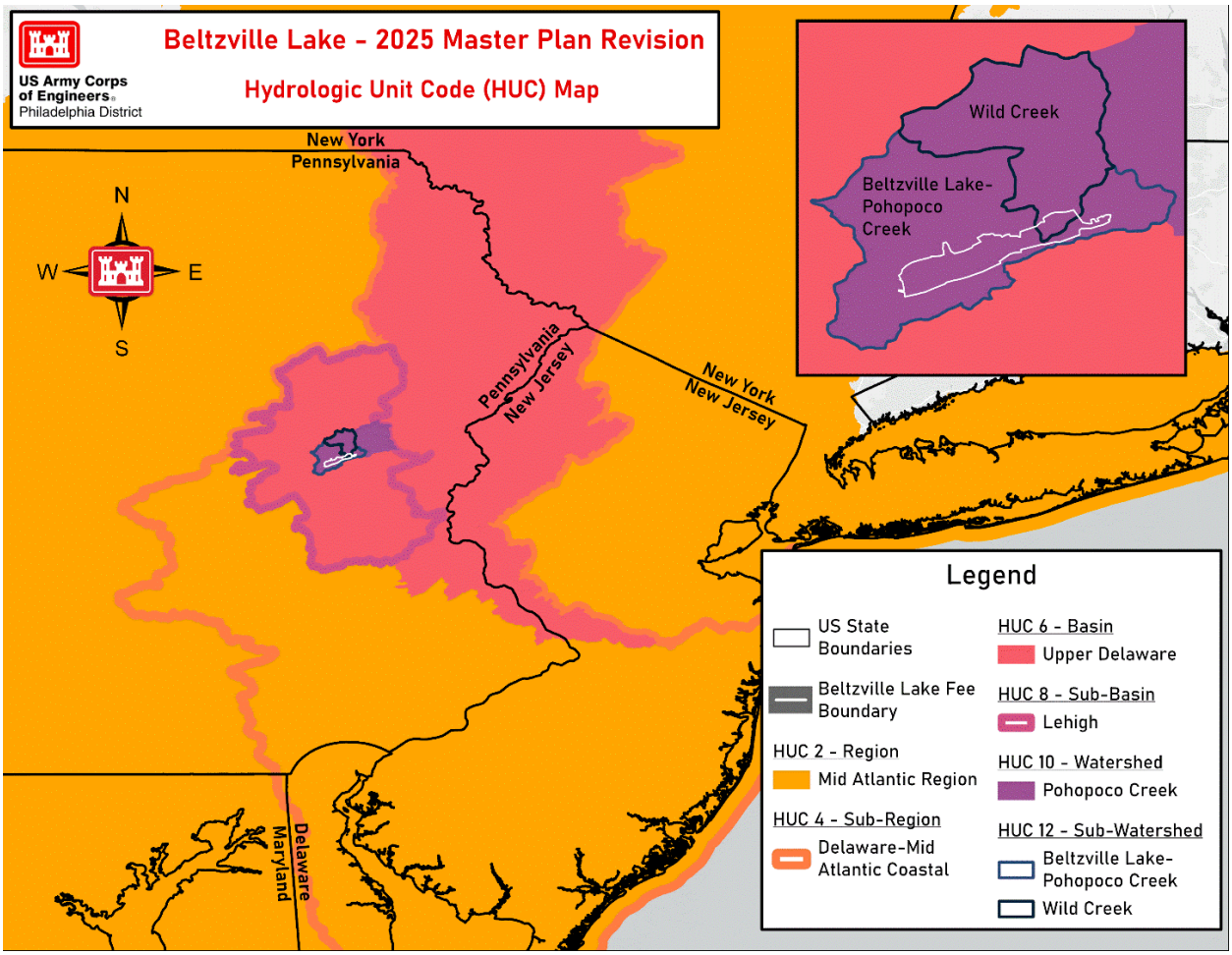

Figure 2.1 Hydrology Map for Beltzville Lake and Surrounding Areas

2.1.2 Ground Water

Beltzville Lake is located near the eastern edge of Pennsylvania atop the Valley and Ridge aquifers, which comprise the main sources of water for the region. This aquifer system generally consists of permeable rocks folded between alternating ridges and valleys of Paleozoic sediment formations (USGS, 1997). Within Pennsylvania, productive aquifer formations consist of either carbonate-rocks from the Cambrian to Devonian geological system or sandstone rocks dating from the Ordovician, Devonian, Mississippi, and Pennsylvania geological systems. The alternating geological sequences of valleys and ridges within the aquifer system results in highly productive aquifers with high flow and interconnectivity, as groundwater can easily move between faults, fractures, and gaps between rock layers. Additionally, the circulation of slightly acidic groundwater has partially dissolved rocks over time, providing even more porosity and groundwater interconnectivity.

Precipitation is easily captured between ridges throughout the area due to large amounts of colluvium (loose accumulations of rock and soil debris) found in between ridges (USGS, 1997). These colluvium wedges are highly permeable and capture precipitation as it flows down a ridge, providing high amounts of aquifer recharge

throughout the region. Valley floors throughout the aquifer system are also highly permeable and provide a significant source of aquifer recharge. Springs are characteristic of the region and are typically found along geological ridges (anticlines), where groundwater out of the ridge and down its slope.

2.1.3 Bathymetric Surveys

Surveys were conducted in 2024 using a deep-water bathymetry system by USACE staff, Operations Division. This was performed to support the flood risk management, water supply, water quality, and recreation missions. The surface area of the lake at normal conservation pool elevation 628.00 feet NGVD29 is 972 acres. The reservoir stores approximately 13.9 billion gallons of water at this elevation.

2.2 SEDIMENTATION AND SHORELINE EROSION

Maintenance of a relatively stable permanent pool has helped to minimize shoreline erosion, thereby contributing to overall good water quality conditions. Erosion/runoff control will be an integral part of resource management activities, such as harvesting operations, access road construction and trail development. Control measures, including proper layout, improved drainage, minimum vegetation removal, erosion bars and seeding, will be accomplished in all management and contract work before jobs are completed. Results of erosion control efforts will be monitored to ensure erosion is controlled. Frequent inspection will be made of problem areas after erosion has been controlled and periodic maintenance will be scheduled as needed to prevent degradation.

2.3 WATER QUALITY

A discussion of impaired waters connected to Beltzville Lake is included in the EA document, located in Appendix B, based on the EPA-approved 2024 Pennsylvania Department of Environmental Protection (PADEP) Integrated Report and 303(d) list (PDEP, 2024). The Clean Water Act (CWA) requires states to adopt water quality standards designating beneficial uses of the state's waters and setting criteria designed to protect those uses. States submit their standards to the U.S. Environmental Protection Agency (USEPA) for approval. The CWA Section 303(d) requires each state to prepare a list of impaired water bodies that do not meet state water quality standards. States, or the USEPA, must develop and the USEPA must approve a Total Maximum Daily Load (TMDL) for each water body on the state's list of impaired water bodies, also known as the 303(d) list. A TMDL is a clean water plan that uses a science-based approach to reduce pollutant loading to water bodies so that water quality standards can be met. The TMDL also includes a Water Quality Management Plan, which identifies the actions that must be taken in order to meet the TMDL and the people responsible for implementing these actions.

The 2024 303(d) list categorizes impaired waterbodies based on whether they support beneficial use categories such as water contact recreation, irrigation, water supply, etc. There are 5 main categories for impaired waterbodies:

- Category 1: All beneficial uses are attained by the waterbody.

- Category 2: Waters where some but not all uses are met. The assessment status of the remaining uses may be unknown because data are insufficient to assess the water, or it may be impaired.
- Category 3: Waters for which there are insufficient or no data to determine if any uses are met.
- Category 4: Available data and/or information indicate that at least one designated use is not being supported but a TMDL is not needed.
    - Subcategory 4a: Waters impaired for one or more uses, not needing a TMDL because a TMDL has been completed.
    - Subcategory 4b: Waters impaired for one or more uses, not needing a TMDL because uses are expected to be attained within a reasonable timeframe.
    - Subcategory 4c: Waters impaired for one or more uses, not needing a TMDL because the impairment is not caused by a pollutant.
- Category 5: Waters impaired for one or more uses by a pollutant that requires the development of a TMDL
    - Subcategory 5alt: Waters impaired for one or more uses by a pollutant that are selected for alternative restoration implementation. A TMDL is still required if the alternative is not successful.

Table 2.1 summarizes the water quality information for Beltzville Lake reported in the in the 2024 303(d) list.

Photo 2-1 Beltzville Lake (USACE)

Table 2.1 2024 PADEP 303(d) List: Beltzville Lake

Assessed Use Category	Assessment Determination	Impairment Category	Designated Use	Impairment Cause	Impairment Source	Year Listed
Potable Water Supply	Supporting	2	Cold Water Fishes	-	-	-

Assessed Use Category	Assessment Determination	Impairment Category	Designated Use	Impairment Cause	Impairment Source	Year Listed
Recreation	Supporting	2	Cold Water Fishes	-	-	-
Fish Consumption	Impaired	5	Cold Water Fishes	Mercury	Atmospheric Deposition	2002

Source: PADEP 2024

2.4 AIR QUALITY AND GREENHOUSE GASES

The Clean Air Act (CAA) establishes the framework for modern air pollution control and delegates primary responsibility for regulating air quality to the States, with oversight by the U.S. Environmental Protection Agency (EPA). The EPA develops rules and regulations to preserve and improve air quality as minimum requirements of the CAA, and delegates specific responsibilities to state and local agencies. Seven specific pollutants (called criteria pollutants) have been identified to be of concern with respect to the health and welfare of the public. The criteria pollutants are carbon monoxide (CO), sulfur dioxide (SO2), nitrogen dioxide (NO2), ozone (O3), particulate matter 10 micrometers or less in aerodynamic diameter (PM10), particulate matter 2.5 micrometers or less in aerodynamic diameter (PM2.5), and lead (Pb). The EPA has established the National Ambient Air Quality Standards (NAAQS) for these pollutants. Attainment zones are areas where the NAAQS have been met. The EPA publishes Air Quality Statistics report each year that compares data on these criteria pollutants to the national standards. As of June 2025, Carbon County is listed as a marginal non-attainment area under the 2008 Ozone Standard, specifically the Allentown-Bethlehem-Easton metropolitan area (EPA, 2025B). The Allentown-Bethlehem-Easton metropolitan area is approximately 30 miles south of Beltzville Lake. No other areas within Carbon County have a non-attainment status under the current NAAQS standards.

A General Conformity determination is not required for the 2026 MP since it would not contribute or produce any emissions that would equal or exceed the de minimis thresholds defined by the EPA for non-attainment areas (40 CFR §93.153).

2.4.1 Greenhouse Gases

The EPA Facility Level Information on Greenhouse gases Tool (FLIGHT) provides data on large emitters of Greenhouse Gas (GHG). EPA records show that there are 2 GHG contributors within Carbon County, PA (EPA, 2023). Both facilities reported by the EPA FLIGHT are described in Table 2.3. Emissions are reported by the EPA in metric tons of Carbon Dioxide (CO_2) equivalent (mt per CO_2e). The provided data is from the most recent data year in the FLIGHT tool, which is 2023.

Table 2.2 EPA Reported GHG Contributor Facilities (EPA, 2023)

Facility Name	Facility Location (City)	2023 EPA Reported Emissions (mt per CO_2e)	Gases Emitted[1]	Source(s) of Emissions
Befeza Zinc US INC	Palmerton	105,609	CO_2, CH_4, N_2O	Stationary Combustion, Zinc Production
Panther Creek Energy Facility	Nesquehoning	760,639	CO_2, CH_4, N_2O	Stationary Combustion

1: CO_2 = Carbon Dioxide; CH_4 = Methane; N_2O = Nitrous Oxide

The general operations and recreation facilities associated with Beltzville Lake do not approach the 2023 proposed reportable limits to the EPA's Air Emissions Reporting Requirements (88 FR 54118 – Appendix A to Subpart A).

2.5 LOCAL AND REGIONAL CLIMATE

2.5.1 Climate

The state of Pennsylvania primarily has a humid continental climate with some areas classified as a hot summer humid continental climate and others as a warm summer continental climate, Köppen climate types Dfa and Dfb, respectively (Peel et al., 2007). The humid continental climate is classified as having temperatures during the coldest months below 0 degrees Celsius (°C) and there must be at least four months where the average temperatures are at or above 10°C. Both Köppen secondary classifications for Pennsylvania (f) indicate that there is not a dry season as humidity and precipitation are high year-round. The hot summer subtype is differentiated from the warm summer subtype by the warmest month average temperatures, as the hot summer subtype has an average temperature during its warmest months of at least 22°C and the warm summer subtype has average warmest months below 22°C, but at least four months average above 10°C.

Local climate data for Beltzville Lake from the Allentown Lehigh Valley International Airport weather station is summarized in Table 2.2.

Table 2.3 2020-2025 Monthly Climate Averages; Allentown Lehigh Valley

Month	Average Temperature (°F)	Average Minimum Temperature (°F)	Average Maximum Temperature (°F)	Average Precipitation (in.)
January	29.31	23.6	39	3.05
February	31.73	24.2	43.3	2.96
March	40.75	32.7	54.2	3.5
April	51.46	40.6	62.7	3.79

Month	Average Temperature (°F)	Average Minimum Temperature (°F)	Average Maximum Temperature (°F)	Average Precipitation (in.)
May	61.45	49.8	72.2	4.03
June	70.15	58.5	81.6	4.66
July	75.01	65.6	86.7	5.4
August	73.22	63.6	84	5.03
September	65.98	55	75.9	4.76
October	54.58	44.3	66.4	4.02
November	43.44	33	54.7	3.09
December	34.4	27.1	43.8	4.17

2.6 TOPOGRAPHY, GEOLOGY, AND SOILS

2.6.1 Topography

Beltzville Lake is located within the Northern Ridge and Valley Ecological Section, as classified by the U.S. Forest Service (USFS). The Northern Ridge and Valley Ecological Section is characterized by a series of parallel, southwest to northeast trending, narrow valleys and mountain ranges created by differential erosion of tightly folded, intensely faulted bedrock (USFS, 1996). The eastern boundary in the Ecological Section is the Great Valley low land; the western boundary is a steep, high ridge, the Allegheny Front. A notable but very minor landform within the Ecological Section is anthropogenic: lands that have been strip-mined exhibit hummocky or gouged topography. Elevation throughout the Ecological Section ranges from 300 to 4,000 ft.; Local relief is 500 to 1,500 ft.

2.6.2 Geology

Geological information for Beltzville Lake and the Ecological Section it is located within is found in the USFS's *Ecological Subregions of the United States*. A veneer of unconsolidated materials overlies most bedrock: residuum on flat and gently sloping uplands, colluvium on slopes, and alluvium in valley bottoms. Shale, siltstone, sandstone, chert, and carbonates form bedrock in the Section. Ordovician and Silurian units dominate the northern part of the Section, with some Devonian, Mississippian, and Pennsylvanian units (including coal) exposed in the larger synclines, and Cambrian limestone exposed in a few anticlines. The southern part is dominated by Devonian units with lesser amounts of Silurian and Ordovician rocks in some anticlines, and Mississippian and Pennsylvanian rocks in some synclines. Cambrian rocks show up along a few major thrust faults. Sandstone, chert, and some of the tougher carbonates hold up most of the upland portions of the Section. Weaker carbonates and shale underlie most valleys.

2.6.3 Soils and Prime Farmland

A soil survey by the Natural Resource Conservation Service (NRCS) shows there are 8 possible general classifications (Class I through Class VIII), but only 6 occur at Beltzville Lake. The erosion hazards and plant cultivation limitations for use increase as the class number increases. Class I has few limitations, whereas Class VIII has many. The soil capability class data for project lands is provided in Table 2.4 and mapped in Figure 2.2. This data is compiled by the NRCS and is a standard component of natural resources inventories on USACE lands.

A general description of the soils and land capability by classification are described below. Detailed information on all soil types surrounding Beltzville is available on websites maintained by the NRCS, U.S. Department of Agriculture (USDA).

- Class I soils have slight limitations that restrict their use.
- Class II soils have moderate limitations that reduce the choice of plants or require moderate conservation practices.
- Class III soils have severe limitations that reduce the choice of plants or require special conservation practices, or both.
- Class IV soils have very severe limitations that restrict the choice of plants or require very careful management, or both.
- Class V soils have little or no hazard of erosion but have other limitations, impractical to remove, that limit their use mainly to pasture, range, forestland, or wildlife food and cover.
- Class VI soils have severe limitations that make them generally unsuited to cultivation and that limit their use mainly to pasture, range, forestland, or wildlife food and cover.
- Class VII soils have very severe limitations that make them unsuited to cultivation and that restrict their use mainly to grazing, forestland, or wildlife.
- Class VIII soils and miscellaneous areas have limitations that preclude their use for commercial plant production and limit their use to recreation, wildlife, or Water Supply or for aesthetic purposes

Table 2.4 Soil Capability Classes at Beltzville Lake (NCRS, 2025)

Soil Capability Class	Acreage
Class I	95.9
Class II	881.5
Class III	843.4
Class IV	229.6
Class V	0
Class VI	71.2
Class VII	480.6
Class VIII	0

(Source: NRI Level I Inventory)

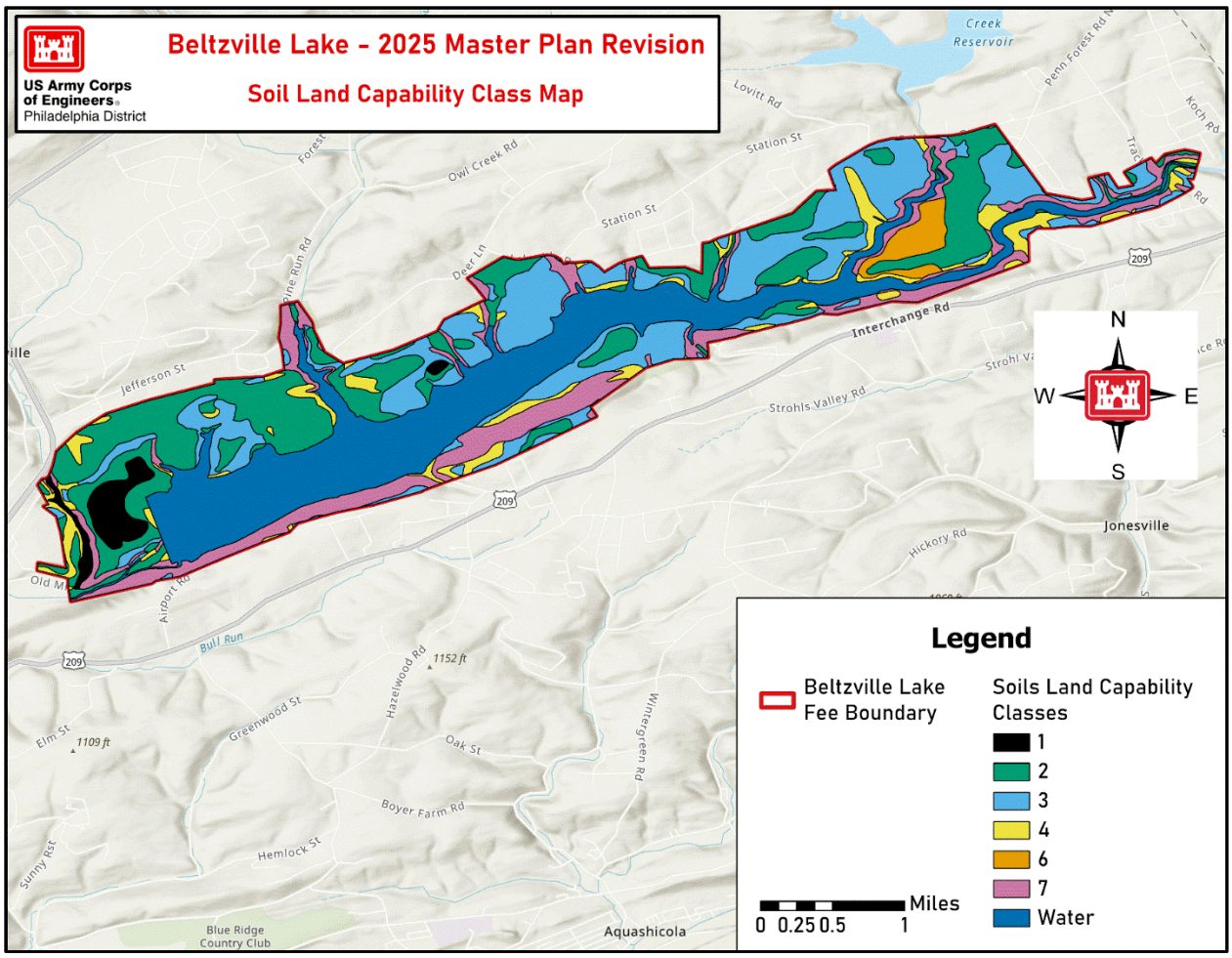

Figure 2.2 Soil Classification

Section 1541(b) of the Farmland Protection Policy Act (FPPA) of 1980 and 1995, 7 U.S.C. 4202(b) requires federal and state agencies, as well as projects funded with federal funds, to (a) use the criteria to identify and take into account the adverse effects of their programs on the preservation of farmland, (b) consider alternative actions, as appropriate, that could lessen adverse effects, and (c) ensure that their programs, to the extent practicable, are compatible with state, units of local government, and private programs and policies to protect farmland. Prime Farmlands and Farmlands of Statewide Importance at Beltzville Lake are described in Table 2.5 and are mapped in Figure 2.3.

Table 2.5 Prime Farmlands and Farmlands of Statewide Importance Identified at Beltzville Lake (NRCS, 2025)

Soil Series*	Farmland Classification	Acreage
Allenwood gravelly loam and silt loam, 0 to 3 percent slopes	All areas are Prime Farmland	76.33
Allenwood gravelly loam and silt loam, 3 to 8 percent slopes, moderately eroded	All areas are Prime Farmland	251.58

Soil Series*	Farmland Classification	Acreage
Comly silt loam, 3 to 8 percent slopes, moderately eroded	All areas are Prime Farmland	45.33
Middlebury silt loam, 0 to 3 percent slopes	All areas are Prime Farmland	15.51
Middlebury silt loam, 3 to 8 percent slopes	All areas are Prime Farmland	27.85
Watson gravelly silt loam, 0 to 8 percent slopes, moderately eroded	All areas are Prime Farmland	26.09
Allenwood gravelly loam and silt loam, 8 to 15 percent slopes, moderately eroded	Farmland of Statewide Importance	21.26
Berks-Weikert channery silt loam, 0 to 3 percent slopes	Farmland of Statewide Importance	79.76
Berks-Weikert channery silt loam, 3 to 8 percent slopes	Farmland of Statewide Importance	480.37
Berks-Weikert channery silt loam, 8 to 15 percent slopes	Farmland of Statewide Importance	320.52
Hartleton channery silt loam, 0 to 3 percent slopes	Farmland of Statewide Importance	90.05
Hartleton channery silt loam, 3 to 8 percent slopes, moderately eroded	Farmland of Statewide Importance	345.3
Hartleton channery silt loam, 8 to 15 percent slopes, moderately eroded	Farmland of Statewide Importance	20.99
Holly silt loam	Farmland of Statewide Importance	0.22

*This table does not include any soil series found at Beltzville Lake that were not reported as Prime Farmland or Farmland of Statewide Importance, as well as open water.

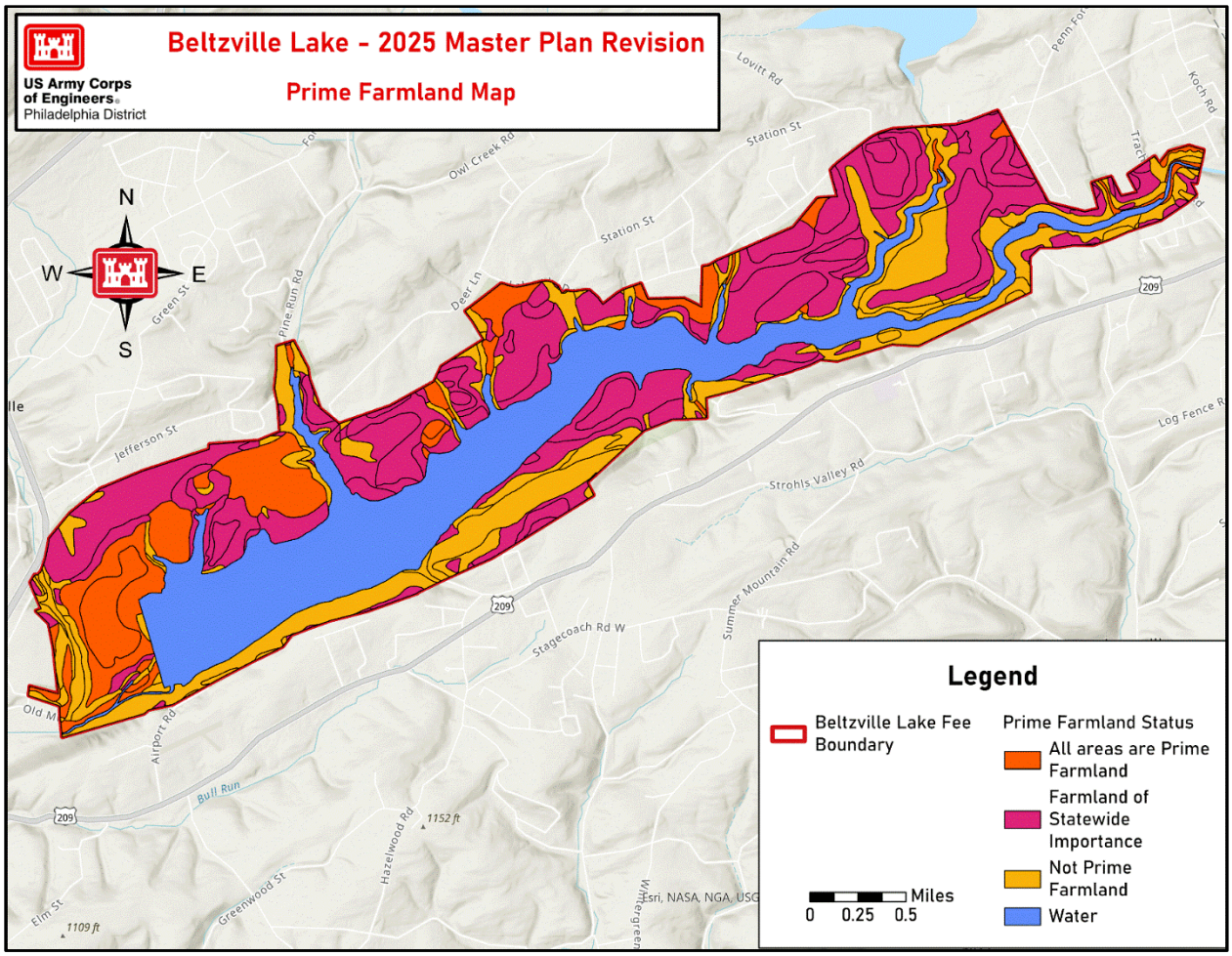

Figure 2.3 Prime Farmland at Beltzville Lake

2.7 NATURAL RESOURCE ANALYSIS

2.7.1 Fish and Wildlife Resources

Common fish and wildlife occurring at Beltzville Lake are typical of Carbon County and Southeastern Pennsylvania. Table 2.6, Table 2.7, and Table 2.8 provide lists of common Pennsylvania mammals, ectotherms, and bird species occurring or potentially occurring at Beltzville Lake, respectively (PA-TNC, 2005).

Table 2.6 Common Mammal Species Potentially Occurring at the Beltzville Lake Project Area

Common Name / Scientific Name	Common Name / Scientific Name
Allegheny woodrat / *Neotoma magister*	Mink / *Mustela vision*
Beaver / *Castor canadensis*	Muskrat / *Ondatra zibethicus*
Big Brown Bat / *Eptesicus fuscus*	New England cottontail / *Sylvilagus transitionalis*

Common Name / Scientific Name	Common Name / Scientific Name
Black Bear / *Ursus americanus*	Northern flying squirrel / *Glaucomys sabrinus*
Bobcat / *Felis rufus*	Northern short-tailed shrew / *Blarina brevicauda*
Deer mouse / *Peromyscus maniculatus*	Norway rat / *Rattus norvegicus*
Eastern chipmunk / *Tamias straitus*	Pine vole / *Microtus pinetorum*
Eastern cottontail / *Sylvilagus floridanus*	Porcupine / *Erethizon dorsatum*
Eastern coyote / *Canis latrans*	Pgymy shrew / *Sorex hoyi*
Eastern mole / *Scalopus aquaticus*	Raccoon / *Procyon lotor*
Eastern pipistrelle / *Pipistrellus pipistrellus*	Red bat / *Lasiurus borealis*
Eastern small-footed Myotis / *Myotis leibii*	Red fox / *Vulpes vulpes*
Fox squirrel / *Sciurus niger*	Red squirrel / *Tamiascurus hudsonicus*
Gray fox / *Urocyon cinerecargenteus*	River otter / *Lutra candensis*
Gray squirrel / *Sciurus carolinensis*	Rock vole / *Mictotus chrotorrhinus*
Hairy-tailed mole / *Parascalops breweri*	Smokey shrew / *Sorex fumeus*
Hoary bat / *Lasiurus cinereus*	Snowshoe hare / *Lepus americanus*
House mouse / *Mus musculus*	Southern flying squirrel / *Glaucomys volans*
Indiana bat / *Myotis sodalist*	Southern red-backed vole / *Clethrionomys gapperi*
Least weasel / *Mustela nivalis*	Star-nosed mole / *Condylura cristata*
Little brown bat / *Myotis licifugus*	Striped skunk / *Mephitis mephitis*
Long eared-bat / *Myotis keenii*	Virginia opossum / *Didelphis virginiana*
Long-tailed shrew / *Sorex dipar*	Water shrew / *Sorex palustris*
Long-tailed weasel / *Mustela frenata*	White footed mouse / *Peromyscus leucopus*
Masked shrew / *Sorex cinereus*	White-tailed deer / *Odocoileus virgnianus*
Meadow jumping mouse / *Zapus hudsonius*	Woodchuck / *Marmota monax*
Meadow vole / *Microtus pennsylvanicus*	Woodland jumping mouse / *Napeozapus insignis*

Table 2.7 Common Ectotherm Species Potentially Occurring at the Beltzville Lake Project Area

Common Name / Scientific Name	Common Name / Scientific Name
American toad / *Bufo americanus*	Northern fence lizard / *Sceloporus undulatus*
Black racer / *Coluber constrictor*	Northern leopard frog / *Rana pipiens*
Brown snake / *Storeria dekayi*	Northern water snake / *Nerodia sipedon*
Bullfrog / *Rana catesbeiana*	Painted turtle / *Chyrsemys picta*
Copperhead / *Agkistorodon contortix*	Pickerel frog / *Rana palustris*
Dusky salamander / *Desmognathus fuscus*	Rat snake / *Elaphe obsolete*
Eastern box turtle / *Terrapene carolina*	Red salamander / *Pseudotriton ruber*
Eastern garter snake / *Thamnophis sirtalis*	Redback salamander / *Plethodon cinereus*
Eastern hognose snake / *Heterodon patirhinos*	Redbelly snake / *Storeria occipitomaculata*
Eastern ribbon snake / *Thamnophis sauritis*	Red-spotted newt / *Notophthalmus viridescens*
Five-lined skink / *Eumeces fasciatus*	Ringneck snake / *Diadophis punctatus*
Four-toed salamander / *Hemidactylium scutatum*	Slimy salamander / *Plethodon glutinosus*
Fowler's toad / *Bufo fowleri*	Smooth green snake / *Liochlorophis vernalis*

Common Name / Scientific Name	Common Name / Scientific Name
Gray treefrog / *Hyla versicolor*	Snapping turtle / *Chelydra serpentina*
Green frog / *Rana clamitans*	Spotted salamander / *Ambystoma maculatum*
Jefferson salamander / *Ambystoma jeffersonianum*	Stinkpot / *Sternotherus odoratus*
Longtail salamander / *Eurycea longicauda*	Timber rattlesnake / *Crotalus horridus*
Marbled salamander / *Ambystom opacum*	Two-lined salamander / *Eurycea bislineata*
Milk snake / *Lampropeltis triangulum*	Wood frog / *Rana sylvatica*
Mountain dusky salamander / *Desmognathus ochrophaeus*	Wood turtle / *Glyptemys insculpta*
Northern cricket frog / *Acris crepitans*	Worm Snake / *Carphophis amoenus*

Table 2.8 Common Bird Species Potentially Occurring at the Beltzville Lake Project Area

Common Name / Scientific Name	Common Name / Scientific Name
Red-winged Blackbird / *Agelaius phoeniceus*	Baltimore Oriole / *Icterus galbula*
Wood Duck / *Aix sponsa*	Belted Kingfisher / *Megaceryle alcyon*
Mallard / *Anas platyrhynchos*	Wild Turkey / *Meleagris gallopavo*
Black Duck / *Anas rubripes*	Song Sparrow / *Melosaiza melodia*
Ruby-throated Hummingbird / A*rchilochus colubris*	Mockingbird / *Mimus polyglottos*
Great Blue Heron / *Ardea herodias*	Black-capped Chickadee / *Parus atricappilus*
Ruffed Grouse / *Bonasa umbellus*	Tufted titmouse / *Parus bicolor*
American Bittern / *Botaurus lentiginosus*	Rufous-sided Towhee / *Piplio erythropthalmus*
Canada Geese / *Branta canadensis*	House Sparrow / *Passer domesticus*
Great Horned Owl / *Bubo virginianus*	Ring-necked Pheasant / *Phasianus colchicus*
Red-tailed hawk / *Buteo jamiacensis borealia*	American Woodcock / *Scolopax minor*
Green Heron / *Butorides birescens*	Field Sparrow / *Spizella pusilla*
Turkey Vulture / *Cathartes aura*	Scarlet Tanager / *Piranga olivacea*
Snow Goose / *Chen caerulescens*	Common Grackle / *Quiscalus quiscala*
Common Flicker / *Colaptes auratus*	Cardinal / *Richmondena cardinalis*
Common Crow / *Corvus brachyrhynchos*	American Goldfinch / *Spinus tritis*
Bluejay / *Cyanocitta cristata*	Starling / *Sturmus vulgaris*
Downy Woodpecker / *Dendrocopos pubescens*	House Wren / *Troglodytes aedon*
Hairy Woodpecker / *Dendrocopos villosus*	American Robin / *Turdus migratorius*
Yellow Warbler / *Dendroica petechia*	Eastern Kingbird / *Tyrannus tyrannus*
Catbird / *Dumetella carolinensis*	Red-eyed Vireo / *Vireo olicaceus*
Least Flycatcher / *Emphidonax minimus*	Mourning Dove / *Zenaidura macroura*
Barn Swallow / *Hirundo rustica*	Bald Eagle / *Haliaeetus leucocephalus*
Osprey / *Pandion haliaetus*	-

Known fish species occurring at Beltzville Lake are described in Table 2.9 using data from the 2013 Fish Population Survey performed by the Pennsylvania Fish and Boat Commission (PFBC).

Table 2.9 Fish Species Reported by the Pennsylvania Fish and Boat Commission 2013 Fish Population Survey for Beltzville Lake (PFBC, 2013)

Common Name / Scientific Name	Common Name / Scientific Name
American eel / *Anguilla rostrata*	Pumpkinseed / *Lepomis gibbosus*
Alewife / *Alosa pseudoharengus*	Redbreast sunfish / *Lepomis auratus*
Banded killifish / *Fundulus diaphanus*	Rock bass / *Amblopites rupestris*
Black crappie / *Pomoxis nigromaculatus*	Satinfin shiner / *Cyprinella analostana*
Bluegill / *Lepomis macrochirus*	Smallmouth Bass / *Micropterus dolomieu*
Bluespotted sunfish / *Enneacanthus gloriosus*	Spotfin shiner / *Cyprinella spiloptera*
Brown bullhead / *Ameiurus nebulosus*	Spottail shiner / *Hudsonius hudsonius*
Brown trout (hatchery) / *Salmo trutta*	Striped Bass / *Morone saxatilis*
Chain pickerel / *Esox niger*	Sunfish hybrid / *Lepomis macrochrius* x *Lepomis cyanellus*
Channel catfish / *Ictalurus punctatus*	Walleye / *Sander vitreus*
Common carp / *Cyprinus carpio*	White perch / *Morone americana*
Green sunfish / *Lepomis cyanellus*	White sucker / *Catostomus commersonii*
Largemouth Bass / *Micropterus nigricans*	Yellow bullhead / *Ameiurus natalis*
Muskellunge */ Esox masquinongy*	Yellow perch / *Perca flavescens*
Muskellunge (tiger) / *Esox masquinongy* x *Esox lucius*	-

2.7.2 Vegetative Resources

Vegetation at Beltzville Lake is dominated by six subclasses of the National Vegetation Classification System (NVCS), comprising a variety of natural forest, shrub, and grassland communities, as well as agriculture and managed landscaping. The subclasses include 1.B Temperate and Boreal Forest and Woodland, 2.B Temperate and Boreal Grassland and Shrubland, 2.C Shrub and Herb Wetland, 7.A Woody Agricultural Vegetation, 7.B Herbaceous Agriculture, and 7.C Herbaceous and Woody Developed Vegetation. A detailed analysis of the NVCS subclasses and subclass acres present at Beltzville Lake is located in Appendix B.

2.7.3 Threatened and Endangered Species

Using the Information for Planning and Consultation tool (IPaC), an official species list for Beltzville Lake was obtained on June 25, 2025 from the USFWS Pennsylvania Ecological Services Field Office. A copy of this list is available in Appendix B. Table 2.10 lists the federally listed species while Table 2.11 lists the Bald and Golden Eagle Protection Act (BGEPA) species, Migratory Bird Treaty Act (MBTA) species reported by the USFWS for Beltzville Lake. The USFWS official species list states that the lake does not overlap with any critical habitat for federally listed species. The state status column in Table 2.10 and Table 2.11 uses current information from the Pennsylvania Natural Heritage Program (PNHP) for each species.

Table 2.10 USFWS IPaC Federally Listed Species with State Status (USFWS 2025; PNHP, 2024)

Species	Federal Status	State Status	Federal Register Listing	Federal Register Listing Date	Critical Habitat Listing	Critical Habitat Listing Date
Indiana Bat (*Myotis sodalis*)	Endangered	Endangered	32 FR 4001	11-MAR-1967	41 FR 41914	24-SEP-1976
Northern Long-eared Bat (*Myotis septentrionalis*)	Endangered	Endangered	80 FR 17974-18033	02-APR-2015	N/A	N/A
Northeastern Bulrush (*Scirpus ancistrochaetus*)	Endangered / Proposed Delisted	Endangered	56 FR 21091-21096	07-MAY-1991	N/A	N/A
Tricolored Bat (*Perimyotis subflavus*)	Proposed Endangered	Endangered	87 FR 56381-56393	14-SEP-2022	N/A	N/A
Monarch butterfly (*Danaus plexippus*)	Proposed Threatened	N/A	85 FR 81813-81822	17-DEC-2020	89 FR 100662-100716	12-DEC-2024

The Migratory Bird Treaty Act and Bald and Golden Eagle Protection Act Species (MBTA) protects all the nation's migratory bird species from harm and harassment, including adverse alterations to their habitat. MBTA-protected bird species that may occur at Beltzville Lake are presented in Table 2.11. This table is non-exhaustive, only including the subset of migratory birds that may be present during a given migration season at Beltzville Lake. These species were identified using the IPaC list provided for Beltzville Lake, as well as comparing the reported MBTA and BGEPA species to the PNHP species records. The MBTA and BGEPA bird species from the IPaC report included in Table 2.11 are protected solely under the MBTA and/or BGEPA and do not have protections under the Endangered Species Act.

Table 2.11 IPaC Listed Migratory Bird Treaty Act and Bald and Golden Eagle Protection Act Species (USFWS, 2025; PNHP, 2025)

Species	Federal Status	State Status
Bald eagle (*Haliaeetus leucocephalus*)	MBTA & BGEPA Protected	Delisted
Black-billed cuckoo (*Coccyzus erythropthalmus*)	MBTA Protected	None
Black-capped chickadee (*Poecile atricapillus practicus*)	MBTA Protected	None
Bobolink (*Dolichonyx oryzivorous*)	MBTA Protected	None
Canada warbler (*Caredllina canadensis*)	MBTA Protected	None
Cerulean warbler (*Setophaga cerulea*)	MBTA Protected	None
Chimney swift (*Chaetura pelagica*)	MBTA Protected	None
Golden eagle (*Aquila chrysaetos*)	MBTA & BGEPA Protected	None
Golden-winged warbler (*Vermivora chrysoptera*)	MBTA Protected	None
Northern saw-whet owl (*Aegolius acadicus*)	MBTA Protected	None

Species	Federal Status	State Status
Prairie warbler (*Setophaga discolor*)	MBTA Protected	None
Red-headed woodpecker (*Melanerpes erythrocephalus*)	MBTA Protected	None
Rusty blackbird (*Euphagus carolinus*)	MBTA Protected	None
Wood thrush (*Hylocichla mustelina*)	MBTA Protected	None

2.7.4 Invasive Species

Invasive species potentially occurring at Beltzville Lake are reported in Table 2.12, using confirmed species occurrences in the last 5 years from an iMap invasives report created for the project area.

Table 2.12 Invasive Species Potentially Occurring at Beltzville Lake

Common Name / Scientific Name	Common Name / Scientific Name
Asiatic clam (*Corbicula fluminea*)	Hydrilla (*Hydrilla verticillata*)
Autumn olive (*Elaeagnus umbellata*)	Japanese barberry (*Berberis thunbergii*)
Bohemian knotweed (*Reynoutria x bohemica*)	Japanese stiltgrass (*Microstegium vimineum*)
Burning bush (*Euonymus alatus*)	Knotweed (*Reynoutria spp.*)
Colt's foot (*Tussilago farfara*)	Lesser periwinkle (*Vinca minor*)
Common carp (*Cyprinus carpio*)	Mile-a-minute vine (*Persicaria perfoliata*)
Dame's rocket (*Hesperis matronalis*)	Mudmat (*Glossostigma cleistanthum*)
Eastern helleborine (*Epipactis helleborine*)	Multiflora rose (*Rosa multifloria*)
Emerald ash borer (*Agrilus plannipennis*)	Mute swan (*Cygnus olor*)
European lily-of-the-valley (*Convallaria majalis*)	Norway maple (*Acer platanoides*)
Freshwater jellyfish (*Craspedacusta sowerbyi*)	Oriental bittersweet (*Celastrus orbiculatus*)
Garlic mustard (*Alliaria petiolata*)	Red-eared slider (*Trachemys scripta elegans*)
Glossy false buckthorn (*Frangula alnus*)	Slider (*Trachemys scripta*)
Goldfish (*Carassius auratus*)	Tree-of-heaven (*Ailanthus altissima*)
Hemlock holly adelgid (*Adelges tsugae*)	Yellow-bellied slider (Trachemys scripta scripta)
Honeysuckle (*Lonicera spp.*)	New Zealand Mudsnail (*Potamopyrgus jenkinsi)*

Chemical, mechanical, and manual methods are used extensively by staff and volunteers at the project to manage invasive species; they include:

- Hand pulling
- Cutting

- Mowing
- Digging
- Brush hogging/cutting
- Pulling with a mini excavator and tractor
- Chemical treatment

These methods are effective if repeated frequently during a growing season to exhaust a plant's root reserves, or if used in combination with other techniques. An invasive species management plan for the project will be developed in the future as funding becomes available.

In collaboration with the PA DCNR and other agencies, the Corps has been focused on containing the spread of hydrilla, thus introducing the Invasive Species Portable Washing Station in 2023. The washing station contains a heating element along with a pressure washer that can be used by boaters at Pine Run Boat Launch to clean their watercraft and help stop the spread of invasive species throughout the region.

2.7.5 Ecological Setting

The EPA's ecoregion classifications describe the broader ecological setting of Beltzville Lake. North America is divided into 15 broad, Level I ecological regions, 50 more detailed Level II ecoregions, and 182 Level III ecoregions that are nested within level II regions.

Beltzville Lake is situated in the Northern Shale Valleys Level IV ecoregion (Region 67b), part of the larger Ridge and Valley Level III ecoregion (Region 67). The Northern Shale Valleys are characterized by intensely folded ridges and valleys that make up a majority of the ecosystem's topography. Forests are generally classified as Appalachian Oak forests in the north dominated by white oak (*Quercus alba*) and red oak (*Quercus rubra*) and Oak-Hickory-Pine forests dominated by hickory (*Carya sp.*), longleaf pine (*Pinus palustris*), shortleaf pine (*Pinus echinata*), loblolly pine (*Pinus taeda*), white oak, and post oak (*Quercus stellata*). American chestnut (*Castanea dentata*) historically dominated the region before chestnut blight (*Cryphonectria parasitica*) was spread to North America in the early 1900s. Historic use of fire and cut and slash techniques to create grazing fields for cattle extensively modified the native landscape and increased soil erosion. Additionally, the prevalence of the logging industry from the 1880's to the 1920's removed significant portions of timber from the region. Contemporary land use such as residential development and extractive industries continues to largely modify the landscape.

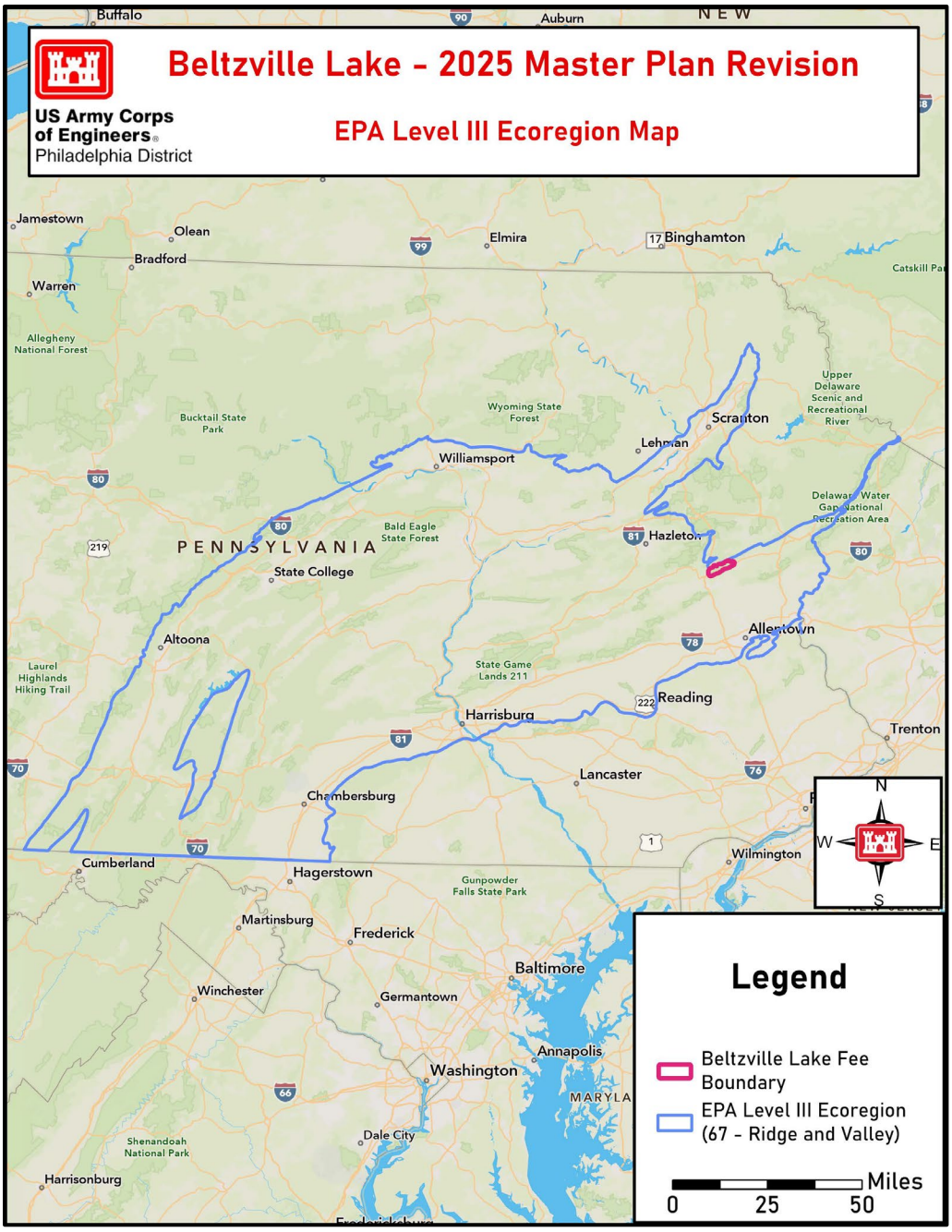

Figure 2.4 EPA Level III Ecoregions of Pennsylvania

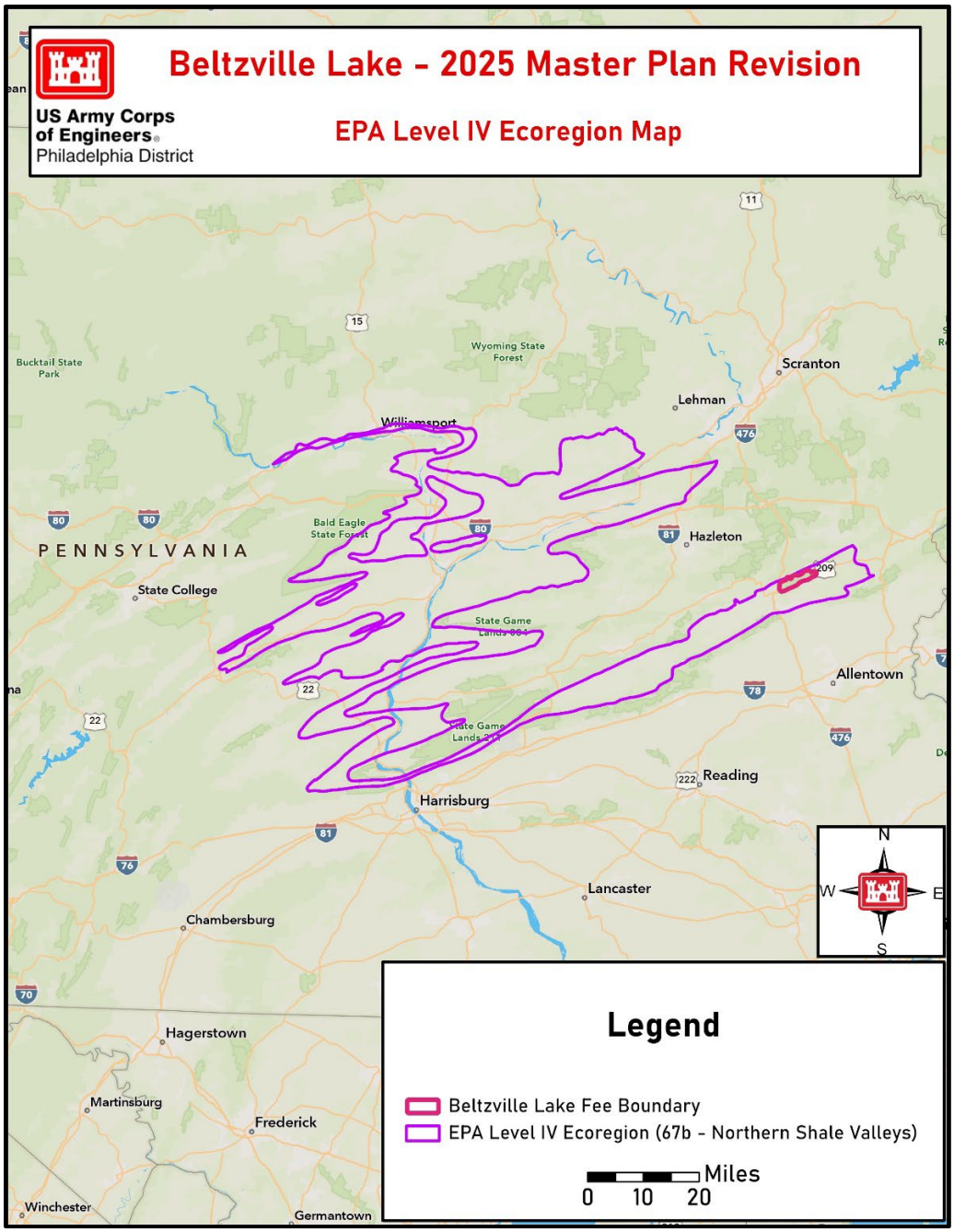

Figure 2.5 EPA Level IV Ecoregion at Beltzville Lake

2.7.6 Wetlands

The USFWS maintains the National Wetlands Inventory (NWI), which is a wetlands database across the United States. Using the NWI's Geographic Information System (GIS) data, approximately 1,033 acres of wetlands were identified within the Beltzville Lake fee boundary (NWI, 2025). Figure 2.6 displays the wetlands mapped using the NWI database at Beltzville Lake, and Table 2.13 summarizes the wetlands by NWI wetland type.

Table 2.13 NWWI Wetland Acreage by Type and Beltzville Lake

NWI Wetland Type	Acres
Freshwater Forested – Shrub Wetland	0.28
Freshwater Pond	0.74
Freshwater Emergent Wetland	1.39
Riverine	17.04
Lake	1,013.1
Total Wetland Acreage	1032.45

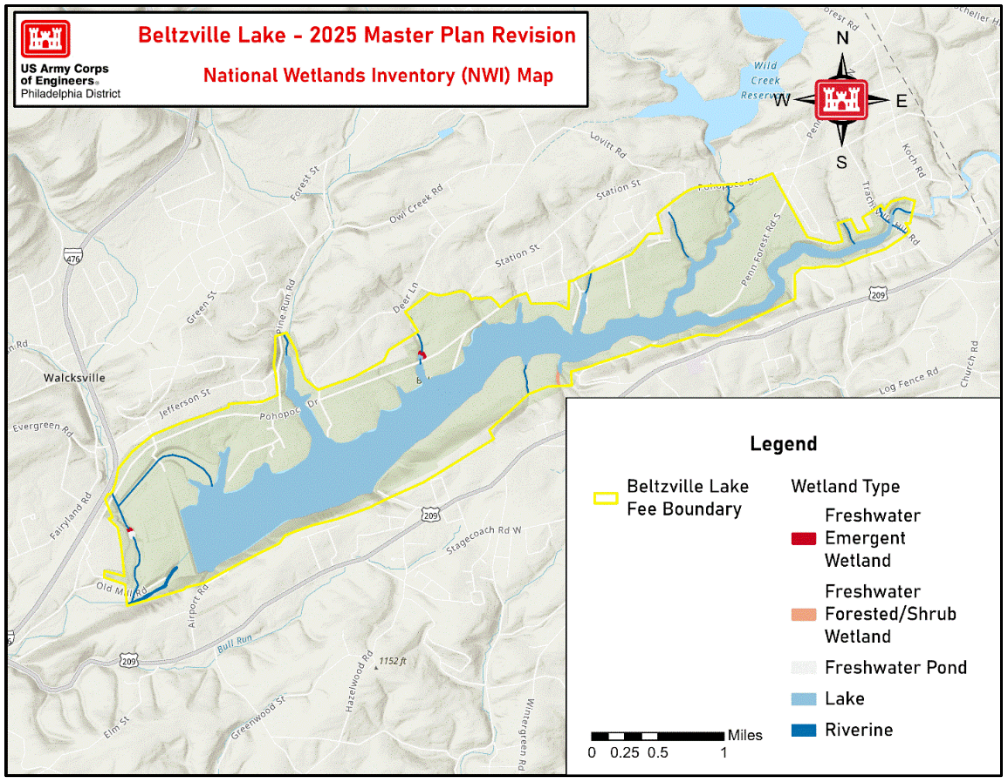

Figure 2.6 NWI Wetlands at Beltzville Lake (NWI, 2025)

2.8 HAZARDOUS, TOXIC AND RADIOACTIVE WASTE

A review of the EPA EnviroMapper Database that includes Superfund sites, toxic releases, water discharges, air emissions, and hazardous wastes, indicates that there are 97 sites known to be within a 5-mile radius of the Beltzville Lake project area (EPA, 2025B). These facilities range from Resource Conservation and Recovery Act (RCRA) sites, Toxic Release Inventory (TRI) sites, brownfields, and Superfund sites. There are no Superfund or Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) sites within a 5-mile radius.

The only known Hazardous, Toxic and Radioactive Waste (HTRW) site within the Beltzville Lake fee boundary is Beltzville State Park, which is listed as a National Pollutant Discharge Elimination System (NPDES) site (NPDES #PA0032107). Figure 2.7 displays all of the EPA listed facilities within a 5-mile buffer of Beltzville Lake (EPA, 2025B).

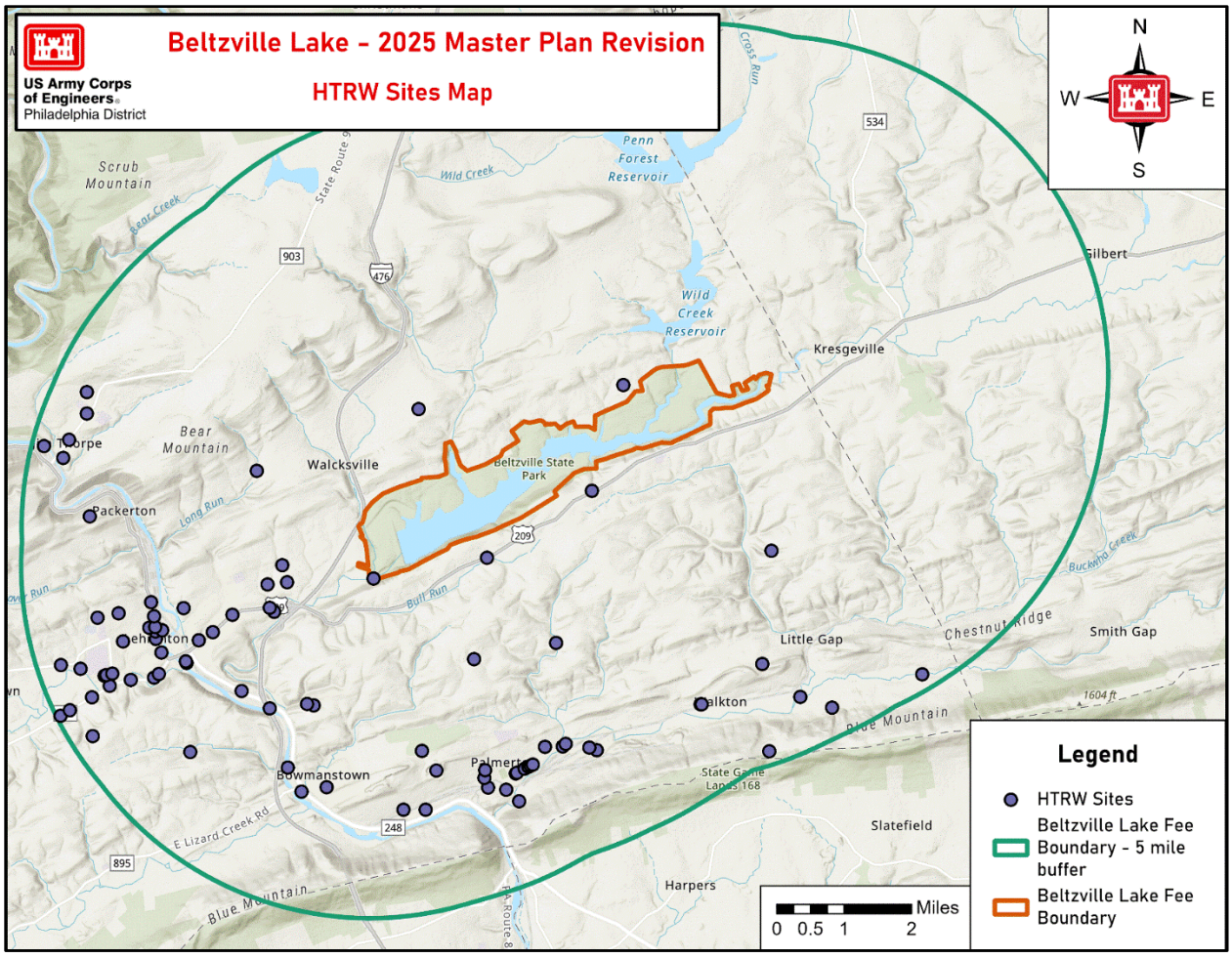

Figure 2.7 EPA Enviromapper HTRW Sites Reported Within 5 miles of Beltzville Lake

2.9 HEALTH AND SAFETY

Beltzville Lake staff work in conjunction with PA DCNR and PFBC to provide public outreach programs on water safety and conservation of natural resources. In addition to the water safety outreach programs, USACE, PA DCNR, and Pennsylvania Fish and Boat Commission (PFBC) have established recreation management practices to protect the public. These include safe boating and swimming regulations, and speed limit and pedestrian signs for park roads. PA DCNR also ensures compliance with rules and regulations governing solid waste, wastewater, and potable water management in place for USACE fee land, including those areas operated by lessees.

2.10 AESTHETIC RESOURCES

Beltzville Lake includes acres of scenic shorelines, lake views, and abundant wildlife. Parks have been designed to access Beltzville Lake, allowing access to hiking trails, and taking advantage of scenic qualities at the lake and surrounding areas. The forest resources located on fee land are managed for their wildlife, recreational, and aesthetic values. Several acres have been designated as Wildlife Management to preserve specific animal, plant, or environmental features that also add to the scenic qualities at the lake. Some areas are admired for their scenic attractiveness (intrinsic scenic beauty that evokes a positive response), scenic integrity (wholeness of landscape character), and landscape visibility (how many people view the landscape and for what reasons and how long). The overlook area at the dam provides views of both project features and the permanent pool. Beltzville Lake has abundant scenic beauty and provides public access to scenic lands in the region where public recreational lands are limited.

2.11 CULTURAL, HISTORICAL, AND ARCHAEOLOGICAL RESOURCES

2.11.1 Cultural Resources

Cultural resources preservation and management is an equal and integral part of all resource management at USACE-administered operational projects. The term “cultural resources” is a broad term that includes, but is not limited to, historic and prehistoric archaeological sites, deposits, and features; burials and cemeteries; historic and prehistoric districts comprised of groups of structures or sites; cultural landscapes; built environment resources such as buildings, structures (such as bridges), and objects; traditional cultural properties; and sacred sites. These property types may be listed on the National Register of Historic Places (NRHP) if they meet the criteria specified by the NRHP (36 CFR 60), reflecting significance in architecture, history, archaeology, engineering, and culture. Cultural resources that are identified as eligible for listing in the NRHP are referred to as “historic properties,” regardless of category. A Traditional Cultural Property (TCP) is a property that is eligible for inclusion in the NRHP based on its associations with the cultural practices, traditions, beliefs, lifeways, arts, crafts, or social institutions of a living community. Ceremonies, hunting practices, plant-gathering, and social practices which are part of a culture’s traditional lifeways, are also cultural resources.

Stewardship of cultural resources on USACE Civil Works water resources projects is an important part of the overall Federal responsibility. Numerous laws pertaining to identification, evaluation, and protection of cultural resources, Native American Indian rights, curation and collections management, and the protection of resources from looting and vandalism, establish the importance of cultural resources to our Nation’s heritage. With the passage of these laws, the historical intent of U.S. Congress has been to ensure that the Federal government protects cultural resources. Additionally, as stewards of cultural resources and in compliance with federal laws, it is incumbent upon the USACE to consult with the State Historic Preservation Officer (SHPO), Tribal Nations, the Advisory Council on Historic Preservation (ACHP), and other interested stakeholders in the preservation and management of cultural resources.

Guidance is derived from a number of cultural resources laws and regulations, including but not limited to Sections 106 and 110 (54 U.S.C. 306101-306114) of the National Historic Preservation Act (NHPA) of 1966 (as amended); Archaeological Resources Protection Act (ARPA) of 1979; Native American Graves Protection and Repatriation Act (NAGPRA); and 36 CFR Part 79, Curation of Federally-Owned and Administered Archeological Collections. Implementing regulations for Section 106 of the NHPA and NAGPRA are 36 CFR Part 800 and 43 CFR Part 10, respectively. All cultural resources laws and regulations should be addressed under the requirements of the National Environmental Policy Act (NEPA) of 1969 (as amended), as applicable. USACE summarizes the guidance provided in these laws in ER and EP 1130-2-540.

2.11.2 Prehistoric Context

Evidence recovered from prehistoric sites within the Appalachian Ridge and Valley physiographic province of Pennsylvania indicates successive periods of human occupation dating from at least 12,000 years ago. Three distinct periods are generally used: Paleoindian, Archaic and Woodland. These periods are best understood by viewing them as constructs created by archaeologists' base on changes in technology and environment.

Paleo-Indian Period

Northern Pennsylvania was covered by the Laurentide glacier. Prevailing climates included cold, moist conditions with little variation in seasons. Lowland areas of the Ridge and Valley province supported grass-dominated tundra, while sedge tundra vegetation inhabited elevated zones. Stands of spruce, pine and hemlock forest lay among the grassy areas. Large animals, such as mastodon, bison, caribou and elk, favored these habitats. Early human populations would have been attracted by the large game, and the numerous bogs, swamps, glacial ponds and lakes. The glacier retreated at approximately 10,600 BC, resulting in a milder climate, warmer temperatures, and a northward expansion of spruce forest.

It is believed Paleo-Indian groups initially moved about as small bands without any real restrictions. Their settlement patterns included rather large, revisited habitation sites. However, most of the sites that were discovered from this period are small, short-term camps or specialized activity locations camps, such as hunting camps. It is believed that their settlement patterns may have been focused on obtaining high-quality lithic resources as they needed suitable tools for hunting game. The availability of game would have been another factor as to where and when the groups moved.

Paleo men hunted large game such as mastodon, caribou, and other large mammals that ranged throughout the area during the withdrawal of the Wisconsin Glacier. Coniferous forests also began to take root during this time period. The lifestyle of the early humans was highly mobile, thus they carried hunting weapons, such as spears with "fluted points," and tools that enabled them to kill and process large game animals. Resources recovered at various sites also indicate that they gathered plant materials as well. The human inhabitants needed to have suitable tools that they could use to successfully hunt for game. Therefore, they would have also had available resources by which to obtain high-quality lithic raw materials.

The Archaic Period

The early Archaic Period experienced a shift from Pleistocene to early Holocene environmental conditions, which resulted in the development of Holocene flora and fauna. This meant that the tundra vegetation and spruce forests were replaced with deciduous forests. They adjusted to the warming climate by creating new tools, which enabled them to become excellent hunters, trappers, fishermen and plant food collectors. They continued to live a nomadic life, camping along streams and rivers for as long as the forests and waters remained productive. A device known as a spear-thrower was used to magnify the hunter's strength in hurling his stone point tipped weapons.

There is an increase in the number and diversity of archaic sites, which has been interpreted as a population increase.

The term "Archaic" was first used in North American archaeology by William A. Ritchie in 1932, who described a culture in the Northeast that had not developed ceramic technology and was dependent on hunting, gathering, and fishing (Treichler 1991). The Archaic period is generally divided into the Early, Middle and Late subperiods, and a Terminal Archaic occurring at the end of the Late Archaic. In general, the Early Archaic (10,000 – 8000 BP) cultures represented an adjustment to changing post-Pleistocene conditions although settlement patterns during this period appear to represent the same preferences for site location as in the preceding Paleoindian period. The Middle Archaic subperiod, which lasted from 8000 BP to 6000 BP, is viewed as a time of dramatic change in the subsistence strategies employed by hunters and gatherers in the Northeast and Mid-Atlantic. The Late Archaic sub-period (6000-3000 BP) beheld the development of regional complexity, as populations rapidly increased and the cultural patterns that were established during the Middle Archaic were elaborated upon and intensified. The Terminal Archaic, which some researchers date from 3700-2700 BP, is a transitional period that sees a change in the subsistence and settlement system and the introduction of new tool types (McLearen 1991).

The Woodland Period

Most scholars consider the Woodland period to have begun in about 3,000 BP, or slightly earlier. As presented by Custer (1982, 1984), Woodland I is defined by four characteristics: 1) the development of estuarine and riverine adaptations that were stable and intensive enough to produce repeatedly reused base camp sites along the major drainages' floodplains; 2) population growth at single site locations, or more intensive site utilization, which produced sites much larger than Middle Archaic macro-band camps; 3) the appearance of foraging and collecting adaptations in areas less productive than riverine settings; and 4) the participation in exchange networks that moved raw materials as well as finished artifacts across large areas.

Although the Woodland period is generally distinguished among Early, Middle and Late subperiods in the Northeast, the Early and Middle Woodland in the Mid-Atlantic region have been treated together because of fewer temporal and cultural distinctions in the region. In general, the Early Woodland subperiod is signaled by the appearance of new cultural traits, namely the widespread use of ceramics, and intensification of older traits, including mortuary ceremonialism, which were carried over

from the Late and Terminal Archaic (Ritchie 1980). Although the beginning of the Early Woodland subperiod is generally marked at 3000 BP, there is an inevitable overlap of several hundred years with the Terminal Archaic. During the Late Woodland (AD 1000-1600), which lasted up until European contact, the adoption of horticulture had an integral part in population growth and subsistence and settlement systems and saw the establishment of large villages in mostly riverine settings. Very late in the Woodland Period evidence from the Ridge and Valley Province west of Beltzville Project indicates the existence of large villages, some of which were fortified. The occupation of small farming hamlets continued throughout the period (Raber 1993).

The Contact Period

The Indigenous people the Europeans met along the Delaware River during the late 16th and early 17th centuries were descended from the Unami and Munsee speaking people who had populated the Delaware and the Hudson River valleys for centuries.

The name collectively attributed to the descendants of such Unami and Munsee speaking people is Delaware, yet the word Delaware is not of indigenous origin. The term “Delaware” actually derives from the title given to Sir Thomas West, the third Lord de la Warr, who was appointed as the English governor of Virginia in 1610. European colonists applied the term “Delaware” to reference the Unami and Munsee speaking groups of the River Valley, who called themselves “the People” or Lenape, or the Lenni Lenape, the “True People”.

In 1680, although most colonists of the time regarded Indians as subhuman, William Penn was careful to treat the Indians as sovereign nations, entitled to fair play, dignity, and respect. For many decades, Penn was able to enforce the statute forbidding settlers on land prior to negotiated purchase from the Indians. However, after Penn’s death, a major wave of German and Scotch-Irish immigration created a population boom in the seaboard areas, increasing the need for additional land.

By this time, the region was controlled by William Penn’s heirs, John Penn and Thomas Penn, along with the Penn’s family land agent, James Logan, who was already illegally selling Indian land in the Lehigh Valley to the new European immigrants. In order to legitimize the theft of Indian Lands, Penn’s heirs hatched a plan to convince the Indians to release the Lehigh Valley to them once and for all.

At dawn on September 19, 1737, three colonists and three Indians set off on the most peculiar "walk" in Pennsylvania's history. Their purpose was to measure out a land purchase that Thomas Penn claimed his father had made from the Indians fifty years earlier. Thomas Penn had in his possession a document that he and James Logan claimed was a deed signed by Unami and Munsee chiefs in 1686, selling the land north of Tohickon Creek to William Penn. According to this document, the amount of land would be measured by a day and a half's walk from an agreed upon starting point (Encyclopedia Britannica, n.d.).

The Indians presented with this document were suspicious and voiced their

objections. Nevertheless, Penn and Logan went ahead with their plans and hired three of the fastest colonists to carry out the measurement of the land. The colonists selected for this task trained for months and were assisted by white settlers who cleared paths through the forest, arranged for supplies, and placed boats to ferry them across waterways. Two of the three colonist **"**walkers**"** dropped out from exhaustion on the second day, leaving only one to complete the task. In the final tally, he covered approximately 65 miles in eighteen hours.

The Penn family compounded the swindle with creative surveying and boundary setting, using the walk to claim possession of the Lehigh Valley, an area containing the modern cities of Allentown, Bethlehem, and Easton. The fraudulent land claim is now called "the Walking Purchase". The Walking Purchase and the Revolutionary war marked the beginning of the removal of the Unami and Munsee speakers from the Delaware Valley westward and northward into the frontier.

2.11.3 Historic Context

Beltzville Lake lies in what is historically referred to as "the Big Creek Valley" in Franklin and Towamensing townships. The mountainous region north of the Blue Ridge was called "Towamensing," which was a Native American term that has been translated to mean "wilderness" or "country not inhabited." European settlement of the northern ridge occurred slowly in the 18th century because of its inaccessibility. There were only 33 taxable inhabitants in 1762 in the district of Towamensing.

According to records the first visit to the vicinity of the project area by a European was in 1742. A Moravian missionary, Count Zinzendorf, made a trip up the Lehigh River and selected its confluence with Mahoning Creek as a site for a Moravian mission. This site now lies within the town of Lehighton.

Carbon County was resettled after the Revolutionary War. Apparently, resettlement was slow at first, but by the first half of the century, a steadily increasing population resulted in the need for a more localized government. Numerous townships were created during the 1840's to answer this need.

Carbon County received its name because of the deposits of coal that were discovered at Summit Hill in 1791 by Philip Ginter. Philip brought specimens of coal to Colonel Jacob Weiss, the founder of Weissport and Lehighton. Weiss and some Philadelphia associates organized the Lehigh Coal Company, but they were not successful in finding a way to transport the coal to the market.

Josiah White and Erskine Hazard secured the property of the Lehigh Coal Company and organized the Lehigh Coal and Navigation Company. Their main goal was to make the Lehigh River navigable so that anthracite coal could reach Philadelphia. They started a program of channel improvements in 1818 to improve the river channel. This involved building a series of wing dams and gates in numerous areas along the river. Coal was successfully transported via this one-way navigation system from Mauch Chunk (Jim Thorpe) to Easton in 1820.

Within five years the tonnage of coal had increased so greatly that a more efficient, two-way method of transportation became necessary. White and Hazard's

solution was to build the Lehigh Canal between Mauch Chunk and Easton; the canal was begun in 1827 and was completed two years later. A northern expansion, from Mauch Chunk to White Haven, was completed in 1838.

After the canal was completed, they then built a gravity railroad to carry coal from the Summit Hill mines to the canal at Mauch Chunk, making this one of the country's earliest railroads and the first to transport coal. The Lehigh Valley Railroad completed its line between Easton and Mauch Chunk in 1855.

Big Creek Valley's network of roads had been expanded by the latter half of the nineteenth century. Maps produced in 1875 show that there was one road that ran along the valley floor on the north bank of the creek. There were also roads on either side of Pine Run, while another thoroughfare crossed Big Creek roughly midway between Pine Run and Wild Creek. The Beers atlas in 1875 indicated that most of the valley was still sparsely settled in the late nineteenth century. Settlements occurred mainly near the confluences of major streams, such as the Pohopoco/Big Creek.

Agriculture was the mainstay of the Big Creek Valley's economy throughout the nineteenth century. Lumbering was also pursued in the valley, but never reached the level of economic importance that it achieved farther north in the less fertile Upper Lehigh and Bear Creek Drainages.

Parryville, which was located at Pohopoco Creek's confluence with the Lehigh River, was a sawmilling and iron manufacturing center on the Lehigh Canal. Early settlers in the area included Peter Frantz and Frederick Scheckler, builders of a gristmill there in the 1780's, and Leonard Beltz, whose farm embraced the site of Parryville. The town developed after becoming the headquarters of the Pine Forest Lumber Company's sawmilling operations. Parryville also became a transshipment point for coal onto the Lehigh Canal for a short period of time. Flood damaged the company's shipping facilities in 1841, resulting in Mauch Chunk becoming the principal coal port. By 1845 there were ten homes, two stores, a school, gristmill, two sawmills, and a lath mill. Dennis and Henry Bauman established an anthracite blast furnace in Parryville in 1855and employed 150 men. It was later renamed the Carbon Iron and Steel Company and produced pipe from the 1870's until 1920, when the company was dismantled.

There were several industrial and commercial enterprises scattered among farmsteads throughout the area during this period of time. Sawmills and forges were especially numerous. However, steep slopes on the south side of the creek apparently limited the creation of commercial enterprises in this part of the valley.

The processing of paint ore was an important local industry in the late nineteenth and early twentieth centuries. Robert Prince did some tests with local ore, which involved burning, screening, and crushing it in his mill and then marketing it as a new paint ingredient. This led to the creation of the Carbon Metallic Paint Company by Henry Bowman. Additional paint mines were opened along the east side of the Lehigh River between the Lehigh Gap and Parryville. The A.R. Bass & Company paint mill complex was located near the confluence of Pine Run and Pohopoco Creek, within the project area.

Agriculture continued to be the mainstay of the economy in the Pohopoco/Big Creek Valley into the 20th century. The lumber industry had gone into a decline because of the lack of timber resources. Local farmers practiced general farming or raising poultry. Farms ranged from 52-300 acres in size, and they typically raised crops including potatoes, grains and apples. Clyde and Arlene Diehl had a farm that the U.S. government purchased and designated it as Tract 326. He raised corn, wheat, soybeans, and also had cattle, pigs and chickens. Clyde Diehl was hired as a carpenter on the project construction crew in 1966 when they began the building of Beltzville Dam.

According to the "Cultural Resources Survey, October 24, 1994," in the 1920's this area of "the Lehigh Basin had begun to develop as a resort and vacation area; however, because much of the land continued to be actively farmed, it would not become as popular as the "wilder" Pocono region to the north." Automobiles were growing in popularity, and there was an expanding network of roads enabling people from cities such as Philadelphia to visit summer retreats in the Big Creek Valley area. The northeast extension of the Pennsylvania Turnpike was built after World War II and included an exit about one mile from the project area. This resulted in attracting even more people to the area.

Following World War II Aaron and Allen Bisbing purchased numerous large tracts of land along the Pohopoco Creek. They developed four summer subdivisions in the late 1950's and early 1960's and also sold numerous lots before the U.S. government started purchasing properties for the construction of Beltzville Dam. At the time of the Government acquisition there were several summer cottages and cabins located along the Pohopoco Creek and its tributaries. Year-round residential structures were scattered along area roads, and the only commercial buildings were a gristmill located near the confluence of Sawmill Run and Pohopoco Creek and a gasoline station.

2.11.4 Previous Cultural Resource Investigations

Various cultural resource studies have been conducted because of the Beltzville Lake Project. These studies have produced considerable information about the archeological resources of the project area as well as the surrounding region. However, most of these studies have focused on the identification and assessment of prehistoric archeological resources and have provided only limited data relevant to historic resources in the project area.

Investigation of Beltzville Lake, Lehighton Vicinity, October 24, 1994

Phase I archaeological investigations of Beltzville Lake were accomplished by the Cultural Resource Group of Louis Berger & Associates, Inc. They performed the investigations for the U.S. Army Corps of Engineers, Philadelphia District. The reason for the investigations was to collect data for the preparation of a Historic Properties Management Plan (HPMP) for Beltzville Lake. The document is titled, *Historic Properties Management Plan, Beltzville Lake Project, Lehigh County, Pennsylvania* prepared by Nikki Minnichbach and Kathy Grim for the USACE Philadelphia District and dated 2011.

2.11.5 Long-term Objectives for Cultural Resources

In accordance with Section 106 of the NHPA, any proposed activities or projects at Beltzville Lake will require review by the District Cultural Resource Specialist and Tribal Liaison (CRSTL) to assess their potential to impact historic properties. These activities may include those described in this master plan or those that may be proposed in the future by others for leases, licenses, right-of-way easements, recreational development, construction, wildlife management, or other activities that can be considered undertakings subject to Section 106 of the NHPA. The need for cultural resource surveys to locate and evaluate historic and prehistoric resources, consultation, or other compliance activities related to Section 106 of the NHPA shall be determined and coordinated by the District CRSTL. Resources determined eligible for the NRHP must be protected from proposed project impacts, or the impacts must be mitigated in consultation with the SHPO, the Tribes and other consulting parties.

The Archaeological Resources Protection Act (ARPA) secures the protection of archaeological resources and sites on lands owned and administered by the United States for the benefit of the American people. According to ARPA, it is illegal to excavate, remove, damage, or deface archaeological resources on public lands without a permit issued by the federal agency managing the land. It is also illegal to sell or transport archaeological resources removed from public lands. The Philadelphia District requires permits for archaeological investigations at Beltzville Lake in accordance with ARPA and is increasing surveillance and coordination with law enforcement agencies in the state to enforce ARPA civil and criminal penalties

According to the Native American Graves Protection and Repatriation Act (NAGPRA), it is the responsibility of a federal agency to inventory human remains and associated funerary objects, as well as summarize any potential sacred objects, that existed within their archaeological collections prior to the passage of the law and, to the extent possible, identify their cultural affiliation in order to repatriate such objects to affiliated Tribes requesting their return. In addition, there are responsibilities related to the inadvertent discovery of human remains or funerary objects that occurred on federal land after the passage of the law that require a separate process of consultation, affiliation determinations, and notifications prior to repatriation.

2.12 DEMOGRAPHICS AND ECONOMIC RESOURCES

2.12.1 Zone of Interest

The dam is located on Pohopoco Creek 5.2 miles from its confluence with the Lehigh River and 3.5 miles east of Weissport, Pennsylvania. The zone of interest (area from which the majority of visitors to the lake originate) for the socioeconomic analysis is comprised of 55 counties across four states. These are listed in Table 2.14. Maryland, New Jersey, New York, and Pennsylvania all contain a portion of the zone of interest.

Table 2.14 Zone of Interest Counties

Zone of Interest Counties	
Anne Arundel County, MD	Orange County, NY
Baltimore County, MD	Queens County, NY
Carroll County, MD	Richmond County, NY
Cecil County, MD	Rockland County, NY
Harford County, MD	Westchester County, NY
Howard County, MD	Adams County, PA
Kent County, MD	Berks County, PA
Montgomery County, MD	Bucks County, PA
Prince George's County, MD	Carbon County, PA
Queen Anne's County, MD	Chester County, PA
Bergen County, NJ	Columbia County, PA
Burlington County, NJ	Delaware County, PA
Camden County, NJ	Lackawanna County, PA
Essex County, NJ	Lancaster County, PA
Gloucester County, NJ	Lebanon County, PA
Hudson County, NJ	Lehigh County, PA
Hunterdon County, NJ	Luzerne County, PA
Middlesex County, NJ	Monroe County, PA
Morris County, NJ	Montgomery County, PA
Passaic County, NJ	Montour County, PA
Somerset County, NJ	Northampton County, PA
Sussex County, NJ	Northumberland County, PA
Union County, NJ	Philadelphia County, PA
Warren County, NJ	Pike County, PA
Bronx County, NY	Schuylkill County, PA
Kings County, NY	Wayne County, PA
New York County, NY	York County, PA

2.12.2 Population

The total population in the zone of interest in 2023 was estimated to be 30,032,215 (Table 2.15). Approximately 34% of the zone's population resides in New York, 26% reside in Pennsylvania, 24% reside in New Jersey, and 17% reside in Maryland.

From 2020 to 2050, the population in the zone of interest is expected to increase by 8.63% from 30,369,839 to 32,991,074, an average annual growth rate of 0.29%. In comparison, the state populations are forecasted to increase as follows: 16.28% in Maryland, 10.54% in New Jersey, 2.4% in New York, and 1.49% in Pennsylvania.

Counties within the zone of interest that are expected to grow the most include Cecil County, MD (333.5%), Orange County, NY (25.2%), Howard County, MD (24.8%). Counties within the zone of interest with the least growth include Pike County, PA (-24.3%), Columbia County, PA (-15.9%), and Wayne County, PA (-15%). Population for the years 2010 and 2020 are included for historical reference.

Table 2.15 Population Estimates and Projections (2010, 2020, 2023, 2040)

Geographical Area	2010	2020	2023 Population Estimate	Population Projection Estimates
Maryland	5,773,552	6,177,224	6,170,738	7,183,020
New Jersey	8,791,894	9,288,994	9,267,014	10,267,599
New York	19,378,102	20,201,249	19,872,319	20,686,329
Pennsylvania	12,702,379	13,002,700	12,986,518	13,195,897
Anne Arundel County, MD	537,656	588,261	590,936	694,240
Baltimore County, MD	805,029	854,535	849,586	934,520
Carroll County, MD	167,134	172,891	174,318	188,360
Cecil County, MD	101,108	103,725	104,366	138,440
Harford County, MD	244,826	260,924	262,509	308,810
Howard County, MD	287,085	332,317	333,916	414,820
Kent County, MD	20,197	19,198	19,265	22,080
Montgomery County, MD	971,777	1,062,061	1,057,586	1,246,490
Prince George's County, MD	863,420	967,201	955,584	1,082,480
Queen Anne's County, MD	47,798	49,874	50,951	57,030
Baltimore City, MD	620,961	585,708	577,193	609,780
Bergen County, NJ	905,116	955,732	954,717	1,100,975
Burlington County, NJ	448,734	461,860	464,226	475,845
Camden County, NJ	513,657	523,485	524,042	526,537
Essex County, NJ	783,969	863,728	854,130	964,318
Gloucester County, NJ	288,288	302,294	304,504	325,589
Hudson County, NJ	634,266	724,854	710,478	875,849
Hunterdon County, NJ	128,349	128,947	129,448	135,661
Middlesex County, NJ	809,858	863,162	861,535	956,858
Morris County, NJ	492,276	509,285	510,375	538,359

Geographical Area	2010	2020	2023 Population Estimate	Population Projection Estimates
Passaic County, NJ	501,226	524,118	518,289	594,700
Somerset County, NJ	323,444	345,361	346,203	371,734
Sussex County, NJ	149,265	144,221	145,117	152,228
Union County, NJ	536,499	575,345	572,549	664,404
Warren County, NJ	108,692	109,632	110,238	116,097
Bronx County, NY	1,385,108	1,472,654	1,419,250	1,633,550
Kings County, NY	2,504,700	2,736,074	2,646,306	2,956,932
NY County, NY	1,585,873	1,694,251	1,627,788	1,791,292
Orange County, NY	372,813	401,310	403,840	502,483
Queens County, NY	2,230,722	2,405,464	2,330,124	2,528,762
Richmond County, NY	468,730	495,747	492,734	507,920
Rockland County, NY	311,687	338,329	338,936	419,236
Westchester County, NY	949,113	1,004,457	996,888	1,029,466
Adams County, PA	101,407	103,852	105,183	91,297
Berks County, PA	411,442	428,849	429,989	460,295
Bucks County, PA	625,249	646,538	645,993	597,516
Carbon County, PA	65,249	64,749	65,191	56,315
Chester County, PA	498,886	534,413	540,896	571,892
Columbia County, PA	67,295	64,727	65,055	54,437
Delaware County, PA	558,979	576,830	576,195	608,268
Lackawanna County, PA	214,437	215,896	215,834	217,277
Lancaster County, PA	519,445	552,984	555,151	599,146
Lebanon County, PA	133,568	143,257	143,592	161,410
Lehigh County, PA	349,497	374,557	375,408	416,810
Luzerne County, PA	320,918	325,594	325,978	336,757
Monroe County, PA	169,842	168,327	167,784	160,476
Montgomery County, PA	799,874	856,553	861,225	858,686
Montour County, PA	18,267	18,136	18,079	17,547
Northampton County, PA	297,735	312,951	315,927	306,295
Northumberland County, PA	94,528	91,647	90,925	83,826
Philadelphia County, PA	1,526,006	1,603,797	1,582,432	1,836,216
Pike County, PA	57,369	58,535	59,691	44,313
Schuylkill County, PA	148,289	143,049	143,259	127,877

Geographical Area	2010	2020	2023 Population Estimate	Population Projection Estimates
Wayne County, PA	52,822	51,155	51,189	43,489
York County, PA	434,972	456,438	459,312	475,084
Zone of Interest Total	**28,565,452**	**30,369,839**	**30,032,215**	**32,991,074**

Source: Sources: U.S. Census Bureau, (2010), RACE, Decennial Census; U.S. Census Bureau, (2020), RACE, Decennial Census; U.S. Census Bureau, 2019-2023 American Community Survey 5-Year Estimates. Population projections from: Preliminary Historical and Projected Total Population for Maryland's Jurisdictions (March 2025), Maryland State Data Center (MSDC); The Preliminary Draft of the State Development and Redevelopment Plan, New Jersey State Planning Commission; Adjusted 2055 SED – Total Population, New York Metropolitan Transportation Council, Pennsylvania Population Projections 2050: A First Look, Center for Rural Pennsylvania.

The zone of interest's population is approximately 48.7% male and 51.3% female. Table 2.16 shows the population estimates by sex for the regions included in the zone and the states it is within.

Table 2.16 Population by Sex

Geographical Area	Male	Female
Maryland	3,002,079	3,168,659
New Jersey	4,558,671	4,708,343
New York	9,702,417	10,169,902
Pennsylvania	6,400,912	6,585,606
Anne Arundel County, MD	292,506	298,430
Baltimore County, MD	404,133	445,453
Carroll County, MD	86,706	87,612
Cecil County, MD	51,768	52,598
Harford County, MD	129,107	133,402
Howard County, MD	164,614	169,302
Kent County, MD	9,301	9,964
Montgomery County, MD	515,257	542,329
Prince George's County, MD	462,493	493,091
Queen Anne's County, MD	25,350	25,601
Baltimore City, MD	268,932	308,261
Bergen County, NJ	467,706	487,011
Burlington County, NJ	229,230	234,996
Camden County, NJ	253,745	270,297
Essex County, NJ	414,880	439,250
Gloucester County, NJ	149,151	155,353
Hudson County, NJ	354,747	355,731

Geographical Area	Male	Female
Hunterdon County, NJ	63,829	65,619
Middlesex County, NJ	427,818	433,717
Morris County, NJ	252,947	257,428
Passaic County, NJ	254,516	263,773
Somerset County, NJ	170,560	175,643
Sussex County, NJ	72,876	72,241
Union County, NJ	282,307	290,242
Warren County, NJ	54,768	55,470
Bronx County, NY	670,728	748,522
Kings County, NY	1,260,397	1,385,909
NY County, NY	777,241	850,547
Orange County, NY	201,512	202,328
Queens County, NY	1,138,438	1,191,686
Richmond County, NY	241,222	251,512
Rockland County, NY	167,624	171,312
Westchester County, NY	485,985	510,903
Adams County, PA	52,268	52,915
Berks County, PA	213,223	216,766
Bucks County, PA	319,358	326,635
Carbon County, PA	32,706	32,485
Chester County, PA	268,207	272,689
Columbia County, PA	31,475	33,580
Delaware County, PA	279,070	297,125
Lackawanna County, PA	105,991	109,843
Lancaster County, PA	273,012	282,139
Lebanon County, PA	70,905	72,687
Lehigh County, PA	184,859	190,549
Luzerne County, PA	162,357	163,621
Monroe County, PA	83,976	83,808
Montgomery County, PA	421,910	439,315
Montour County, PA	8,862	9,217
Northampton County, PA	156,368	159,559
Northumberland County, PA	46,275	44,650
Philadelphia County, PA	749,410	833,022

Geographical Area	Male	Female
Pike County, PA	30,399	29,292
Schuylkill County, PA	73,971	69,288
Wayne County, PA	27,355	23,834
York County, PA	228,254	231,058
Zone of Interest Total	**14,622,605**	**15,409,610**

Source: U.S. Census Bureau, 2019-2023 American Community Survey 5-Year Estimates

Figure 2.8 shows the percent of the population by age group for the zone of interest, Maryland, New Jersey, New York, and Pennsylvania for 2023. The zone of interest population's age distribution is consistent when compared to the three states across most of the age ranges.

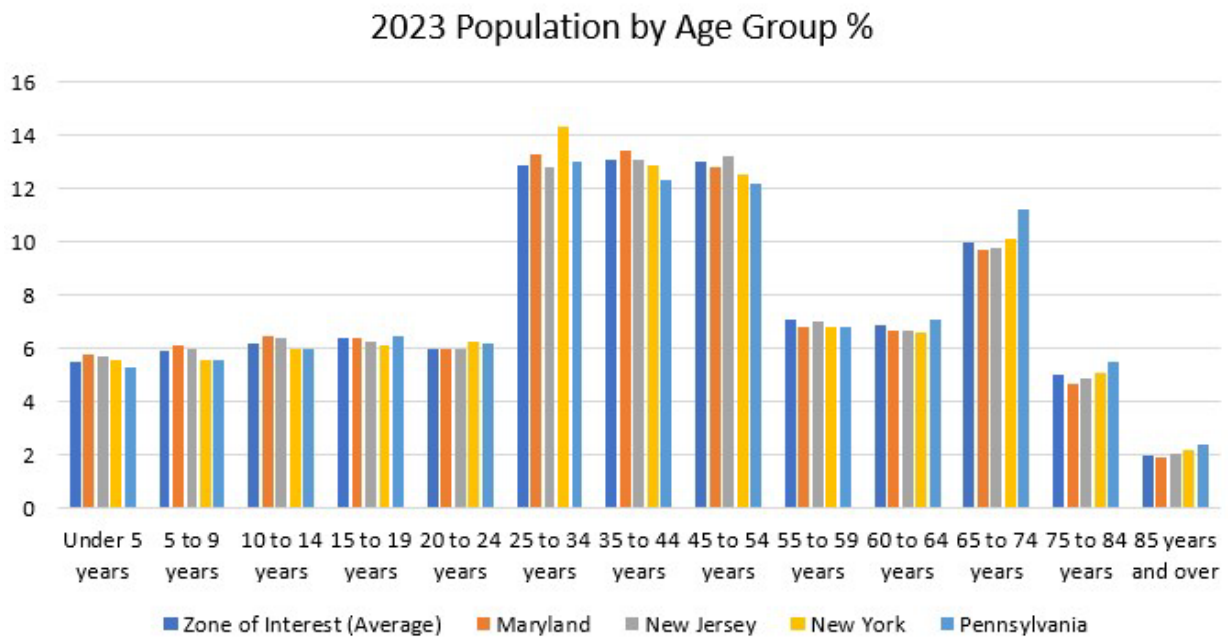

Figure 2.8 Percent of Population by Age Group for 2023

U.S. Census Bureau, 2019-2023 American Community Survey 5-Year Estimates

Population by race and Hispanic Origin is displayed in Table 2.17. The zone of interest is approximately 47.4% White, 20.3% Hispanic or Latino, 18.4% Black, 9.5% Asian, and 3.4% two or more races. The other race categories each account for less than 1%.

By comparison, the population in the state of Maryland is 47.4% White, 12% Hispanic or Latino, 29.2% Black, 0.12% American Indian or Alaskan Native, 6.4% Asian, 0.03% Native Hawaiian/Other Pacific, 0.6% Some Other Race, and 4.3% Two or More Races.

The population in the state of New Jersey is 51.9% White, 21.9% Hispanic or Latino, 12.3% Black, 0.07% American Indian or Alaskan Native, 9.8% Asian, 0.03% Native Hawaiian/Other Pacific, 0.8% Some Other Race, and 3.2% Two or More Races.

The population in the state of New York is 53.4% White, 19.6% Hispanic or Latino, 13.6% Black, 0.19% American Indian or Alaskan Native, 8.8% Asian, 0.03% Native Hawaiian/Other Pacific, 0.9% Some Other Race, and 3.4% Two or More Races.

The population in the state of Pennsylvania is 73.8% White, 8.4% Hispanic or Latino, 10.3% Black, 0.06% American Indian or Alaskan Native, 3.7% Asian, 0.02% Native Hawaiian/Other Pacific, 0.44% Some Other Race, and 3.3% Two or More Races.

Table 2.17 Population Estimate by Race/Hispanic Origin for 2023

Area	White	Hispanic or Latino	Black	American Indian and Alaska Native	Asian	Native Hawaiian and Other Pacific Islander	Some other race	Two or more races
Maryland	2,923,706	744,272	1,799,355	7,494	395,663	1,944	36,201	262,103
New Jersey	4,813,341	2,032,968	1,138,893	6,790	910,968	1,955	69,560	292,539
New York	10,608,842	3,898,652	2,708,094	37,212	1,754,957	6,220	178,956	679,386
Pennsylvania	9,585,453	1,087,732	1,339,554	7,187	476,888	2,816	57,678	429,210
Anne Arundel County, MD	370,531	59,213	102,913	602	23,896	240	2,850	30,691
Baltimore County, MD	444,583	63,048	253,564	1,011	50,898	231	4,202	32,049
Carroll County, MD	149,221	8,333	6,772	146	4,036	17	968	4,825
Cecil County, MD	84,928	5,617	7,167	92	1,338	33	468	4,723
Harford County, MD	190,219	14,585	37,600	61	7,626	111	1,730	10,577
Howard County, MD	156,832	28,121	65,587	351	62,823	122	2,018	18,062
Kent County, MD	14,669	1,074	2,735	3	190	1	71	522
Montgomery County, MD	427,787	218,219	193,539	1,216	159,535	410	9,377	47,503
Prince George's County, MD	106,025	207,694	563,799	1,667	37,228	254	5,972	32,945
Queen Anne's County, MD	42,351	2,678	3,041	0	525	0	293	2,063
Baltimore City, MD	151,037	45,420	342,194	980	14,383	159	3,418	19,602
Bergen County, NJ	501,031	211,044	50,548	868	158,311	206	6,856	25,853
Burlington County, NJ	295,500	42,820	73,455	122	25,819	25	3,310	23,175
Camden County, NJ	280,083	97,957	92,876	183	30,309	92	3,616	18,926
Essex County, NJ	238,415	210,724	307,823	1,224	48,998	192	12,186	34,568
Gloucester County, NJ	228,951	23,885	30,792	88	9,249	142	1,360	10,037
Hudson County, NJ	199,498	289,220	76,501	975	115,819	129	6,220	22,116

Area	White	Hispanic or Latino	Black	American Indian and Alaska Native	Asian	Native Hawaiian and Other Pacific Islander	Some other race	Two or more races
Hunterdon County, NJ	104,980	11,451	3,083	24	5,750	38	527	3,595
Middlesex County, NJ	333,972	198,174	82,833	596	215,014	249	6,052	24,645
Morris County, NJ	341,684	78,992	15,264	177	54,003	8	3,278	16,969
Passaic County, NJ	201,527	225,149	51,612	316	27,940	114	2,489	9,142
Somerset County, NJ	175,148	59,019	32,114	203	66,017	33	2,825	10,844
Sussex County, NJ	117,519	16,039	3,292	23	2,704	0	735	4,805
Union County, NJ	207,815	196,795	112,379	256	31,556	29	7,741	15,978
Warren County, NJ	84,170	13,343	5,849	89	3,262	21	283	3,221
Bronx County, NY	125,116	779,093	412,484	3,533	56,102	627	14,126	28,169
Kings County, NY	957,510	499,799	727,987	3,477	316,500	975	25,967	114,091
NY County, NY	754,045	395,429	204,185	1,679	200,758	638	13,046	58,008
Orange County, NY	239,186	93,608	42,478	438	11,223	26	2,563	14,318
Queens County, NY	550,499	650,071	384,677	6,689	603,690	1,360	52,607	80,531
Richmond County, NY	278,796	96,147	44,439	765	59,191	10	2,657	10,729
Rockland County, NY	205,539	67,951	35,626	181	19,772	38	1,921	7,908
Westchester County, NY	498,855	269,085	128,199	1,197	59,912	96	10,638	28,906
Adams County, PA	92,050	7,919	1,727	33	906	5	356	2,187
Berks County, PA	291,378	103,077	16,986	284	5,531	77	1,846	10,810
Bucks County, PA	522,180	40,952	23,017	220	31,645	82	4,393	23,504
Carbon County, PA	57,866	4,154	1,193	52	317	0	143	1,466
Chester County, PA	412,488	44,329	26,638	128	34,462	123	1,987	20,741
Columbia County, PA	59,223	2,393	1,148	32	658	212	248	1,141
Delaware County, PA	364,839	27,733	125,246	271	35,324	170	2,687	19,925
Lackawanna County, PA	174,964	19,782	6,284	113	6,365	71	1,046	7,209
Lancaster County, PA	442,954	62,574	18,912	253	13,012	67	2,598	14,781
Lebanon County, PA	113,909	21,113	2,594	37	2,192	4	494	3,249
Lehigh County, PA	226,834	101,194	22,525	208	13,035	133	1,822	9,657
Luzerne County, PA	247,469	51,917	13,279	74	3,580	349	763	8,547
Monroe County, PA	102,633	29,702	21,849	164	4,238	4	2,343	6,851
Montgomery County, PA	623,261	55,791	78,360	179	67,082	224	4,366	31,962

Area	White	Hispanic or Latino	Black	American Indian and Alaska Native	Asian	Native Hawaiian and Other Pacific Islander	Some other race	Two or more races
Montour County, PA	16,194	531	430	18	631	0	42	233
Northampton County, PA	230,785	47,075	16,807	42	9,597	22	1,884	9,715
Northumberland County, PA	81,353	4,412	2,224	9	406	12	413	2,096
Philadelphia County, PA	531,413	240,543	614,807	2,162	122,016	325	10,826	60,340
Pike County, PA	46,342	7,177	3,251	25	865	0	97	1,934
Schuylkill County, PA	125,559	9,744	3,745	30	611	11	154	3,405
Wayne County, PA	45,199	2,528	1,473	25	347	27	152	1,438
York County, PA	367,605	41,774	24,941	195	6,367	99	2,220	16,111
Zone of Interest	**14,234,520**	**6,106,211**	**5,524,843**	**33,786**	**2,843,564**	**8,643**	**253,250**	**1,027,398**

Source: U.S. Census Bureau, 2019-2023 American Community Survey 5-Year Estimates

2.12.3 Education and Employment

Table 2.18 displays the highest level of education attained by the population ages 25 and over in each of the regions. In the zone of interest, 5.6% of the population have less than a 9th grade education; another 5.8% have between a 9th and 12th grade education; 25.2% have at least a high school diploma or equivalent; 14.9% have some college education; 7% have an associate degree; 23.7% have a bachelor's degree; and 17.8% have a graduate or professional degree.

In Maryland, 4% of the population have less than a 9th grade education; another 5% have between a 9th and 12th grade education; 23.7% have at least a high school diploma or equivalent; 17.7% have some college education; 6.9% have an associate degree; 22.5% have a bachelor's degree; and 20.3% have a graduate or professional degree.

In New Jersey, 4.6% of the population have less than a 9th grade education; another 4.7% have between a 9th and 12th grade education; 23.7% have at least a high school diploma or equivalent; 17.7% have some college education; 6.9% have an associate degree; 25.8% have a bachelor's degree; and 17.1% have a graduate or professional degree.

In New York, 6% of the population have less than a 9th grade education; another 6.2% have between a 9th and 12th grade education; 24.6% have at least a high school diploma or equivalent; 14.5% have some college education; 8.9% have an associate degree; 22% have a bachelor's degree; and 17.5% have a graduate or professional degree.

In Pennsylvania, 2.9% of the population have less than a 9th grade education; another 5.2% have between a 9th and 12th grade education; 33.2% have at least a high school diploma or equivalent; 15.4% have some college education; 8.9% have an associate degree; 20.6% have a bachelor's degree; and 13.9% have a graduate or professional degree.

Table 2.18 Highest Level of Educational Attainment,

Population 25 Years of Age and Older, 2023 Estimates

Area	Population 25 years and over	Less than 9th grade	9th to 12th grade, no diploma	High school graduate (includes equivalency)	Some college, no degree	Associate's degree	Bachelor's degree	Graduate or professional degree
Maryland	4,272,813	169,933	212,768	1,014,175	754,700	295,192	959,925	866,120
New Jersey	6,459,220	298,733	302,003	1,662,983	989,663	434,152	1,666,634	1,105,052
New York	13,996,138	836,124	862,413	3,437,438	2,081,783	1,242,877	3,083,769	2,451,734
Pennsylvania	9,153,146	262,339	478,397	3,039,316	1,404,570	811,206	1,883,145	1,274,173
Anne Arundel County, MD	411,412	9,392	16,200	90,488	80,052	29,156	103,249	82,875
Baltimore County, MD	588,072	19,276	29,542	142,063	109,898	43,701	135,838	107,754
Carroll County, MD	121,441	1,875	4,350	33,515	22,952	10,487	29,204	19,058
Cecil County, MD	72,901	1,722	4,444	26,111	15,138	5,875	11,635	7,976
Harford County, MD	183,637	2,956	6,909	48,383	36,799	16,085	41,497	31,008
Howard County, MD	227,341	5,823	4,973	28,221	28,341	13,404	69,773	76,806
Kent County, MD	13,934	325	817	4,558	2,073	877	2,770	2,514
Montgomery County, MD	733,108	37,706	26,456	98,664	88,380	39,942	199,428	242,532
Prince George's County, MD	656,475	50,929	36,129	166,011	124,537	42,021	133,084	103,764
Queen Anne's County, MD	36,635	663	1,684	10,206	7,439	3,004	8,205	5,434
Baltimore City, MD	404,300	16,746	34,993	112,940	74,331	22,057	73,130	70,103
Bergen County, NJ	678,249	27,367	20,693	136,071	91,564	45,693	212,294	144,567
Burlington County, NJ	332,056	6,298	12,297	86,704	60,433	26,873	88,885	50,566
Camden County, NJ	362,628	15,957	20,905	105,529	63,874	28,444	78,065	49,854
Essex County, NJ	575,988	40,432	35,618	159,352	89,090	33,266	126,748	91,482
Gloucester County, NJ	209,605	4,389	8,195	65,170	36,980	19,868	49,440	25,563
Hudson County, NJ	514,663	36,236	26,094	116,789	64,044	24,961	144,763	101,776
Hunterdon County, NJ	94,312	1,664	2,293	17,862	13,100	6,107	31,349	21,937
Middlesex County, NJ	594,249	31,601	31,980	138,873	84,160	39,465	155,383	112,787
Morris County, NJ	362,347	8,469	9,260	68,681	46,287	22,216	121,697	85,737
Passaic County, NJ	347,256	29,329	22,387	116,947	54,340	18,996	70,096	35,161

Area	Population 25 years and over	Less than 9th grade	9th to 12th grade, no diploma	High school graduate (includes equivalency)	Some college, no degree	Associate's degree	Bachelor's degree	Graduate or professional degree
Somerset County, NJ	244,416	7,549	7,484	43,930	30,402	14,876	75,953	64,222
Sussex County, NJ	105,664	1,458	3,380	29,260	20,420	8,910	27,233	15,003
Union County, NJ	390,558	31,105	22,496	104,348	59,779	22,216	89,607	61,007
Warren County, NJ	80,008	1,402	3,409	24,638	13,928	7,484	19,925	9,222
Bronx County, NY	937,893	115,476	116,187	266,402	158,737	75,166	130,281	75,644
Kings County, NY	1,848,847	152,124	140,294	446,123	227,561	118,692	454,186	309,867
NY County, NY	1,260,428	72,130	64,334	148,866	124,215	44,174	415,812	390,897
Orange County, NY	258,632	10,091	16,609	72,466	49,355	26,722	46,977	36,412
Queens County, NY	1,698,073	176,752	117,151	435,024	238,690	131,696	365,531	233,229
Richmond County, NY	345,412	18,904	20,693	101,569	55,232	25,441	74,016	49,557
Rockland County, NY	208,594	11,800	13,858	45,118	33,790	16,169	48,405	39,454
Westchester County, NY	697,202	37,761	36,459	124,954	87,534	44,393	181,482	184,619
Adams County, PA	74,009	2,345	4,521	30,052	12,200	6,562	10,664	7,665
Berks County, PA	294,011	13,147	21,018	108,364	44,379	27,222	51,020	28,861
Bucks County, PA	466,402	8,437	15,386	128,441	70,218	38,938	121,430	83,552
Carbon County, PA	48,194	1,339	3,355	21,447	8,143	5,070	6,014	2,826
Chester County, PA	371,656	9,343	9,563	71,857	47,597	23,007	122,249	88,040
Columbia County, PA	43,838	986	2,605	19,655	6,106	3,580	6,599	4,307
Delaware County, PA	392,827	9,393	15,771	106,929	66,244	31,086	92,346	71,058
Lackawanna County, PA	152,357	4,102	8,630	53,977	24,446	15,288	27,959	17,955
Lancaster County, PA	377,538	23,472	25,048	130,089	51,789	30,197	74,352	42,591
Lebanon County, PA	99,085	3,926	7,919	41,242	14,559	7,706	15,036	8,697
Lehigh County, PA	257,679	10,182	14,830	82,865	40,506	23,287	53,447	32,562
Luzerne County, PA	232,115	8,029	13,615	86,188	41,203	25,086	35,628	22,366
Monroe County, PA	119,743	3,234	8,362	42,466	22,272	10,025	20,846	12,538
Montgomery County, PA	607,780	11,534	19,443	133,819	81,446	43,957	177,678	139,903
Montour County, PA	13,257	336	616	4,501	1,750	1,198	2,257	2,599
Northampton County, PA	222,029	5,198	11,110	73,087	35,977	21,683	45,687	29,287
Northumberland County, PA	66,645	1,737	4,919	31,760	9,951	5,500	8,964	3,814
Philadelphia County, PA	1,088,969	52,764	84,484	324,642	178,958	70,910	210,729	166,482
Pike County, PA	45,250	815	2,259	15,174	9,168	4,770	7,591	5,473

Area	Population 25 years and over	Less than 9th grade	9th to 12th grade, no diploma	High school graduate (includes equivalency)	Some college, no degree	Associate's degree	Bachelor's degree	Graduate or professional degree
Schuylkill County, PA	104,202	2,616	7,809	46,949	15,345	11,559	13,058	6,866
Wayne County, PA	39,450	767	2,614	17,083	6,913	3,557	4,990	3,526
York County, PA	322,163	8,171	19,633	122,457	53,502	30,737	55,071	32,592
Zone of Interest	**21,035,535**	**1,167,580**	**1,222,083**	**5,308,880**	**3,136,127**	**1,469,362**	**4,979,556**	**3,751,947**

Source: U.S. Census Bureau, 2019-2023 American Community Survey 5-Year Estimates

Employment by sector is presented in Figure 2.9 and Table 2.19. Figure 2.9 shows that the largest percentage of the zone of interest is employed in the educational services, health care, and social assistance sector at 26.2%. 14.4% of the population works in professional, scientific, management, administrative, and waste management services, 9.6% work in retail trade, 8% work in finance and insurance, real estate, and rental and leasing, 7.8% work in arts, entertainment, recreation, accommodation, and food services, 6.9% work in manufacturing, 6.2% work in transportation and warehousing and 5.9% work in construction. The remainder of the employment sectors each comprise less than 15% of the zone of interest's labor force.

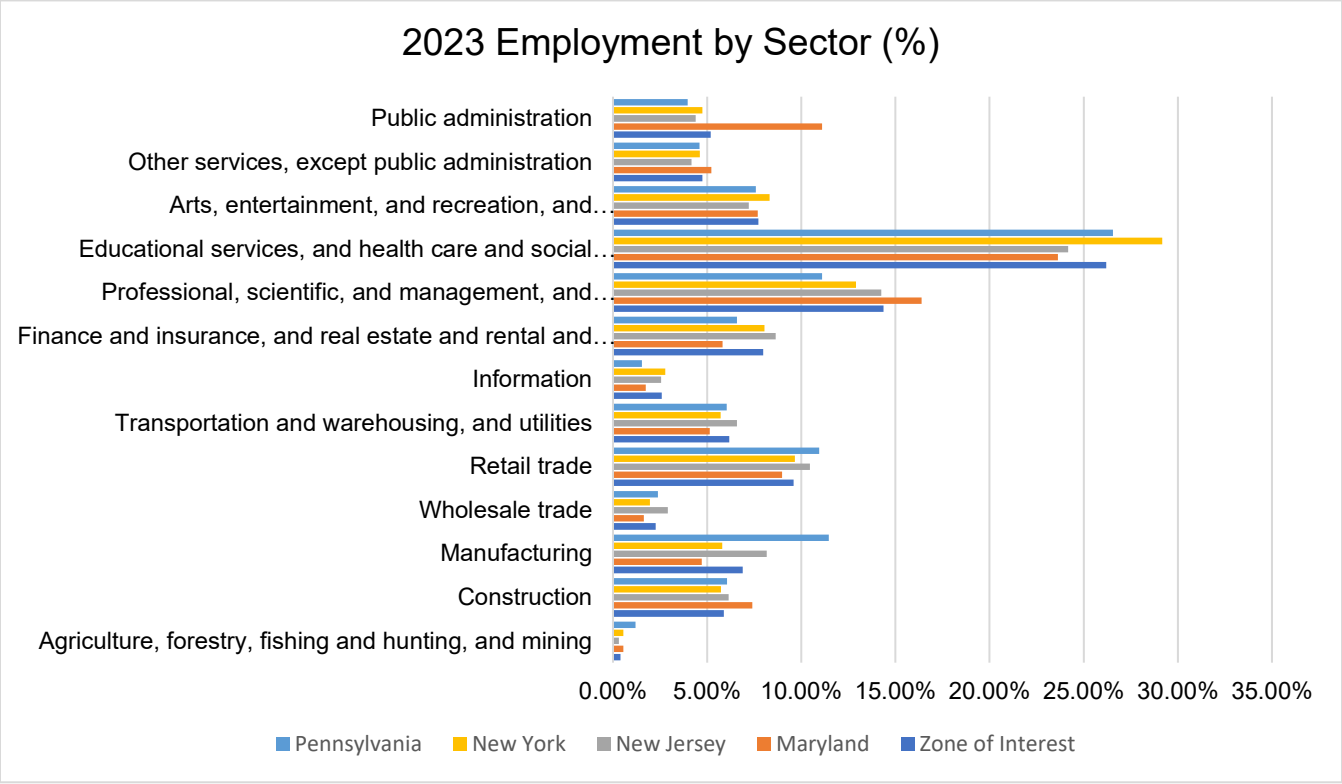

Figure 2.9 2023 Employment by Sector

Source: U.S. Census Bureau, 2019-2023 American Community Survey 5-Year Estimates

Table 2.19 Annual Average Employment by Sector (2023)

Employment Sector	Maryland	New Jersey	New York	Pennsylvania	Zone of Interest
Civilian employed population 16 years and over	3,133,266	4,644,770	9,568,411	6,315,752	14,875,189
Agriculture, forestry, fishing and hunting, and mining	17,285	14,652	52,954	75,354	60,231
Construction	231,877	285,256	549,110	382,376	875,104
Manufacturing	147,750	378,966	554,587	724,231	1,023,724
Wholesale trade	51,357	135,591	187,705	151,113	336,154
Retail trade	281,445	485,852	924,784	691,539	1,426,996
Transportation and warehousing, and utilities	160,819	306,213	547,156	381,042	919,372
Information	54,385	118,752	265,249	96,795	385,639
Finance and insurance, and real estate and rental and leasing	182,078	401,128	769,593	416,324	1,187,995
Professional, scientific, and management, and administrative and waste management services	513,425	662,154	1,234,322	701,043	2,137,418
Educational services, and health care and social assistance	740,359	1,123,151	2,790,946	1,676,795	3,895,782
Arts, entertainment, and recreation, and accommodation and food services	241,134	335,168	796,182	478,688	1,149,853
Other services, except public administration	163,544	193,846	440,780	290,442	705,383
Public administration	347,808	204,041	455,043	250,010	771,538

Source: U.S. Census Bureau, 2019-2023 American Community Survey 5-Year Estimates

Table 2.20 contains the 2023 population estimates for the civilian labor force in each of the regions. In 2023, the zone of interest had an unemployment rate of 5.45%, lower than the unemployment rates of New Jersey (6.2%) and New York (6.2%) and higher than the unemployment rate in Maryland (4.9%) and Pennsylvania (5.2%).

Table 2.20 Labor Force, Employment, and Unemployment Rates, 2023 Estimates

Geographic Area	Civilian Labor Force	Number Employed	Number Unemployed	Unemployment Rate
Maryland	3,296,039	3,133,266	162,773	4.90%
New Jersey	4,949,651	4,644,770	304,881	6.20%
New York	10,200,538	9,568,411	632,127	6.20%

Geographic Area	Civilian Labor Force	Number Employed	Number Unemployed	Unemployment Rate
Pennsylvania	6,665,571	6,315,752	349,819	5.20%
Anne Arundel County, MD	315,487	303,008	12,479	4.00%
Baltimore County, MD	451,026	428,418	22,608	5.00%
Carroll County, MD	94,756	91,737	3,019	3.20%
Cecil County, MD	51,871	49,486	2,385	4.60%
Harford County, MD	141,802	136,437	5,365	3.80%
Howard County, MD	181,188	174,635	6,553	3.60%
Kent County, MD	9,846	9,572	274	2.80%
Montgomery County, MD	587,388	559,184	28,204	4.80%
Prince George's County, MD	532,203	498,220	33,983	6.40%
Queen Anne's County, MD	27,854	26,822	1,032	3.70%
Baltimore City, MD	292,156	273,015	19,141	6.60%
Bergen County, NJ	523,454	494,921	28,533	5.50%
Burlington County, NJ	247,803	235,108	12,695	5.10%
Camden County, NJ	279,103	259,794	19,309	6.90%
Essex County, NJ	446,633	409,416	37,217	8.30%
Gloucester County, NJ	165,215	156,704	8,511	5.20%
Hudson County, NJ	408,443	384,403	24,040	5.90%
Hunterdon County, NJ	70,824	67,580	3,244	4.60%
Middlesex County, NJ	466,150	436,300	29,850	6.40%
Morris County, NJ	285,821	270,937	14,884	5.20%
Passaic County, NJ	272,247	251,131	21,116	7.80%
Somerset County, NJ	196,608	187,223	9,385	4.80%
Sussex County, NJ	82,543	78,190	4,353	5.30%
Union County, NJ	312,930	293,183	19,747	6.30%
Warren County, NJ	61,106	57,702	3,404	5.60%
Bronx County, NY	646,993	575,057	71,936	11.10%
Kings County, NY	1,352,910	1,251,991	100,919	7.50%
NY County, NY	950,067	883,486	66,581	7.00%
Orange County, NY	194,723	184,167	10,556	5.40%
Queens County, NY	1,218,380	1,133,085	85,295	7.00%
Richmond County, NY	240,078	226,877	13,201	5.50%
Rockland County, NY	158,008	148,731	9,277	5.90%
Westchester County, NY	528,070	496,310	31,760	6.00%
Adams County, PA	54,712	53,027	1,685	3.10%
Berks County, PA	223,263	211,518	11,745	5.30%
Bucks County, PA	352,858	336,781	16,077	4.60%
Carbon County, PA	33,037	30,695	2,342	7.10%
Chester County, PA	296,687	285,273	11,414	3.80%

Geographic Area	Civilian Labor Force	Number Employed	Number Unemployed	Unemployment Rate
Columbia County, PA	31,935	30,169	1,766	5.50%
Delaware County, PA	304,628	283,724	20,904	6.90%
Lackawanna County, PA	106,221	101,206	5,015	4.70%
Lancaster County, PA	289,633	280,073	9,560	3.30%
Lebanon County, PA	71,680	68,711	2,969	4.10%
Lehigh County, PA	194,346	183,620	10,726	5.50%
Luzerne County, PA	162,694	153,364	9,330	5.70%
Monroe County, PA	83,763	78,404	5,359	6.40%
Montgomery County, PA	473,974	453,294	20,680	4.40%
Montour County, PA	8,666	8,442	224	2.60%
Northampton County, PA	164,706	156,857	7,849	4.80%
Northumberland County, PA	42,767	41,091	1,676	3.90%
Philadelphia County, PA	809,321	741,315	68,006	8.40%
Pike County, PA	28,726	26,615	2,111	7.30%
Schuylkill County, PA	68,201	64,636	3,565	5.20%
Wayne County, PA	22,168	20,832	1,336	6.00%
York County, PA	243,489	232,712	10,777	4.40%
Zone of Interest	**15,861,161**	**14,875,189**	**985,972**	**5.45%**

Source: U.S. Census Bureau, 2019-2023 American Community Survey 5-Year Estimates (2023 Averages)

2.12.4 Households, Income, and Poverty

Table 2.21 displays the number of households and average household sizes in the state and zone of interest. There were approximately 11,492,434 households in the zone of interest. The average household size of 2.55 was smaller than Maryland (2.58) and New Jersey (2.61) and larger than New Year (2.51) and Pennsylvania (2.40).

Table 2.21 2023 Households and Household Size

Geographic Area	Total Households	Average Household Size
Maryland	2,339,510	2.58
New Jersey	3,478,355	2.61
New York	7,668,956	2.51
Pennsylvania	5,235,339	2.40
Anne Arundel County, MD	223,602	2.60
Baltimore County, MD	330,151	2.51
Carroll County, MD	63,487	2.68
Cecil County, MD	40,172	2.56
Harford County, MD	100,271	2.60
Howard County, MD	120,066	2.76
Kent County, MD	8,530	2.07
Montgomery County, MD	387,881	2.70

Geographic Area	Total Households	Average Household Size
Prince George's County, MD	344,586	2.72
Queen Anne's County, MD	19,637	2.57
Baltimore City, MD	250,608	2.22
Bergen County, NJ	353,307	2.67
Burlington County, NJ	176,046	2.58
Camden County, NJ	200,569	2.58
Essex County, NJ	317,473	2.62
Gloucester County, NJ	111,796	2.67
Hudson County, NJ	295,552	2.38
Hunterdon County, NJ	50,322	2.52
Middlesex County, NJ	305,610	2.74
Morris County, NJ	191,840	2.61
Passaic County, NJ	177,964	2.86
Somerset County, NJ	129,459	2.64
Sussex County, NJ	57,328	2.50
Union County, NJ	201,663	2.81
Warren County, NJ	44,943	2.41
Bronx County, NY	530,067	2.57
Kings County, NY	1,009,596	2.57
NY County, NY	775,376	2.01
Orange County, NY	137,311	2.86
Queens County, NY	828,230	2.77
Richmond County, NY	170,047	2.86
Rockland County, NY	103,284	3.22
Westchester County, NY	370,256	2.62
Adams County, PA	40,411	2.50
Berks County, PA	161,701	2.57
Bucks County, PA	247,674	2.57
Carbon County, PA	27,093	2.37
Chester County, PA	202,405	2.60
Columbia County, PA	25,874	2.36
Delaware County, PA	216,660	2.56
Lackawanna County, PA	88,266	2.35
Lancaster County, PA	210,536	2.57
Lebanon County, PA	55,846	2.50
Lehigh County, PA	143,445	2.55
Luzerne County, PA	133,434	2.36
Monroe County, PA	60,562	2.72
Montgomery County, PA	333,514	2.52
Montour County, PA	7,689	2.25

Geographic Area	Total Households	Average Household Size
Northampton County, PA	121,496	2.50
Northumberland County, PA	37,581	2.32
Philadelphia County, PA	669,222	2.29
Pike County, PA	24,009	2.47
Schuylkill County, PA	57,465	2.37
Wayne County, PA	20,314	2.36
York County, PA	180,207	2.50
Zone of Interest	**11,492,434**	**2.55**

Source: U.S. Census Bureau, 2019-2023 American Community Survey 5-Year Estimates

The median household income in the zone of interest ranged from $146,982 in Howard County, MD to $49,036 in Bronx County, NY in 2023, as displayed in Table 2.22. Per capita income in the zone of interest was $48,424 in 2023, higher than the per capita income of the state of Pennsylvania ($43,104) and lower than the states of Maryland ($51,689), New Jersey ($53,118), and New York ($49,520).

Table 2.22 Median and Per Capita Income

Geographic Area	Median Household Income (All)	Per Capita Income
Maryland	$101,652	$51,689
New Jersey	$101,050	$53,118
New York	$84,578	$49,520
Pennsylvania	$76,081	$43,104
Anne Arundel County, MD	$120,324	$58,462
Baltimore County, MD	$90,904	$48,196
Carroll County, MD	$115,876	$51,465
Cecil County, MD	$91,146	$42,560
Harford County, MD	$111,317	$50,861
Howard County, MD	$146,982	$65,860
Kent County, MD	$74,402	$45,817
Montgomery County, MD	$128,733	$66,124
Prince George's County, MD	$100,708	$45,287
Queen Anne's County, MD	$113,347	$54,824
Baltimore City, MD	$59,623	$39,195
Bergen County, NJ	$123,715	$62,986
Burlington County, NJ	$105,271	$53,077
Camden County, NJ	$86,384	$44,380
Essex County, NJ	$76,712	$48,021
Gloucester County, NJ	$102,807	$47,760
Hudson County, NJ	$90,032	$53,998
Hunterdon County, NJ	$139,453	$71,070
Middlesex County, NJ	$109,028	$49,417

Geographic Area	Median Household Income (All)	Per Capita Income
Morris County, NJ	$134,929	$69,226
Passaic County, NJ	$87,137	$40,241
Somerset County, NJ	$135,960	$70,321
Sussex County, NJ	$114,316	$56,471
Union County, NJ	$100,117	$51,850
Warren County, NJ	$99,596	$48,232
Bronx County, NY	$49,036	$26,956
Kings County, NY	$78,548	$46,057
NY County, NY	$104,553	$94,922
Orange County, NY	$96,497	$42,019
Queens County, NY	$84,961	$41,160
Richmond County, NY	$98,290	$44,368
Rockland County, NY	$110,631	$45,538
Westchester County, NY	$118,411	$70,607
Adams County, PA	$81,071	$39,339
Berks County, PA	$77,684	$39,012
Bucks County, PA	$111,951	$56,824
Carbon County, PA	$67,877	$36,380
Chester County, PA	$123,041	$63,089
Columbia County, PA	$61,992	$32,432
Delaware County, PA	$88,576	$48,676
Lackawanna County, PA	$64,691	$36,217
Lancaster County, PA	$83,703	$41,319
Lebanon County, PA	$76,350	$37,701
Lehigh County, PA	$77,493	$41,804
Luzerne County, PA	$62,321	$34,857
Monroe County, PA	$82,374	$37,512
Montgomery County, PA	$111,521	$60,507
Montour County, PA	$72,926	$45,274
Northampton County, PA	$86,687	$44,837
Northumberland County, PA	$57,948	$32,241
Philadelphia County, PA	$60,698	$37,669
Pike County, PA	$79,318	$42,243
Schuylkill County, PA	$66,901	$33,769
Wayne County, PA	$62,182	$33,735
York County, PA	$82,238	$40,530
Zone of Interest	**$93,442**	**$48,424**

Source: U.S. Census Bureau, 2019-2023 American Community Survey 5-Year Estimates

Table 2.23 displays the percentage of persons and families whose incomes fell below the poverty level in the past twelve months as of 2023. Within the zone of interest, Bronx County, NY had the highest percentage of people with incomes below the poverty level at 26.9% and Hunterdon County, NJ had the lowest at 3.8%. In terms of families below the poverty level, Hunterdon County, NJ has the lowest percentage with 2.3% and Bronx County, NY has the highest with 22.1%. In comparison, the state of Maryland has the lowest percentage of families below the poverty line with 6.3%, while New York has the highest with 9.8%.

Table 2.23 Percent of Families and People Whose Income in the Past 12 Months is Below the Poverty Level (2023)

Geographic Area	All Families	All People
Maryland	6.30%	9.30%
New Jersey	7.00%	9.80%
New York	9.80%	13.70%
Pennsylvania	8.10%	11.80%
Anne Arundel County, MD	3.70%	5.50%
Baltimore County, MD	6.90%	10.00%
Carroll County, MD	3.70%	5.30%
Cecil County, MD	7.80%	10.90%
Harford County, MD	4.60%	7.00%
Howard County, MD	3.30%	5.10%
Kent County, MD	6.20%	9.50%
Montgomery County, MD	4.90%	7.10%
Prince George's County, MD	6.60%	10.20%
Queen Anne's County, MD	3.40%	7.00%
Baltimore City, MD	15.30%	20.10%
Bergen County, NJ	5.00%	6.70%
Burlington County, NJ	4.90%	6.80%
Camden County, NJ	9.10%	12.20%
Essex County, NJ	11.70%	15.00%
Gloucester County, NJ	4.50%	7.60%
Hudson County, NJ	10.90%	14.80%
Hunterdon County, NJ	2.30%	3.80%
Middlesex County, NJ	6.20%	8.50%
Morris County, NJ	3.40%	5.10%
Passaic County, NJ	11.10%	13.70%
Somerset County, NJ	3.50%	5.50%
Sussex County, NJ	3.50%	5.40%
Union County, NJ	6.20%	8.90%
Warren County, NJ	5.60%	8.10%
Bronx County, NY	22.10%	26.90%
Kings County, NY	14.90%	18.90%

Geographic Area	All Families	All People
NY County, NY	12.00%	15.80%
Orange County, NY	9.10%	13.00%
Queens County, NY	9.40%	12.20%
Richmond County, NY	8.00%	10.90%
Rockland County, NY	10.70%	15.60%
Westchester County, NY	6.00%	8.90%
Adams County, PA	5.40%	8.40%
Berks County, PA	8.30%	11.70%
Bucks County, PA	4.10%	6.10%
Carbon County, PA	8.40%	12.00%
Chester County, PA	3.70%	5.90%
Columbia County, PA	9.60%	15.70%
Delaware County, PA	7.40%	10.20%
Lackawanna County, PA	10.70%	14.00%
Lancaster County, PA	5.60%	8.70%
Lebanon County, PA	7.60%	10.60%
Lehigh County, PA	8.20%	11.90%
Luzerne County, PA	11.30%	15.40%
Monroe County, PA	8.70%	11.30%
Montgomery County, PA	4.20%	6.50%
Montour County, PA	5.60%	8.80%
Northampton County, PA	5.90%	8.80%
Northumberland County, PA	8.60%	12.20%
Philadelphia County, PA	17.50%	22.00%
Pike County, PA	6.30%	9.30%
Schuylkill County, PA	8.00%	12.50%
Wayne County, PA	9.30%	12.20%
York County, PA	5.90%	8.60%
Zone of Interest	7.58%	10.63%

Source: U.S. Census Bureau, 2019-2023 American Community Survey 5-Year Estimates

2.13 RECREATION FACILITIES, ACTIVITIES, AND NEEDS

2.13.1 Visitation Profile

Beltzville Lake visitors are a diverse group that includes residents of the immediate area, hunters, fishermen, trail users, and day users who picnic, swim, boat, observe wildlife, and sightsee. The peak visitation months are May through September, with July typically being the highest visitation month. At Beltzville Lake, USACE maintains traffic counters at locations where the majority of visitation occurs. These locations generally include developed park areas and minor access points.

Table 2.24 provides 5 years of annual visitation by activity for FY2020-2024. Table 2.25 provides total visitation by year for FY2020-2024. Visitation numbers are impacted by several factors including counting methodology, flooding, drought, COVID-19, and other environmental factors. The top 3 activities per year are highlighted in blue. In the 5 years reported by visitation, water contact activities and picnicking were in the top 3 each year. Other popular activities include boating, sightseeing, and walking, hiking, and jogging. Overall visitation is trending up over the last 5 years with 2024 reporting over 581,733 visitors.

Table 2.24 Beltzville Lake Visitation by Activity FY2020-2024

	2020	2021	2022	2023	2024
Boating*	39,597	55,295	59,116	101,574	107,965
Fishing**	26,775	42,755	35,490	56,789	60,725
Water Contact Activities	126,177	406,584	207,494	299,219	309,846
Walking, Hiking, Jogging	45,726	127,821	66,578	94,429	98,002
Picnicking	88,828	277,036	140,054	199,542	206,602
Bicycling	4,921	12,206	6,894	9,998	10,422
Field Sports	12,175	34,789	17,413	24,194	25,060
Special Event	18,957	57,456	27,928	38,571	39,871
Other	13,669	29,814	19,548	29,906	31,354

	2020	2021	2022	2023	2024
Sightseeing	68,099	91,111	71,686	96,180	100,040

Source: USACE VERS (Visitation Estimation & Reporting System, 2020-2024)
Top three activities per year highlighted in blue
*Sum of boating, power boating, and nonpowered boating
** Sum of fishing, boat fishing, and shore fishing

Table 2.25 Beltzville Lake Total Visitation FY2020-2024

	2020	2021	2022	2023	2024
TOTAL VISITATION	130,048	670,708	388,948	559,374	581,733

Source: USACE VERS (Visitation Estimation & Reporting System, 2020-2024)

Zone of Interest

The visitation market area, or zone of interest, is the area from which the majority of visitors to the lake originate. The study team determined the majority of visitors travel from 55 counties across four states. More information about the zone of interest can be found in 2.12.1.

2.13.2 Recreation Areas and Facilities

The 3,002-acre Beltzville State Park is in the southern foothills of the Poconos. Pohopoco Creek, an excellent trout stream, feeds the 972-acre Beltzville Lake, which is a rest stop for migrating waterfowl and is a destination for boaters and anglers. The park consists of four areas; Pine Run Recreation Area, Pine Run West Area, Pine Run East Area, and Preacher's Camp Recreation Area. The sandy beach and picnic pavilions are very popular. The park also offers 15 miles of hiking trails and offers hunting opportunities on over 1,700 acres of land. Recreational facilities are a result of a cooperative effort of the USACE, Pennsylvania Department of Conservation and Natural Resources (PA DCNR) Bureau of State Parks and the Pennsylvania Game Commission (PGC).

Of great importance to the lake's zone of interest are the existing and future recreational opportunities. Table 2.26 lists the various recreational facilities at Beltzville Lake. These areas do not include camping, lodging, showers, marinas, or playgrounds. Each recreation area is more specifically described in Chapter 5.

Table 2.26 Recreation Facilities at Beltzville Lake

Recreation Area	Managed	Showers	Boat Ramps	Picnic Areas	Playground	Swimming Area	Trails
Beltzville Dam Overlook	U			A			
Pine Run East Boat Launch	O		X	A			
Pine Run West Day Use Area	O	X		GS	X	BE	B M
Preacher's Camp Boat Launch	O		X	A		X	

Source: USACE Corps Lakes website

X Exists at lake

Managing Entity
O Other
U USACE

Picnic
A Picnic Area
GS Group Picnic Shelter

Swimming
BE Beach

Trails
B Bike Trails
M Multipurpose Trails

Fishing and Hunting

Beltzville Lake is stocked with warmwater and cold water game fish and panfish. Common species are trout, striped bass, largemouth and smallmouth bass, walleye, muskellunge, and perch. Below the dam, Pohopoco Creek is stocked with trout. Much of the lake's northern shoreline can be reached from Pohopoco Drive.

During hunting seasons, more than 1,707 acres are open to hunting, trapping, and training of dogs. Common species are deer, rabbit, pheasant, ruffed grouse, and waterfowl.

Day Use and Picnicking

Wooded and open picnic areas are in the Pine Run West Day Use Area, which has modern restrooms, drinking water, picnic tables, parking areas, and day-use mooring for boats. Playfields are around the wooded picnic area with an ADA accessible children's playground between Picnic Pavilion Four and the beach. Beltzville has four picnic pavilions that may be reserved up to 11 months in advance for a fee Unreserved picnic pavilions are free on a first-come, first-served basis.

Boating and Water Sports

The Pine Run East Launch along the northern shore of the lake features a three-lane boat launching ramp, ADA accessible courtesy dock, a wide gravel beaching area, and parking for cars and trailers. The Preacher's Camp Launching Area on the southern shore has a two-lane launch ramp, parking for cars and boat trailers, and seasonal mooring of canoes and kayaks. An ADA accessible courtesy dock in the day use area near the beach is available upon request.

Skiing is permitted from sunrise to sunset in the zoned ski area along the south shore of the lake. All boats in this ski area shall operate in a counterclockwise direction. Boats not engaged in skiing must remain outside the ski area while skiing is in progress. A boat may not tow more than one water-ski device on weekends and holidays from the Saturday preceding Memorial Day through Labor Day. Kite-skiing and parasailing are prohibited. Boats may not exceed 45 mph. A boat rental concession, west of the swimming beach, is open daily during the summer season. It rents kayaks, paddleboats, and a pontoon boat (advance reservations required).

Trails

Beltzville lake offers 10 hiking trails covering 15 miles of varying difficulties and route types. Mountain biking is only permitted on the 2.5-mile Christman Trail.

- Bird Blind Trail

  The Bird Blind Trail is a short (0.1 mile), easy trail that starts near the Ground Pine Trail and continues to a wall-type bird blind. Visitors must turn around just past the bird blind and obey all “No Trespassing” signs in the area. Hiking and cross-country skiing are recommended for this trail.

- Christman Trail

  The Christman Trail is 2.5 miles long, featuring more difficult hiking that leads past an old orchard, through a mixed forest, and through old farm fields. The easy main loop is marked with yellow medallions, and connects with the Wild Creek Trail. Hiking, mountain biking, and cross-country skiing are recommended for this trail.

- Cove Ridge Trail

  The Cove Ridge Trail is a 2.4-mile loop trail of more difficult hiking. It can be accessed by the Wild Creek Tailhead. The trail begins at the Wild Creek Falls Bridge and follows the forested ridge above Wild Creek Cove.

- Falls Trail

  The Falls Trail is a 1-mile loop of more difficult hiking accessed by the Wild Creek Trailhead. The trail leads to the Wild Creek Bridge and continues upstream to the waterfalls area.

- Ground Pine Trail

The Ground Pine Trail is a loop that features 1.2 miles of the easiest hiking. The entrance to the trail is located behind the park office and leads through a mixed forest to loop back to the park office. Cross country skiing, as well as hiking are recommended for this trail.

- Pine Cove Trail

  The Pine Cove Trail is a 0.7 mile loop of easiest hiking. It begins at the southeast corner of Parking Lot A and follows a path along pine Run Cove then loops back through a field area. Hiking and cross-country skiing are recommended for Pine Cove Trail.

- Preachers Camp Trail

  This hiking trail can be accessed from the end of Preachers Camp Road or the parking lot off of Trachsville Hill Road. This moderately difficult trail ascends steep mountainside through deciduous and coniferous forests. It cuts through a thick section of rhododendron understory, as it follows the Pohopoco Cove.

- Sawmill Loop Trail

  Looping along the Sawmill Run Creek, this 2.0-mile more difficult hiking trail passes by mixed forest with large Eastern hemlocks, fields, a pons, and a forested swamp. There are several historical points of interest along this trail, such as several dams and remnants of a water raceway for a grist mill. An abandoned slate quarry dates back to the 18th and 19th century.

- Tree ID Trail

  The Tree ID Trail is an easy, 0.2-mile out-and-back trail that begins near Parking Lot B and ends near the Ground Pine Trail. Along the trail, identify trees using a pamphlet (available at the trailhead or in the park office).

- Trinity Gorge Trail

  The Trinity Gorge Trail is a 4.1-mile long out-and-back trail of more difficult hiking. It leads past farm fields and through forests for 2.9 miles between the two trailheads. An optional 1.2-mile section of the trail follows the lakeshore to make a loop in the middle of the trail. Modern restrooms are available at Preachers Camp Boat Launch.

2.13.3 Recreation Analysis

The current Pennsylvania Statewide Comprehensive Outdoor Recreation Plan (SCORP) was prepared by the Commonwealth of Pennsylvania DCNR for 2020-2024. The SCORP serves to address emerging issues in Pennsylvania outdoor recreation and set priority areas to serve as the foundation for action over the next five years.

According to the 2020-2024 Pennsylvania SCORP the following priority areas were identified:

- Health and Wellness
- Recreation for All
- Sustainable Systems
- Funding and Economic Development
- Technology

To implement these priorities the SCORP identified 20 recommendations and 70 action steps.

In order to gain an understanding of statewide participation trends several surveys were conducted to support the development of the SCORP. Some highlights of the participation trends include:

- More than 9 out of 10 Pennsylvanians participated in some outdoor recreation activity in the past year.
- Over half of Pennsylvanians participated in outdoor recreation at least one or twice per month.
- 88.4% of Pennsylvania's outdoor enthusiasts said that outdoor recreation is an essential part of their lives.
- 80.7% of Pennsylvania's outdoor enthusiasts said they would like to participate in more outdoor activities.

Where people recreate was also surveyed with 49% of responders indicating that they recreate at their local or county amenities, 24% in state amenities, and 4% federal. Nationally this is the trend, with even a higher number of participants (63%) recreating within 10 miles of their homes.

Activities that PA's outdoor recreation enthusiasts were most interested in participating in was surveyed and results are presented with different activities identified by race as shown in Table 2.27.

Table 2.27 Top Five Activities by Race

White	Black/African American	Hispanic/Chicano/Latino	Asian/Pacific Islander
Walking	Basketball	Hiking	Hiking
Hiking	Walking	Walking	Walking
Swimming	Other	Other	Fishing
Fishing	Fishing	Swimming	Swimming
Camping	Swimming	Basketball	Biking

(Source: 2020-2024 Pennsylvania Outdoor Recreation Plan)

Walking and/or hiking consistently rank on the top of the list for all races, with fishing and swimming being other activities that are popular among a diversity of Pennsylvanians. Beltzville Lake provides opportunities for the public to participate in their favorite activities by making use of the numerous hiking trials for all levels, access to fishing along the shoreline or by boat, and a swimming beach.

2.13.4 Recreation Carrying Capacity

The plan formulated herein proposes to provide a variety of activities and to encourage optimal, safe use of present public use areas without causing irreparable harm to natural resources. The carrying capacity of the land is determined primarily by the distinct characteristics of the site including but not limited to soil type, steepness of topography, and available moisture. Recreational carrying capacity of the Lake's water surface is based primarily on available space and numbers of users. These characteristics, both natural and manmade, are development constraints that often determine the type and number of facilities that should be provided.

A carrying capacity study was conducted at Beltzville Lake in April 2021 by the Department of Recreation Park and Tourism Management, Pennsylvania University. Presently, the USACE manages recreation areas using historic visitation data combined with best professional judgment to address recreation areas, including the water surface, considered to be overcrowded, overused, underused, or well balanced. Compared to other USACE Projects of similar size, Beltzville Lake experiences high visitation. This trend is expected to continue based on regional population projections, supported by the analysis provides within the 2021 capacity study. However, the USACE, in partnership with the PA DCNR, will continue to identify possible causes and effects of overcrowding and overuse and apply appropriate best management practices including site management, regulating visitor behavior, and modifying visitor behavior as needed.

2.14 REAL ESTATE

A total of 3,316.69 acres of fee simple land and 78 acres of easements were acquired for the Beltzville Lake project. Easement acres reflect all easements on the project and not solely flowage easements. These are the official acres and may differ from those in other parts of this plan, which are for planning purposes only, due to improved measurement technology, erosion, and sedimentation.

2.14.1 Outgrants

The term "outgrant" is a broad term used by the USACE to describe a variety of real estate instruments wherein an interest in real property has been conveyed by the USACE to another party. Outgrants at Beltzville Lake include leases, licenses, easements, consents, permits, and others which include the following:

- 18 Easements
- 11 Licenses
- 5 Leases

- 4 Consents

The demand for real estate outgrants at Beltzville Lake ranks fairly low among all USACE lake projects in terms of the total number and complexity of real estate outgrants. Management actions related to outgrants include routine inspections to ensure compliance with the terms of the outgrant, public safety requirements, and environmental compliance such as proper solid waste disposal and storage of pesticides. Additional actions include review of maintenance and construction proposals made by grantees. Easements, licenses, and leases are generally inspected annually for overall compliance. The management of outgrants is a major responsibility shared by the Operations and Real Estate Divisions of the Philadelphia District.

2.14.2 Guidelines for Property Adjacent to Public Land

It is the policy of the USACE to manage the natural, cultural, and developed resources of Beltzville Lake to provide the public with safe and healthful recreational opportunities, while protecting and enhancing those resources. While private exclusive use of public land is not permitted, property owners adjacent to public lands do have all the same rights and privileges as any other citizen on their own property. Therefore, the information contained in these guidelines is designed to acquaint the adjoining landowner and other interested persons with the types of property involved in the management of government land at Beltzville Lake.

2.14.3 Trespass and Encroachment

Government property is monitored by USACE personnel to identify and correct instances of unauthorized use, including trespasses and encroachments. The term “trespass” includes unauthorized transient use and occupancy, such as mowing, tree cutting and removal, livestock grazing, cultivation and harvesting crops, and any other alteration to Government property done without the USACE approval. Unauthorized trespasses may result in a Title 36 citation requiring violators to appear in Federal Magistrate Court, which could subject the violator to fines or imprisonment (See 36 C.F.R. Part 327 Rules and Regulations Governing Public Use of Water Resources Development Projects Administered by the Chief of Engineers). More serious trespasses will be referred to the USACE Office of Counsel for enforcement under state and federal law, which may require restoration of the premises and collection of monetary damages.

The term “encroachment” pertains to an unauthorized structure or improvement on Government property. When encroachments are discovered, project personnel will attempt to resolve the issue at the project level. Where no resolution is reached, or where the encroachment is a permanent structure, the method of resolution will be determined by the USACE Real Estate Division, with recommendations from Operations Division and Office of Counsel. The USACE’s general policy is to require removal of encroachments, restoration of the premises, and collection of appropriate administrative costs and fair market value for the term of the unauthorized use.

The most common trespass are unauthorized mowing and paths, unauthorized structures such as fences and temporary structures, grazing, storage of personal property on USACE lands, and tree and vegetation removal. Trash dumping is an especially difficult and expensive problem at many USACE lakes. Encroachments can be prevented. Identifying the USACE fee boundary line and flowage easement designation are critical elements for the public who are planning for any type of activity near a USACE fee boundary.

CHAPTER 3 – RESOURCE GOALS AND OBJECTIVES

INTRODUCTION

The terms “goal” and “objective” are often defined as synonymous, but in the context of this Master Plan goals express the overall desired end state of the Master Plan whereas resource objectives are specific task-oriented actions necessary to achieve the overall Master Plan goals.

RESOURCE GOALS

The following statements, paraphrased from EP 1130-2-550, Chapter 3, express the goals for the Beltzville Lake Master Plan:

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 the project’s 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 the project’s natural resources.

GOAL D. Recognize the project’s unique qualities, characteristics, and potentials.

GOAL E. Provide consistency and compatibility with national objectives and other State and regional goals and programs.

In addition to the above goals, USACE management activities are guided by USACE-wide Environmental Operating Principles as follows:

- Foster sustainability as a way of life throughout the organization.
- Proactively consider environmental consequences of all USACE activities and act accordingly.
- Create mutually supporting economic and environmentally sustainable solutions.
- Continue to meet our corporate responsibility and accountability under the law for activities undertaken by USACE, which may impact human and natural environments.
- Consider the environment in employing a risk management and systems approach throughout the life cycles of projects and programs.
- Leverage scientific, economic and social knowledge to understand the environmental context and effects of USACE actions in a collaborative manner.

- Employ an open, transparent process that respects views of individuals and groups interested in USACE activities.

RESOURCE OBJECTIVES

Resource objectives are defined as clearly written statements that respond to identified issues and that specify measurable and attainable activities for resource development and/or management of the lands and waters under the jurisdiction of the Philadelphia District, Beltzville Lake Project Office. The objectives stated in this Master Plan support the goals of the Master Plan, the USACE Environmental Operating Principles (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. Recreational and natural resources carrying capacities are also accounted for during development of the objectives found in this Master Plan, as well as regional and state planning documents including:

- Pennsylvania Wildlife Action Plan, Carbon County, PA
- Pennsylvania Statewide Comprehensive Outdoor Recreation Plan

The objectives in this Master Plan are intended to provide project benefits, meet public needs, and foster environmental sustainability for Beltzville Lake to the greatest extent possible. Tables 3.1 through 3.4 list the objectives for Beltzville Lake.

Table 3.1 Recreational Objectives

Recreational Objectives	Goals				
	A	B	C	D	E
Consider existing and future potential recreational opportunities for multiple user groups while ensuring visitor safety.	*		*	*	*
Identify potential locations for future LDR or FOIR areas to accommodate visitation growth on USACE fee property. Provide opportunities for day use activities, especially picnicking. Provide enough campsites in popular areas.	*		*		
Evaluate boating trends and traffic at ramps and on lake to determine whether the need for a boating capacity study is warranted. Study, if warranted, would focus on boater safety traffic on waterway.	*		*		
Support and provide technical guidance to lease partners on the management of recreation facilities in accordance with public demand. Examples include universally accessible fishing docks, fish cleaning stations near boat ramps, and playground equipment in day use area.	*		*		
Consider flood/conservation pool to address potential impact to recreational facilities (boat ramps, courtesy docks, etc.).	*	*	*	*	

Recreational Objectives	Goals				
Ensure consistency with USACE Natural Resource Management (NRM) Strategic Plan.					*
Monitor the Pennsylvania SCORP to ensure that USACE is responsive to outdoor recreation trends, public needs and resource protection within a regional framework. All plans by others will be evaluated considering USACE policy and operational aspects of Beltzville Lake.			*		*

*Denotes that the objective helps to meet the specified goal.

Table 3.2 Natural Resource Management Objectives

Natural Resource Management Objectives	Goals				
	A	B	C	D	E
Give priority to the preservation and improvement of open space in public use planning, design, development, and management activities.	*	*		*	*
Work with Tribal Nations to provide access to any culturally significant natural resources.		*		*	*
Consider flood/conservation pool levels to ensure that natural resources are managed in ways that are compatible with project purposes.	*	*	*	*	*
Actively manage and conserve fish and wildlife resources, especially threatened and endangered species and Species of Greatest Conservation Need, by implementing ecosystem management principles. Key among these principles is the use of native species adapted to the Central Appalachian Forest ecoregion in restoration and mitigation plans.	*	*		*	*
Manage high density and low-density recreation lands in ways that balance visitor use with benefits to wildlife.			*		*
Optimize resources, labor, funds, and partnerships for protection and restoration of fish and wildlife habitats.		*			*
Minimize activities which disturb the scenic beauty and aesthetics of the lake.	*	*	*	*	
Work with the PGC on prescribed fire, timber harvests, and removal of targeted species as a management tool to promote the vigor and health of forests, woodlands, and prairies.	*	*	*	*	*
Deter unauthorized use and damage of public lands through utilization of Title 36 CFR authorities, as well as state and local rules and regulation related to the protection of natural resources.	*	*	*	*	*
Manage lands and waters to reduce the spread of invasive, non-native, and aggressively spreading native species.	*	*	*	*	*

Natural Resource Management Objectives	Goals				
Protect and restore important native habitats such as prairies, bottomland hardwoods, riparian zones, and wetlands where they occur or historically occurred on project lands. Special emphasis should be placed on protection and/or restoration of special or rare plant species. Emphasize promotion of pollinator habitat, migratory bird habitat, and habitat for birds listed by USFWS and the Commonwealth of Pennsylvania as Birds of Conservation Concern.	*	*	*	*	*
As funding permits, complete an inventory of timber resources and prepare a Forest Management Plan.	*	*		*	*

*Denotes that the objective helps to meet the specified goal.

Table 3.3 Visitor Information, Education, and Outreach Objectives

Visitor Information, Education, and Outreach Objectives	Goals				
	A	B	C	D	E
Create opportunities (i.e., updates to local municipalities, web page) for communication with partner agencies, special interest groups, and the general public. Utilize social media as a platform to share information with visitors and stakeholders.	*			*	*
Provide educational, interpretive, and outreach programs at the lake office and around the lake. Topics to include history, project purposes (flood risk management, water supply, water quality, and recreation), water safety, cultural resources, ecology, and USACE missions.	*	*	*	*	*
Promote USACE Water Safety message.	*		*	*	*
Educate adjacent landowners on policies and permit processes in order to reduce encroachment actions.	*	*	*	*	*
Work with local communities to engage the public and provide educational and informational opportunities.	*	*	*	*	*

*Denotes that the objective helps to meet the specified goal.

Table 3.4 Cultural Resources Management Objectives

Cultural Resources Management Objectives	Goals				
	A	B	C	D	E
As funding permits, complete an inventory in accordance with Section 110 NHPA and prepare a Cultural Resources Management Plan.	*	*		*	*
Increase public awareness and education of regional and local Tribal histories.		*		*	*

Cultural Resources Management Objectives	Goals				
Monitor and enforce Title 36 through PA DCNR NRM staff using Title 18 and ARPA to prevent unauthorized excavation and removal of cultural resources.		*		*	*
Provide access by Tribal Nations to any cultural resources, sacred sites, or other Traditional Cultural Properties.	*	*			
Preserve and protect cultural resources sites in compliance with existing federal statutes and regulations.	*	*	*	*	*

*Denotes that the objective helps to meet the specified goal.

CHAPTER 4 – LAND ALLOCATION, LAND CLASSIFICATION, WATER SURFACE, AND PROJECT EASEMENT LANDS

4.1 LAND ALLOCATION

All lands at 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: Operations, Recreation, Fish and Wildlife, and Mitigation. At Beltzville Lake, the land allocation category that applies is Operations. Operations is defined as those lands that are required to operate the project for the primary authorized purposes of flood risk management, water supply, recreation, water quality, and fish and wildlife. The remaining allocations of Recreation, Fish and Wildlife, and Mitigation would apply only if lands had been acquired specifically for these purposes.

4.2 LAND CLASSIFICATION

4.2.1 General

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.

4.2.2 Prior Land Classifications

The previous version of the Beltzville Lake Master Plan included land classification criteria that were similar, but not identical to the current criteria. In the years since the previous Master Plan was published, wildlife habitat values, surrounding land use, and regional recreation trends have changed giving rise to the need for revised classifications. Table 4.1 identifies land and water surface classification changes from the 1971 Master Plan and revisions to the 2026 Master Plan Revision.

Table 4.1 Change from 1971 Land and Water Surface Classifications to 2026 Proposed Land and Water Surface Classifications

Prior Land Classifications (1971)	Acres	Proposed Land Classifications (2026)	Acres	Net Difference
Project Operations	340	Project Operations (PO)	282	(58)
Recreation Lands	1,771	High Density Recreation (HDR)	250	(1521)
-	-	Multiple Resource Management Lands (MRML)	0	0
-	-	Low Density Recreation (MRML-LDR)	1,597	1,597
Wildlife Management (MRML-WM)	486	Wildlife Management (MRML-WM)	509	23
Environmentally Sensitive Area (ESA)	-	Environmentally Sensitive Area (ESA)	0	0
LAND TOTAL	**2,597**	**LAND TOTAL**	**2,638**	**41**
Prior Water Surface Classifications (1971)	**Acres**	**Proposed Water Surface Classifications (2026)**	**Acres**	**Net Difference**
Open Recreation	998	Open Recreation	776	(222)
		Restricted	5	5
		No-Wake	191	191
WATER TOTAL	**998**	**WATER TOTAL**	**972**	**(26)**
TOTAL FEE	**3,595**	**TOTAL FEE**	**3,610**	**15**

*1971 acres are approximate based on digitizing the 1971 land and water classification map. Total fee acreage differences from the 1971 totals to the 2026 totals are due to improvements in measurement technology, deposition/siltation, and erosion. Totals also differ due to rounding while adding parcels.

4.2.3 Land Classifications

USACE regulations require project lands and waters to be classified in accordance with the primary use for which project lands are managed. There are six categories of classification identified in USACE regulations, including:

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

The land and water surface classifications for Beltzville Lake were established after considering public comments and input from key stakeholders, including elected officials, and city and county governments. Additionally, information from the 2020-2024 Pennsylvania SCORP, including public comments, wildlife habitat values, and the trends analysis were used in decision making. Maps showing the various land classifications can be found in Appendix A. The following paragraphs provide acreages and descriptions of allowable uses for each of the land classifications.

Project Operations (PO)

The PO classification includes the lands managed for operation of the dam, project office, spillway, dikes, and maintenance yards, all of which must be maintained to carry out the authorized purpose of flood risk management. In addition to the operational activities taking place on these lands, limited recreational use may be allowed for activities such as public access to the shoreline for fishing. Regardless of any limited recreation use allowed on these lands, the primary classification of Project Operations will take precedent over other uses. There are 282 acres of Project Operations land specifically managed for this purpose.

High Density Recreation (HDR)

HDR lands are developed for intensive recreational activities for the visiting public, including day use areas, campgrounds, marinas, and related concession areas. Recreational areas operated by lessees on USACE lands must follow policy guidance contained in USACE regulations at ER 1130-2-550, Chapter 16. That policy includes the following statement:

> "*The primary rationale for any future recreation development must be dependent on the project's natural or other resources. This dependency is typically reflected in facilities that accommodate or support water-based activities, overnight use, and day use such as marinas, campgrounds, picnic areas, trails, swimming beaches, boat launching ramps, and comprehensive resort facilities. Examples that do not rely on the project's natural or other resources include theme parks or ride-type attractions, sports or concert stadiums, and standalone facilities such as restaurants, bars, motels, hotels,*

non-transient trailers, and golf courses. Normally, the recreation facilities that are dependent on the project's natural or other resources, and accommodate or support water-based activities, overnight use, and day use, are approved first as primary facilities followed by those facilities that support them. Any support facilities (e.g., playgrounds, multipurpose sports fields, overnight facilities, restaurants, camp stores, bait shops, comfort stations, and boat repair facilities) must also enhance the recreation experience, be dependent on the resource-based facilities, [and] be secondary to the original intent of the recreation development…"

Lands classified for HDR are suitable for the development of comprehensive resorts. The regulation cited above defines Comprehensive Resort as follows:

"*Typically, multi-faceted developments with facilities such as marinas, lodging, conference centers, golf courses, tennis courts, restaurants, and other similar facilities."*

At Beltzville Lake, prior land classifications did not include the HDR classification. The 2026 MP study team determined 250 acres at Beltzville Lake to be classified as HDR. A brief description and resource management plan for each HDR area is described briefly in Chapter 5 and mapped in Appendix A.

Mitigation (MG)

The MG classification is used only for lands allocated by Congress for mitigation for the purpose of offsetting losses associated with the development of the project. There are no acres at Beltzville Lake with this classification.

Environmentally Sensitive Areas (ESA)

ESAs include scientific, ecological, cultural, and aesthetic features identified and in need of preservation. At Beltzville Lake, there no acres with this classification.

Multiple Resource Management Lands (MRML)

This land classification is divided into four sub-classifications: Low Density Recreation, Wildlife Management, Vegetative Management, and Future/Inactive Recreation Areas. A given tract of MRML land is classified using one of these sub-classifications, with the primary sub-classification reflective of the dominant use of the land. Typically, MRMLs support only passive, non-intrusive uses with very limited facilities or infrastructure. Where needed, some areas may require basic facilities that include, but are not limited to, minimal parking spaces, a small boat launch, and/or primitive sanitary facilities. There are 2,106 acres of MRML lands at Beltzville Lake. The following sections describes each sub-classification, the number of acres, and primary uses for each designation.

Low Density Recreation (LDR)

LDR lands support passive public recreational use (e.g., fishing, hunting, wildlife viewing, natural surface trails, hiking, etc.). There are 1,597 acres under this land classification at Beltzville Lake. All acres within the Beltzville State Park

lease was reclassified from HDR to LDR. Managed recreation areas maintained their high density recreation classification.

Wildlife Management (WM)

The WM land classification applies to lands managed primarily for the conservation of fish and wildlife habitat. These lands generally include comparatively large contiguous parcels of land for passive recreation uses such as natural surface trails, fishing, hunting, and wildlife observation, unless restrictions are necessary to protect sensitive species or to promote public safety. There are 509 acres of land included in this classification at Beltzville Lake.

Vegetative Management (VM)

VM lands are designated for stewardship of forest, grassland and other native vegetative cover. Passive recreation activities previously described may be allowed in these areas. There are no acres of land included in this classification at Beltzville Lake.

Future or Inactive Recreation (FOIR)

FOIR lands have site characteristics compatible with HDR development. These are areas where HDR development was anticipated in prior land classifications, but the development either never took place or was minimal. These areas are typically closed to vehicular traffic and are managed as MRML until development takes place. There are no acres of land included in this classification at Beltzville Lake.

4.2.4 Water Surface Classifications

USACE regulations specify the possible classifications for the water surface, which are intended to promote public safety, protect resources, or protect project operational features such as the dam and spillway. These areas are typically marked by USACE or with navigational or informational buoys, signs, or denotations on public maps and brochures. In general, the management of the water surface includes the maintenance of warning, information, and regulatory buoys as well as routine water safety patrols during peak use periods. Maintenance of buoys is the responsibility of USACE. There are 972 acres of water surface at the conservation pool of 628 ft NGVD29 at Beltzville Lake.

<u>Open Recreation</u>

Open Recreation includes all water surface areas available for year-round or seasonal water-based recreational use. This classification encompasses the majority of the lake water surface and is open to general recreational boating. Boaters are advised through maps and brochures, or signs at boat ramps that navigational hazards may be present at any time and at any location. Operation of a boat in these areas is at the owner's risk, as specific navigational hazards may or may not be marked with a buoy. There are 776 acres of open recreation water surface at Beltzville Lake.

Restricted

Restricted water surface includes those areas where recreational boating is prohibited or restricted for project operations, safety, and security purposes. The areas include PFBC and PA DCNR boat dock access, as well as the State Park boat rental area. There are 5 acres of Restricted water surface at Beltzville Lake.

Designated No-Wake

Designated No-Wake areas are intended to protect sensitive shorelines and improve boating safety near key recreational water access areas such as boat ramps. No-wake restrictions are managed through the project buoy plan in place for reasons of public safety and protection of property due to changes in water level and safety needs. There are 191 acres of designated no-wake water surface at Beltzville Lake.

Fish and Wildlife Sanctuary

This water surface classification applies to areas with annual or seasonal restrictions to protect fish and wildlife species during periods of migration, resting, feeding, nesting, and/or spawning. Beltzville Lake has no water surface areas designated as a Fish and Wildlife Sanctuary.

4.2.5 Project Easement Lands

Project Easement Lands are primarily lands on which easement interests were acquired. Fee title was not acquired on these lands, but the easement interests convey to the Federal government certain rights to use and/or restrict the use of the land for specific purposes. Easement lands are typically classified as Operations Easement, Flowage Easement, and/or Conservation Easement. At Beltzville Lake, Flowage Easement lands are the only type of easements present. A flowage easement, in general, grants to the government the perpetual right to temporarily flood/inundate private land during flood risk management operations and to prohibit activities on the flowage easement that would interfere with flood risk management operations such as placement of fill material or construction of habitable structures. According to the Beltzville Lake and Dam Water Control Manual (2015) flowage easements were purchased up to elevation 656 ft. NGVD29 in the upper reaches of the project original segment. USACE holds flowage easements on 69 acres at Beltzville Lake.

CHAPTER 5 – RESOURCE PLAN

5.1 MANAGEMENT BY CLASSIFICATION

This chapter describes the management plans for each land use classification within the Master Plan. The classifications that exist at Beltzville Lake are Project Operations, High Density Recreation, and Multiple Resource Management Lands, which consist of Low Density Recreation and Wildlife Management. The management plans describe how these project lands and water surface will be managed in broad terms. A more descriptive plan for managing these lands can be found in the Beltzville Park Management Plan and the Beltzville Lake Operation and Maintenance Manual.

5.2 PROJECT OPERATIONS

Project Operations is land associated with the dam, spillway, dikes, project office, maintenance facilities, and other areas solely for the operation of the project. There are 282 acres of lands under this classification, all of which are managed by the USACE. The management plan for the PO area is to continue providing physical security necessary to ensure sustained operations of the dam and related facilities, including restricting public access in hazardous locations near the dam and spillway. The Beltzville Lake Operation and Maintenance Manual contains more details and plans for the area and equipment within the PO designation. Limited and passive recreation use such as bank fishing and hiking is currently allowed within some areas classified as PO, but USACE considers this use to be incidental and may prohibit such use without notice for project operational or security needs. Additionally, the Overlook Area near the USACE project office, affords panoramic views of the project while providing a brief visual history of the region. A parking lot and comfort station are available for visitor use.

Recommended future actions for these areas include facility upgrades to meet USACE sustainability objectives as funding and personnel allow. Implementing low impact design into future building, parking and site developments will continue to be emphasized. Opportunities to incorporate environmental stewardship objectives for land management.

5.3 HIGH DENSITY RECREATION

Beltzville Lake has 250 acres developed for intensive recreational activities for the visiting public, including day use areas, boat launches, and access points, which is all managed by the PA DCNR. National USACE policy set forth in ER 1130-2-550, Chapter 16, adopted March 30, 2009, limits new recreation development within outgranted (leased) areas on USACE lands to those activities that are dependent on a project's natural resources and typically include water-based activities, overnight use, and day use (such as campgrounds, picnic areas, and boat launching ramps). Examples of activities that are not dependent on a lake's natural resources include stand-alone theme parks, sport or concert stadiums, restaurants, and hotels. Stand-alone golf courses are considered an example of these activities that cannot be developed following adoption of Chapter 16 of ER 1130-2-550.

Based upon outdoor recreation trends documented in the 2020-2024 Pennsylvania SCORP, activities such as hiking, walking/running, camping, wildlife

watching/bird watching, paddling, and fishing remain the most favorite and are common activities that can be undertaken at Beltzville Lake (see Section 2.14.3). Seeking opportunities to improve facilities and provide access to outdoor recreation activities in response to public demand are important to the USACE recreation goals of Beltzville Lake. The future management of HDR areas includes continuing to maintain and improve existing facilities through partnerships and other funding options.

The HDR areas at Beltzville Lake include 2 main recreation areas. These areas are managed by the PA DCNR. The USACE will continue to review requests and ensure compliance with applicable laws and regulations for proposed activities in all HDR areas. USACE will also continue to ensure that recreation areas are managed and operated in accordance with the objectives prescribed in Chapter 3.

The following is a description of the main recreation areas at Beltzville Lake, some of which are highly developed, while others have only basic facilities and limited development. Maps showing existing parks and facilities can be found in Appendix A.

5.3.1 High Density Recreation Areas

Beltzville State Park Day Use

The Beltzville State Park Day Use area hosts picnic areas in wooded and open areas. Water-borne restrooms, drinking water, picnic tables, and parking areas are available for use. Overnight lodging on watercraft, in self-contained campers, or in any other form is strictly prohibited. The State Park office is also located in this area as well as soccer fields, portions of the Ground Pine Trail, Pine Run Cove Trail, and the popular Tree ID Trail. A swim beach is popular with visitors in warmer months and cross country skiing is enjoyed by visitors in the winter months. Recreational facilities are a result of a cooperative effort of the USACE, the DCNR, and the PGC.

Within this area is the Buck covered bridge which is of great historic significance to local citizens. Jacob Buck, a local craftsman, built the Buck covered bridge in 1841. Mr. Buck was contracted by Carbon County to build the bridge across Pohopoco Creek. Only horse and buggy traffic first used the bridge. Later, one-lane car traffic was allowed. The bridge became known throughout the area as the Buck covered bridge because of its builder. It is also referred to as the “Harrity” covered bridge in some publications. The USACE moved it in 1970 to its present location over a swale between the picnic area and beach, as the lake impoundment would cover its original location. The bridge is 66 feet long, 31 feet wide, and built with a king-post type truss. The gable roof is covered with wooden shingles.

Pine Run

Pine Run at Beltzville State Park is known for its boat launch on the lake's northern shore. The boat launch offers a three-lane ramp and accessible courtesy dock. Restroom facilities are available at this location in addition to a boat and trailer parking lot. Also included is a decontamination station and area to clean and secure watercraft after removal from the lake.

Preacher's Camp

Preacher's Camp at Beltzville State Park is a popular area for boating and hiking. It features a two-lane boat launch, parking for cars and trailers, and seasonal mooring for kayaks and canoes. The Preacher's Camp Trail is a moderately challenging hiking trail, known for its elevation gain and scenic views.

The park manager's residence, located near the Preacher's Camp boat launch area, is of historic significance to the area. This building was originally a log cabin built around 1850. Many additions and alterations have been made to the original structure over the years. It now stands as a two-story farmhouse clad in white vinyl-coated aluminum siding.

5.4 MITIGATION

This classification is used for lands that were acquired specifically for the purpose of offsetting losses associated with development of the project. There are no acres at Beltzville Lake under this classification.

5.5 ENVIRONMENTALLY SENSITIVE AREAS

There are no areas at Beltzville Lake designated as Environmentally Sensitive Areas (ESA). These are areas where scientific, ecological, cultural, or aesthetic features have been identified. Designation of these lands is not limited to just lands that are otherwise protected by laws such as the Endangered Species Act, the NHPA, or applicable state statutes. The primary management objective for ESAs is to allow existing uses to continue but to protect sensitive resources from intensive development, use, or disturbance beyond that which currently exists. In general, these areas must be managed to ensure that they are not adversely impacted. With the exception of natural surface pedestrian trails and minimal visitor parking areas, limited or no development of public use facilities is allowed on these lands and no real estate outgrants for easements should be granted unless disturbance can be confined to the boundaries of existing easements. No agricultural or grazing uses are permitted on these lands unless necessary for a specific resource management benefit, such as habitat restoration and management. An ESA classification provides the highest level of ecological protection among the various land use classifications.

5.6 MULTIPLE RESOURCE MANAGEMENT LANDS

Multiple Resource Management Lands are organized into four sub-classifications. These sub-classifications are Low Density Recreation, Wildlife Management, Vegetative Management, and Future/Inactive Recreation Areas. The following is a description of each sub-classification's resource objectives, acreages, and description of use.

5.6.1 Low Density Recreation

At Beltzville Lake, LDR lands are leased by PADCNR to operate Beltzville State Park. Development is generally limited to unpaved parking, natural surface boat launches, and trails. Future management of these lands calls for minimal development

to maintain a healthy, ecologically adapted vegetative cover to reduce erosion and improve aesthetics. The general public may use these lands for bank fishing, hiking, and for access to the shoreline. Future uses may include additional designated multipurpose, natural surface trails. There are 1,597 acres classified as Low Density Recreation.

5.6.2 Wildlife Management (WM)

These are lands designated for the stewardship of fish and wildlife resources and are managed by USACE and PA DCNR. There are currently 509 acres of land under this classification at Beltzville Lake. Management efforts focus on producing native wildlife food and habitat.

The broad objective of fish and wildlife management is to conserve, maintain and improve the fish and wildlife habitat to produce the greatest dividend for the benefit of the general public. Implementation of a fish and wildlife management plan is the first step toward achieving the goals of the Fish and Wildlife Coordination Act (Public Law 85-624). The PA DCNR manages game lands and wildlife primarily through enforcement of laws and regulations and establishing seasons and bag limits for game species. Future management plans for wildlife areas include continued cooperation with partners and managing and improving wildlife management areas under this land classification.

There are 5 known federally listed threatened and endangered species, along with 14 federally listed migratory birds, and more than 50 state-listed species that could utilize habitat within the Beltzville Lake project area. Therefore, any work conducted on this project will be in accordance with the Endangered Species Act and will be appropriately coordinated with the USFWS and state resource agencies. These species (Table 2.10 and 2.11) will continue to receive attention to ensure they are managed in accordance with their habitat needs.

Non-game wildlife is also managed. The following list of non-game programs is being or will be pursued as funds become available.

- Early detection and prevention of introduction and spread of aquatic invasive species
- Invasive plant species management
- Native vegetation restoration where needed using native species
- Fish spawning and habitat structures
- Food/habitat plots for various native wildlife
- Pollinator plots
- Wildlife friendly fencing

5.6.3 Vegetative Management

These are lands that have vegetative types considered to be sensitive and needing special classification to ensure success. There are no acres currently identified at Beltzville Lake for vegetative management purposes.

5.6.4 Future/Inactive Recreation Areas

These are areas with site characteristics compatible with potential future recreational development or recreation that are closed. Until there is an opportunity to develop or reopen these areas, they will be managed for multiple resources. There are no acres classified under this sub-classification at Beltzville Lake.

5.7 WATER SURFACE

There are 972 acres of water surface at the conservation pool of 628 ft NGVD29 at Beltzville Lake. Buoys are managed by PA DCNR and help mark the designated swimming area, hazards, and restricted areas.

5.8 SUSTAINABILITY

Sustainability is a multi-pronged aspect of responsible stewardship of USACE lands. The outcome of sustainability initiatives is to have a program that is able to adapt to fiscal challenges, safeguards the environment, and continues to provide high quality recreational opportunities for the public. As the nation's largest provider of outdoor recreation, managing 12 million acres of lands and waters across the country, USACE is committed to implementing initiatives that link people to water.

The recreational mission of USACE is to manage and conserve natural resources, while providing quality public outdoor recreation opportunities to serve the needs of the present and future generations. This is in line, and indeed the underpinning, of all the goals and objectives for Beltzville Lake resources and management. The national USACE 2021 Natural Resources Management Strategic Plan identifies several goals and related objectives designed to build a more robust environmental and recreational program on USACE managed lands. The four primary goals are Workforce Development; Improved Communication; Resourcing; and Program Delivery. Under the umbrella goal of Program Delivery, several objectives center specifically on promoting environmental sustainability in all aspects of natural resources management. This includes integrating environmental operating principles and other environmental regulations and initiatives into day-to-day decision making and long-range planning. Other objectives include using Leadership in Energy and Environmental Design (LEED) certified personnel and projects in facility design and maintenance, adopting Sustainable Sites Initiative criteria where applicable on land-based recreation areas, and updating project Master Plans to include environmental sustainability elements.

Meeting the public's needs and continuing to provide a full range of outdoor recreation opportunities will require collaboration. In support of that, USACE will maintain and enhance existing rapports while seeking new and innovative types of relationships with federal, state, and local agencies, volunteers, non-government organizations, cooperators, and others to provide certain recreation services and opportunities to the public. Besides pursuing and maintaining partnerships, it is

important to continue to identify, analyze, and evaluate authorities and policies such as fee collection and retention, and increased partnership capabilities. Areas identified for changes to meet the goals and objectives of this strategy include authorities for fee collection and retention without budgetary offset, and policies that pertain to funding schedules for partnership projects.

Through creativity, innovation, strong partnerships, and environmentally sustainable stewardship, quality recreational opportunities will continue to be available to the public. This will be done while simultaneously protecting the water, environment, and cultural resources for current and future generations.

CHAPTER 6 – SPECIAL TOPICS/ISSUES/CONSIDERATIONS

6.1 COMPETING INTERESTS OF NATURAL RESOURCES

Beltzville Lake is a multi-purpose project with numerous authorized purposes. The authorized purposes accommodate the needs of federal, state, and municipal users which have developed over time and have contractual rights that must be honored. The benefits provided by virtue of authorized purposes are critical to the local and regional economies and are of great interest to the public. Aside from operating the reservoir 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, those who own mineral rights, utility providers, and all entities that provide and maintain public roads. A growing population and increasing urbanization places additional stress on these competing interests through increased demand for water resources and recreation spaces as well as diminishing quality and space for natural habitat and open spaces. Balancing the interests of each of these groups to ensure that valid needs are met while at the same time protecting natural and cultural resources is a challenge. The purpose of this Plan is to guide management into the foreseeable future to ensure responsible stewardship and sustainability of the project's resources for the benefit of present and future generations.

6.2 UTILITY CORRIDORS

USACE policy allows for the establishment of designated corridors on project lands, where feasible, to serve as the preferred location for future outgrants such as easements for roads or utility lines. After obtaining public input and examining the location of existing roads and utility lines on project lands, and due to the relatively low demand for easements at Beltzville Lake, the USACE decided that the creation of utility corridors would not be necessary. Any entity seeking a utility easement to cross USACE property must research alternate routes around USACE property and demonstrate that a feasible alternative does not exist. Additionally, an evaluation under NEPA would be required.

6.3 CULTURAL RESOURCES AND CONSULTATION WITH TRIBAL NATIONS

It is required for federal agencies to consult with affiliated Federally Recognized Tribes on various activities that take place on federal land under federal guidance including but not limited to Sections 106 and 110 of the National Historic Preservation Act (NHPA) of 1966 (as amended); Archaeological Resources Protection Act (ARPA) of 1979; Native American Graves Protection and Repatriation Act (NAGPRA); and 36 CFR Part 79, Curation of Federally-Owned and Administered Archeological Collections. Implementing regulations for Section 106 of the NHPA and NAGPRA are 36 CFR Part 800 and 43 CFR Part 10, respectively. All cultural resources laws and regulations should be addressed under the requirements of NEPA as amended. USACE summarizes the guidance provided in these laws in ER and EP 1130-2-540.

Additionally, Executive Order 13007 states that each federal agency with responsibility for the management of federal lands shall accommodate access to and

ceremonial use of Native American sacred sites by religious practitioners and avoid adversely affecting the physical integrity of such sacred sites.

The Philadelphia District takes its responsibilities for consultation on a government-to-government basis very seriously and consulted extensively with federally recognized tribes on the Beltzville Lake Master Plan. The Tribes the USACE consults with are the Absentee Shawnee Tribe of Indians of Oklahoma, Delaware Nation of Oklahoma, Delaware Tribe of Indians, Eastern Shawnee Tribe of Oklahoma, Oneida Indian Nation, Shawnee Tribe, Stockbridge-Munsee Community, Saint Regis Mohawk Tribe, and Seneca Nation of Indians.

The Philadelphia District consulted with Tribes primarily on developing best practices and ensuring areas of Tribal concern were addressed. This process has allowed Tribes to become more familiar with USACE property at Beltzville Lake, and has increased USACE staff awareness of Tribal histories, sites, and concerns in the area. This exchange of knowledge from developing the Master Plan will allow USACE staff to better engage with Tribes on future projects at Beltzville Lake and will likely lead to more efficient reviews and better outcomes meeting objectives for both parties. More information about the consultation can be found in Section 7.4.

CHAPTER 7 – PUBLIC AND AGENCY COORDINATION

7.1 PUBLIC, AGENCY, AND TRIBAL COORDINATION OVERVIEW

The USACE is dedicated to serving the public interests in support of the overall development of land uses related to land management of cultural, natural, and recreational resources of Beltzville Lake. An integral part of this effort is gathering public comment and engaging stakeholders in the process of planning. USACE policy guidance in ER and EP 1130-2-550 requires thorough public involvement and agency coordination throughout the Master Plan revision process including any associated NEPA process. Public involvement is especially important at Beltzville Lake to ensure that future management actions are environmentally sustainable and responsive to public outdoor recreation needs. The following milestones provide a brief look at the overall process of revising the Beltzville Lake Master Plan.

The USACE began planning to revise the Beltzville Lake Master Plan in the fall of 2023. The objectives for the Mater Plan revision are to (1) revise land classifications to reflect changes in USACE land management policies since the 1971 Master Plan, (2) prepare new resource goals and objectives, and (3) revise the Master Plan to reflect new agency requirements for Master Plan documents in accordance with ER 1130-2-550, Change 7, January 30, 2013 and EP 1130-2-550, Change 5, January 30, 2013.

7.2 INITIAL STAKEHOLDER AND PUBLIC MEETINGS

On October 10, 2024, a public open house was held at the Towamensing Township Volunteer Fire Company, 105 Firehouse Road, Palmerton, Pennsylvania to inform the public of the intent to revise the Master Plan. The public input period remained open for 30 days from October 10, 2024 to November 9, 2024. At the public information meeting a presentation was given that included the following topics:

- What is a Master Plan?
- What a Master Plan is Not
- Why Revise a Master Plan?
- Overview of the National Environmental Policy Act (NEPA) process
- Master Planning Process
- Instructions for submitting comments

The USACE received a total of 22 comments for the Beltzville Lake Master Plan revision. These comments and the USACE response can be found in Appendix E.

7.3 PUBLIC AND AGENCY REVIEW OF DRAFT MP, EA, AND FONSI

This section will be completed after the public comment period for the Draft MP, EA, and FONSI.

7.4 TRIBAL CONSULTATION

In 2024, the USACE consulted with the appropriate Tribal Nations on the notice of availability for the scoping effort for this Master Plan and Environmental Assessment seeking their comments and confirmation of interest. A sample letter is included in Appendix B.

The following recognized Tribal Nations were consulted in 2024 prior to the initial open house:

- Absentee -Shawnee Tribe of Indians of Oklahoma
- Delaware Nation of Oklahoma
- Delaware Tribe of Indians
- Eastern Shawnee Tribe of Oklahoma
- Oneida Indian Nation
- Shawnee Tribe
- Stockbridge-Munsee Community
- St. Regis Mohawk Tribe
- Seneca Nation of Indians

For initial scoping, no comments were received from the Tribal Nations listed above.

For the Draft Master Plan and Environmental Assessment, the same group of recognized Tribal Nations were notified of the Open House and availability of the draft documents.

CHAPTER 8 – SUMMARY OF RECOMMENDATIONS

8.1 SUMMARY OVERVIEW

The preparation of this Master Plan for Beltzville Lake followed the USACE master planning guidance in ER 1130-2-550 and EP 1130-2-550, both dated 30 January 2013. Three major requirements set forth in the guidance include the preparation of contemporary resource objectives, classification of project lands using the approved classification standards, and the preparation of a resource plan describing in broad terms how the land in each of the land classifications will be managed into the foreseeable future. Additional important requirements include rigorous public involvement throughout the process, consideration of regional recreation and natural resource management priorities identified by other federal, state, and municipal authorities, and consultation with local Tribal Nations.

The study team endeavored to follow this guidance to prepare a Master Plan that will provide for enhanced recreational opportunities for the public, improve environmental quality, and foster a management philosophy conducive to existing and projected USACE staffing levels at Beltzville Lake as also reflected in ER 1130-2-540 Change 2 dated July 2005. Factors considered in the Plan development were identified through public involvement and review of regional and statewide planning documents including the current Pennsylvania SCORP prepared by the Commonwealth of Pennsylvania Department of Conservation & Natural Resources (DCNR) for 2020-2024, EPA Ecoregion Handbook and descriptions, and the USFWS IPaC website. This Master Plan will guide the long-term sustainability of the outdoor recreation program and natural resources associated with Beltzville Lake.

8.2 LAND CLASSIFICATION

A key component in preparing this Master Plan was examining prior land classifications and addressing the needed transition to the updated land classification standards that reflect how lands are being managed now and will be managed in the foreseeable future. The updated land classification standards will also comply with current USACE standards. Public comment was solicited to assist in making these land reclassification decisions. Consultation was also conducted with Tribal Nations to provide input on cultural and natural resources to help inform the land classification decisions. Chapter 7 of this Plan describes the public involvement process and Appendix E provides a summary of public comments received. After analyzing public comment, examining recreational trends, and taking into account regional natural resource management priorities, USACE team members reclassified the federal lands and waters associated with Beltzville Lake as described in Table 8.1 and explained in Table 8.2. A map is included in Appendix A to define the areas where proposed changes in land classification were implemented.

Table 8.1 Change from 1971 Land and Water Surface Classification to 2026 Proposed Land and Water Surface Classifications

Prior Land Classifications (1971)	Acres	Proposed Land Classifications (2026)	Acres	Net Difference
Project Operations	340	Project Operations (PO)	282	(58)
Recreation Lands	1,771	High Density Recreation (HDR)	250	(1521)
-	-	Multiple Resource Management Lands (MRML)	0	0
-	-	Low Density Recreation (MRML-LDR)	1,597	1,597
Wildlife Management (MRML-WM)	486	Wildlife Management (MRML-WM)	509	23
Environmentally Sensitive Area (ESA)	-	Environmentally Sensitive Area (ESA)	0	0
LAND TOTAL	**2,597**	**LAND TOTAL**	**2,638**	**41**
Prior Water Surface Classifications (1971)	**Acres**	**Proposed Water Surface Classifications (2026)**	**Acres**	**Net Difference**
Open Recreation	998	Open Recreation	776	(222)
		Restricted	5	5
		No-Wake	191	191
WATER TOTAL	**998**	**WATER TOTAL**	**972**	**(26)**
TOTAL FEE	**3,595**	**TOTAL FEE**	**3,610**	**15**

*1971 acres are approximate based on digitizing the 1971 land and water classification map. Total fee acreage differences from the 1971 totals to the 2026 totals are due to improvements in measurement technology, deposition/siltation, and erosion.

Table 8.2 Changes and Justifications for Proposed Land Classifications [1]

Land Classification	Description of Changes [2]	Justification
Project Operations (PO)	Net decrease in PO from 340 acres to 282 acres.	All lands classified as PO are managed and used primarily in support of critical operational requirements related to the primary missions. Changes related to the decrease in PO are due to the refinement of these areas. Additionally, the boundary of the state park lease was better defined. 38 acres previously classified as PO were reclassified as MRML-WM.
High Density Recreation (HDR)	Net decrease in HDR from 1,771 acres to 250 acres.	The net decrease in HDR was in large part due to the reclassification of acres within the Beltzville State Park lease area which were originally classified as Recreation Lands with the intent to develop, but were never developed or minimally developed. The reclassification of these acres reflects current and future use. Managed recreation areas within the state park lease were updated to the HDR classification from their previous classification of Recreation Lands in the 1971 MP.
MRML – Low Density Recreation (LDR)	Net increase in LDR from 0 acres to 1,597acres.	All acres within the Beltzville State Park lease currently managed for low density recreation were reclassified from Recreation Lands to LDR to align with current and future management of these acres.
MRML – Wildlife Management (WM)	Net increase in MRML-WM from 486 acres to 509 acres.	Approximately 38 acres previously classified as PO were reclassified as MRML-WM to align with current and future management of these acres. Additionally, acres within the Beltzville Wildlife Management Project (a PA DCNR lease area) were also reclassified to MRML-WM.
Environmentally Sensitive (ESA)	No change.	No change.

(1) The land classification changes described in this table are the result of changes to individual parcels of land ranging from a few acres to several hundred acres. New acreages were measured using more accurate GIS technology, thus total changes will not equal individual changes. The acreage numbers provided are approximate.
(2) Acreages are based on GIS measurements and may vary from net difference detailed in Table 8.1.

CHAPTER 9 – BIBLIOGRAPHY

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APPENDIX A – LAND CLASSIFICATION, MANAGING AGENCIES, AND RECREATION MAPS

INDEX TO MASTER PLAN MAPS

GENERAL

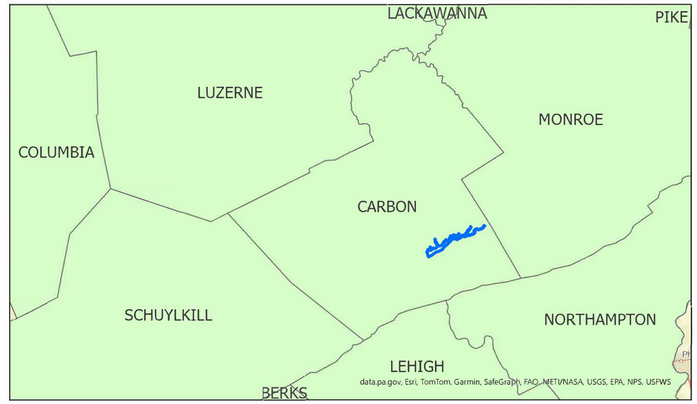
MAP NO.	TITLE
BZL25MP-O1-00	PROJECT LOCATION & INDEX TO MAPS
BZL25MP-OM-01	LAND MANAGING ENTITIES

LAND CLASSIFICATION

MAP NO.	TITLE
BZL25MP-LC-01	MASTER PLAN REVISION LAND CLASSIFICATION CHANGES
BZL25MP-OC-00	LAND CLASSIFICATIONS
BZL25MP-OC-01	WATER SURFACE CLASSIFICATIONS

RECREATIONAL AREAS

BZL25MP-OR-0A	MANAGED RECREATION AREAS
BZL25MP-OR-01	DAY USE AREA & PINE RUN
BZL25MP-OR-02	PREACHER'S CAMP



- HIGH DENSITY RECREATION
- LOW DENSITY RECREATION
- OPERATIONS
- RECREATION
- WILDLIFE MANAGEMENT
- BOUNDARY

US ARMY CORPS OF ENGINEERS
PHILADELPHIA DISTRICT

BELTZVILLE LAKE — POHOPOCO CREEK, PENNSYLVANIA

BELTZVILLE LAKE
PROJECT LOCATION &
INDEX TO MAPS

N

0 2 3 Miles

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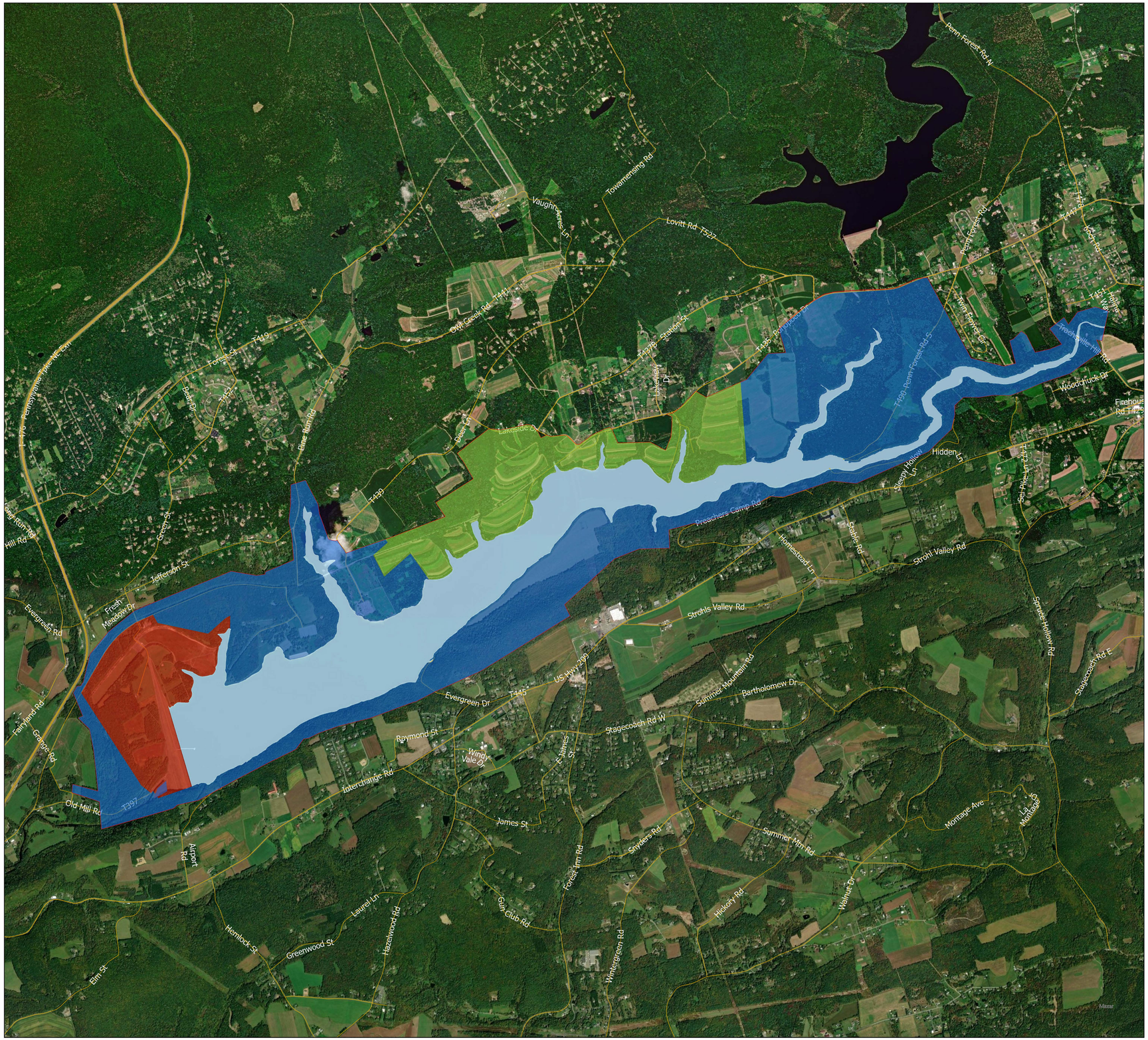

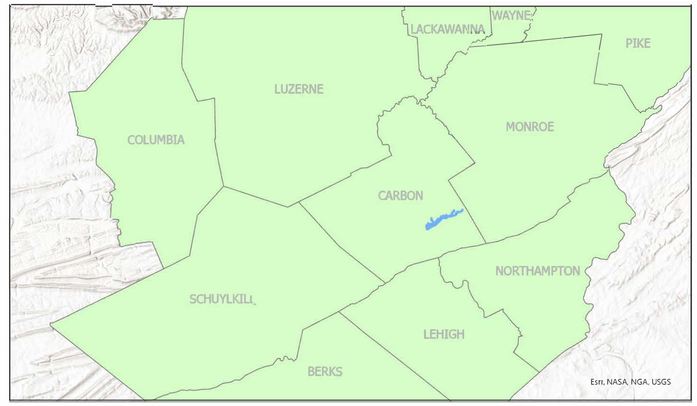

LAND MANAGING ENTITIES

- PGC
- USACE
- DCNR
- BOUNDARY
- RESERVOIR

US ARMY CORPS OF ENGINEERS
PHILADELPHIA DISTRICT

BELTZVILLE LAKE — POHOPOCO CREEK, PENNSYLVANIA

BELTZVILLE LAKE
LAND MANAGING ENTITIES

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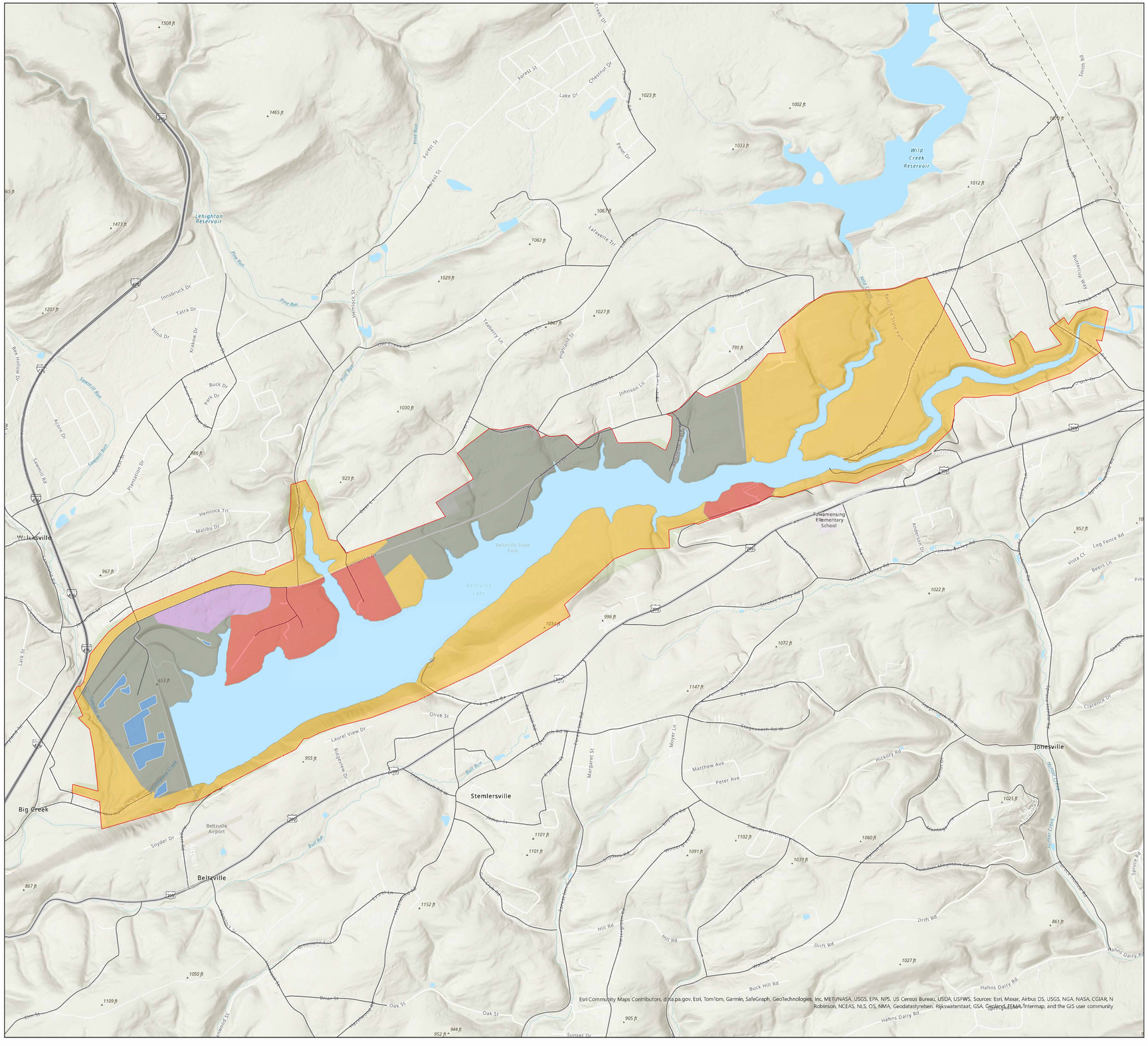

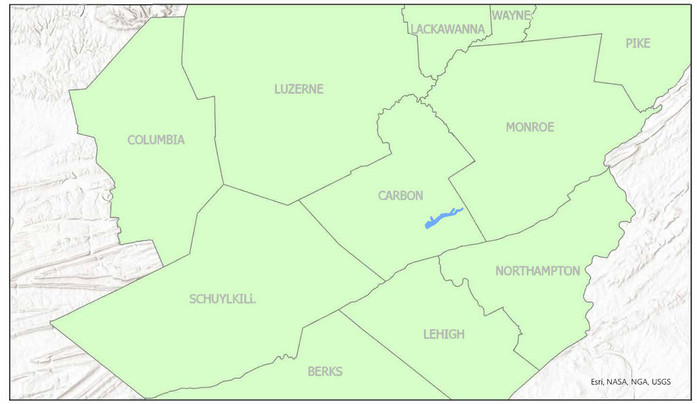

LAND CLASSIFICATION CHANGES FROM 1971 MASTER PLAN TO 2025

- NO CHANGE
- OPS TO WM
- REC TO LDR
- REC TO HDR
- OPS TO LDR
- BOUNDARY
- RESERVOIR

US ARMY CORPS OF ENGINEERS
PHILADELPHIA DISTRICT

BELTZVILLE LAKE — POHOPOCO CREEK, PENNSYLVANIA

BELTZVILLE LAKE MASTER PLAN REVISION LAND CLASSIFICATION CHANGES

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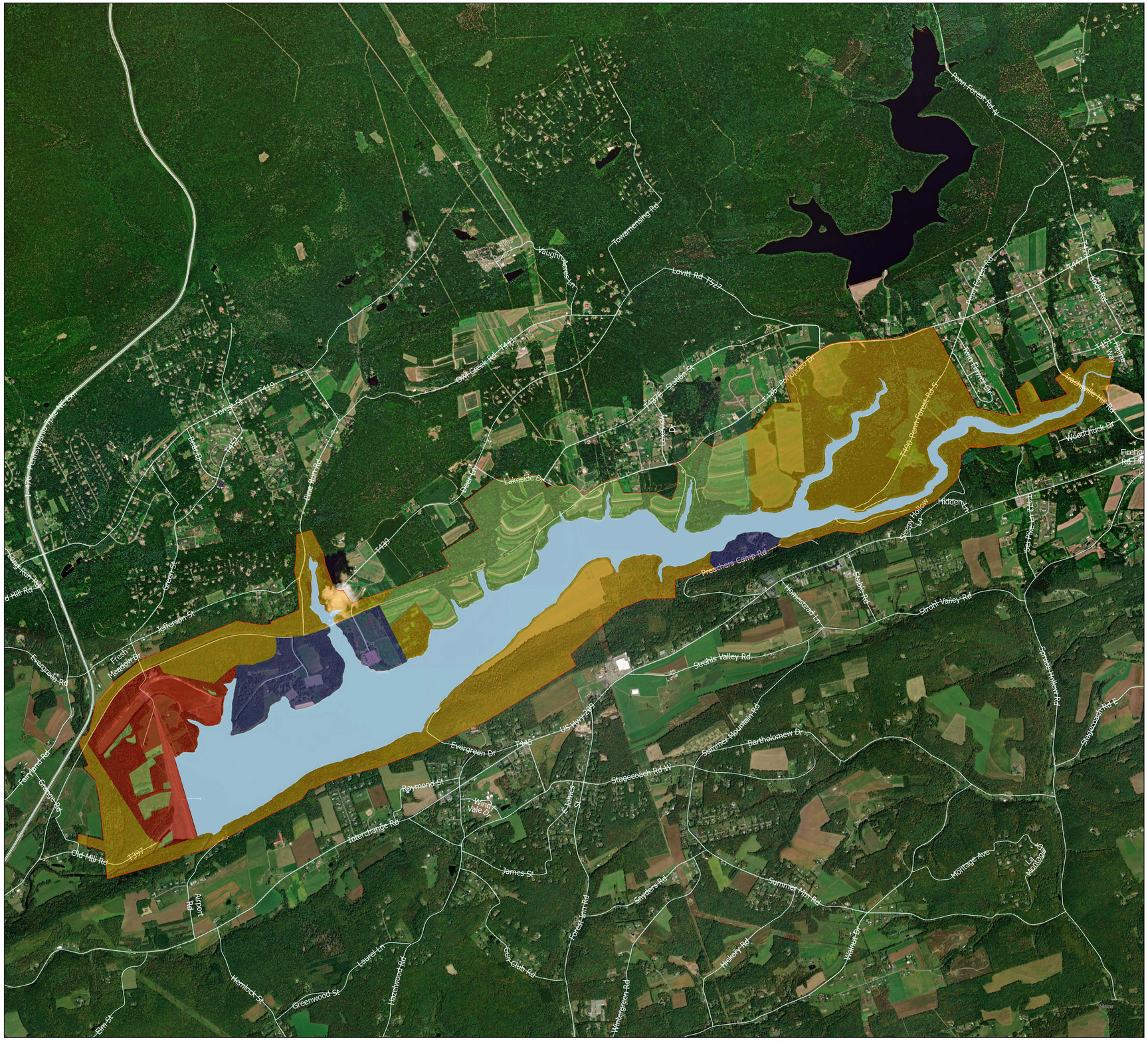
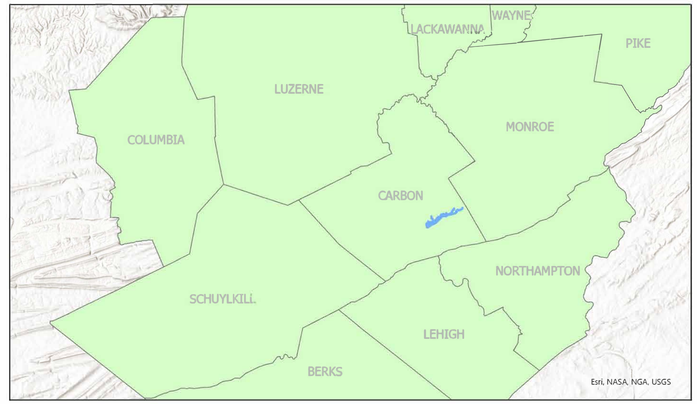




- High Density Recreation
- Low Density Recreation
- Operations
- Recreation
- Wildlife Management
- Reservoir
- Boundary

US ARMY CORPS OF ENGINEERS
PHILADELPHIA DISTRICT

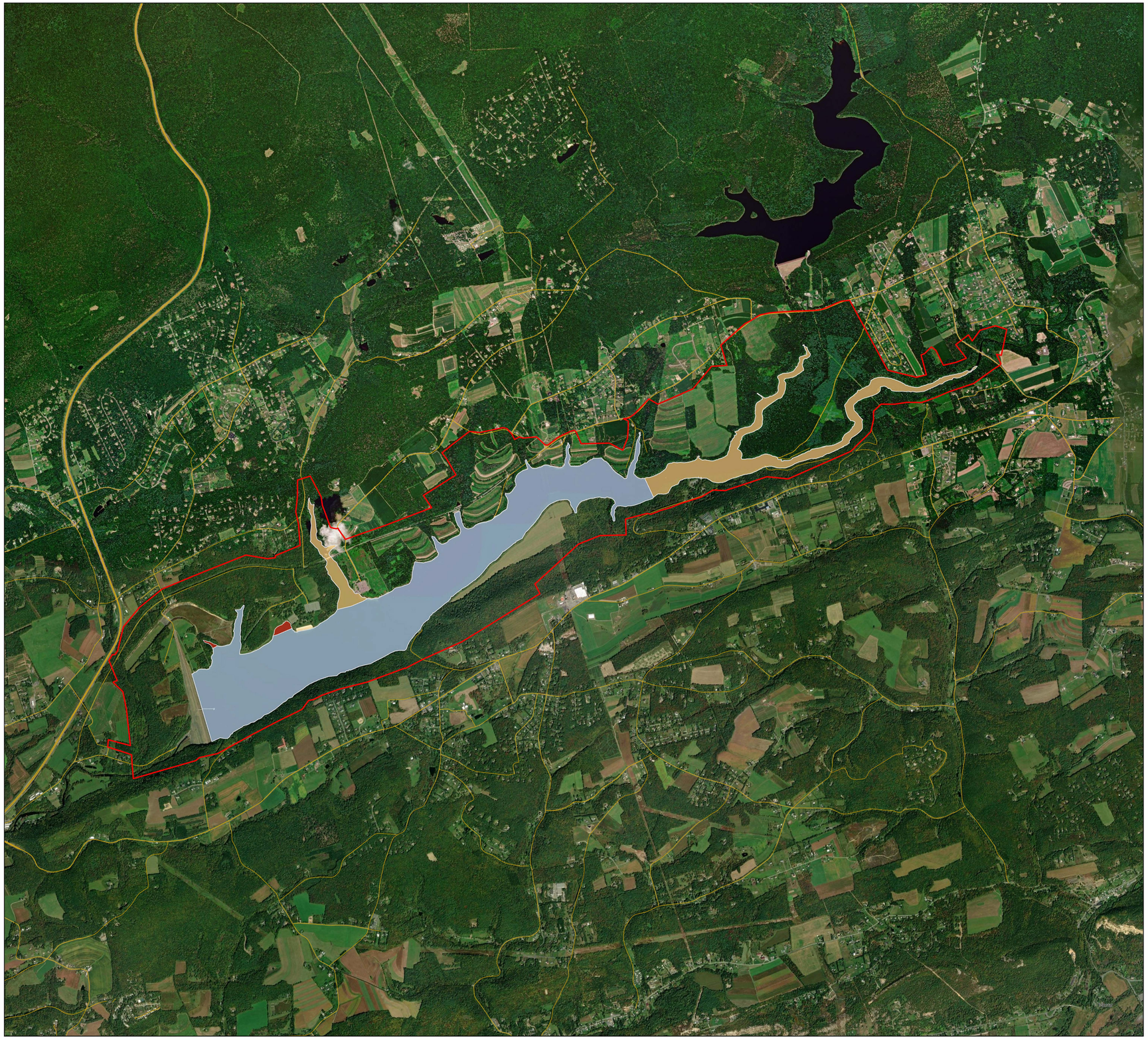
BELTZVILLE LAKE — POHOPOCO CREEK, PENNSYLVANIA

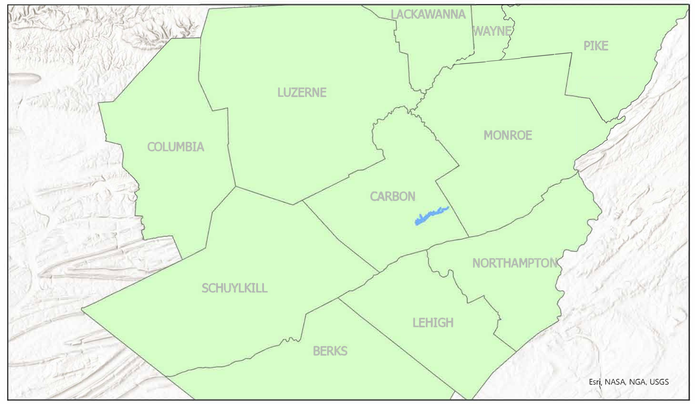
BELTZVILLE LAKE
MASTER PLAN
LAND CLASSIFICATIONS

N

0 1 2 Miles

DATE	MAP NO.
JANUARY 2026	BZL25MP-OC-00





No Wake

Open Recreation

Restricted

Boundary

US ARMY CORPS OF ENGINEERS
PHILADELPHIA DISTRICT

BELTZVILLE LAKE

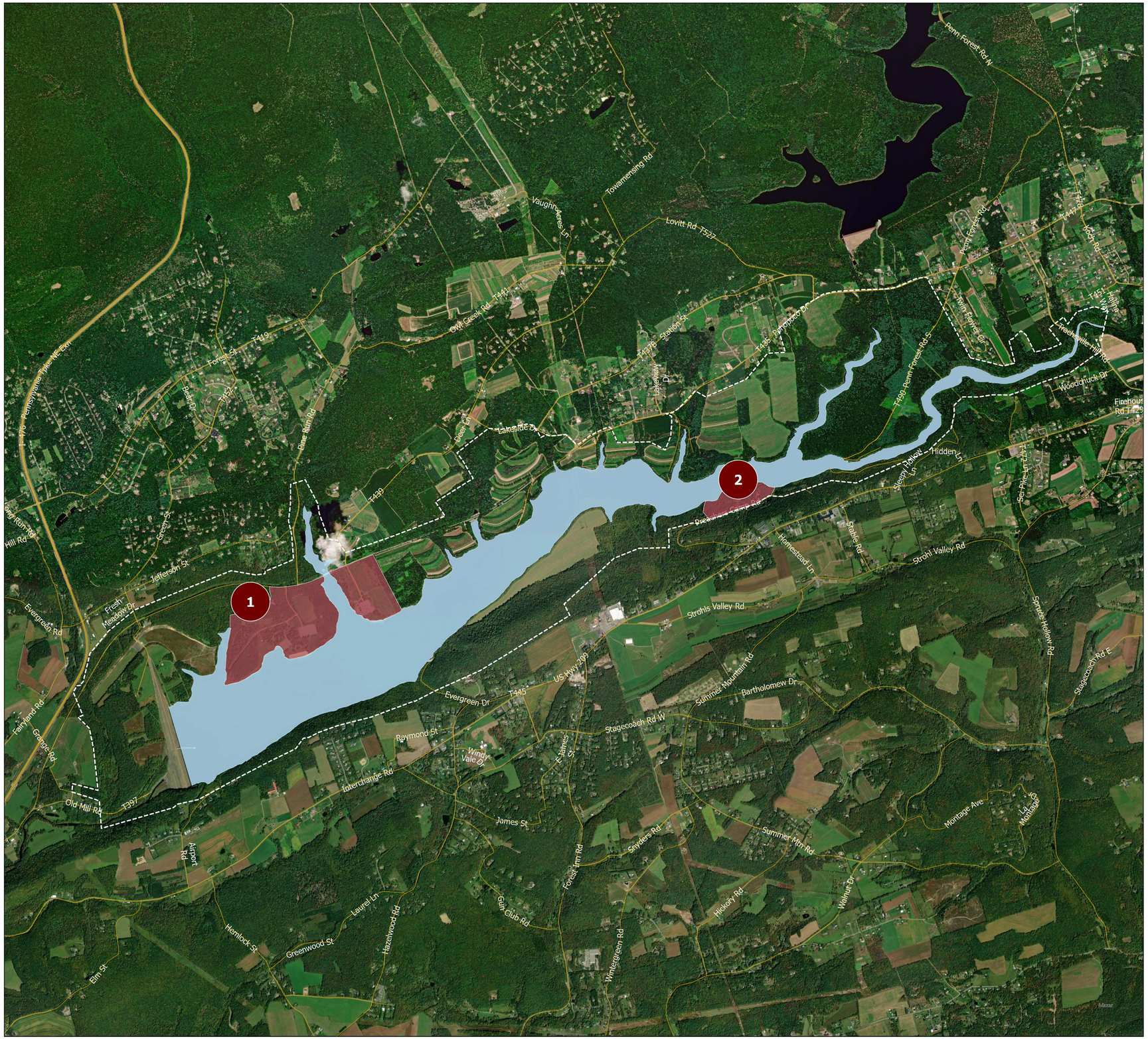
POHOPOCO CREEK, PENNSYLVANIA

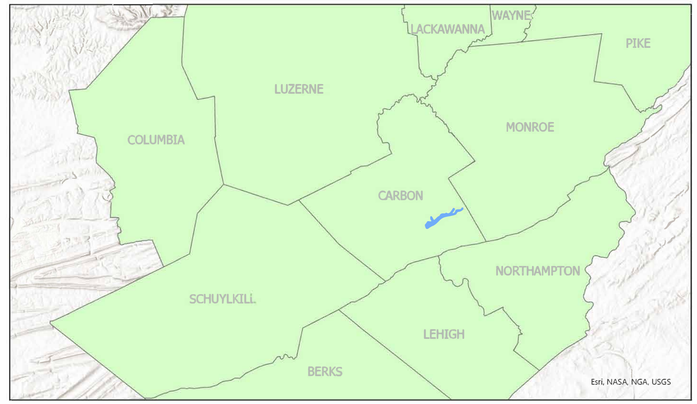
BELTZVILLE LAKE MASTER PLAN WATER SURFACE CLASSIFICATIONS

N

0 1 2 Miles

DATE	MAP NO.
JANUARY 2026	BZL25MP-OC-01





RECREATION AREA		
ID #	NAME	SHEET
1	Day Use and Pine Run	BZL25MP-OR-01
2	Preacher's Camp	BZL25MP-OR-02

US ARMY CORPS OF ENGINEERS
PHILADELPHIA DISTRICT

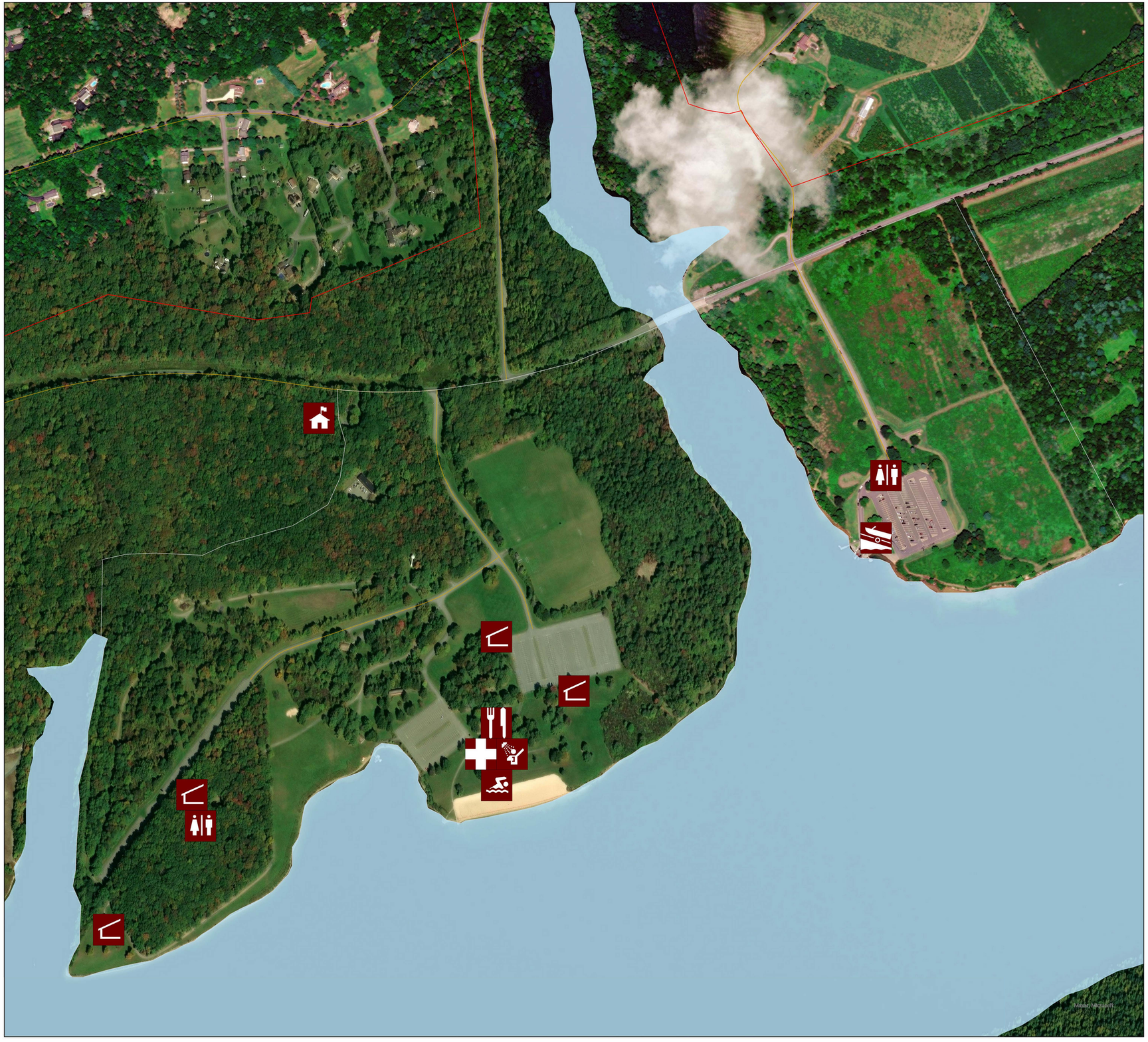
BELTZVILLE LAKE — POHOPOCO CREEK, PENNSYLVANIA

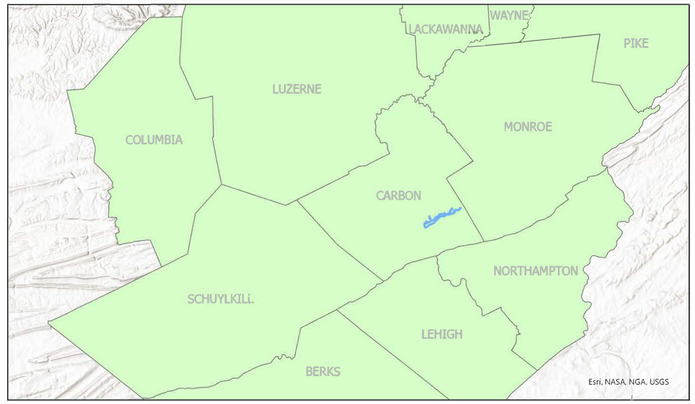
BELTZVILLE LAKE
MASTER PLAN
PARK PLATE INDEX

N

0 1 2 Miles

DATE	MAP NO.
JANUARY 2026	BZL25MP-OR-0A





- PARK OFFICE
- SWIMMING AREA
- BOAT RAMP
- PAVILLION
- RESTROOMS
- BATHHOUSE
- CONCESSION
- FIRST AID

US ARMY CORPS OF ENGINEERS
PHILADELPHIA DISTRICT

BELTZVILLE LAKE — POHOPOCO CREEK, PENNSYLVANIA

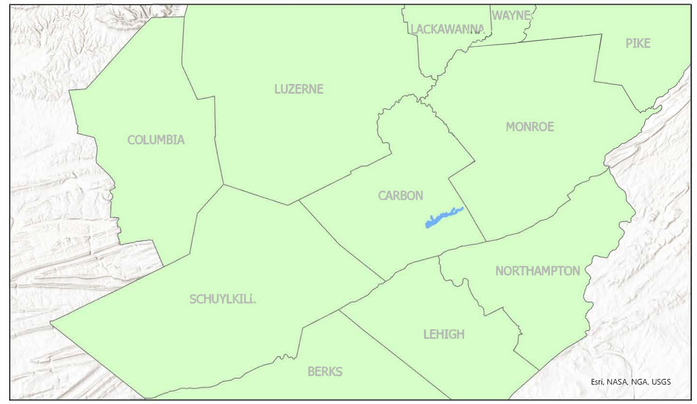
BELTZVILLE LAKE MASTER PLAN

MANAGED RECREATION AREAS
DAY USE AREA AND PINE RUN

N

0 0 0 Miles

DATE	MAP NO.
JANUARY 2026	BZL25MP-OR-01



NON-POWERED BOAT RAMP

BOAT RAMP

RESTROOMS

US ARMY CORPS OF ENGINEERS
PHILADELPHIA DISTRICT

BELTZVILLE LAKE — POHOPOCO CREEK, PENNSYLVANIA

BELTZVILLE LAKE MASTER PLAN

MANAGED RECREATION AREAS
PREACHER'S CAMP

N

0 0 0 Miles

DATE	MAP NO.
JANUARY 2026	BZL25MP-OR-02

APPENDIX B – NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) DOCUMENTATION

DRAFT FINDING OF NO SIGNIFICANT IMPACT
ENVIRONMENTAL ASSESSMENT FOR THE
PROPOSED BELTZVILLE LAKE MASTER PLAN 2026
UPPER DELAWARE RIVER BASIN
CARBON COUNTY, PENNSYLVANIA

In accordance with the National Environmental Policy Act of 1969, as amended, (42 United States Code [USC] § 4321 *et seq*.), as amended by the Fiscal Responsibility Act of 2023, and the Council on Environmental Quality (CEQ) implementing regulations published by the USACE (33 CFR 230) and associated implementation guidance (ER 200-2-2) (please see explanation of use in Section 1 of the environmental assessment), the Philadelphia District and the Regional Planning and Environmental Center (RPEC) of the U.S. Army Corps of Engineers, have assessed the potential environmental impacts of the Beltzville Lake 2026 Master Plan (MP) revision.

Engineering Regulation (ER) 1130-2-550 Change 07, dated January 2013 and Engineering Pamphlet (EP) 1130-2-550 Change 05, dated 30 January 2013, require Master Plans for most USACE water resources development projects having a federally owned land base. The revision of the 1971 Beltzville Lake Master Plan is being conducted pursuant to this ER and EP, and is necessary to bring it up to date to reflect current ecological, socio-demographic, and outdoor recreation trends that are affecting the lake, as well as those anticipated to occur within the 50-year planning period. The final recommendation will be included in the final Beltzville Lake Master Plan anticipated in 2026.

This Environmental Assessment (EA) for the 2026 Beltzville Lake Master Plan evaluated various alternatives that would revise the 1971 Beltzville Lake Master Plan to meet current policy. A detailed assessment of potential impacts are included in the draft EA (included as reference) and are summarized in Table 1 below.

The revision of the *Beltzville Lake Master Plan* (hereafter Plan or Master Plan) is a framework built collaboratively to serve as a guide toward appropriate stewardship of USACE administered resources at Beltzville Lake over the next 25 years.

In addition to a “no action” plan, one alternative that fully met the project purpose was evaluated (recommended plan). Section 2.0 of the 2026 Beltzville Lake Master Plan EA discusses alternative formulation and selection. The recommended plan includes coordination with the public, updates to comply with the USACE regulations and guidance, and reflects changes in land management and land uses that have occurred since 1971. Land classifications were refined to meet authorized project purposes and current resource objectives that address a mix of natural resources and recreation management objectives that are compatible with regional goals, recognize outdoor recreation trends, and are responsive to public comments.

Table 1: Summary of Potential Effects of the Proposed Plan

Resource	Insignificant effects	Insignificant effects as a result of mitigation*	Resource unaffected by action
Aesthetics	☒	☐	☐
Air quality	☒	☐	☐
Aquatic resources/wetlands	☒	☐	☐
Climate	☒	☐	☐
Invasive species	☒	☐	☐
Fish and wildlife habitat	☒	☐	☐
Threatened/Endangeredspecies/critical habitat	☐	☐	☒
Historic properties	☐	☐	☒
Other cultural resources	☒	☐	☐
Floodplains	☒	☐	☐
Hazardous, toxic & radioactive waste	☐	☐	☒
Health Safety	☒	☐	☐
Hydrology	☒	☐	☐
Land use	☒	☐	☐
Recreation	☒	☐	☐
Socioeconomics	☐	☐	☒
Topography, Geology & Soils	☒	☐	☐
Water quality	☒	☐	☐

All practicable and appropriate means to avoid or minimize adverse environmental effects have been analyzed and incorporated into the proposed plan. The proposed plan will not entail any ground-disturbing activities. Future ground-disturbing activities on USACE property will be subject to all necessary environmental evaluations and compliance regulations.

No compensatory mitigation is required as part of the proposed plan.

Public review of the draft Master Plan, Environmental Assessment, and Finding of No Significant Impact (FONSI) will be completed on February 6, 2026. All comments submitted during the public review period will be responded to in the final Master Plan.

Pursuant to Section 7 of the Endangered Species Act of 1973, as amended, the U.S. Army Corps of Engineers has determined that the proposed plan will have no effect on federally listed species or their designated critical habitat.

Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended, the U.S. Army Corps of Engineers has determined that the proposed plan will have no effect on historic properties.

All applicable environmental laws were considered and coordination with appropriate agencies and officials has been completed.

All applicable laws, executive orders, regulations, and local government plans were considered in evaluation of alternatives. Based on the draft report, the reviews by other Federal, State, and local agencies, Tribes, input of the public, and the review by my staff, it is my determination that the proposed plan would not cause significant adverse impacts on the quality of the human environment, therefore, preparation of an Environmental Impact Statement is not required.

DRAFT

Date

Ryan A. Baum
LTC. Colonel, U.S. Army
District Commander

Appendix B - Environmental Assessment for the Beltzville Lake Master Plan

EAXX-202-00-E5O-1757494705

Upper Delaware River Basin

Carbon County, Pennsylvania

2026

US Army Corps of Engineers®
Philadelphia District

ENVIRONMENTAL ASSESSMENT ORGANIZATION

This Environmental Assessment (EA) evaluates the potential environmental and socioeconomic impacts of the 2026 Beltzville Lake Master Plan (MP). This EA facilitates the decision process regarding the Proposed Action and alternatives.

CHAPTER 1	*INTRODUCTION* of the Proposed Action summarizes the purpose of and need for the Proposed Action, provides relevant background information, and describes the scope of the EA.
CHAPTER 2	*PROPOSED ACTION AND ALTERNATIVES* examines alternatives for implementing the Proposed Action and describes the recommended alternative.
CHAPTER 3	*AFFECTED ENVIRONMENT* describes the existing environmental and socioeconomic setting.
	ENVIRONMENTAL CONSEQUENCES identifies the potential environmental and socioeconomic effects of implementing the Proposed Action and alternatives.
CHAPTER 4	*CUMULATIVE IMPACTS* describes the impact on the environment that may result from the incremental impact of the action when added to other past, present, and reasonably foreseeable actions.
CHAPTER 5	*COMPLIANCE WITH ENVIRONMENTAL LAWS* provides a listing of environmental protection statutes and other environmental requirements.
CHAPTER 6	*PUBLIC AND AGENCY COORDINATION* provides a listing of individuals and agencies consulted during preparation of this EA.
CHAPTER 7	*REFERENCES* provides bibliographical information for cited sources.
CHAPTER 8	*ACRONYMS and ABBREVIATIONS*
CHAPTER 9	*LIST OF PREPARERS* identifies persons who prepared the document and their areas of expertise.
APPENDIX A	National Environmental Policy Act (NEPA) Coordination and scoping documentation.

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1 INTRODUCTION

This Environmental Assessment (EA) has been prepared by the United States (U.S.) Army Corps of Engineers (USACE) to evaluate the proposed 2026 Beltzville Lake MP. The proposed MP is a programmatic document that is subject to evaluation under the National Environmental Policy Act (NEPA) of 1969, as amended (42 United States Code [USC] § 4321 *et seq*.), as amended by the Fiscal Responsibility Act of 2023, and the Council on Environmental Quality (CEQ) implementing regulations published by the USACE (33 CFR 230) and associated implementation guidance (ER 200-2-2).

CEQ regulations implementing NEPA, first issued in 1978, were rescinded on April 11, 2025, pursuant to Executive Order 14154, Unleashing American Energy. However, the NEPA process for this EA began in 2023, prior to any revisions to CEQ's implementing regulations. USACE NEPA guidance issued 30 June 2025 noted any actions which were ongoing as of that date would continue to use the NEPA guidance at the time the action was started. This EA will continue to use NEPA implementing regulations in effect when this EA began, as well as incorporate other applicable Executive Orders, laws, regulations, and policies.

Per Engineering Pamphlet (EP) 1130-2-550 Chapter 3, master plans are an essential element in any water resources project, fostering efficient and cost-effective natural resources, recreational, and cultural management programs. Master plans provide direction for project development and are a vital tool for the responsible stewardship of project resources for the benefit of present and future generations. Master plans should promote the protection, conservation, and enhancement of natural, cultural, and man-made resources. The proposed MP guides and articulates USACE responsibilities pursuant to Federal laws to preserve, conserve, restore, maintain, manage, and develop the land, water, and associated resources focusing on resource-specific goals and objectives. It ensures that equal attention is given to the economy, quality, and need in the management of Beltzville Lake's resources and facilities, and that goals and objectives are accomplished at an appropriate scale. It does not include water management, designs, or estimated costs. All actions carried out by the USACE, other agencies, and individuals granted leases to USACE lands must be consistent with the proposed MP. All actions carried out by the USACE, other agencies, and individuals granted leases to USACE lands must be consistent with the 2026 MP. Therefore, the MP must be revised in order to provide effective guidance in USACE decision-making. The Beltzville Lake and Dam Master Plan was approved in 1971 as "Design Memorandum No. 18" and has served past the intended planning horizon period of 25 years.

The MP is a dynamic document containing guidelines for the management of all Corps-managed land and water areas of Beltzville Lake. In accordance with Engineer Pamphlet (EP) 1130-2-550, this Master Plan would be reviewed every 25 years and updated as USACE policies, Project conditions, or regional needs change.

1.1 Project Description

Beltzville Lake is a multi-purpose reservoir located approximately 5 miles Northeast of the town of Lehighton in Carbon County, Pennsylvania. The Beltzville Dam is located on the western portion of the Lake on Pohopoco Creek, 5.2 miles from its confluence with the Lehigh River. Construction of the dam began in 1966 and was completed in 1971. Beltzville Lake is a unit of the Upper Delaware river basin (Hydrologic Unit Code (HUC)-6: 020401), which has a drainage area span of approximately 6,879 square miles. Above Beltzville Dam, the watershed consists of a 96.3 square mile drainage area. Pohopoco Creek drains 111 square miles of the 6,879 square mile Upper Delaware River Basin.

Construction of the Beltzville Lake and Dam was authorized by the 1962 Flood Control Act (Public Law 87-874; 87th Congress) and is currently managed by the Philadelphia District of USACE for the authorized purposes of flood risk management, water supply, and low flow augmentation with secondary authorizations for water quality and recreation purposes. Beltzville Lake and Dam spans approximately 3,610 acres total, 972 acres of which are water surface area at the top of the flood control pool of 628 feet NGVD29. For more information on Beltzville Dam and its spillway, outlet, levee, and drainage system, please refer to Sections 1.5 and 1.8 of the 2026 MP.

1.2 Purpose and Need for The Action

The purpose of the Proposed Action is to ensure that the conservation and sustainability of the land, water, and recreational resources at Beltzville Lake and Dam comply with applicable environmental laws and regulations and to maintain quality lands for future public use. The 2026 MP is intended to serve as a comprehensive land and recreation management plan with an effective life of approximately 25 years.

The Beltzville Lake and Dam Master Plan must be kept current in order to provide effective guidance in decision-making that responds to changing regional and local needs, resource capabilities and suitability, and expressed public interests consistent with authorized project purposes and pertinent legislation and regulations. The current 1971 Beltzville Lake and Dam Master Plan is over 50 years old and does not currently reflect ecological, socio-political, and socio-demographic changes that are currently affecting Beltzville Lake and Dam, or those changes anticipated to occur through 2050. Changes in outdoor recreation trends, regional land use, population, current legislative requirements and USACE management policy have indicated the need to revise the plan. Additionally, increasing fragmentation of wildlife habitat, national policies related to climate change, a growing demand for recreational access, and protection of natural resources are all factors impacting public lands both nationwide and regionally, and have the potential to affect the Beltzville Lake and Dam Project. In response to these continually evolving trends, the USACE determined that a full revision of the 1971 MP is needed.

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. With a generalized conceptual framework, the process focuses on the following four primary components:

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

1.3 Scope of the Action

The proposed action results from the need to update the 1971 master plan for Beltzville Lake and Dam and is comprised of the many land classification changes and updates described by the 2026 MP. This EA was prepared to evaluate the existing conditions and potential impacts of the proposed alternatives associated with the implementation of the 2026 MP. The alternative considerations were formulated with special attention given to revised land classifications, new resource management objectives, and a conceptual resource plan for each land classification category. The proposed MP is incorporated into this EA by reference.

2 PROPOSED ACTION AND ALTERNATIVES

During the alternative development process, the Project Delivery Team (PDT) utilized an iterative process to evaluate different land classes for each parcel of USACE land. This evaluation included consideration of the multiple Congressionally authorized missions of the Project, public and agency comments, USACE staff knowledge, and potential impacts to the social, cultural, and environmental resources, to determine the primary use for each parcel (i.e. land classification). USACE regulations specify five possible categories of land reclassification: Project Operations (PO), High Density Recreation (HDR), Mitigation, Environmentally Sensitive Areas (ESA), and Multiple Resource Managed Lands (MRML). MRML are divided into four subcategories: Low Density Recreation (MRML-LDR), Wildlife Management (MRML-WM), Vegetation Management (MRML-VM), and Inactive/Future Recreation (MRML-IFR) Areas.

Two alternatives were developed in detail and brought forward for evaluation, including a No Action Alternative and a Proposed Action Alternative. The Proposed Action Alternative is the culmination of the iterative evaluation process described above and best meets the Purpose and Need identified in Section 1.2 of this document and Section 1.4 of the 2026 MP revision. The No Action Alternative, while it does not meet the purpose and need, serves as a benchmark of existing conditions against which Federal actions can be evaluated, and, therefore, is included in this EA pursuant to CEQ regulations 40 CFR § 1502.14(c).

The goals for the 2026 MP include the following:

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 the project's 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 the project's natural resources.

GOAL D. Recognize the project's unique qualities, characteristics, and potentials.

GOAL E. Provide consistency and compatibility with national objectives and other State and regional goals and programs.

In addition to the above goals, USACE management activities are guided by USACE-wide Environmental Operating Principles as follows:

- Foster sustainability as a way of life throughout the organization.
- Proactively consider environmental consequences of all USACE activities and act accordingly.

- Create mutually supporting economic and environmentally sustainable solutions.
- Continue to meet our corporate responsibility and accountability under the law for activities undertaken by USACE, which may impact human and natural environments.
- Consider the environment in employing a risk management and systems approach throughout the life cycles of projects and programs.
- Leverage scientific, economic and social knowledge to understand the environmental context and effects of USACE actions in a collaborative manner.
- Employ an open, transparent process that respects views of individuals and groups interested in USACE activities.

Specific resource objectives to accomplish these goals can be found in Chapter 3 of the 2026 MP.

The USACE will not address the flood risk management or water supply authorized purposes of Beltzville Lake under either the No Action or Proposed Action alternatives. Table 2 catalogs each change proposed by the 2026 MP and the associated justification for that change.

2.1 Alternative 1: No Action Alternative

The No Action Alternative serves as a basis for comparison to the anticipated effects of the other action alternatives. It is included in this EA as required by NEPA. Section 102(2)(h) of NEPA requires that agencies “study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts to concerning alternative uses of available resources”. Under the No Action Alternative, the USACE would not adopt or implement the 2026 MP. Instead, the USACE would continue to manage Beltzville Lake and Dam as set forth in the 1971 MP. The 1971 MP would continue to provide the only sources of comprehensive management guidelines and objectives. However, the 1971 MP is out of date and does not reflect the current ecological and socioeconomic conditions of Beltzville Lake and Dam. The No Action Alternative, while it does not meet the purpose and need, serves as a benchmark of existing conditions against which Federal actions can be evaluated, and has therefore been included in this EA using CEQ regulations in 40 CFR § 1502.14(c) as guidance.

2.2 Alternative 2: Proposed Action

Under the Proposed Action, the USACE will adopt and implement the 2026 MP, which guides and articulates USACE responsibilities pursuant to Federal laws to preserve, conserve, restore, maintain, manage, and develop the land, water, and associated resources. The 2026 MP will replace the 1971 MP and provide an up-to-date management plan that follows current Federal laws and regulations while sustaining the project’s natural resources and providing recreational opportunities for the next 25 years. The Proposed Action will meet regional goals associated with good stewardship

of land, water, and recreational resources; address identified recreational trends; and allow for continued use and development of project lands without violating national policies or public laws.

The 2026 MP will classify all Federal land lying above elevation 628 feet NGVD29 into management reclassification categories. These management reclassification categories will allow uses of Federal property that meet the definition of the assigned category and ensure the protection of natural resources and environmental stewardship while allowing maximum public enjoyment of the lake's resources. However, this EA does not evaluate as part of its Proposed Action development needs activities. As those efforts and actions receive funding and are further refined, the appropriate separate NEPA compliance processes would be executed to account for action specific impacts. This EA only evaluates impacts from, and provides NEPA compliance for, the implementation of the 2026 MP revision.

The proposed land classification categories are defined as follows:

- Project Operations (PO): Lands required for the dam, project office, and maintenance yards, and other areas used solely for the operation of Beltzville Lake.
- High Density Recreation (HDR): Lands developed for the intensive recreational activities for the visiting public, including day use and campgrounds. These areas could also be for commercial concessions and quasi-public development.
- Environmentally Sensitive Areas (ESA): Areas where scientific, ecological, cultural, or aesthetic features have been identified.
- Multiple Resource Management Lands (MRML): Allows for the designation of a predominate use with the understanding that other compatible uses may also occur on these lands.
    - MRML Low Density Recreation (MRML-LDR): Lands with minimal development or infrastructure that support passive recreational use (primitive camping, fishing, hunting, trails, wildlife viewing, etc.).
    - MRML Wildlife Management (MRML-WM): Lands designated for stewardship of fish and wildlife resources.
    - Future/Inactive Recreation (MRML-IFR): Lands that are set aside for future High Density Recreation development and use.
    - Vegetative Management (MRML-VM): Lands designated for stewardship of forest, prairie, and other native vegetative cover.
- Water Surface: Allows for surface water zones.
    - Restricted: Water areas restricted for Beltzville Lake operations, safety, and security.
    - Designated No-Wake: Water areas to protect environmentally sensitive shoreline areas, recreational water access areas from disturbance, and areas to protect public safety.

- Open Recreation: Water areas available for year-round or seasonal water-based recreational use.
- Fish and Wildlife Sanctuary: Water areas that have either annual or seasonal restrictions to protect fish and wildlife within a designated area.

Table 1 shows the land classification changes between the 1971 MP and the 2026 MP. Table 2 provides justifications for the proposed reclassifications. Figure 1 shows the proposed 2026 MP land classifications for Beltzville Lake on a map.

Table 1 – Beltzville Lake Proposed Land and Water Surface Classifications Changes from 1971 to 2026

Prior Land Classifications (1971)	Acres	Proposed Land Classifications (2026)	Acres	Net Difference
Project Operations	340	Project Operations (PO)	282	(58)
Recreation Lands	1,771	High Density Recreation (HDR)	250	(1521)
-	-	Multiple Resource Management Lands (MRML)	0	0
-	-	Low Density Recreation (MRML-LDR)	1,597	1,597
Wildlife Management (MRML-WM)	486	Wildlife Management (MRML-WM)	509	23
Environmentally Sensitive Area (ESA)	-	Environmentally Sensitive Area (ESA)	0	0
LAND TOTAL	**2,597**	**LAND TOTAL**	**2,638**	**41**
Prior Water Surface Classifications (1971)	**Acres**	**Proposed Water Surface Classifications (2026)**	**Acres**	**Net Difference**
Open Recreation	998	Open Recreation	776	(222)
		Restricted	5	5
		No-Wake	191	191
WATER TOTAL	**998**	**WATER TOTAL**	**972**	**(26)**
TOTAL FEE	**3,595**	**TOTAL FEE**	**3,610**	**15**

*1971 acres are approximate based on digitizing the 1971 land and water classification map. Total fee acreage differences from the 1971 totals to the 2026 totals are due to improvements in measurement technology, deposition/siltation, and erosion. Totals also differ due to rounding while adding parcels.

Table 2 – Beltzville Lake Changes and Descriptions for Proposed Land Classifications

Land Classification	Description of Changes	Justification
Project Operations (PO)	Net decrease in PO from 340 acres to 282 acres.	All lands classified as PO are managed and used primarily in support of critical operational requirements related to the primary missions. Changes related to the decrease in PO are due to the refinement of these areas. Additionally, the boundary of the state park lease was better defined. 38 acres previously classified as PO were reclassified as MRML-WM.
High Density Recreation (HDR)	Net decrease in HDR from 1,771 acres to 250 acres.	The net decrease in HDR was in large part due to the reclassification of acres within the Beltzville State Park lease area which were originally classified as Recreation Lands with the intent to develop but were never developed or minimally developed. The reclassification of these acres reflects current and future use. Managed recreation areas within the state park lease were updated to the HDR classification from their previous classification of Recreation Lands in the 1971 MP.
MRML – Low Density Recreation (LDR)	Net increase in LDR from 0 acres to 1,597 acres.	All acres within the Beltzville State Park lease currently managed for low density recreation were reclassified from Recreation Lands to LDR to align with current and future management of these acres.
MRML – Wildlife Management (WM)	Net increase in MRML-WM from 486 acres to 509 acres.	Approximately 38 acres previously classified as PO were reclassified as MRML-WM to align with current and future management of these acres. Additionally, acres within the Beltzville Wildlife Management Project (a PGC lease area) were also reclassified to MRML-WM.
Environmentally Sensitive (ESA)	No change.	No change.

The land classification changes described in this table are the result of changes to individual parcels of land ranging from a few acres to several hundred acres. New acreages were measured using more accurate GIS technology, thus total changes will not equal individual changes. The acreage numbers provided are approximate.

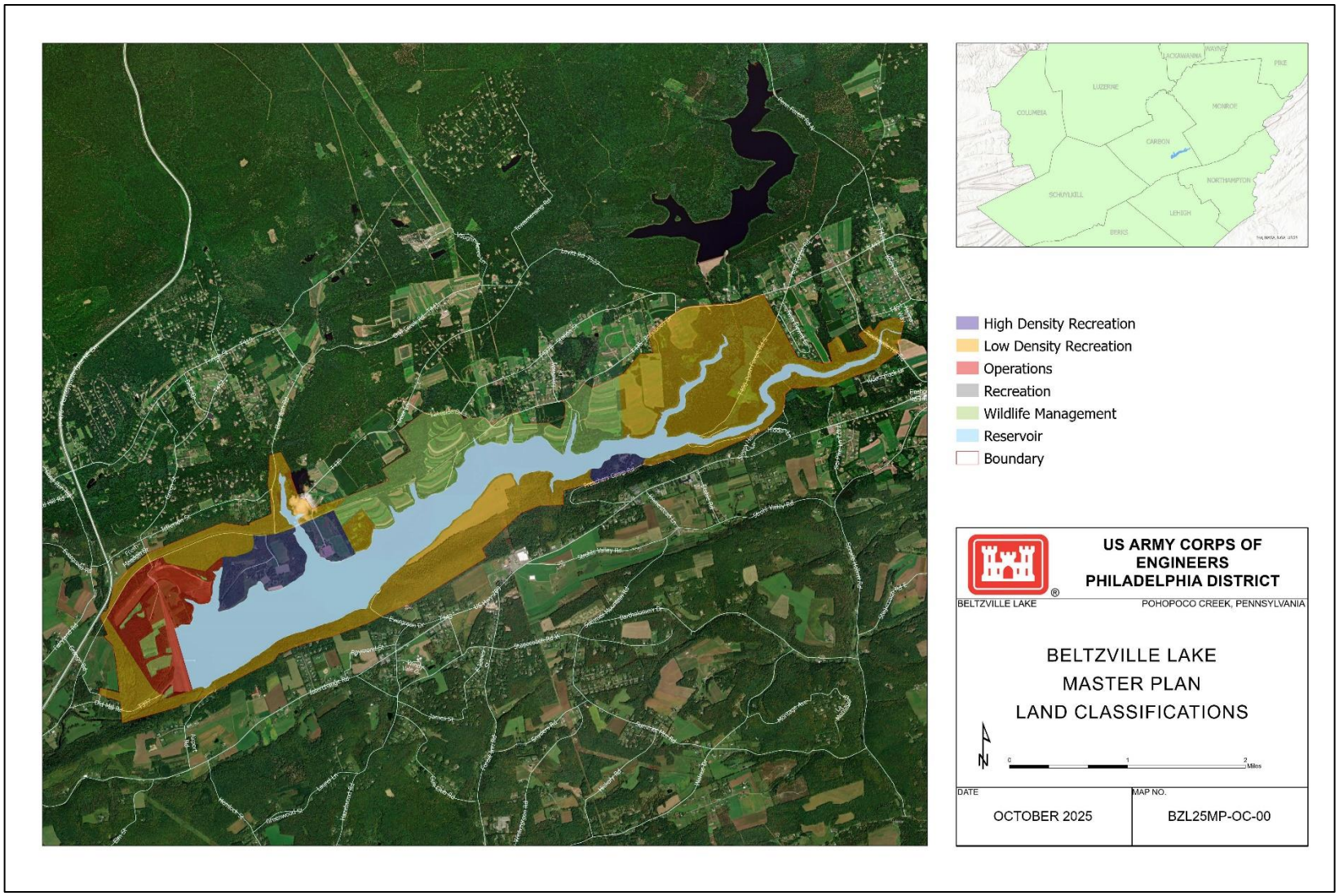

Figure 1 - Beltzville Lake 2026 Proposed Land Classifications

2.3 Alternatives Considered but Eliminated from Further Consideration

Other alternatives to the Proposed Action were initially considered as part of the scoping process for this EA, consisting of different iterations of land classifications. However, none met the purpose of and need for the Proposed Action or the current USACE regulations and guidance. Furthermore, no other alternatives addressed public concerns. Therefore, no other alternatives are being carried forward for analysis in this EA.

3 AFFECTED ENVIRONMENT AND EFFECTS

This section of the EA describes the natural and human environments that exist at the Project and the potential impacts of the No Action Alternative (Alternative 1) and Proposed Action (Alternative 2), outlined in Chapter 2 of this document. Only those resources that have the potential to be affected by these alternatives are described. Some topics are limited in scope due to the lack of direct effect from the Proposed Action on the resource or because that particular resource is not located within Beltzville Lake's fee boundary. For example, no body of water in Beltzville Lake's HUC-10 watershed (Pohopoco Creek) is designated as a Federally Wild or Scenic River, so this resource would not be discussed.

Impacts (impacts or effects) can be either beneficial or adverse and can be either directly related to the action or indirectly caused by the action. Direct effects are caused by the action and occur at the same time and place. Indirect effects are caused by the action and are later in time or further removed in distance but are still reasonably foreseeable.

As discussed in this section, the alternatives may create short-term (up to 2 years) or long-term (greater than 2 years or permanent) effects following the MP revision. Whether an impact is significant depends on the context in which the impact occurs and the intensity of the impact. The context refers to the setting in which the impact occurs and may include society as a whole, the affected region, the affected interests, and the locality. Impacts on each resource can vary in degree or magnitude from an undetectable change to a total change in the environment. For the purpose of this analysis, the intensity of impacts would be classified as no effect, negligible, minor, moderate, or major. Geographical context of impacts are also included either locally or regionally. For this EA's analysis, local effects would only be within the Beltzville Lake fee boundary, while regional effects would be within Carbon County, Pennsylvania. The intensity thresholds are defined as follows:

Table 3 – Resource Effects Classifications

Effects Classification	Classification Type	Description of Effects Classification
No effect	Magnitude	Activity would not affect the resource
Negligible	Magnitude	Activity would have negligible effects to the resource that are not observable or measurable

Effects Classification	Classification Type	Description of Effects Classification
Minor	Magnitude	Activity would have observable or measurable effects that would have minimal or effectively minimized changes to the characteristics of the resource
Moderate	Magnitude	Activity would have observable or measurable effects that would alter the overall function or characteristics of the resource to a degree that would necessitate consideration of mitigation
Short-term	Duration	Effects to resource would have a duration of up to two years
Long-term	Duration	Effects to resource would have a duration greater than two years or would be permanent
Local	Geographic Context	Effects would occur solely within the individual geographic unit of analysis
Regional	Geographic Context	Effects would occur within multiple geographic units of analysis or within the entire regional area of analysis

3.1 Land Use

The MP area of analysis is Carbon County, Pennsylvania (PA), located northeast of the community of Lehighton and northwest of the Philadelphia metropolitan area. Lands considered by the MP are specifically USACE-managed lands around Beltzville Lake (Figure 2). These lands are subdivided according to discrete land-use objectives presenting a combination of project operations, wildlife management, vegetation management, and high- and low-density recreation. In addition, lands around Beltzville Lake host several easements and outgrants for flowage, powerlines, and roads. The lake surface at Beltzville Lake is open to a variety of recreation opportunities, including boating, swimming, and fishing. Project operations represent the superseding purpose

of these lands, with recreation, vegetation, and wildlife management being secondary to dam operations.

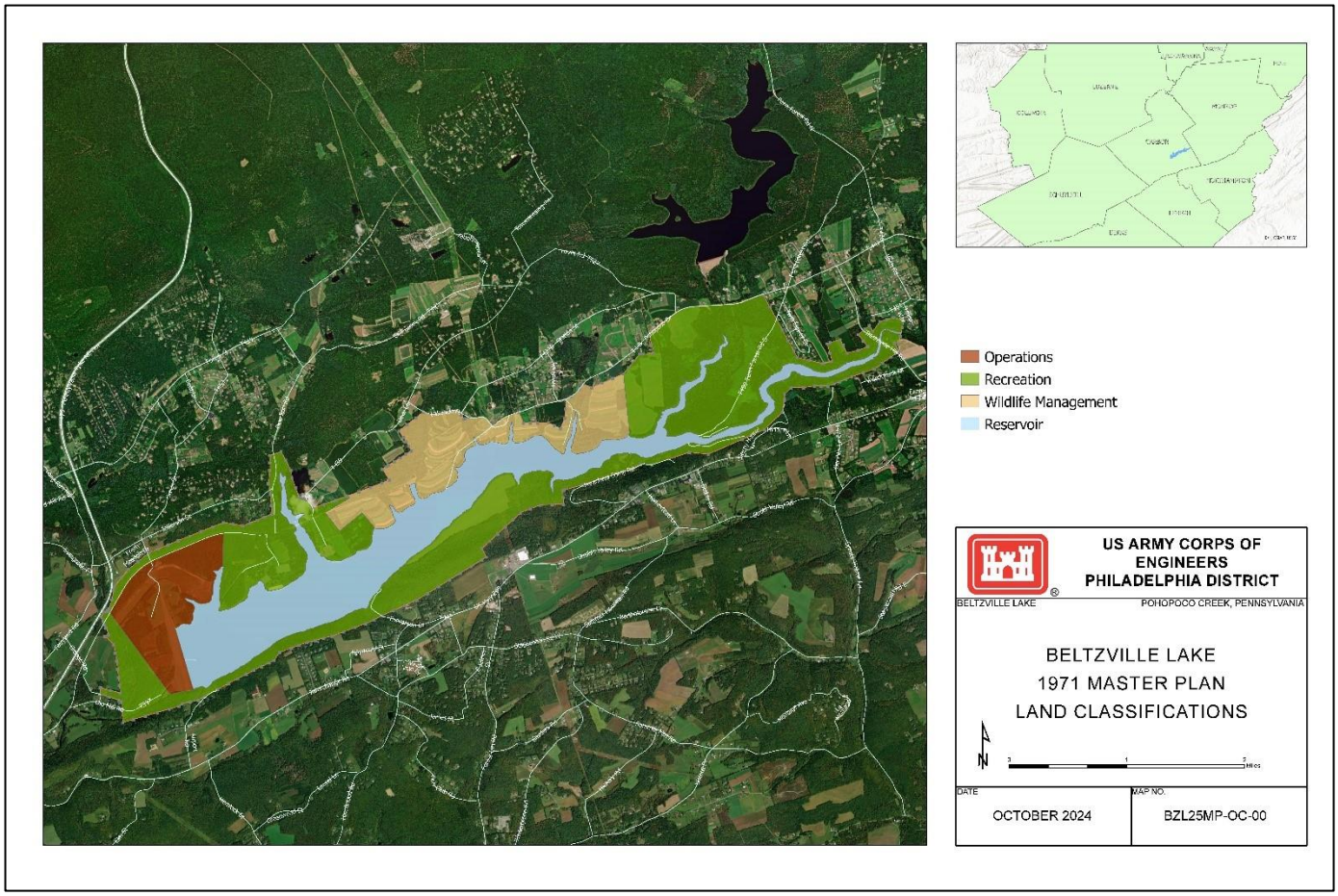

Figure 2 – 1971 Beltzville Lake Land and Water Use Plan

Beltzville Lake is located within the Pohopoco Creek watershed (HUC-10 0204010604), within the Lehigh River sub-basin (HUC-8 02040106), comprising the southernmost portion of the Upper Delaware Basin (Figure 3). Pohopoco Creek is one of the main tributaries of the Lehigh River within its sub-basin. Beltzville Lake is formed via the impoundment of Pohopoco Creek.

Beltzville Lake totals 3,610 fee-owned acres. The 1971 Beltzville Lake MP included 998 surface acres of water and 2,597 acres of fee land, consisting of 340 acres of Project Operations, 1,771 acres of Recreation lands, and 486 acres of Wildlife Management lands.

3.1.1 Alternative 1: No Action Alternative

Under the No Action Alternative, USACE would not implement the 2026 MP, and existing land use management would not be updated to reflect current and projected future needs and demands. The management of USACE lands at Beltzville Lake would continue as outlined in the 1971 MP to the extent that current and future laws and

regulations would permit. Management would have difficulty meeting the current and future recreational needs identified through scoping efforts and USACE Project staff experience and recommendations. If the 1971 MP is kept and implemented, this would not align with current and future management needs for the Lake. This divergence would create a patchwork of management requirements that would be inefficient for Beltzville Lake staff to implement. The management would also increasingly lack transparency to the public or alternately create more of a burden to staff to communicate how the lake management differs from that in the 1971 MP.

Implementation of the No Action Alternative would have moderate, permanent, local, adverse impacts on land use within and on Beltzville Lake Project lands due to conflicting guidance and management of USACE lands.

3.1.2 Alternative 2: Proposed Action

The objectives for revising the 1971 MP describe current and foreseeable land uses while considering expressed public opinion, regional trends, and USACE policies that have evolved to meet day-to-day management needs. The reclassifications in the proposed MP were developed to help fulfill regional goals associated with good stewardship of land and water resources that would allow for continued use and development of Project lands.

The 1971 MP classified 340 acres as Project Operations. The Proposed Action would convert 23 acres of PO to MRML-WM to reflect updated management needs. Refinements in the fee boundary further reduced the PO acres by 35, resulting in a total of 282 acres of PO lands at Beltzville Lake.

The 1971 MP classified 1,771 acres as Recreation Lands, and the Proposed Action would classify 250 acres of the original 1,771 acres as HDR. The Proposed Action would reclassify 1,597 acres as MRML-LDR, all of which are comprised from lands within the Beltzville State Park lease area, which remains unused and undeveloped. These changes to HDR and LDR reflect an overall increase in recreation lands by 76 acres.

The 1971 MP did not classify any lands as ESA, and none would be added with the Proposed Action.

The 1971 MP classified 486 acres as Wildlife Management, and the Proposed Action would establish 509 acres total as MRML-WM lands. These changes to MRML-WM reflect the conversion of 23 acres of PO to MRML-WM and acres within the Beltzville State Park lease area being converted to MRML-WM. The proposed reclassifications for MRML-WM reflect a total increase of 23 acres.

The majority of the land use reclassifications in the proposed MP would maintain the functional management that is currently occurring. While the terminology updates seem substantial, they have been implemented after public input and seek to maintain the values the public holds highest at Beltzville Lake. Additionally, the land reclassifications provide a balance between public use, both intensive and passive, and natural

resources conservation. Therefore, the implementation of the Proposed Action would have moderate, permanent, local, beneficial impacts to land use as the land reclassifications further refine areas for appropriate activities.

3.2 Water Resources

3.2.1 Surface Water

Surface waters are categorized by hydrologic units. Hydrologic units are classified by the United States Geologic Survey (USGS) using a Hydrologic Units Code (HUC) system. The units are classified from largest HUC with a two-digit region (i.e., the Mid-Atlantic Region), encompassing the largest area, to a twelve-digit sub-watershed HUC. Beltzville Lake is classified from its HUC 2 region to HUC 12 sub-watersheds as follows:

- 02 (HUC 2: Region) – Mid Atlantic Region
- 0204 (HUC 4: Sub-region) – Delaware-Mid Atlantic Coastal
- 020401 (HUC 6: Basin) – Upper Delaware
- 02040106 (HUC 8: Sub Basin) – Lehigh
- 0204010604 (HUC 10: Watershed) – Pohopoco Creek
- 020401060404 (HUC 12: Sub-Watershed) - Beltzville Lake-Pohopoco Creek
- 020401060403 (HUC 12: Sub-Watershed) – Wild Creek

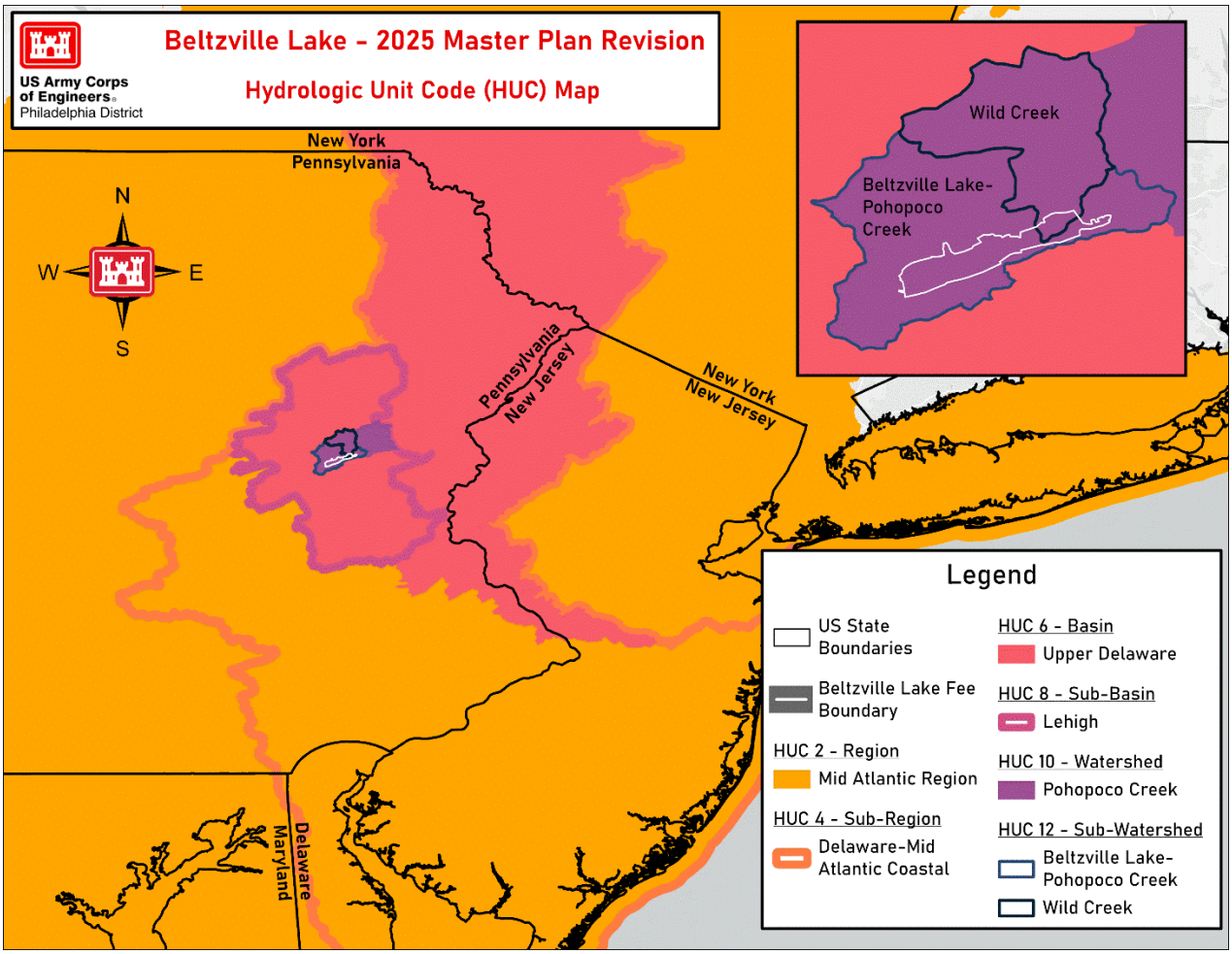

Figure 3 - Hydrologic Unit Codes for Beltzville Lake and the Surrounding Area

3.2.2 Hydrology and Groundwater

Beltzville Lake is located near the eastern edge of Pennsylvania atop the Valley and Ridge aquifers, which comprise the main sources of water for the region. This aquifer system generally consists of permeable rocks folded between alternating ridges and valleys of Paleozoic sediment formations (USGS, 1997). Within Pennsylvania, productive aquifer formations consist of either carbonate-rocks from the Cambrian to Devonian geological system or sandstone rocks dating from the Ordovician, Devonian, Mississippi, and Pennsylvania geological systems. The alternating geological sequences of valleys and ridges within the aquifer system results in highly productive aquifers with high flow and interconnectivity, as groundwater can easily move between faults, fractures, and gaps between rock layers. Additionally, the circulation of slightly acidic groundwater has partially dissolved rocks over time, providing even more porosity and groundwater interconnectivity.

Precipitation is easily captured between ridges throughout the area due to large amounts of colluvium (loose accumulations of rock and soil debris) found in between ridges (USGS, 1997). These colluvium wedges are highly permeable and capture

precipitation as it flows down a ridge, providing high amounts of aquifer recharge throughout the region. Valley floors throughout the aquifer system are also highly permeable and provide a significant source of aquifer recharge. Springs are characteristic of the region and are typically found along geological ridges (anticlines), where groundwater out of the ridge and down its slope.

3.2.3 Water Quality

A discussion of impaired waters connected to Beltzville Lake is included in this EA based on the EPA-approved 2024 Pennsylvania Department of Environmental Protection (PADEP) Integrated Report and 303(d) list (PDEP, 2024). The Clean Water Act (CWA) requires states to adopt water quality standards designating beneficial uses of the state's waters and setting criteria designed to protect those uses. States submit their standards to the U.S. Environmental Protection Agency (USEPA) for approval. The CWA Section 303(d) requires each state to prepare a list of impaired water bodies that do not meet state water quality standards. States, or the USEPA, must develop and the USEPA must approve a Total Maximum Daily Load (TMDL) for each water body on the state's list of impaired water bodies, also known as the 303(d) list. A TMDL is a clean water plan that uses a science-based approach to reduce pollutant loading to water bodies so that water quality standards can be met. The TMDL also includes a Water Quality Management Plan, which identifies the actions that must be taken in order to meet the TMDL and the people responsible for implementing these actions.

The 2024 303(d) list categorizes impaired waterbodies based on whether they support beneficial use categories such as water contact recreation, irrigation, water supply, etc. There are 5 main categories for impaired waterbodies:

- Category 1: All beneficial uses are attained by the waterbody.
- Category 2: Waters where some but not all uses are met. The assessment status of the remaining uses may be unknown because data are insufficient to assess the water, or it may be impaired.
- Category 3: Waters for which there are insufficient or no data to determine if any uses are met.
- Category 4: Available data and/or information indicate that at least one designated use is not being supported but a TMDL is not needed.
    - Subcategory 4a: Waters impaired for one or more uses, not needing a TMDL because a TMDL has been completed.
    - Subcategory 4b: Waters impaired for one or more uses, not needing a TMDL because uses are expected to be attained within a reasonable timeframe.
    - Subcategory 4c: Waters impaired for one or more uses, not needing a TMDL because the impairment is not caused by a pollutant.
- Category 5: Waters impaired for one or more uses by a pollutant that requires the development of a TMDL
    - Subcategory 5alt: Waters impaired for one or more uses by a pollutant that are selected for alternative restoration implementation. A TMDL is still required if the alternative is not successful.

Table 4 summarizes the water quality information for Beltzville Lake reported in the in the 2024 303(d) list.

Table 4 – 2024 PADEP 303(d) List: Beltzville Lake

Assessed Use Category	Assessment Determination	Impairment Category	Designated Use	Impairment Cause	Impairment Source	Year Listed
Potable Water Supply	Supporting	2	Cold Water Fishes	-	-	-
Recreation	Supporting	2	Cold Water Fishes	-	-	-
Fish Consumption	Impaired	5	Cold Water Fishes	Mercury	Atmospheric Deposition	2002

Source: PADEP 2024

Additionally, the USACE, Philadelphia District maintains an annual water quality monitoring program at Beltzville Lake. The 2024 report noted that Beltzville Lake shows strong temperature stratification and exceeded the maximum downstream temperature set by the Pennsylvania state water quality criteria for cold water fisheries in the early fall. Downstream water temperatures are typically maintained to support the cold-water fishery temperature criteria throughout the summer utilizing water quality monitoring and selective water releases. Beltzville Lake also maintained dissolved oxygen levels above the minimum of 5 milligrams (mg) per Liter (L) (mg/L) in the surface waters, but deeper areas of the Lake were reported as hypoxic (2 mg/L or less). The pH of the Lake was recorded as consistently within the PADEP's pH criteria (between 6 and 9). Nutrient levels for Beltzville Lake were consistently low and routinely within the USEPA water quality recommended levels; upstream sampling in Pohopoco Creek did exceed the USEPA's suggested 0.01 mg/L total phosphorous concentration. Surface water bacteria samples were collected at 7 fixed stations in the watershed and reservoir. Three *Escherichia coli* samples exceeded the EPA 235 organisms per 100 milliliters (mL) recreational single water sample threshold. Bacteria concentrations were consistently elevated closer to the upstream tributary stations and were attributed to upstream watershed activities or land use. No long-term elevated bacteria counts were recorded in the main reservoir body where public water recreation is permitted.

3.2.4 Wetlands

The U.S. Fish and Wildlife Service (USFWS) maintains the National Wetlands Inventory (NWI), which is a wetlands database across the United States. Using the NWI's Geographic Information System (GIS) data, there are approximately 1,033 acres of wetlands present within the Beltzville Lake fee boundary (USFWS-NWI, 2025). Figure 4 displays the mapped wetlands using the NWI database at Beltzville Lake, and Table 5 summarizes the wetlands by NWI wetland type.

Table 5 - NWI Wetland Acreage by Wetland Type at Beltzville Lake

NWI Wetland Type	Acres
Freshwater Forested – Shrub Wetland	0.28
Freshwater Pond	0.74
Freshwater Emergent Wetland	1.39
Riverine	17.04
Lake	1,013.1
Total Wetland Acreage	1032.45

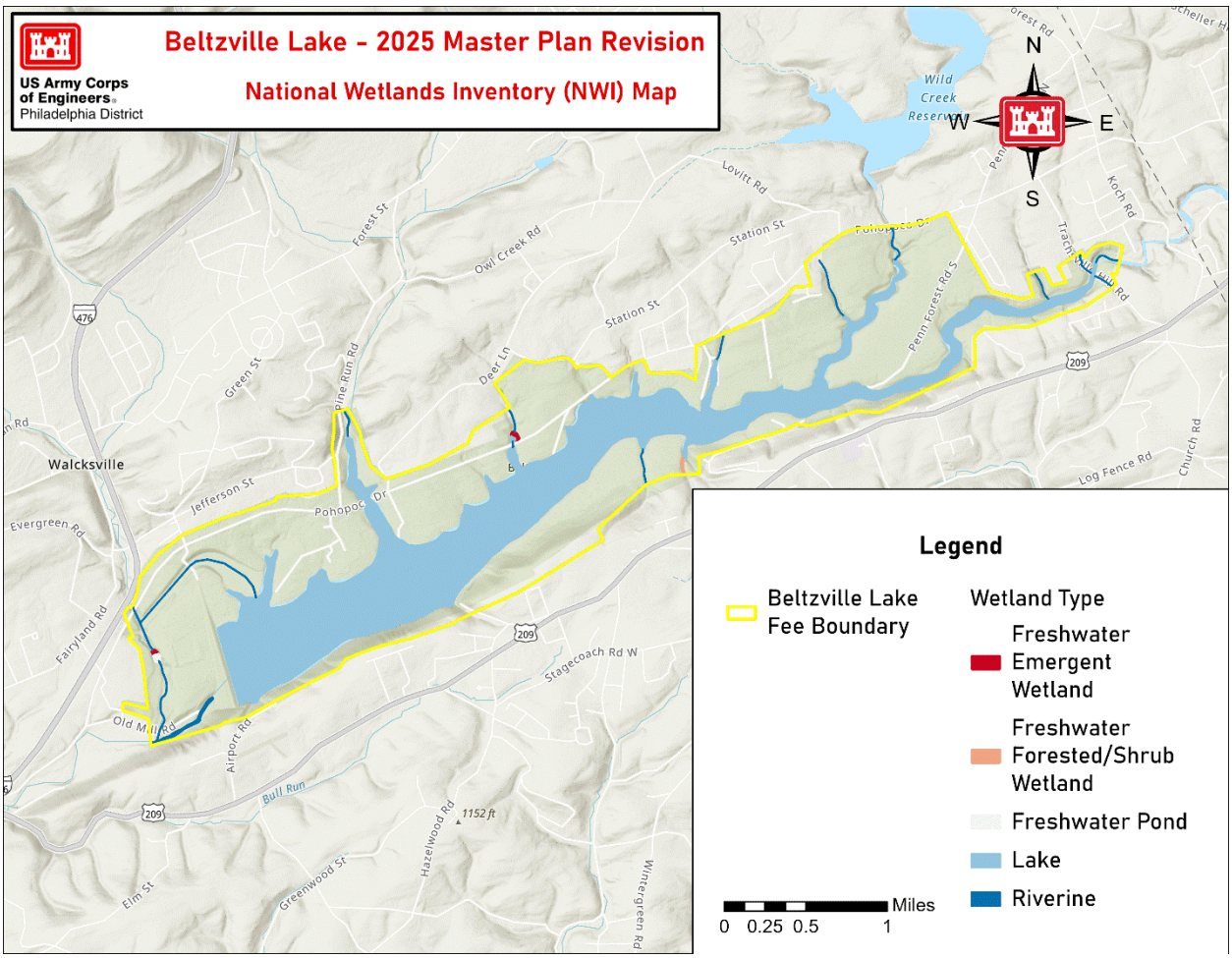

Figure 4 - NWI Wetlands at Beltzville Lake (USFWS-NWI, 2025)

3.2.5 Alternative 1: No Action Alternative

The No Action Alternative would result in no changes to land classifications. Management and future actions would continue to occur without the benefit of an updated and comprehensive management strategy. Actions associated with ongoing management would not significantly impact water quality as they are minor actions

primarily associated with ongoing operations and maintenance. Existing minor effects to turbidity would continue due to shoreline erosion caused primarily by wave action initiated by existing winds and near-shore boating activity. These impacts would not affect water parameters such as temperature, pH, dissolved oxygen, or bacteria, so they would not adversely affect beneficial uses or result in noncompliance with water quality standards. Under the No Action Alternative, USACE would continue to manage USACE lands at Beltzville Lake through the 1971 MP. If new management issues arise, USACE would address them through individual documentation on an action-by-action basis. In conclusion, the No Action Alternative would have no impacts on water resources.

3.2.6 Alternative 2: Proposed Action

The reclassifications and resource management objectives required for implementing the Proposed Action would allow land management and land uses to be adjusted for current and reasonably foreseeable future changes in water resources. For example, the establishment of 21 additional acres as MRML-WM lands would help to stabilize soils through the promotion and potential restoration of native habitats. In turn, these habitats would help reduce erosion, and buffer and filter storm runoff before making its way into the lake, therefore reducing water turbidity. The reclassification of a majority of Recreation Lands to MRML-LDR would decrease anthropogenic disturbance and potential development of these lands throughout the life of the 2026 MP, resulting in decreased erosion that may contribute to adverse water quality. The Proposed Action would not affect mercury, temperature, pH, dissolved oxygen, or fecal coliform levels at Beltzville Lake.

Implementation of the Proposed Action would have minor, permanent, local, beneficial impacts on water resources located within USACE Project lands at Beltzville Lake.

3.3 Climate

The state of Pennsylvania primarily has a humid continental climate with some areas classified as a hot summer humid continental climate and others as a warm summer continental climate, Köppen climate types Dfa and Dfb, respectively (Peel et al., 2007). The humid continental climate is classified as having temperatures during the coldest months below 0 degrees Celsius (°C) and there must be at least four months where the average temperatures are at or above 10°C. Both Köppen secondary classifications for Pennsylvania (f) indicate that there is not a dry season as humidity and precipitation are high year-round. The hot summer subtype is differentiated from the warm summer subtype by the warmest month average temperatures, as the hot summer subtype has an average temperature during its warmest months of at least 22°C and the warm summer subtype has average warmest months below 22°C, but at least four months average above 10°C.

Local climate data for Beltzville Lake collected from the Allentown Lehigh Valley International Airport weather station is summarized in Table 6.

Table 6 – 2020-2025 Monthly Climate Averages; Allentown Lehigh Valley International Airport (cli-MATE: Midwestern Regional Climate Center, 2025)

Month	Average Temperature (°C)	Average Minimum Temperature (°C)	Average Maximum Temperature (°C)	Average Precipitation (in.)
January	29.31	23.6	39	3.05
February	31.73	24.2	43.3	2.96
March	40.75	32.7	54.2	3.5
April	51.46	40.6	62.7	3.79
May	61.45	49.8	72.2	4.03
June	70.15	58.5	81.6	4.66
July	75.01	65.6	86.7	5.4
August	73.22	63.6	84	5.03
September	65.98	55	75.9	4.76
October	54.58	44.3	66.4	4.02
November	43.44	33	54.7	3.09
December	34.4	27.1	43.8	4.17

3.3.1 Alternative 1: No Action Alternative

The No Action Alternative would not result in any changes in climate or changing conditions at Beltzville Lake. Implementation of the 1971 MP would have no impact (beneficial or adverse) on existing or future climate conditions. Current USACE policies requires project lands and recreational programs be managed in a way that advances broad national changing conditions mitigation goals including, but not limited to, changing conditions resilience and carbon sequestration. Changing conditions were not evaluated in the 1971 MP, as such the 1971 MP does not align with current laws and regulations. This non-compliance has no impact on climate or changing conditions because the 1971 MP does not have any action that impacts existing conditions.

3.3.2 Alternative 2: Proposed Action

The 2026 MP will have negligible, long-term, beneficial impacts to climate or changing conditions in the region. These benefits will come from the promotion of land management practices and design standards that promote sustainability. Management under the 2026 MP will follow current USACE policy to meet changing conditions goals as described for the No Action Alternative. Any ground disturbing activities considered under the 2026 MP will be evaluated and analyzed for impacts to climate under NEPA and design processes prior to implementation.

3.4 Air Quality

National Ambient Air Quality Standards (NAAQS) have been established by the U.S. EPA, Office of Air Quality Planning and Standards (OAQPS), for six criteria pollutants that are deemed to potentially impact human health and the environment. These include 1) carbon monoxide (CO); 2) lead (Pb); 3) nitrogen dioxide (NO_2); 4) ozone (O_3); 5) particulate matter <10 microns (PM_{10}) and <2.5 microns ($PM_{2.5}$); and 6) sulfur dioxide (SO_2). Ground level or "bad" O_3 is not emitted directly into the air but is created by chemical reactions between oxides of nitrogen (NOx) and volatile organic compounds (VOC) in the presence of sunlight. Emissions from industrial facilities and electric utilities, motor vehicle exhaust, gasoline vapors, and chemical solvents are some of the major sources of NOx and VOC (EPA, 2025A).

EPA records show that there are 2 GHG contributors within Carbon County, PA (EPA, 2023). Both facilities reported by the EPA Facility Level Information GHG Tool (FLIGHT) tool are described in Table 7. Emissions are reported by the EPA in metric tons of Carbon Dioxide (CO_2) equivalent (mt per CO_2e). The provided data is from the most recent data year in the FLIGHT tool, which is 2023.

Table 7- EPA Reported GHG Contributor Facilities (EPA, 2023)

Facility Name	Facility Location (City)	2023 EPA Reported Emissions (mt per CO_2e)	Gases Emitted[1]	Source(s) of Emissions
Befeza Zinc US INC	Palmerton	105,609	CO_2, CH_4, N_2O	Stationary Combustion, Zinc Production
Panther Creek Energy Facility	Nesquehoning	760,639	CO_2, CH_4, N_2O	Stationary Combustion

1: CO_2 = Carbon Dioxide; CH_4 = Methane; N_2O = Nitrous Oxide

On November 30, 1993, the USEPA published a Conformity Rule requiring all Federal actions to conform to appropriate State Implementation Plans that were established to improve ambient air quality. At this time, the Conformity Rule only applies to Federal actions in non-attainment areas. A non-attainment area is an area which does not meet one or more of the NAAQS for the criteria pollutants designated in the Clean Air Act (CAA).

To comply with this rule, a conformity determination based on air emission analysis is required for each proposed Federal action within a non-attainment area. As of June 2025, Carbon County is listed as a marginal non-attainment area under the 2008 Ozone Standard, specifically the Allentown-Bethlehem-Easton metropolitan area (EPA, 2025B). The Allentown-Bethlehem-Easton metropolitan area is approximately 30 miles south of Beltzville Lake. No other areas within Carbon County have a non-attainment

status under the current NAAQS standards. A conformity determination is not required for the Proposed Action since it would not generate any emissions.

The USACE manages Project lands and recreational programs to advance sustainability and resilience goals related to National and USACE policy. As part of management activities, the USACE is required to consider the effect that their actions may have on Greenhouse Gases (GHG) emissions.

3.4.1 Alternative 1: No Action Alternative

The No Action Alternative would result in no changes to land classifications. Project lands would continue to be managed under outdated land classifications in the current master plans or, if new management issues arose, would be addressed through individual documentation on an action basis. Ongoing management actions associated with recreational, cultural, and natural resources do not currently result in significant impacts to air resources at a regional (county) level, which is in attainment for all pollutants. Controlled burns could result in exceedances of particulate matter 2.5 micrometers or less in diameter ($PM_{2.5}$) and would be evaluated in action specific NEPA documentation. Routine operations and maintenance activities at Beltzville Lake includes the use of gas-powered machinery such as chainsaws, mowers, trucks, etc. Negligible, temporary, local, adverse impacts to air quality during routine operations and maintenance are anticipated from the No Action Alternative.

3.4.2 Alternative 2: Proposed Action

The Proposed Action does not contain measures expected to increase air emissions, substantial pollution concentrations, or objectionable odors at Beltzville Lake. The proposed land classification updates would allow for ongoing operations and maintenance activities that may utilize heavy machinery, emissions from this type of source would be well below any established Federal or State emissions thresholds and would not violate any air quality standards or result in a cumulative net increase of a criteria pollutant. Other maintenance activities such as small-scale spraying of pesticides and herbicides may occur but would generally be applied by hand or truck-mounted equipment, so any release of airborne toxins would be localized to the Project. Adverse impacts from maintenance activities would be localized, negligible, and short-term.

The Proposed Action would create an overall increase in recreation lands (76 acres). The majority of the originally classified Recreation Lands would be reclassified to MRML-LDR to meet future recreation plans. Additionally, the 23-acre increase in MRML-WM would contribute to the stabilization and bolstering of native vegetation communities that can sequester criteria air pollutants, providing net benefits to local air quality. Improved management of recreational resources due to updated resource goals and objectives may also contribute to minor, permanent, local, beneficial impacts to air quality over the life of the MP. The benefits to air quality provided by the Proposed Action would offset any of the adverse impacts to air quality resulting from regular maintenance activities.

3.5 Topography, Geology, and Soils

3.5.1 Topography

Beltzville Lake is located within the M221A – Northern Ridge and Valley Ecological Section, as classified by the U.S. Forest Service (USFS). The Northern Ridge and Valley Ecological Section is characterized by a series of parallel, southwest to northeast trending, narrow valleys and mountain ranges created by differential erosion of tightly folded, intensely faulted bedrock (USFS, 1996). The eastern boundary in the Ecological Section is the Great Valley low land; the western boundary is a steep, high ridge, the Allegheny Front. A notable but very minor landform within the Ecological Section is anthropogenic: lands that have been strip-mined exhibit hummocky or gouged topography. Elevation throughout the Ecological Section ranges from 300 to 4,000 ft.; Local relief is 500 to 1,500 ft.

3.5.2 Geology

Additional information from the USFS's *Ecological Subregions of the United States* provides geological information for Beltzville Lake and the Ecological Section it is located within. A veneer of unconsolidated materials overlies most bedrock: residuum on flat and gently sloping uplands, colluvium on slopes, and alluvium in valley bottoms. Shale, siltstone, sandstone, chert, and carbonates form bedrock in the Section. Ordovician and Silurian units dominate the northern part of the Section, with some Devonian, Mississippian, and Pennsylvanian units (including coal) exposed in the larger synclines, and Cambrian limestone exposed in a few anticlines. The southern part is dominated by Devonian units with lesser amounts of Silurian and Ordovician rocks in some anticlines, and Mississippian and Pennsylvanian rocks in some synclines. Cambrian rocks show up along a few major thrust faults. Sandstone, chert, and some of the tougher carbonates hold up most of the upland portions of the Section. Weaker carbonates and shale underlie most valleys.

3.5.3 Soils

A soil survey by the Natural Resource Conservation Service (NRCS) shows there are 8 possible general classifications (Class I through Class VIII), but only 6 occur at Beltzville Lake. The erosion hazards and plant cultivation limitations for use increase as the class number increases. Class I has few limitations, whereas Class VIII has many. The soil capability class data for project lands is provided in Table 8 and mapped in Figure 6. This data is compiled by the NRCS and is a standard component of natural resources inventories on USACE lands.

A general description of the soils and land capability by classification are described below. Detailed information on all soil types surrounding Beltzville is available on websites maintained by the NRCS, U.S. Department of Agriculture (USDA).

- Class I soils have slight limitations that restrict their use.

- Class II soils have moderate limitations that reduce the choice of plants or require moderate conservation practices.
- Class III soils have severe limitations that reduce the choice of plants or require special conservation practices, or both.
- Class IV soils have very severe limitations that restrict the choice of plants or require very careful management, or both.
- Class V soils have little or no hazard of erosion but have other limitations, impractical to remove, that limit their use mainly to pasture, range, forestland, or wildlife food and cover.
- Class VI soils have severe limitations that make them generally unsuited to cultivation and that limit their use mainly to pasture, range, forestland, or wildlife food and cover.
- Class VII soils have very severe limitations that make them unsuited to cultivation and that restrict their use mainly to grazing, forestland, or wildlife.
- Class VIII soils and miscellaneous areas have limitations that preclude their use for commercial plant production and limit their use to recreation, wildlife, or Water Supply or for aesthetic purposes

Table 8 – Soil Capability Classes at Beltzville Lake (NRCS, 2025)

Soil Capability Class	Acreage
Class I	95.9
Class II	881.5
Class III	843.4
Class IV	229.6
Class V	0
Class VI	71.2
Class VII	480.6
Class VIII	0

Section 1541(b) of the Farmland Protection Policy Act (FPPA) of 1980 and 1995, 7 U.S.C. 4202(b) requires federal and state agencies, as well as projects funded with federal funds, to (a) use the criteria to identify and take into account the adverse effects of their programs on the preservation of farmland, (b) consider alternative actions, as appropriate, that could lessen adverse effects, and (c) ensure that their programs, to the extent practicable, are compatible with state and units of local government and private programs and policies to protect farmland. Prime Farmlands and Farmlands of Statewide Importance described in Table 9 and are mapped in Figure 6.

Table 9 - Prime Farmlands and Farmlands of Statewide Importance Identified at Beltzville Lake (NRCS, 2025)

Soil Series*	Farmland Classification	Acreage
Allenwood gravelly loam and silt loam, 0 to 3 percent slopes	All areas are Prime Farmland	76.33
Allenwood gravelly loam and silt loam, 3 to 8 percent slopes, moderately eroded	All areas are Prime Farmland	251.58
Comly silt loam, 3 to 8 percent slopes, moderately eroded	All areas are Prime Farmland	45.33
Middlebury silt loam, 0 to 3 percent slopes	All areas are Prime Farmland	15.51
Middlebury silt loam, 3 to 8 percent slopes	All areas are Prime Farmland	27.85
Watson gravelly silt loam, 0 to 8 percent slopes, moderately eroded	All areas are Prime Farmland	26.09
Allenwood gravelly loam and silt loam, 8 to 15 percent slopes, moderately eroded	Farmland of Statewide Importance	21.26
Berks-Weikert channery silt loam, 0 to 3 percent slopes	Farmland of Statewide Importance	79.76
Berks-Weikert channery silt loam, 3 to 8 percent slopes	Farmland of Statewide Importance	480.37
Berks-Weikert channery silt loam, 8 to 15 percent slopes	Farmland of Statewide Importance	320.52
Hartleton channery silt loam, 0 to 3 percent slopes	Farmland of Statewide Importance	90.05
Hartleton channery silt loam, 3 to 8 percent slopes, moderately eroded	Farmland of Statewide Importance	345.3
Hartleton channery silt loam, 8 to 15 percent slopes, moderately eroded	Farmland of Statewide Importance	20.99
Holly silt loam	Farmland of Statewide Importance	0.22

*This table does not include any soil series found at Beltzville Lake that were not reported as Prime Farmland or Farmland of Statewide Importance, as well as open water.

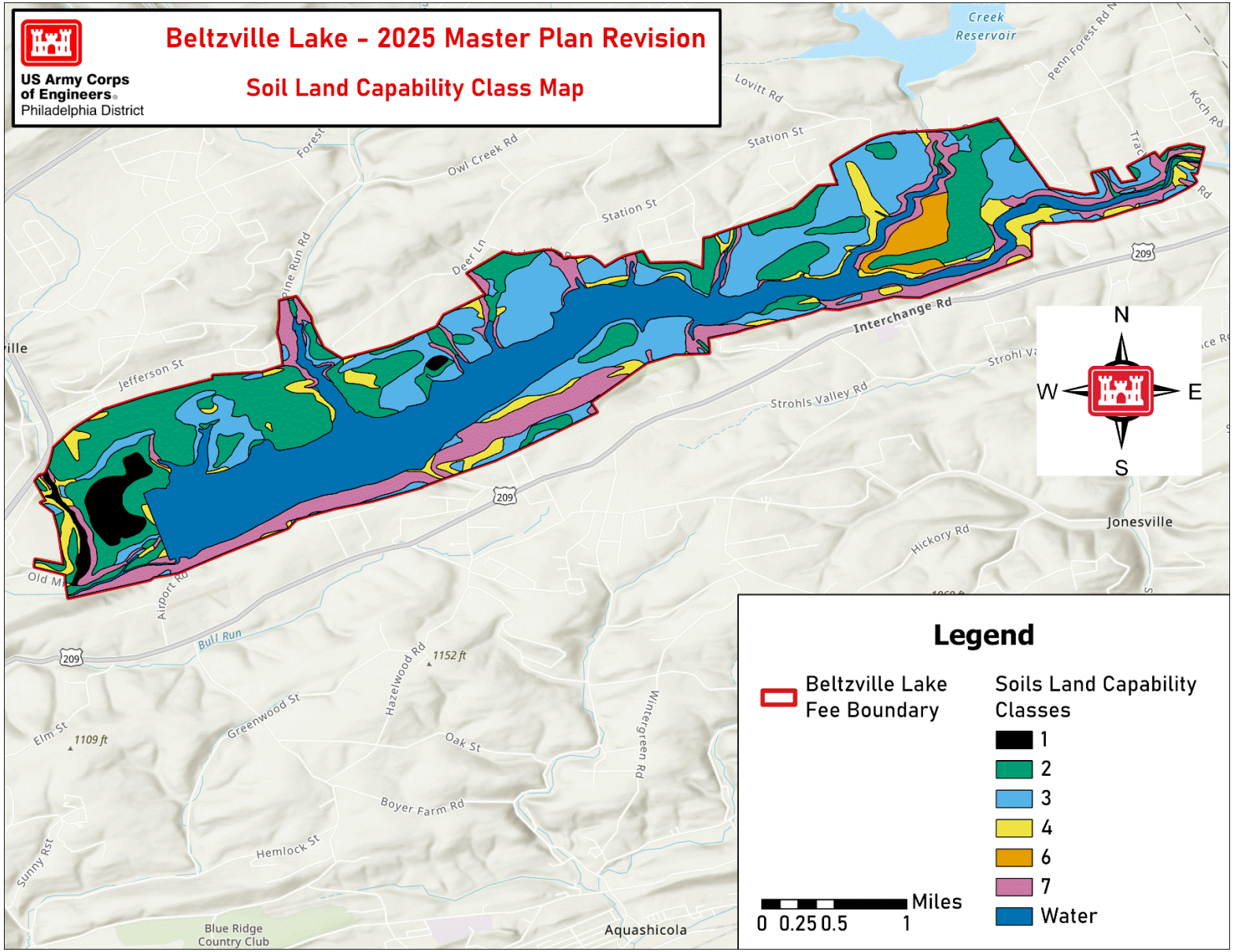

Figure 5 - Soil Land Capability Classes at Beltzville Lake

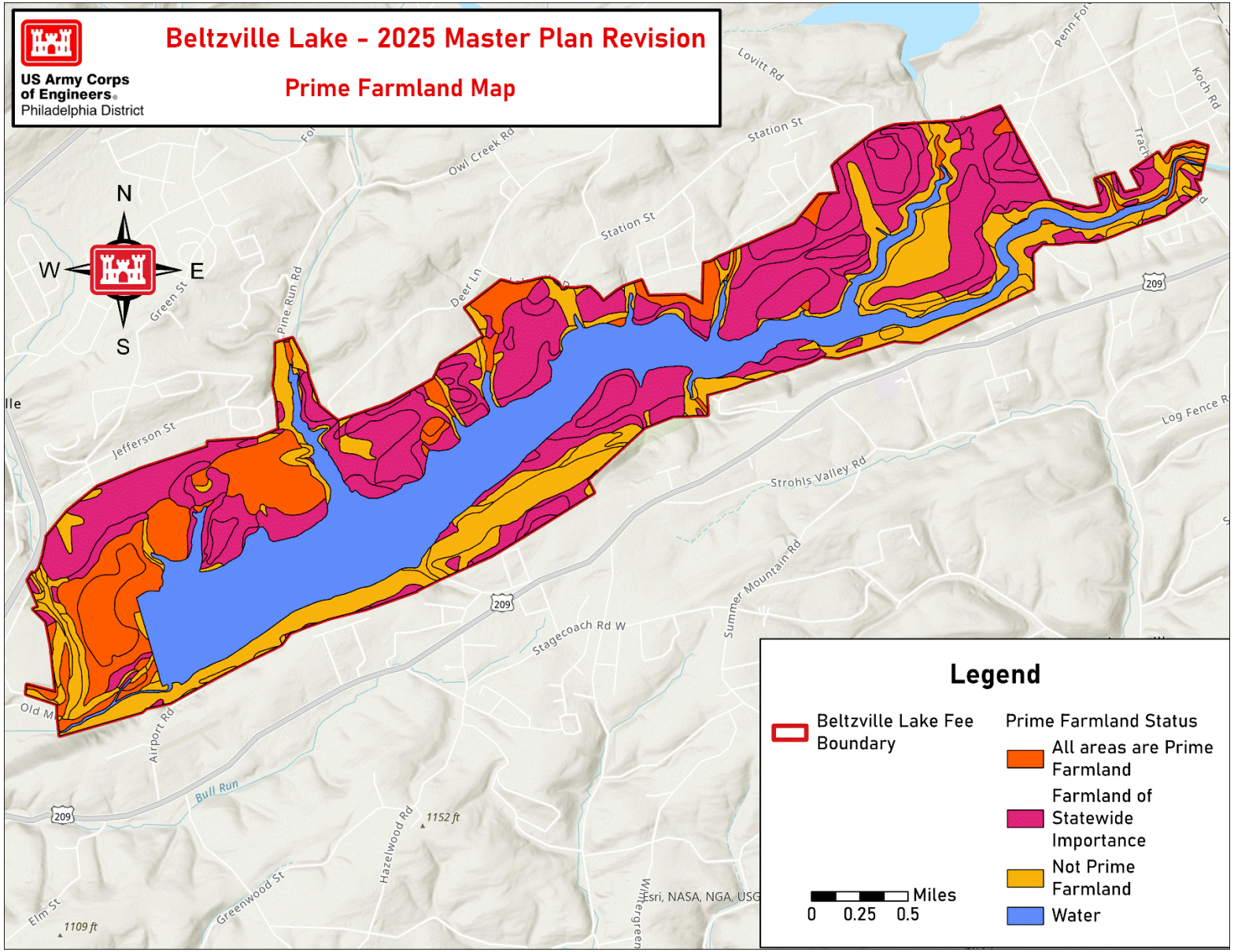

Figure 6 – Beltzville Lake Prime Farmland Soil Status Map

3.5.4 Alternative 1: No Action Alternative

The No Action Alternative would result in no changes to land classifications. Actions associated with ongoing recreational, cultural, and natural resource management would not impact topography, geology, soils (including Prime Farmlands), or mineral resources. Erosion would continue in Beltzville Lake's recreation areas.

Under the No Action Alternative, USACE would continue to manage USACE lands at Beltzville Lake through the Operational Management Plan (OMP) or current management plan. If new management issues arise, USACE would address them through individual documentation on an action specific basis. Therefore, the No Action Alternative would result in minor, permanent and local adverse effects.

3.5.5 Alternative 2: Proposed Action

This section describes the Proposed Action's effects on topography, geology, and soils at Beltzville Lake and determines the level of effects based on the information provided in the previous subsections. The overall reclassification of recreation lands at Beltzville Lake due to the reclassification of 1,771 acres of Recreation Lands to MRML-LDR (1,597 acres), HDR (250 acres) and a 23-acre increase in MRML-WM lands would help to increase the long-term preservation and stabilization of soils and soil stabilizing vegetation within USACE Beltzville Lake lands. The 2026 MP would not adversely affect the 443 acres of Prime Farmlands or 1,359 acres of Farmland of Statewide Importance at Beltzville Lake since it does not irreversibly convert them into nonagricultural lands. Implementation of the Proposed Action would have minor, permanent, local, beneficial impacts on soil conservation, topography, and geology at Beltzville Lake.

3.6 Natural Resources

3.6.1 Ecological Setting

The Environmental Protection Agency (EPA) mapped ecoregions, which are major ecosystems within physiographic regions and defined by geographically distinct plant and animal species, natural communities, and environmental conditions. Beltzville Lake is situated in the Northern Shale Valleys Level IV ecoregion (Region 67b), part of the larger Ridge and Valley Level III ecoregion (Region 67). The Northern Shale Valleys are characterized by intensely folded ridges and valleys that make up a majority of the ecosystem's topography. Forests are generally classified as Appalachian Oak forests in the north dominated by white oak (*Quercus alba*) and red oak (*Quercus rubra*) and Oak-Hickory-Pine forests dominated by hickory (*Carya sp.*), longleaf pine (*Pinus palustris*), shortleaf pine (*Pinus echinata*), loblolly pine (*Pinus taeda*), white oak, and post oak (*Quercus stellata*). American chestnut (*Castanea dentata*) historically dominated the region before chestnut blight (*Cryphonectria parasitica*) was spread to North America in the early 1900s. Historic use of fire and cut and slash techniques to create grazing fields for cattle extensively modified the native landscape and increased soil erosion. Additionally, the prevalence of the logging industry from the 1880's to the 1920's removed significant portions of timber from the region. Contemporary land use such as

residential development and extractive industries continues to largely modify the landscape.

3.6.2 Vegetation Resources

Vegetation at Beltzville Lake is dominated by six subclasses of the National Vegetation Classification System (NVCS), comprising a variety of natural forest, shrub, and grassland communities, as well as agriculture and managed landscaping.

Table 10 presents the specific characteristics of each subclass and their respective acreages at Beltzville Lake. Figure 7 illustrates the vegetation subclasses for Beltzville Lake. The next level of hierarchy in the NVCS after the subclass level, the formation level, is discussed briefly for Beltzville Lake following Table 10. NVCS subclasses are indicated by a single number and single letter, such as 1.B representing the Temperate and Boreal Forest and Woodland subclass, whereas 1.B.1 represents the Warm Temperate Forest and Woodland Formation within the 1.B subclass.

Table 10 - National Vegetation Classification System (NVCS) Subclasses at Beltzville Lake

NVCS Subclass*	Subclass Description	Acreage within Beltzville Lake Fee Boundary
1.B – Temperate and Boreal Forest and Woodland	Temperate & Boreal Forest & Woodland includes temperate rainforest, temperate deciduous forest and woodland, and temperate evergreen forest and woodland. These forests are dominated by broad-leaved or needle-leaved growth forms. Trees typically range in height from 10 to 30 m, but rainforest trees may attain great height, exceeding 50 m. Temperate broad-leaved deciduous and needle-leaved forests grow in cool-temperate climates, with summer rainfall and cold winters (during which the broad-leaved trees lose their leaves), extending to the tree line of temperate regions, where they resemble boreal forests.	1,894.6
2.B – Temperate and Boreal Grassland and Shrubland	Temperate & Boreal Grassland & Shrubland vegetation varies from grasslands of open to dense bunch or sod grasses, often with scattered shrubs or trees, to low (<2 m) open to dense shrublands and sclerophyllous or soft chaparral scrub, and trees absent to scattered (<10% cover). The xeromorphic growth forms are largely absent; the surface layer has a thin to thick litter and duff layer, posed in contrast to desert grassland and scrub, where the surface layer may be bare or contain a biological crust. Structure is a single, major grass or shrub stratum, or a mix of the two, typically exceeding 10-20% cover.	63.08
2.C – Shrub and Herb Wetland	Shrub & Herb Wetland is dominated by grasses and shrubs, with or without scattered trees (which may have up to 10% cover), sometimes with a wet moss layer (bogs and fens), halophytic growth forms (salt marsh), or a mix of emergent and hydromorphic growth forms, with seasonally to annually saturated or flooded soils, or standing water	2.87

NVCS Subclass*	Subclass Description	Acreage within Beltzville Lake Fee Boundary
7.A – Woody Agricultural Vegetation	Agricultural crops dominated by shrub and tree vegetation, including orchards, vineyards, woody berry crops, intensive (often short rotation) forest plantations, various agroforestry woody crops, and woody wetland crops, such as cranberries.	99.78
7.B – Herbaceous Agriculture	Agricultural vegetation, including row crops, planted grain crops, pastures, hayfields, horticultural crops (such as commercial flower operations), fallow fields and early successional weed fields, and wetland rice and taro crop fields.	447.57
7.C – Herbaceous and Woody Developed Vegetation	Vegetation includes closely cropped vegetation such as lawns, gardens, sports fields, and golf courses, as well as vegetation growing in urban materials, such as pavement, from dry lands to emergent wetlands. Tree canopy varies from 0 to 100% (e.g., open to shaded lawns and gardens).	57.03

*Listed subclasses do not include open water, barren, or developed areas at Beltzville Lake as classified by NVCS data.

The largest NVCS formation present at Beltzville Lake is the 1.B.2 formation (cool temperate forest and woodland), which accounts for approximately 73% of all vegetated landcover at Beltzville Lake. The 1.B.2 formation is known for its pure or mixed stands of broad-leaved deciduous or needle-leaved evergreen trees, with a seasonal green understory of herbs. The tall-shrub layer is variable, and is often broad-leaved and deciduous, but the short-shrub layer may be heath. This formation in eastern North America is typically dominated by pure conifer stands of Eastern hemlock (*Tsuga canadensis*) and Eastern white pine (*Pinus strobus*). Other common tree species include oaks (*Quercus sp.*), maples (*Acer sp.*), beech (*Fagus sp.*), chestnut (*Castanea sp.*), hickory (*Carya sp.*), elm (*Ulmus sp.*), and basswood (*Tilia sp.*).

The next four largest NVCS formations found at Beltzville Lake comprise approximately 25% of the remaining vegetated landcover; in order of size, they are the 7.B.2 (pasture and hay field crop), 7.B.1 (row and close grain crop), 7.A.2 (forest plantation and agroforestry), and 2.B.2 (temperate grassland and shrubland) formations. Formations 7.B.2 and 7.B.1 fall under the 7.B subclass, which generally represents planted agricultural species such as row crops, pastures and hayfields. The 7.A.2 formation falls under the 7.A subclass, which generally represents planted agricultural woody plants seen in orchards, berry farms, or other woody crops. Lastly, the 2.B.2 formation is described as temperate grasslands comprised of perennial grasses and variable amounts of perennial forbs. The 2.B.2 formation is highly variable since it is comprised of many vegetation habitat types ranging from patchy vegetation on rock outcrops, open grasslands, sparsely treed areas with dense mixed understories, and dense shrublands. The 2.B.2 formation is also heavily affected by anthropogenic disturbance such as livestock grazing, plowing for conversion to agriculture, and fires (both created and prevented).

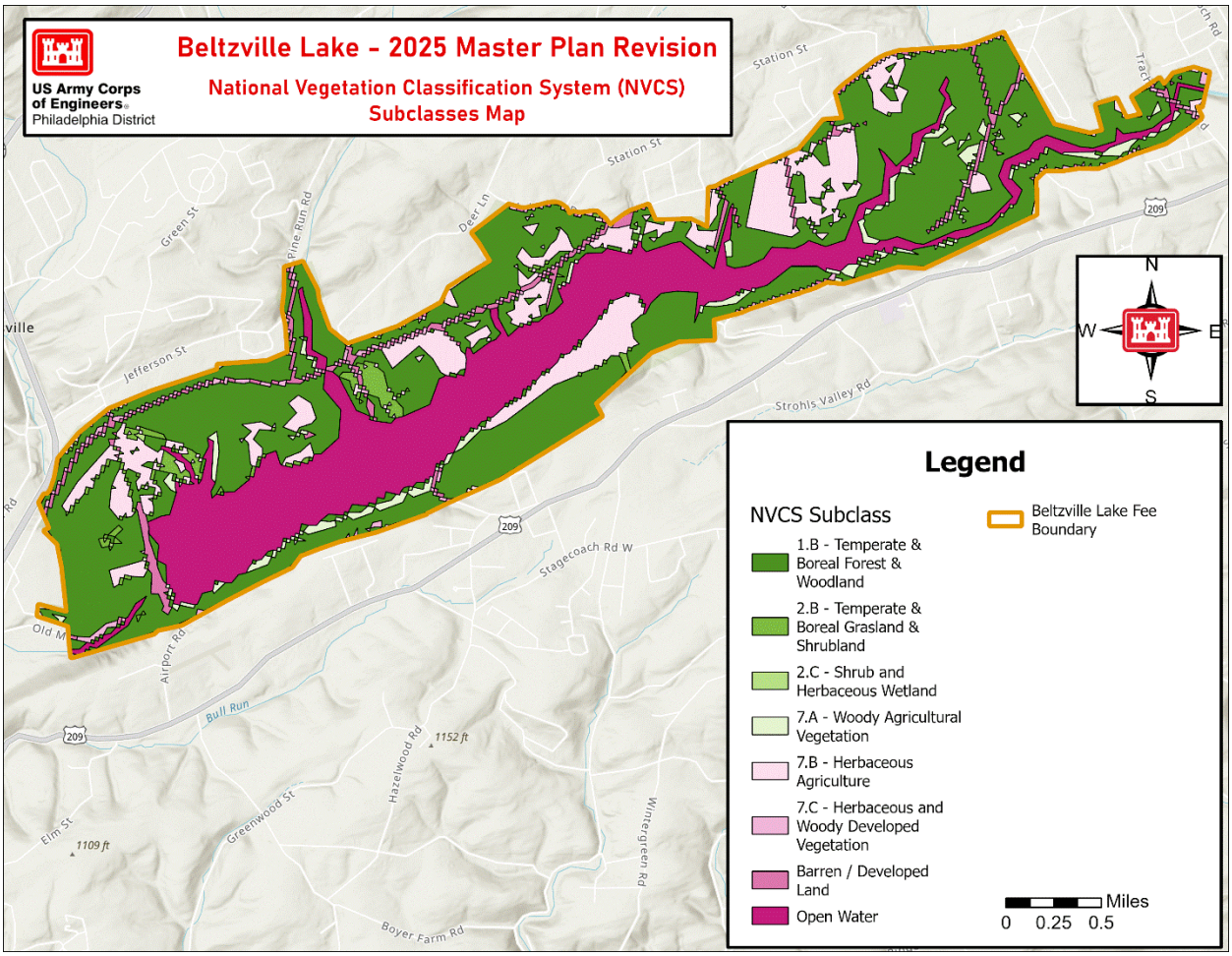

Figure 7 - National Vegetation Classification System Subclasses Map (USGS, 2025)

3.6.3 Fish and Wildlife Resources

Common fish and wildlife occurring at Beltzville Lake are typical of Carbon County and Southeastern Pennsylvania. Table 11, Table 12, and Table 13 provide lists of common Pennsylvania mammals, ectotherms, and bird species occurring or potentially occurring at Beltzville Lake, respectively (PA-TNC, 2005).

Table 11 - Common Mammal Species Potentially Occurring at the Beltzville Lake Project Area

Common Name / Scientific Name	Common Name / Scientific Name
Allegheny woodrat / *Neotoma magister*	Mink / *Mustela vision*
Beaver / *Castor canadensis*	Muskrat / *Ondatra zibethicus*
Big Brown Bat / *Eptesicus fuscus*	New England cottontail / *Sylvilagus transitionalis*
Black Bear / *Ursus americanus*	Northern flying squirrel / *Glaucomys sabrinus*
Bobcat / *Felis rufus*	Northern short-tailed shrew / *Blarina brevicauda*

Common Name / Scientific Name	Common Name / Scientific Name
Deer mouse / *Peromyscus maniculatus*	Norway rat / *Rattus norvegicus*
Eastern chipmunk / *Tamias straitus*	Pine vole / *Microtus pinetorum*
Eastern cottontail / *Sylvilagus floridanus*	Porcupine / *Erethizon dorsatum*
Eastern coyote / *Canis latrans*	Pgymy shrew / *Sorex hoyi*
Eastern mole / *Scalopus aquaticus*	Raccoon / *Procyon lotor*
Eastern pipistrelle / *Pipistrellus pipistrellus*	Red bat / *Lasiurus borealis*
Eastern small-footed Myotis / *Myotis leibii*	Red fox / *Vulpes vulpes*
Fox squirrel / *Sciurus niger*	Red squirrel / *Tamiascurus hudsonicus*
Gray fox / *Urocyon cinerecargenteus*	River otter / *Lutra candensis*
Gray squirrel / *Sciurus carolinensis*	Rock vole / *Mictotus chrotorrhinus*
Hairy-tailed mole / *Parascalops breweri*	Smokey shrew / *Sorex fumeus*
Hoary bat / *Lasiurus cinereus*	Snowshoe hare / *Lepus americanus*
House mouse / *Mus musculus*	Southern flying squirrel / *Glaucomys volans*
Indiana bat / *Myotis sodalis*	Southern red-backed vole / *Clethrionomys gapperi*
Least weasel / *Mustela nivalis*	Star-nosed mole / *Condylura cristata*
Little brown myotis / *Myotis lucifugus*	Striped skunk / *Mephitis mephitis*
Northern long-eared bat / *Myotis septentrionalis*	Virginia opossum / *Didelphis virginiana*
Long-tailed shrew / *Sorex dipar*	Water shrew / *Sorex palustris*
Long-tailed weasel / *Mustela frenata*	White footed mouse / *Peromyscus leucopus*
Masked shrew / *Sorex cinereus*	White-tailed deer / *Odocoileus virgnianus*
Meadow jumping mouse / *Zapus hudsonius*	Woodchuck / *Marmota monax*
Meadow vole / *Microtus pennsylvanicus*	Woodland jumping mouse / *Napeozapus insignis*

Table 12 - Common Ectotherm Species Potentially Occurring at the Beltzville Lake Project Area

Common Name / Scientific Name	Common Name / Scientific Name
American toad / *Bufo americanus*	Northern fence lizard / *Sceloporus undulatus*
Black racer / *Coluber constrictor*	Northern leopard frog / *Rana pipiens*
Brown snake / *Storeria dekayi*	Northern water snake / *Nerodia sipedon*
Bullfrog / *Rana catesbeiana*	Painted turtle / *Chyrsemys picta*
Copperhead / *Agkistorodon contortix*	Pickerel frog / *Rana palustris*
Dusky salamander / *Desmognathus fuscus*	Rat snake / *Elaphe obsolete*
Eastern box turtle / *Terrapene carolina*	Red salamander / *Pseudotriton ruber*
Eastern garter snake / *Thamnophis sirtalis*	Redback salamander / *Plethodon cinereus*
Eastern hognose snake / *Heterodon patirhinos*	Redbelly snake / *Storeria occipitomaculata*
Eastern ribbon snake / *Thamnophis sauritis*	Red-spotted newt / *Notophthalmus viridescens*
Five-lined skink / *Eumeces fasciatus*	Ringneck snake / *Diadophis punctatus*
Four-toed salamander / *Hemidactylium scutatum*	Slimy salamander / *Plethodon glutinosus*

Common Name / Scientific Name	Common Name / Scientific Name
Fowler's toad / *Bufo fowleri*	Smooth green snake / *Liochlorophis vernalis*
Gray treefrog / *Hyla versicolor*	Snapping turtle / *Chelydra serpentina*
Green frog / *Rana clamitans*	Spotted salamander / *Ambystoma maculatum*
Jefferson salamander / *Ambystoma jeffersonianum*	Stinkpot / *Sternotherus odoratus*
Longtail salamander / *Eurycea longicauda*	Timber rattlesnake / *Crotalus horridus*
Marbled salamander / *Ambystom opacum*	Two-lined salamander / *Eurycea bislineata*
Milk snake / *Lampropeltis triangulum*	Wood frog / *Rana sylvatica*
Mountain dusky salamander / *Desmognathus ochrophaeus*	Wood turtle / *Glyptemys insculpta*
Northern cricket frog / *Acris crepitans*	Worm Snake / *Carphophis amoenus*

Table 13 - Common Bird Species Potentially Occurring at the Beltzville Lake Project Area

Common Name / Scientific Name	Common Name / Scientific Name
Red-winged Blackbird / *Agelaius phoeniceus*	Baltimore Oriole / *Icterus galbula*
Wood Duck / *Aix sponsa*	Belted Kingfisher / *Megaceryle alcyon*
Mallard / *Anas platyrhynchos*	Wild Turkey / *Meleagris gallopavo*
Black Duck / *Anas rubripes*	Song Sparrow / *Melosaiza melodia*
Ruby-throated Hummingbird / A*rchilochus colubris*	Mockingbird / *Mimus polyglottos*
Great Blue Heron / *Ardea herodias*	Black-capped Chickadee / *Parus atricappilus*
Ruffed Grouse / *Bonasa umbellus*	Tufted titmouse / *Parus bicolor*
American Bittern / *Botaurus lentiginosus*	Rufous-sided Towhee / *Piplio erythropthalmus*
Canada Geese / *Branta canadensis*	House Sparrow / *Passer domesticus*
Great Horned Owl / *Bubo virginianus*	Ring-necked Pheasant / *Phasianus colchicus*
Red-tailed hawk / *Buteo jamiacensis borealia*	American Woodcock / *Scolopax minor*
Green Heron / *Butorides birescens*	Field Sparrow / *Spizella pusilla*
Turkey Vulture / *Cathartes aura*	Scarlet Tanager / *Piranga olivacea*
Snow Goose / *Chen caerulescens*	Common Grackle / *Quiscalus quiscala*
Common Flicker / *Colaptes auratus*	Cardinal / *Richmondena cardinalis*
Common Crow / *Corvus brachyrhynchos*	American Goldfinch / *Spinus tritis*
Bluejay / *Cyanocitta cristata*	Starling / *Sturmus vulgaris*
Downy Woodpecker / *Dendrocopos pubescens*	House Wren / *Troglodytes aedon*
Hairy Woodpecker / *Dendrocopos villosus*	American Robin / *Turdus migratorius*
Yellow Warbler / *Dendroica petechia*	Eastern Kingbird / *Tyrannus tyrannus*
Catbird / *Dumetella carolinensis*	Red-eyed Vireo / *Vireo olicaceus*
Least Flycatcher / *Emphidonax minimus*	Mourning Dove / *Zenaidura macroura*
Barn Swallow / *Hirundo rustica*	Bald Eagle / *Haliaeetus leucocephalus*
Osprey / *Pandion haliaetus*	-

Known fish species occurring at Beltzville Lake are described in Table 14 using data from the 2013 Fish Population Survey performed by the Pennsylvania Fish and Boat Commission (PFBC).

Table 14 - Fish Species Reported by the Pennsylvania Fish and Boat Commission 2013 Fish Population Survey for Beltzville Lake (PFBC, 2013)

Common Name / Scientific Name	Common Name / Scientific Name
American eel / *Anguilla rostrata*	Muskellunge (tiger) / *Esox masquinongy* x *Esox lucius*
Alewife / *Alosa pseudoharengus*	Pumpkinseed / *Lepomis gibbosus*
Banded killifish / *Fundulus diaphanus*	Redbreast sunfish / *Lepomis auratus*
Black crappie / *Pomoxis nigromaculatus*	Rock bass / *Amblopites rupestris*
Bluegill / *Lepomis macrochirus*	Satinfin shiner / *Cyprinella analostana*
Bluespotted sunfish / *Enneacanthus gloriosus*	Spotfin shiner / *Cyprinella spiloptera*
Brown bullhead / *Ameiurus nebulosus*	Spottail shiner / *Hudsonius hudsonius*
Brown trout (hatchery) / *Salmo trutta*	Striped Bass / *Morone saxatilis*
Chain pickerel / *Esox niger*	Sunfish hybrid / *Lepomis macrochrius* x *Lepomis cyanellus*
Channel catfish / *Ictalurus punctatus*	Walleye / *Sander vitreus*
Common carp / *Cyprinus carpio*	White perch / *Morone americana*
Green sunfish / *Lepomis cyanellus*	White sucker / *Catostomus commersonii*
Largemouth Bass / *Micropterus nigricans*	Yellow bullhead / *Ameiurus natalis*
Smallmouth Bass / *Micropterus dolomieu*	Yellow perch / *Perca flavescens*
Muskellunge / *Esox masquinongy*	Brown Trout / *Salmo trutta*

3.6.4 Alternative 1: No Action Alternative

The No Action Alternative would result in no changes to land classifications. Natural resources would continue to be managed under the 1971 MP. The No Action Alternative would not update land management policies, as well as not provide any updated land classifications that could affect natural resources at Beltzville Lake. The No Action Alternative would cause minor, permanent, local, adverse impacts to natural resources since they would not be managed by current policies and needs at Beltzville Lake.

3.6.5 Alternative 2: Proposed Action

The Proposed Action would bring land management policies up to date with current needs and natural resource requirements at Beltzville Lake. The implementation of the proposed land classifications would allow Project lands to further support the USACE and PDEP and PFBC missions for wildlife conservation, as well as implementation of operational procedures that would protect and enhance wildlife and fishery populations and habitat. The 2026 MP resource goals and objectives aim to further enhance, conserve, and protect natural resources at Beltzville Lake, including State and federally Listed species. The majority of the reclassification of Recreation Lands to MRML-LDR

(1,597 acres) represents a focus on less intensive recreational development plans for future years. Combined with the 21-acre increase in MRML-WM lands, the proposed changes would help protect and conserve natural resources from various types of adverse impacts such as disturbance and habitat fragmentation. Therefore, the Proposed Action would provide moderate short-term and permanent, local, beneficial impacts to natural resources at Beltzville Lake.

3.7 Special Status Species

The Endangered Species Act of 1973 (16 U.S.C. § 1531 et seq., as amended) defines an endangered species as a species “in danger of extinction throughout all or a significant portion of its range.” A threatened species is a species “likely to become endangered within the foreseeable future throughout all or a significant portion of its range.” Proposed species are those that have been proposed in the Federal Register (FR) to be listed under Section 4 of the Endangered Species Act. Species may be considered endangered or threatened “because of any of the following factors: (1) the present or threatened destruction, modification, or curtailment of its habitat or range; (2) overutilization for commercial, recreational, scientific, or educational purpose; (3) disease or predation; (4) the inadequacy of existing regulatory mechanisms; or (5) other natural or human-induced factors affecting continued existence.” The USFWS and National Marine Fisheries Service (NMFS) have identified species that are candidates for listing as a result of identified threats to their continued existence. The candidate designation includes those species for which the USFWS or NMFS has sufficient information to support proposals to list as endangered or threatened under the Endangered Species Act, but have no legal status and accorded no protection under the Act.

Section 7(a)(2) of the Endangered Species Act requires Federal agencies to ensure that any action authorized, funded, or carried out by such agency is not likely to 1) jeopardize the continued existence of any endangered or threatened species, or 2) result in the destruction or adverse modification of critical habitat. The term "jeopardize the continued existence of" means to appreciably reduce the likelihood of both the survival and recovery of listed species in the wild by reducing the species' reproduction, numbers, or distribution (50 CFR 402.02). Jeopardy opinions must present reasonable evidence that the project would jeopardize the continued existence of the listed species or result in destruction or adverse modification of critical habitat.

Federal and State-protected species are documented to occur or may occur on and near Beltzville Lake. Species federally protected under the Endangered Species Act include those currently listed as endangered or threatened. Candidate species are those species for USFWS or NMFS has sufficient information to propose listing them as endangered or threatened under the Endangered Species Act, but for which development of a listing regulation is precluded by other higher priority activities. Petitioned species refer to those species that have been petitioned for listing under the Endangered Species Act and for which the Services have found substantial information indicating that listing may be warranted.

Migratory birds are federally protected under the Migratory Bird Treaty Act (MBTA). Eagles at Beltzville Lake are protected by the Bald and Golden Eagle Protection Act.

Pennsylvania state status categories include endangered, threatened, rare, extirpated, vulnerable, and tentatively undetermined. State listed species reported within Carbon County, PA are described in Section 3.7.3 according to current information from the Pennsylvania Natural Heritage Program (PNHP).

Using the Information for Planning and Consultation tool (IPaC), an official species list for Beltzville Lake was obtained on December 1, 2025, from the USFWS Pennsylvania Ecological Services Field Office. A copy of this list is available in Appendix C of the 2026 Beltzville Lake MP. Table 15 lists the federally listed species while Table 16 lists the Bald and Golden Eagle Protection Act (BGEPA) species, Migratory Bird Treaty Act (MBTA) species reported by the USFWS for Beltzville Lake. The USFWS official species list states that neither lake overlaps with any critical habitat for federally listed species. The state status column in Table 15 and Table 16 uses current information from the PNHP for each species.

3.7.1 Federally Listed Species

Table 15 – USFWS IPaC Federally Listed Species with State Status (USFWS 2025; PNHP, 2024)

Species	Federal Status	State Status	Federal Register Listing	Federal Register Listing Date	Critical Habitat Listing	Critical Habitat Listing Date
Indiana Bat (*Myotis sodalis*)	Endangered	Endangered	32 FR 4001	11-MAR-1967	41 FR 41914	24-SEP-1976
Northern Long-eared Bat (*Myotis septentrionalis*)	Endangered	Endangered	80 FR 17974-18033	02-APR-2015	N/A	N/A
Northeastern Bulrush (*Scirpus ancistrochaetus*)	Endangered / Proposed Delisted	Endangered	56 FR 21091-21096	07-MAY-1991	N/A	N/A
Tricolored Bat (*Perimyotis subflavus*)	Proposed Endangered	Endangered	87 FR 56381-56393	14-SEP-2022	N/A	N/A
Monarch butterfly (*Danaus plexippus*)	Proposed Threatened	N/A	85 FR 81813-81822	17-DEC-2020	89 FR 100662-100716	12-DEC-2024

Based on the 2025 obtained USFWS official species list, Beltzville Lake does not overlap or contain any critical habitat for federally listed species.

3.7.2 Migratory Bird Treaty Act and Bald and Golden Eagle Protection Act Species

The MBTA protects all the nation's migratory bird species from harm and harassment, including adverse alterations to their habitat. MBTA-protected bird species that may occur at Beltzville Lake are presented in Table 16. This table is non-exhaustive, only including the subset of migratory birds that may be present during a given migration season at Beltzville Lake. These species were identified using the IPaC list provided for Beltzville Lake, as well as comparing the reported MBTA and BGEPA species to the PNHP species records. The MBTA and BGEPA bird species from the IPaC report included in Table 16 are protected solely under the MBTA and/or BGEPA and do not have protections under the Endangered Species Act.

Table 16 – IPaC Listed Migratory Bird Treaty Act and Bald and Golden Eagle Protection Act Species (USFWS, 2025; PNHP, 2025)

Species	Federal Status	State Status
Bald eagle (*Haliaeetus leucocephalus*)	MBTA & BGEPA Protected	Delisted
Black-billed cuckoo (*Coccyzus erythropthalmus*)	MBTA Protected	None
Black-capped chickadee (*Poecile atricapillus practicus*)	MBTA Protected	None
Bobolink (*Dolichonyx oryzivorous*)	MBTA Protected	None
Canada warbler (*Caredllina canadensis*)	MBTA Protected	None
Cerulean warbler (*Setophaga cerulea*)	MBTA Protected	None
Chimney swift (*Chaetura pelagica*)	MBTA Protected	None
Golden eagle (*Aquila chrysaetos*)	MBTA & BGEPA Protected	None
Golden-winged warbler (*Vermivora chrysoptera*)	MBTA Protected	None
Northern saw-whet owl (*Aegolius acadicus*)	MBTA Protected	None
Prairie warbler (*Setophaga discolor*)	MBTA Protected	None
Red-headed woodpecker (*Melanerpes erythrocephalus*)	MBTA Protected	None
Rusty blackbird (*Euphagus carolinus*)	MBTA Protected	None
Wood thrush (*Hylocichla mustelina*)	MBTA Protected	None

3.7.3 State-Protected and State Species of Concern

More than 50 State-protected species and State species of concern reported by the PNHP were evaluated for presence within the Beltzville Lake area and the larger surrounding area of Carbon County, PA. The PNHP Species of Concern list includes species, subspecies, or distinct populations that could become listed as endangered or threatened in the foreseeable future, throughout all or a significant portion of their range, without active management or removal of threats. Additionally, the 2005 Natural Areas Inventory and a PNHP Conservation Report were evaluated for State-protected and State species of concern at Beltzville Lake. A copy of the PNHP conservation report for Beltzville Lake is included in Appendix C of the 2026 Beltzville Lake MP.

3.7.4 Alternative 1: No Action Alternative

The No Action Alternative would have no effect on any Threatened and Endangered species, or species listed by the State of Pennsylvania or the PNHP that may occur at Beltzville Lake. Migratory bird species protected under the MBTA and BGEPA would also not be affected.

3.7.5 Alternative 2: Proposed Action

The implementation of the 2026 MP would allow for better cooperative management practices with the USFWS, PDEP, and PFBC that would help to preserve, enhance, and protect vegetation and wildlife habitat resources that are essential to various endangered and threatened species that may be found within USACE Beltzville Lake Federal Project lands. To strengthen management opportunities and beneficially impact habitat diversity, the reclassifications in the 2026 MP includes a 21 acre increase in MRML-WM lands. Additionally, the proposed action would decrease the overall recreation intensity across Beltzville Lake due to the reclassification of 1,577 acres of Recreation Lands to MRML-LDR. The net increase in MRML-WM lands, and overall reduction in recreation intensity would provide updated and more effective land management practices. This would provide permanent, minor, local, beneficial impacts habitat which these resources may utilize over the life of the 2026 MP.

3.8 Invasive Species Management

Invasive species potentially occurring at Beltzville Lake are reported in Table 17, using confirmed species occurrences in the last 5 years from an iMapinvasives report created for the project area.

Table 17 - Invasive Species Potentially Occurring at Beltzville Lake

Common Name / Scientific Name	Common Name / Scientific Name
Asiatic clam (*Corbicula fluminea*)	Hydrilla (*Hydrilla verticillata*)
Autumn olive (*Elaeagnus umbellata*)	Japanese barberry (*Berberis thunbergii*)
Bohemian knotweed (*Reynoutria x bohemica*)	Japanese stiltgrass (*Microstegium vimineum*)
Burning bush (*Euonymus alatus*)	Knotweed (*Reynoutria spp.*)
Colt's foot (*Tussilago farfara*)	Lesser periwinkle (*Vinca minor*)
Common carp (*Cyprinus carpio*)	Mile-a-minute vine (*Persicaria perfoliata*)
Dame's rocket (*Hesperis matronalis*)	Mudmat (*Glossostigma cleistanthum*)
Eastern helleborine (*Epipactis helleborine*)	Multiflora rose (*Rosa multifloria*)
Emerald ash borer (*Agrilus plannipennis*)	Mute swan (*Cygnus olor*)
European lily-of-the-valley (*Convallaria majalis*)	Norway maple (*Acer platanoides*)
Freshwater jellyfish (*Craspedacusta sowerbyi*)	Oriental bittersweet (*Celastrus orbiculatus*)
Garlic mustard (*Alliaria petiolata*)	Red-eared slider (*Trachemys scripta elegans*)
Glossy false buckthorn (*Frangula alnus*)	Slider (*Trachemys scripta*)
Goldfish (*Carassius auratus*)	Tree-of-heaven (*Ailanthus altissima*)
Hemlock holly adelgid (*Adelges tsugae*)	Yellow-bellied slider (Trachemys scripta scripta)
Honeysuckle (*Lonicera spp.*)	-

Chemical, mechanical, and manual methods are used extensively by staff and volunteers at the project to manage invasive species; they include:

- Hand pulling
- Cutting
- Mowing
- Digging
- Brush hogging/cutting
- Pulling with a mini excavator and tractor
- Chemical treatment

Additionally, an Invasive Species Portable Washing Station was constructed at the Pine Run Boat Launch in 2023 to allow boaters to clean their watercraft in an effort to help stop the spread of hydrilla throughout the region.

3.8.1 Alternative 1: No Action Alternative

The No Action Alternative would have no effect on invasive species or their management. The 1971 MP would not be revised, and no activities of the No Action Alternative would contribute to changes in the existing conditions for invasive species.

3.8.2 Alternative 2: Proposed Action

The reclassifications of land classes, improvement of resource management objectives, and the overall improvement of the 2026 MP would allow invasive species within USACE Beltzville Lake lands to be better managed. The 21-acre increase in MRML-WM and overall decrease in recreation intensity across Beltzville Lake contribute to protecting natural resources from various types of adverse impacts such as habitat fragmentation, which can increase the opportunity for the spread of invasive species. These areas would also receive updated invasive species management efforts. The resource goals and objectives would require monitoring and reporting of invasive species, as well as action items to prevent and/or reduce the spread of these species. Therefore, under the Proposed Action, there would be minor, permanent, local, beneficial impacts on invasive species management at Beltzville Lake as a result of implementing the 2026 MP.

3.9 Cultural, Historical, and Archaeological Resources

Section 2.11 of the 2026 MP describes the affected environment for cultural, historical, and archaeological resources at Beltzville Lake.

3.9.1 Alternative 1: No Action Alternative

Under the No Action Alternative, management of cultural resources would remain the same as under the 1971 master plan. There would be no changes in short- or long-term/permanent, minor or moderate impacts on cultural, historical, and archaeological resources from implementation of the No Action Alternative, as there would be no changes to the existing master plans and current management activities. The USACE currently reviews all undertakings under the NHPA Section 106 process outlined in 36 CFR Part 800 to assess their potential to impact historic properties and all adverse effects are mitigated through measures negotiated with the Pennsylvania State Historic Preservation Officer (SHPO) and tribes.

3.9.2 Alternative 2: Proposed Action Alternative

USACE cultural resource specialists participated in designating the land classifications identified in the new Beltzville Lake Master Plan and considered known cultural resources in its design. The Proposed Action would provide more long-term protection measures for Cultural Resources Management efforts at Beltzville Lake. The 2026 MP would not have an adverse effect on historic properties eligible or listed on the NRHP but instead would provide more well-planned monitoring and protection for historic properties over its period of use. As a result, the 2026 MP would provide minor, permanent, local, beneficial impacts to Cultural Resources over the planning horizon of 25 years at Beltzville Lake.

Under the Proposed Action, all future Federal undertakings on USACE managed lands around Beltzville Lake would continue to be reviewed under the NHPA Section 106 process to assess their potential to impact historic properties and any adverse impacts would be mitigated through measures negotiated with the Pennsylvania SHPO and applicable federally recognized Tribes.

3.10 Socioeconomics and Demographics

Section 2.12 of the 2026 MP describes the affected environment for socioeconomics and demographics at Beltzville Lake.

3.10.1 Protection of Children

Executive Order 13045 states that each Federal agency shall “make it a high priority to identify and assess environmental health risks and safety risks that may disproportionately affect children” and “ensure that its policies, programs, activities, and standards address disproportionate risks to children that result from environmental health risks or safety risks.” This EO was prompted by the recognition that children, still undergoing physiological growth and development, are more sensitive to adverse environmental health and safety risks than adults. The potential for impacts on the health and safety of children is greater where projects are located near residential areas.

3.10.2 Demographics and Economics

Characterization of demographics and economic information helps describe the regional planning setting and facilitates the evaluation of impacts. Socioeconomic indicators for Beltzville Lake and its surrounding area are sourced from current U.S. census data. For a complete overview of Demographics and Economics in the zone of interest refer to Section 2.12 of the 2026 MP.

3.10.3 Alternative 1: No Action Alternative

The No Action Alternative would not have any impacts on socioeconomics. The 2026 MP would not be implemented, and lands at Beltzville Lake would continue to be managed by the 1971 MP. There would be no impacts to low-income populations, children, or minority populations as a result of the No Action Alternative. The No Action Alternative would not change existing access or quality of recreation opportunities at Beltzville Lake; there would be no disproportionate impacts on minority populations, low-income populations, or children as a result of the No Action Alternative.

3.10.4 Alternative 2: Proposed Action

The Proposed Action would implement the 2026 MP and would not have any impacts on socioeconomics or demographics at Beltzville Lake since no construction or changes that could affect local socioeconomic/demographic factors would occur; the changes proposed in the 2026 MP would not affect the local economy or local populations in any perceivable way. The Proposed Action would not disproportionately affect any low-income populations, minority populations, or children. The proposed land classification changes would not reduce the access or quality of recreation at Beltzville for low-income populations, minority populations, or children. The 2026 MP is fully compliant with EO 13045 and EO 13045 was fully considered when drafting the land management changes in the 2026 MP.

3.11 Recreation

Section 2.13 of the 2026 MP describes the affected environment for recreation at Beltzville Lake.

3.11.1 Alternative 1: No Action Alternative

The No Action Alternative would result in no changes to land classifications. Actions associated with the ongoing management of recreational, cultural, and natural resources would not significantly impact recreation or interpretive services. Under the No Action Alternative, ongoing management would be expected to preserve the character of existing recreation resources. It would hinder the implementation of management actions needed to update recreational services. Over the long term, USACE’s ability to implement management actions effectively and efficiently in response to growth in total recreation demand could be limited by the outdated land classifications that would be carried forward under the No Action Alternative. As such, the ability of natural resource managers to manage effectively could decrease over time

as future conditions continue to deviate from the conditions under which the original land classifications were developed. Minor to moderate, permanent, local, adverse impacts to recreation would be anticipated from the No Action Alternative.

3.11.2 Alternative 2: Proposed Action

The Proposed Action would implement the 2026 MP, which provides updates to both recreation policies and goals, as well as changes to recreation land classifications. The 2026 MP would reclassify 1,597 acres of the original 1,771 acres of Recreation Lands as MRML-LDR, as well as 250 total acres of HDR lands. These changes collectively represent a 76-acre increase in all recreation lands at Beltzville Lake, but overall reflect a decrease in recreational intensity and anthropogenic disturbance at Beltzville Lake. These land classification changes reflect current recreation needs, as well as the conversion of recreation lands within the Beltzville State Park lease area that were never developed into HDR areas, reflecting the project need for improved land management. The overall changes to recreation lands (MRML-LDR and HDR) decrease as a result of the 2026 MP does not mean that recreational opportunities at Beltzville Lake would be diminished since the converted acres were unused or undeveloped HDR areas. The overall updates and land classification changes presented by the 2026 MP would provide moderate, permanent, local, beneficial impacts to recreation at Beltzville Lake.

3.12 Aesthetic and Interpretive Resources

Section 2.10 of the 2026 MP describes the affected environment for aesthetic resources at Beltzville Lake.

3.12.1 Alternative 1: No Action Alternative

The No Action Alternative would result in no changes to land classifications and USACE lands at Beltzville Lake would continue to be managed under the 1971 MP. Visual and interpretive resources would continue to be managed and protected through existing USACE regulations and according to Federal, State, and local laws. There would be no impacts to visual or interpretive resources under the No Action Alternative.

3.12.2 Alternative 2: Proposed Action

The Proposed Action may have negligible, permanent, local, beneficial impacts to aesthetic resources at Beltzville Lake due to a net increase in MRML-WM and a net decrease in recreation intensity as a result of the conversion of Recreation Lands to MRML-LDR lands. Benefits to aesthetic resources may occur due to overall less disturbance of aesthetic nature areas with recreation intensity as well as an increase in MRML-WM lands that may better manage these areas.

3.13 Hazardous, Toxic, Radioactive, or Solid Wastes (HTRW)

This section describes the existing condition of Beltzville Lake with regard to potential environmental contamination and the sources of releases to the environment.

Contaminants could enter the lake environment via air or water pathways. The highways and roads, railroads, and oil and gas pipelines in the vicinity could also provide sources of contaminants to Beltzville Lake. The only known HTRW site within the Beltzville Lake fee boundary is Beltzville State Park, which is listed as a National Pollutant Discharge Elimination System (NPDES) site (NPDES #PA0032107). Figure 8 displays all of the EPA listed facilities within a 5-mile buffer of Beltzville Lake (EPA, 2025B).

Data from the EPA Enviromapper tool shows that within 5 miles of Beltzville Lake, there are 97 EPA listed facilities (EPA, 2025C).These facilities range from Resource Conservation and Recovery Act (RCRA) sites, National Pollutant Discharge Elimination System (NPDES) sites, Toxic Release Inventory (TRI) sites, and Biennial Hazardous Waste Reporting System (BRS) sites. There is one reported National Priorities List (Superfund) site reported, which is the Palmerton Zinc Pile site. No Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) sites were identified within the 5-mile buffer for Beltzville Lake.

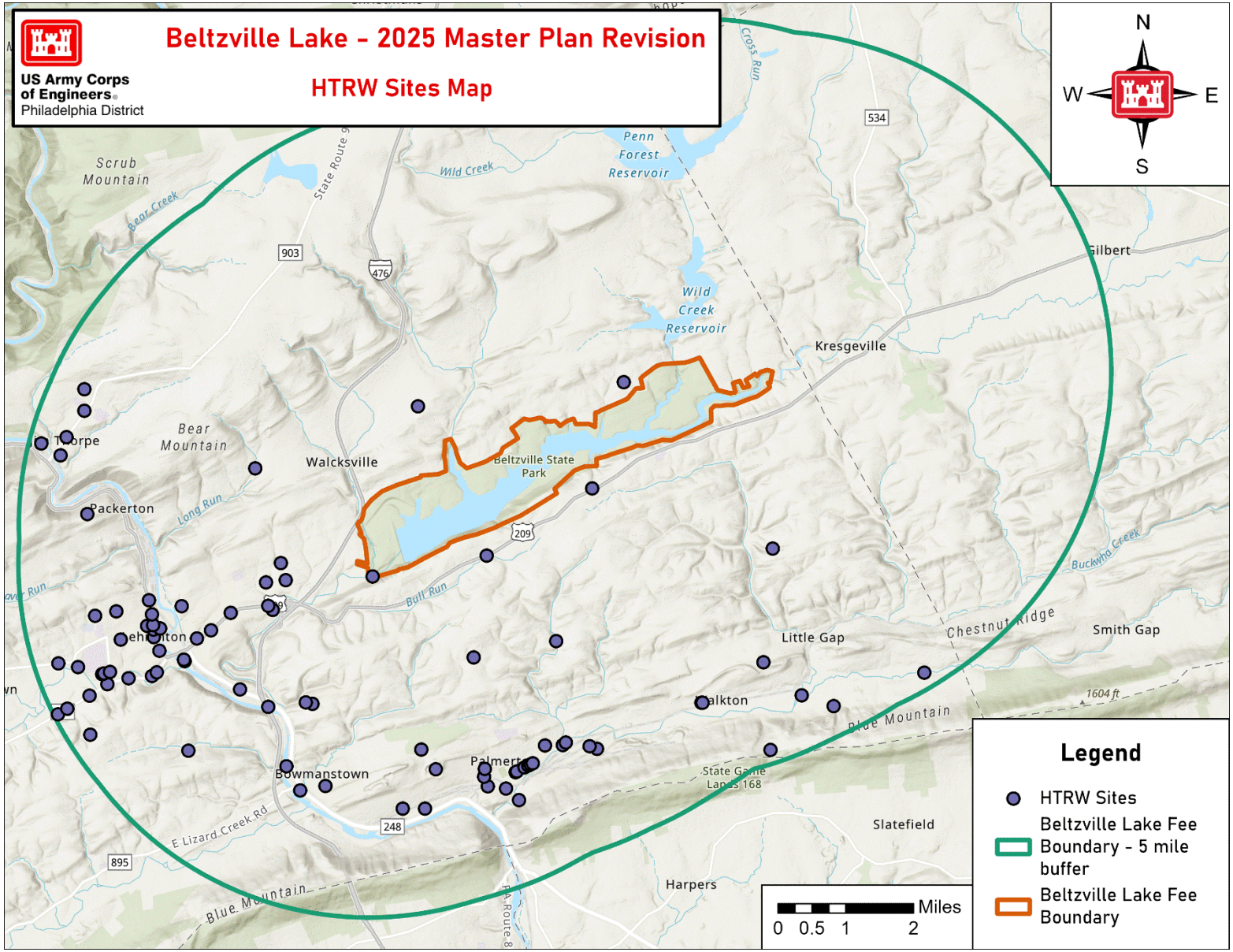

Figure 8 - EPA Enviromapper HTRW Sites Reported Within 5 miles of Beltzville Lake

3.13.1 Alternative 1: No Action Alternative

The No Action Alternative would result in no changes to land classifications. There would be no change using or managing hazardous substances and petroleum products on USACE-managed lands at Beltzville Lake. There would be no change in the likelihood of an accident involving such substances. USACE would comply with relevant regulations, including the Resource Conservation and Recovery Act (RCRA) and USACE guidance including ER 200-2-3. Therefore, no impacts associated with hazardous substances and petroleum products would be anticipated from implementing the No Action Alternative.

3.13.2 Alternative 2: Proposed Action

The Proposed Action seeks to implement the 2026 MP which is a land management document that does not involve construction or ground-disturbing activities. There would be no impacts to any HTRW facilities or resources identified in the vicinity of Beltzville Lake.

3.14 Health and Safety

As mentioned in Section 1.1, Beltzville Lake's authorized purposes include flood risk management, water supply, low flow augmentation, water quality, and recreation. Compatible uses incorporated in project operation management plans include programs that establish recreation management practices to protect the public, such as water safety education, safe boating and swimming regulations, safe hunting regulations, and speed limit and pedestrian signs for park roads. The staff of Beltzville Lake State Park are in place to enforce these policies, rules, and regulations during normal park hours. For more information regarding the existing conditions of health and safety at Beltzville Lake, please refer to Section 2.9 of the 2026 MP.

3.14.1 Alternative 1: No Action Alternative

The No Action Alternative would result in no changes to land classifications. Under this alternative, health and safety measures would continue to be addressed through USACE guidance, local law enforcement, and Federal safety programs. Public health and safety would not change under the No Action Alternative, and there would be no impacts.

3.14.2 Alternative 2: Proposed Action

The Proposed Action would adopt and implement the 2026 MP which would change land management policies and land classifications at Beltzville Lake. The Proposed Action does not involve any construction or ground-disturbing activities. The Proposed Action would provide moderate, permanent, local beneficial impacts to health and safety at Beltzville Lake due to the establishment of boat-restriction zones near the Dam, and the reclassification of 191 acres of no-wake zone.

3.15 Summary Of Consequences and Benefits

Table 18 provides a tabular summary of the consequences and benefits for the No Action and Proposed Action alternatives for each of the assessed resource categories in Section 3.

Table 18 - Summary of Consequences and Benefits

Resource	Change Resulting from the proposed 2026 MP	Environmental Consequences: No Action Alternative	Environmental Consequences: Proposed Action	Benefits Summary
Land Use	Updates to land management policies and land reclassifications: Beltzville Lake Land Classifications: • PO: 282 acres (-58) • HDR: 250 acres (-1,521) • MRML-LDR: 1,597 acres (+1,597) • ESA: 0 acres (no change) • MRML-WM: 509 acres (+23) • MRML-VM: 0 acres (no change) Beltzville Lake Water Surface Classifications: • Open Recreation: 810 acres • Restricted: 4 acres (+4) • No-Wake: 157 acres (+157)	Moderate, permanent, local, adverse impacts due to outdated land management policies and land classifications.	Moderate, permanent, local, beneficial impacts due to updated land management policies, updated land classifications, and updated resource goals and objectives	Benefits caused by updated land management policies, land classifications, and updated resource goals and objectives that better align land management at Beltzville Lake with current needs and trends, allowing for more effective and appropriate Land Use.
Water Resources Including Groundwater, Wetlands, and Water Quality	No Change	No Effect	Minor, permanent, local, beneficial impacts on water resources due to enhancement and preservation of wetland and shoreline habitats that may enhance water quality.	Benefits caused by the preservation of wetland habitats due to land classification changes at Beltzville Lake that may conserve and enhance wetland habitats. Wetland habitats reduce erosion by stabilizing soils, which reduces sediment runoff into the aquatic environment.
Climate	No Change	No Effect.	Negligible, permanent, local, beneficial impacts due to updated management practices and resource goals and objectives compliant with changing climate conditions and GHG's.	Benefits caused by updated management practices and resource goals and objectives that are conscious of changing climate conditions and GHG emissions, reflecting modern trends in resource management.

Resource	Change Resulting from the proposed 2026 MP	Environmental Consequences: No Action Alternative	Environmental Consequences: Proposed Action	Benefits Summary
Air Quality	No Change	Minor, local, short-term, adverse impacts to air quality due to routine use of machinery, vehicles and controlled burns.	Minor, permanent, local, beneficial impacts due to enhancement and preservation of native vegetation that may filter and sequester air pollutants.	Benefits occur from the preservation and enhancement of wildlife habitat (vegetation) due to land reclassifications. Vegetation can remove and sequester air pollutants over time, providing local benefits to air quality.
Topography, Geology and Soils	No Change	No Effect	Minor, permanent, local, beneficial impacts due to decreased erosion and soil disturbance.	Benefits occur from decreased erosion and soil disturbance due to land reclassifications. Soil erosion is also decreased by the conservation and enhancement of vegetation that further stabilizes soils.
Natural Resources	No Change	Minor, permanent, local, adverse impacts to natural resources since they would not be managed by current policies and needs.	Moderate, short-term and permanent, local, beneficial impacts to natural resources.	Benefits occur due to updated land management policies and land classifications that would enhance and preserve wildlife habitat and reduce anthropogenic disturbances.
Threatened and Endangered Species, including PDEP and PNHP species.	No Change	No Effect	Minor, permanent, local, beneficial impacts to Threatened and Endangered Species, PDEP, and PNHI species due to habitat preservation and enhancement.	Benefits would occur due to updated land management policies and land classifications that would enhance and conserve wildlife habitat, including potential T&E/PDEP and PNHI species' habitat. Land classification changes provide overall less potential disturbance to any of the listed species and their habitat.
Invasive Species	No Change	No Effect	Minor, permanent, local, beneficial impacts to invasive species management.	Benefits would occur due to updated land management policy, resource goals and objectives, and habitat preservation that may enhance invasive species control.

Resource	Change Resulting from the proposed 2026 MP	Environmental Consequences: No Action Alternative	Environmental Consequences: Proposed Action	Benefits Summary
Cultural Resources	Updated long-term goals and objectives for Cultural Resources.	No potential to effect.	Minor, permanent, local, beneficial impacts due to updated goals and objectives.	Benefits would occur due to updated long-term goals and objectives that would provide updates to Cultural Resource management at Beltzville Lake.
Socioeconomics and Demographics	No Changes	No Effect	No Effect	No added benefit.
Recreation	No Change	Minor to moderate permanent, local, adverse impacts to recreation.	Moderate, permanent, local, beneficial impacts to recreation.	Benefits occur from updates to land classifications that reflect current recreation trends and needs at Beltzville Lake. These changes allow recreation to be more effectively managed.
Aesthetic Resources	No Changes	No Effect	Negligible, permanent, local, beneficial impacts to aesthetic resources.	Benefits would occur from land reclassifications that would provide more opportunities for less disturbed nature areas, potentially increasing aesthetic value.
Hazardous, Toxic, and Radioactive Waste	No Changes	No Effect	No Effect	No added benefit.
Health and Safety	Restricted Zone classification of 5 acres near dam; classification of 191 acres of no-wake	No Effect	Moderate, permanent, local, beneficial impacts due to restricted zone classification near dam and 191 acres of no-wake classification	Benefits would occur from water reclassifications

4 CUMULATIVE IMPACTS

Army regulations require that NEPA analyses, such as the preparation of an EA, assess the cumulative impacts of a proposed action (32 CFR § 651.16 (a)). Cumulative impacts are defined as an impact on the environment that results from the incremental effects of the action when added to the effects of other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative effects can result from actions with individually minor but collectively significant effects taking place over a period of time. Impacts can be adverse or beneficial.

By Memorandum dated June 24, 2005 from the Chairman of the CEQ to the Heads of Federal Agencies entitled “Guidance on the Consideration of Past Actions in Cumulative Effects Analysis”, CEQ made clear its interpretation that “…generally, agencies can conduct an adequate cumulative effects analysis by focusing on the current aggregate effects of past actions without delving into the historical details of individual past actions…” and that the “…CEQ regulations, however, do not require agencies to catalogue or exhaustively list and analyze all individual past actions.” CEQ guidance recommends narrowing the focus of cumulative impacts of analyses “to effects of significance to the proposal for agency action and its alternatives, based on thorough scoping”.

The initial step of the cumulative impact analysis uses information from the evaluation of direct and indirect impacts in the selection of environmental resources that should be evaluated for cumulative impacts. A Proposed Action would not contribute to a cumulative impact if it would not have a direct or indirect effect on the resource.

Based on a review of the likely environmental impacts analyzed in Section 3 (Affected Environment and Consequences) the USACE determined that the analysis of cumulative impacts would not include the following resources: socioeconomics and HTRW. With respect to these resource topics in Section 3, both the No Action and Proposed Action alternatives would either:

1. Not result in any direct or indirect impacts and therefore will not contribute to a cumulative impact; or,

2. That the nature of the resource is such that impacts do not have the potential to cumulate. For example, impacts related to geology are site specific and do not cumulate; or,

3. That the future with or future without project condition analysis is a cumulative analysis and no further evaluation is required. For example, because changing climate conditions are global in nature, the future without project condition and future with project condition analysis is inherently a cumulative impact assessment.

For each resource topic carried forward for cumulative impact analysis, the timeframe for analysis is the time since the 1971 MP was implemented (past) and 25 years following the proposed 2026 MP implementation. The zone of interest for all resources is identified as Carbon County, Pennsylvania.

4.1 Past Impacts Within the Zone of Interest

Construction of Beltzville Lake was authorized by the 1962 Flood Control Act and is currently managed by the Philadelphia District of USACE for the authorized purposes of flood risk management, water supply, low flow augmentation, water quality, and recreation. Beltzville Lake spans approximately 3,610 acres total, 972 acres of which are water surface area.

4.2 Current and Reasonably Foreseeable Actions Within and Near the Zone of Interest

Future management of the Flowage Easement Lands at Beltzville Lake includes routine inspection of these areas to ensure that the Government's rights specified in the easement deeds are protected. In almost all cases, the Government acquired the right to prevent placement of fill material or habitable structures on the easement area. Placement of any structure that may interfere with the USACE flood risk management and water conservation missions may also be prohibited. Future management of utility easements may require routine inspection of these areas by the Government and the third parties that are granted the utility easements to ensure the Government's rights specified in the easement deeds are protected.

At the time of this publication, there are many foreseeable road and infrastructure projects within the zone of interest by the Pennsylvania Department of Transportation (PennDOT) and Carbon County. These projects vary from the addition of sidewalks, safety improvements, upgrades to ramps, curbs, stormwater facilities, and pavement, bridge retrofits, culvert replacements, and various improvements along Highway 476 and Route 209.

National USACE policy set forth in ER 1130-2-550, Appendix H, states that USACE lands will, in most cases, only be made available for roads that are regional arterials or freeways (as defined in ER 1130-2-550). All other types of proposed roads, including driveways and alleys, are generally not permitted on USACE lands. Any proposed expansion or widening of existing roadways on USACE lands will be considered on a case-by-case basis.

4.3 Analysis of Cumulative Impacts

Impacts on each resource were analyzed according to how other actions and projects within the zone of interest might be affected by the No Action Alternative and Proposed Action. Impacts can vary in degree or magnitude from an undetectable change to a total change in the environment. For the purpose of this analysis the intensity of impacts will be classified as negligible, minor, or moderate, with the included geographical contexts of local and regional, and with the durations of short-term, long-

term / permanent. These intensity, geographical, and duration thresholds were previously defined in Section 3.0. Moderate growth and development are expected to continue in the vicinity of Beltzville Lake and cumulative adverse impacts on resources would not be expected when added to the impacts of activities associated with the Proposed Action or No Action Alternative. A summary of the anticipated cumulative impacts on each resource is presented below.

4.4 Land Use

Impacts would occur if any action were inconsistent with adopted land use plans or if an action would substantially alter those resources required for, supporting, or benefiting the current use. Land use around Beltzville Lake and within Carbon County is primarily agricultural with mixed urban areas, industrial areas, forests, and open spaces. Neighboring cities such as Lehighton, PA are primarily zones for single-family residential use. There are approximately 200 farms or more in Carbon County, PA with a variety of crops grown across approximately 19,498 acres of croplands (USDA, 2017). Cattle, egg-laying chickens (layers), and sheep and lambs are the most common livestock operations within Carbon County (USDA, 2017). Forested areas in the zone of interest have been steadily declining due to increased residential and commercial developments. Most wooded areas along streams and bottomlands have been cleared over time for agricultural purposes. Under the No Action Alternative, land use would not change. The Proposed Action would result in the reclassification of Project lands within the Federal fee boundary of Beltzville Lake, the reclassifications were developed to help fulfill regional goals associated with good stewardship of land resources that would allow for continued use of Project lands.

Therefore, cumulative impacts on land use within the area surrounding Beltzville Lake when combined with past and future actions in the region, are anticipated to be negligible.

4.5 Water Resources

Impacts would occur if any action were inconsistent with adopted surface water classifications or water use plans, or if an action would substantially alter those resources required for, supporting, or benefiting the current use. Beltzville Lake was developed for flood risk management, water supply, low flow augmentation, water quality, and recreation. The reclassifications and resource objectives required to revise the 1971 MP are compatible with water use plans and surface water classification; further, they were developed to help fulfill regional goals associated with good stewardship of water resources that would allow for continued use of water resources associated with Beltzville Lake. Therefore, cumulative impacts on water resources within the area surrounding Beltzville Lake, when combined with past and proposed actions in the region, are anticipated to be negligible.

4.6 Air Quality

There are many road and highway projects in the zone of interest for Beltzville Lake and many potential proposed projects that may contribute to the level of new emissions that could potentially affect air quality within the region. Vehicle traffic along park and area roadways and routine daily activities in nearby communities contribute to current and future emission sources. Emission-generating activities by USACE at Beltzville Lake (e.g. gas-powered equipment, controlled vegetation burns, etc.) would be negligible in comparison. Maintaining a high percentage of wildlife and vegetation management lands would help to offset any GHG emissions by serving as ecological filters. The Proposed Action would not contribute to a regional increase in emissions that would degrade air quality. Therefore, there would be negligible cumulative impacts to air quality resulting from the Proposed Action when combined with past and future proposed action in the area.

4.7 Topography, Geology, and Soils

Impacts could occur if a proposed future action exacerbates or promotes long-term erosion, if the soils are inappropriate for the proposed construction and would create a risk to life or property, or if there would be a substantial reduction in agricultural production or loss of Prime Farmland soils. The Proposed Action does not include any construction or ground-disturbing activities. The potential repeated removal or mowing of vegetation at Beltzville Lake is consistent with current use and as a result of the Proposed Action may contribute to negligible amounts of soil loss in the forecasted 25-year period of analysis. The Proposed Action is also expected to provide minor, long-term, local, beneficial impacts to these resources by stabilizing the soil and reducing erosion due to enhanced vegetative habitat. Cumulative impacts on topography, geology, and soils within the area surrounding Beltzville Lake, when combined with past and proposed actions in the region, are anticipated to be negligible.

4.8 Natural Resources

Past, present, and future projects are not anticipated to impact the viability of any plant species or community, rare or sensitive habitats, or wildlife. The Proposed Action is expected to have moderate, short and long-term, local beneficial impacts due to enhanced preservation and conservation of natural resources. The Proposed Action would not threaten viability of any natural resources or contribute to any substantial losses of communities. Therefore, there would be negligible cumulative impacts as a result of the Proposed Action when combined with past and future proposed actions in the area.

4.9 Special Status Species

The Proposed Action is not expected to affect any special status species. The Proposed Action is expected to provide minor, long-term, local beneficial impacts to wildlife habitat that special status species may utilize at Beltzville Lake. When combined with current and future USACE management actions and cooperative management with

PDEP, PFBC, and USFWS, the proposed action is expected to have negligible cumulative effects.

4.10 Invasive Species

The Proposed Action is expected to have beneficial effects by reducing the introduction and spread of invasive species. Current Corps practice includes multiple avenues to prevent and limit the spread of invasive species. Additionally, all future actions occurring in the zone of interest would be required to follow standard Best Management Practices meant to avoid or minimize the introduction and spread of invasive species. Therefore, the proposed action when combined is expected to result in negligible cumulative impacts when combined with past and future actions in the area.

4.11 Cultural, Historical, and Archaeological Resources

Impacts could occur if a future proposed action would exacerbate the loss or degradation of cultural, historical, or archaeological resources at Beltzville Lake. The Proposed Action is expected to provide minor, long-term, local, beneficial impacts to cultural, historical, and archaeological resources at Beltzville Lake due to updated long-term goals and objectives that would modernize cultural resource management for Beltzville Lake. The Proposed Action also does not involve any ground-disturbing activities that may affect cultural, historical, or archaeological resources and the 2026 MP takes into consideration the issue of artifact looting at Beltzville Lake. Therefore, the Proposed Action, when combined with other past and future actions in the area, is expected to have negligible cumulative impacts when combined with past and future actions in the area.

4.12 Recreation

Population growth increases in local and tourism recreation, and local community policies and plans all have the potential to affect recreation at Beltzville Lake. The Proposed Action is expected to provide moderate, long-term, local, beneficial impacts to recreation due to updated land classifications and recreation management practices that reflect current recreation trends and needs at Beltzville Lake. Therefore, cumulative impacts to recreation are expected to be negligible as a result of the Proposed Action combined with past and future actions in the area.

4.13 Aesthetic and Interpretive Resources

The Proposed Action is expected to have negligible, long-term, local, beneficial impacts to aesthetic resources due to conservation and enhancement of natural environments across Beltzville Lake as a result of the proposed land classification changes, such as increases in MRML-WM lands. Cumulative impacts to aesthetic resources are expected to be negligible as a result of the Proposed Action combined with past and future actions in the area.

4.14 Health and Safety

The Proposed Action is expected to have moderate, permanent, local, beneficial impacts to health and safety at Beltzville Lake due to the establishment of boat-restriction zones near the Dam and the creation of a No-Wake Zone that would improve public safety. Cumulative impacts to health and safety are expected to be moderate as a result of the Proposed Action combined with past and future actions in the area.

5 COMPLIANCE WITH ENVIRONMENTAL LAWS

As described in Chapter 1, preparation of this EA began prior to changes in CEQ implementing regulations. As such, it has been prepared to satisfy the requirements of all applicable environmental laws and regulations, and has been prepared in accordance with NEPA (42 U.S.C. 4321 et seq.) and the USACE ER 200-2-2, Environmental Quality: Procedures for Implementing NEPA. Additionally, this EA incorporates applicable Executive Orders, laws, regulations, and policies. The proposed 2026 MP is consistent with the USACE's Environmental Operating Principles. The following is a table of applicable environmental laws and regulations that were considered in the planning of this Project and the status of compliance with each:

Table 19 - Summary of Compliance with Relevant Laws and Regulations

Relevant Law/Regulation	Agency	Compliance Status
Archaeological Resources Protection Act (ARPA)	U.S. Army Corps of Engineers (USACE)	An ARPA permit is not necessary for the proposed action as the proposed action would not adversely affect archaeological resources. The USACE would issue a permit under ARPA prior to implementing any future management action involving the excavation or removal of any archeological resources that is not conducted by USACE. Therefore, the 2026 MP is compliant with the ARPA.
Bald and Golden Eagle Protection Act (BGEPA)	U.S. Fish and Wildlife Service (USFWS)	Consultation under the BGEPA is not necessary for the proposed action because it would have no impact to preferred nesting, rearing, or foraging habitat and no "take" of bald or golden eagles. USACE would follow the USFWS National Bald Eagle Management Guidelines (May 2007) prior to implementing any future action prescribed by this Master Plan. Therefore, the 2026 MP is compliant with the BGPA.
Clean Water Act (CWA), Section 401	U.S. Environmental Protection Agency (USEPA) / Pennsylvania Department of Environmental Protection (PDEP)	The proposed action would not involve activities resulting in the discharge of pollutants, dredged or fill material under Section 404 of the CWA. Therefore, no Section 401 Water Quality Certification is required. For future actions that may discharge pollutants into navigable waters, the USACE would coordinate compliance with the PDEP. Therefore, the 2026 MP is compliant with the CWA, Section 401.
CWA, Section 402 U.S.	USEPA / PDEP	The proposed action also would not involve point source discharges of pollutants requiring a permit under Section 402 of the Act. For future management actions resulting in a point source discharge or construction activities that would impact an acre or more, the USACE would acquire a permit under the National Pollutant Discharge Elimination System (NPDES) program and would prepare a Stormwater Pollution Prevention Plan and Sediment and Erosion Control Plan. Therefore, the 2026 MP is compliant with the CWA, Section 402.

Relevant Law/Regulation	Agency	Compliance Status
CWA, Section 404	USACE	The proposed action would not involve activities resulting in the discharge of pollutants, dredged or fill material under Section 404 of the CWA. Federal Regulations at 33 CFR § 336.1 (a), provide that a Section 404 permit is not issued by USACE to itself. For future actions that would result in a discharge of fill material into Waters of the U.S., the USACE would apply all applicable substantive legal requirements. Therefore, the 2026 MP is compliant with the CWA, Section 404.
Clean Air Act	USEPA / State and Local Air Quality Management Districts (AQMDs)	Updating the land classifications would not affect air quality as the updates would not result in increased emissions of criteria pollutants or pollutants of concern in the planning area. The USACE would coordinate with relevant AQMDs prior to implementing any large actions that may result in extensive emissions of gases or particulate matter under this Master Plan. Therefore, the 2026 MP is compliant with the CAA.
Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)	USEPA	At this time, the proposed action is not expected to affect any HTRW sites. Therefore, the 2026 MP is compliant with the CERCLA.
Endangered Species Act	USFWS and National Marine Fisheries Service (NMFS)	Endangered Species Act consultation is not needed for the new land and water surface classifications as the changes would not affect listed species or designated critical habitat. The USACE would consult with USFWS and/or NMFS prior to implementing any future action under this Master Plan that may affect listed species or their designated critical habitat. Therefore, the 2026 MP is compliant with the Endangered Species Act
Farmland Protection Policy Act of 1994 (FPPA), 7 U.S.C. §4201 et seq.	United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS)	The FPPA is intended to minimize the impact Federal programs have on the unnecessary and irreversible conversion of farmland to nonagricultural uses. Prime Farmland, the land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is also available for these land uses, is present within Beltzville Lake; and the 2026 MP would not irreversibly convert Prime Farmland into non-agricultural land. Therefore, the 2026 MP is compliant with the FPPA.
Fish and Wildlife Coordination Act (FWCA)	USFWS, NMFS, PDEP, and PFBC	The proposed action is not a water-resource development program, nor would it impound, divert, deepen, control, or modify a body of water. Therefore, coordination with USFWS, NMFS, and PDEP, and PFBC under the FWCA is not applicable to the proposed Project. The USACE would coordinate with USFWS, NMFS, PDEP, and PFBC as necessary prior to implementing any water-resource development action that may occur as a result of the proposed action. Therefore, the 2026 MP is compliant with the FWCA.

Relevant Law/Regulation	Agency	Compliance Status
Migratory Bird Treaty Act (MBTA)	USFWS	Coordination with USFWS under the MBTA is not needed for the proposed action as the updates would not affect migratory birds. The USACE would implement measures to avoid impacts to migratory birds during any future actions that may occur under this Master Plan. USACE would coordinate with the USFWS for any future action under this Maser Plan that may result in the "take" of a migratory bird prior to implementation. Therefore, the 2026 MP is compliant with the MBTA
National Historic Preservation Act (NHPA)	SHPO	USACE has determined that the proposed action complies with the NHPA. Therefore, the 2026 MP is compliant with the NHPA.
Native American Graves Protection and Repatriation Act (NAGPRA)	USACE	Consultation under NAGPRA is not needed for the proposed action as the updates would not adversely affect resources protected under this regulation. The USACE would coordinate with the relevant Tribes if any Native American remains, or cultural items are discovered during future actions that may be implemented under this Master Plan. Therefore, the 2026 MP is compliant with the NAGPRA.
National Environmental Policy Act (NEPA)	USACE	This EA has been prepared in accordance with the NEPA, the Council on Environmental Quality's NEPA regulations (40 CFR parts 1500-1508), and USACE's NEPA regulations (33 CFR part 230). CEQ regulations implementing NEPA, first issued in 1978, were rescinded on April 11, 2025, pursuant to Executive Order 14154, Unleashing American Energy. However, the NEPA process for this EA began in 2023, prior to any revisions to CEQ's implementing regulations. This EA was therefore initially subject to and complies with the 1978 NEPA implementing regulations and follows CEQ guidance, Implementation of the National Environmental Policy Act, dated February 19, 2025. Therefore, the 2026 MP is compliant with NEPA.
Resource Conservation and Recovery Act (RCRA)	USEPA	As part of planning for this Master Plan update, USACE has performed database searches to identify any underground storage tanks or other potential sources of contamination. The 2026 MP is a zoning document which will have no effect on the generation, storage, or transport of hazardous and other special wastes. USACE maintains a Spill Prevention, Control, and Countermeasure Plan for all their facilities. Therefore, the 2026 MP is compliant with the RCRA.
Safe Drinking Water Act	USEPA	The proposed action will not endanger underground aquifers and will not result in any effects on the public drinking water supply. Therefore, the 2026 MP is compliant with the Safe Drinking Water Act.

Relevant Law/Regulation	Agency	Compliance Status
Executive Order (EO) 11514, Protection and Enhancement of Environmental Quality	Office of the President	Through the preparation of this Master Plan and Integrated EA, USACE followed the requirements of this EO. Therefore, the 2026 MP is compliant with EO 11514.
EO 11593, Protection and Enhancement of the Cultural Environment	Office of the President	USACE policies ensure that all proposed actions are performed only after appropriate inventory, management, and protection of cultural resources has occurred. Therefore, the 2026 MP is compliant with EO 11593.
EO 11988 – Floodplain Management	Office of the President	The land classifications would not result in development of the floodplain, and any future actions under this Master Plan would be implemented in the floodplain only if there was no practicable alternative. Therefore, the 2026 MP is compliant with EO 11988.
EO 11990 – Protection of Wetlands	Office of the President	Wetlands have been identified and mapped to the extent possible during this planning process. The proposed land classifications have been developed to reduce the potential for loss or degradation of wetlands. Wetlands would be further delineated, avoided, and preserved during planning for any future management actions resulting from this Master Plan. Therefore, the proposed action complies with EO 11990.
EO 13175, Consultation and Coordination with Indian Tribal Governments	Office of the President	Tribal representatives were consulted with as part of the Master Plan scoping and were provided copies of the Draft Master Plan for review. USACE fully respects Tribal law, recognizes Tribal governments as sovereign nations, and would consult with Tribal governments to ensure that Tribal rights and concerns are considered prior to implementing future actions that may affect Tribal resources. USACE recognizes that Tribal interests are not limited to cultural resources, but may also include fish, wildlife, water resources and wetlands, vegetation, health, socioeconomic impacts, noise, and visual resources. USACE also recognizes that Tribes may have specific rights reserved under treaties, such as fishing, hunting, gathering and grazing rights. Therefore, the 2026 MP is compliant with EO 13175.
EO 13186 – Migratory Birds, January 10, 2001	Office of the President	This EO requires that each Federal agency taking actions that have, or are likely to have, a measurable negative effect on migratory bird populations must develop and implement a Memorandum of Understanding with USFWS that shall promote the conservation of migratory bird populations. The proposed action would not result in the take of migratory birds or disturbance of their habitat. Future activities implemented as a result of the proposed action would include individual impact analysis of migratory birds. Therefore, the proposed action complies with EO 13186.

Relevant Law/Regulation	Agency	Compliance Status
EO 13751, Safeguarding the Nation from the Impacts of Invasive Species	Office of the President	The proposed action would not have the potential to introduce, establish, or spread invasive species. Additionally, the Philadelphia District's Environmental Stewardship Integrated Vegetation Management Program reduces the effects of invasive plants through prevention, inventory, treatment, monitoring and restoration as well as education and cross-jurisdictional cooperation. This program would continue under the proposed action. Therefore, the proposed action complies with EO 13751.

6 PUBLIC AND AGENCY COORDINATION

Public engagement for the Public Scoping Phase began in October 2024 and concluded on November 09, 2024, with the closing of the public comment period. During this period, the Project team created a Master Plan website and conducted an in-person public scoping meeting. The public scoping meeting was held on October 10, 2024 at the Towamensing Township Volunteer Fire Company, 105 Firehouse Road in Palmerton, Pennsylvania, followed by a 30-day public comment period. The purpose of the public meeting was to provide an avenue for public and agency stakeholders to ask questions and provide comments.

A second in-person public meeting will be held January 7, 2026 at the Towamensing Township Volunteer Fire Company, 105 Firehouse Road in Palmerton, Pennsylvania. This meeting will introduce the public to the draft Master Plan and EA and will begin the 30-day public review period of the Master Plan, EA and draft Finding of No Significant Impact (FONSI). As with the first meeting, USACE, Philadelphia District, placed advertisements on the USACE webpage, and various social media sites. In addition, news releases will be sent to local newspapers.

Comments received during the initial scoping period and on the draft Master Plan and EA will be incorporated in the documents, as appropriate. Public and Agency coordination is further detailed in Section 7 of the 2026 MP and Attachment A to this EA.

Attachment A to this EA includes the ads published in the local newspaper, the agency coordination letters, and the distribution list for the coordination letters published as of the time of this draft publication. The draft EA has been coordinated with agencies having legislative and administrative responsibilities for environmental protection.

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8 ACRONYMS AND ABBREVIATIONS

%	Percent
°	Degrees
§	Section
BGEPA	Bald and Golden Eagle Protection Act
BRS	Biennial Reporting System
CAA	Clean Air Act
CCS	Cowardin Classification System
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
cfs	Cubic Feet per Second
CH_4	Methane
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide equivalent
CWA	Clean Water Act
EA	Environmental Assessment
EIS	Environmental Impact Statement
EO	Executive Order
EP	Engineer Pamphlet
EPA	Environmental Protection Agency
ER	Engineering Regulation
ESA	Environmentally Sensitive Area

FLIGHT	Facility Level Information GHG Tool
Ft	Feet
FONSI	Finding of No Significant Impact
FPPA	Farmland Protection and Policy Act
GHG	Greenhouse Gas
HDR	High Density Recreation
HTRW	Hazardous, Toxic, Radioactive Wastes
HUC	Hydrologic Unit Code
IPaC	Information for Planning and Consultation (USFWS)
LCC	Land Capability Classes
LDR	Low Density Recreation
MBTA	Migratory Bird Treaty Act
MP	Master Plan
MRML	Multiple Resource Managed Lands
MRML-FIRA	Multiple Resource Managed Lands – Future or Inactive Recreation
MRML-LDR	Multiple Resource Managed Lands – Low Density Recreation
MRML-VM	Multiple Resource Managed Lands – Vegetation Management
MRML-WM	Multiple Resource Managed Lands – Wildlife Management
mt per CO_2e	Metric Tons of Carbon Dioxide Equivalent
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act
NEPA	National Environmental Policy Act
NGVD	National Geodetic Vertical Datum
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service

NO_2	Nitrogen Dioxide
NOAA	National Oceanic and Atmospheric Administration
NO_X	Nitric Oxide
NPDES	national Pollutant Discharge Elimination System (NPDES)
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NRM	Natural Resources Management tool
NVCS	National Vegetation Classification System
NWI	National Wetlands Inventory (USFWS)
O&M	Operations and Maintenance
O_3	Ozone
OAQPS	Office of Air Quality Planning and Standards
OMP	Operational Management Plan
PA	Pennsylvania
PADEP	Pennsylvania Department of Environmental Protection
Pb	Lead
PFBC	Pennsylvania Fish and Boat Commission
PL	Public Law
$PM_{2.5}$	Particulate Matter Less than 2.5 Microns
PM_{10}	Particulate Matter Less than 10 Microns
PNHP	Pennsylvania Natural Heritage Program
PO	Project Operations
RCRA	Resource Conservation and Recovery Act
RM	River Mile
RPEC	Regional Planning and Environmental Center

SHPO	State Historic Preservation Officer
SO_2	Sulfur Dioxide
SSURGO	Soil Survey Geographic Database
TCP	Traditional Cultural Place
TMDL	Total Maximum Daily Load
TRI	Toxic Release Inventory
U.S.	United States
U.S.C.	U.S. Code
USACE	U.S. Army Corps of Engineers
USCB	United States Census Bureau
USEPA	U.S. Environmental Protection Agency
USFS	U.S. Forestry Service
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VOC	Volatile Organic Compound

9 LIST OF PREPARERS

Blake Westmoreland: Biologist and Master Planning Program Manager - USACE Regional Planning and Environmental Center, 7 Years of Experience

Craig Hilburn: Biologist and Regional Technical Specialist - USACE Regional Planning and Environmental Center, 10 Years of Experience

ATTACHMENT A: PUBLIC AND AGENCY COORDINATION

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U.S. ARMY CORPS OF ENGINEERS

News Release

Contact:
Steve Rochette, Public Affairs Officer (stephen.rochette@usace.army.mil)

USACE to host open house for Beltzville Lake Master Plan revision

PHILADELPHIA – The U.S. Army Corps of Engineers (USACE) will host an open house on October 10, 2024, to kick off a process to revise the 1971 Beltzville Lake Master Plan. The open house will be held from 4-6 p.m. at the Towamensing Township Volunteer Fire Company, 105 Firehouse Road, Palmerton, PA 18071.

During the open house session, there will be no formal presentation or public comment session. The public is invited to visit at any point during the 4-6 p.m. timeframe to interact with USACE team members. Team members will be stationed around the room and can share information about the revision process, provide the general schedule, and gather initial feedback from the public.

Master Plan Overview
The Master Plan is defined as 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 water resource development project. It defines "how" USACE will manage the resources for public use and conservation.

The current Beltzville Lake Master Plan, last approved in 1971, needs revision to address changes in regional land use, population, outdoor recreation trends, and the USACE management policy. Key topics to be discussed in the revised MP include revised land use classifications, new natural and recreational resource management objectives, recreation facility needs, and special issues such as invasive species management and threatened and endangered species habitat.

The Master Plan revision WILL NOT address the technical and operational aspects of the lake related to flood risk management or the water conservation missions of the project.

Initial Comment Period
An initial 30-day comment period will begin October 10, 2024, and end November 9, 2024; however, there will be future comment periods associated with the draft document. The public can send comments, suggestions, and concerns during this time. Comments must be submitted in writing at the open house or digitally via the comment form on the Master Plan Revision webpage: https://www.nap.usace.army.mil/Missions/Civil-Works/Beltzville-Dam/Beltzville-Dam-Master-Plan/

The webpage also contains a presentation which will be available during the open house. The presentation provides a schedule as well as details on an additional comment period after the draft report is released (currently scheduled for October 2025).

About Beltzville Lake

Beltzville Lake was constructed by the U.S. Army Corps of Engineers in 1971. The multi-purpose project was authorized by Congress primarily for flood risk management, water supply, and low flow augmentation; and authorized secondarily for water quality and recreation purposes. The Pennsylvania Department of Conservation & Natural Resources manages the 3,002-acre Beltzville State Park surrounding the lake, which attracts numerous visitors each year. The dam is located on Pohopoco Creek 5.2 miles from its confluence with the Lehigh River and 4 miles east of Lehighton, Pennsylvania. Beltzville Dam operates as a system in conjunction with Francis E. Walter Dam, located in White Haven, to reduce flooding in the downstream communities along the Lehigh River. Since its construction in 1971, the dam has prevented more than $73 million in flood damages.

-End-

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, FORT WORTH DISTRICT
P.O. BOX 17300
FORT WORTH, TX 76102-0300

September 26, 2024

PUBLIC NOTICE

BELTZVILLE LAKE MASTER PLAN REVISION OPEN HOUSE

The U.S. Army Corps of Engineers (USACE) is revising the 1971 Beltzville Lake Master Plan (MP). The USACE defines the MP as 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 water resource development project. It defines "how" the USACE will manage the resources for public use and conservation. The current MP, last approved in 1971, needs revision to address changes in regional land use, population, outdoor recreation trends, and the USACE management policy. Key topics to be discussed in the revised MP include revised land use classifications, new natural and recreational resource management objectives, recreation facility needs, and special issues such as invasive species management and threatened and endangered species habitat.

Revision of the MP will not address in detail the technical and operational aspects of the lake related to flood risk management or the water conservation missions of the project. The Master Plan study area will include Beltzville Lake proper and all adjacent recreational and natural resources properties under Federal Fee ownership.

An open house will be held from **4:00 pm to 6:00 pm on October 10, 2024, at the Towamensing Township Volunteer Fire Company, 105 Firehouse Road, Palmerton, PA 18071**. The USACE will provide attendees with the revision content, process, and a general schedule. Attendees can view the 1971 Master Plan and current land use classification maps and ask USACE staff questions.

The 30-day public comment period will begin October 10, 2024, and end November 09, 2024. The public can send comments, suggestions, and concerns during this time. **Public participation is critical to successfully revising the 1971 MP.** Information provided at the open house, including the current MP, may be viewed on the USACE website at the following link beginning October 10, 2024.

www.nap.usace.army.mil/Missions/Civil-Works/Beltzville-Dam/Beltzville-Dam-Master-Plan/

Comments must be submitted in writing at the scheduled open house, mailed to the USACE: Joshua Dinko – Facility Operations Specialist, 2145 Pohopoco Drive, Lehighton, PA 18235, or emailed to: PDPA-NAP@usace.army.mil. The public may call the Lake Office to ask questions regarding the MP revision at 610-377-0332.

Sincerely,

Robert Morrow, PMP

Robert Morrow, PMP
Chief, Environmental Branch
Regional Planning and Environmental Center

US Army Corps of Engineers®

Comment Form Instructions
Public Meeting October 10, 2024

Master Plan Revision
Beltzville Lake

The U.S. Army Corps of Engineers is in the process of revising the Beltzville Lake Master Plan. The Master Plan revision will guide the land and recreational management of the federally owned property that make up the flood storage area for the next 25 years. Management activities include protecting natural and cultural resources, providing access to public land and water recreation, protecting the public, and ensuring reservoir and dam operations. Pertinent information and a copy of the current master plan and land use map can be found on the USACE website below. To add your comments, ideas, or concerns about the future land and recreational management for the Master Plan, please submit comments using any of the following methods:

- Fill out and return a comment form available below or at the following website: www.nap.usace.army.mil/Missions/Civil-Works/Beltzville-Dam/Beltzville-Dam-Master-Plan
- Provide comments in an email message or use the comment form and send to: PDPA-NAP@usace.army.mil
- Provide comments in a letter or use comment form and send via mail to:

  USACE Beltzville Lake
  Attn: Josh Dinko, Facility Operations Specialist
  2145 Pohopoco Drive
  Lehighton, PA 18235

- Drop off or mail written comments to the project office at the address above.

The **30-day comment period is October 10 through November 9, 2024**. Please provide written comments via the methods above. Your input into the Master Plan revision and related environmental concerns under the National Environmental Policy Act (NEPA) is key to developing a successful Master Plan for the lake project. Please write your questions, comments, or suggestions in on the next page and mail or e-mail them to the address above during the comment period. **Comments due by November 9, 2024**. Thank you for your participation!

Comment Form
Public Meeting October 10, 2024
Comments due by November 9, 2024

Questions, comments, or suggestions?

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Optional Information (used for mailing list to keep you informed and will not be used for any other purpose):

Name: _____

Affiliation: _____

Address: _____

City:_____ **State:**_____

Zip Code: _____ **Email:** _____

Scan QR Code

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, PHILADELPHIA DISTRICT
1650 ARCH STREET
PHILADELPHIA PA 19103-2004

DECEMBER 22, 2025

Public Notice
2026 Draft Beltzville Lake Master Plan and Environmental Assessment
Beltzville Lake, Upper Delaware River Basin
Carbon County, Pennsylvania

The U.S. Army Corps of Engineers (USACE), Philadelphia District, hereby informs the public that the 2026 Draft Beltzville Lake Master Plan (MP), Finding of No Significant Impact (FONSI), and Environmental Assessment (EA) are available for public review. An open house will be held from 4:00 PM to 6:00 PM on January 7, 2026, at the Towamensing Township Volunteer Fire Company, 105 Firehouse Rd., Palmerton, PA 18071. The public open house will give an overview of the proposed changes to the current Beltzville Lake Master Plan, inform the public on how to submit comments, and provide an opportunity for the public to ask questions and offer feedback. The 30-day public comment period will begin on January 7, 2026, and end on February 6, 2026. For those unable to attend the public open house, the draft MP, EA, FONSI, comment form with instructions, and a presentation covering the same topics covered in the open house will be available for download starting on January 7, 2026, at the following Philadelphia District website:

https://www.nap.usace.army.mil/Missions/Civil-Works/Beltzville-Dam/Beltzville-Dam-Master-Plan/

The MP is a vital tool produced and used by the USACE to guide the responsible stewardship of the USACE administered lands and resources for present and future generations. The MP provides direction for appropriate management, use, development, enhancement, protection, and conservation of the natural, cultural, and manmade resources at Beltzville Lake. The MP presents an inventory and analysis of land resources, resource management objectives, land use classifications, a resource use plan for each land use classification, current and projected park facility needs, an analysis of existing and anticipated resource use, and anticipated influences on overall project operation and management. The most recent MP for Beltzville Lake was last approved in 1971.

Comments, suggestions, and questions can be submitted in writing and can be given to the USACE staff at the scheduled open house, or mailed to: USACE, Joshua Dinko – Facility Operations Specialist, 2145 Pohopoco Drive, Lehighton, PA 18235. Comments can also be submitted via email to: PDPA-NAP@@usace.army.mil. The public may call the lake office to ask questions regarding the MP revision at 610-377-0438.

Sincerely,

Robert M. Morrow, PMP
Chief, Environmental Branch
Southwestern Regional Planning and
Environmental Center

BELTZVILLE MP/NEPA SCOPING EMAILING ADDRESS LIST

Delaware River Basin Commission
P.O. Box 7360, 25 Cosey Road
West Trenton, NJ 08628-0360

Delaware River Basin Commission
P.O. Box 7360, 25 Cosey Road
West Trenton, NJ 08628-0360

U.S. Fish and Wildlife Service
Pennsylvania Ecological Services Field Office
110 Radnor Rd; Suite 101
State College, PA 16801

Wildlife Biologist/Environmental Review Lead (suguers@pa.gov) Pennsylvania Game Commission
Bureau of Wildlife Management
2001 Elmerton Avenue
Harrisburg, PA 17110

Park Manager
Pennsylvania Department of Conservation and Natural Resources
Beltzville State Park
2950 Pohopoco Dr
Lehighton, PA 18235

Pennsylvania Department of Environmental Protection
Planning & Conservation Division
Compacts and Commissions Office
Rachel Carson State Office Building
400 Market St.
Harrisburg PA 17101

Pennsylvania Department of Environmental Protection
Compacts and Commissions Office
Rachel Carson State Office Building
400 Market St.
Harrisburg PA 17101

BELTZVILLE MP/NEPA SCOPING EMAILING ADDRESS LIST

Pennsylvania Department of Environmental Protection
Bureau of Waterways Engineering and Wetlands
Dam Safety Program
PO Box 8460
Harrisburg, PA 17105-8460

Pennsylvania Department of Environmental Protection Northeast
Regional Office
2 Public Square
Wilkes-Barre, PA 18701-1915

District Manager
Carbon County Conservation District
5664 Interchange Road
Lehighton, PA 18235

Pennsylvania Fish and Boat Commission
Area Fisheries Management 5
3155 U.S. Route 209 (Federal Road)
PO Box 155
Bushkill, PA 18324

Watershed Analysis Section Chief
Pennsylvania Fish and Boat Commission
595 E Rolling Ridge Drive
Bellefonte, PA 16823

United States Geological Survey
Pennsylvania Water Science Center
215 Limekiln Road
New Cumberland, PA 17070

Acting NEPA Branch Chief
EJ, Community Health, & Environmental Review Division
U.S. EPA Region III
4 Penn Center
Philadelphia, PA 19103

BELTZVILLE MP/NEPA SCOPING EMAILING ADDRESS LIST

NOAA/National Marine Fisheries Service
Greater Atlantic Regional Fisheries Office Habitat Conservation Division
55 Great Republic Drive
Gloucester, MA 01930-2276

External Review Coordinator / Resource Planning Specialist
National Park Service
Interior Region 1, North Atlantic-Appalachian
Resource Planning and Compliance Division
1234 Market Street, 20th Floor
Philadelphia, PA 19107

Office of Planning & Policy
Pennsylvania Department of Conservation & Natural Resources
P.O. Box 4767
Harrisburg, PA 17101

Deputy State Historic Preservation Officer
Pennsylvania State Historic Preservation Office
Commonwealth Keystone Building, 2nd Floor
400 North Street
Harrisburg, PA 17120-0093

Pennsylvania Natural Diversity Inventory (PNDI)

Online specific project footprint assessment and project area conservation reports
(Project Boundaries and proposal must be provided for review as needed)
https://conservationexplorer.dcnr.pa.gov/

PA Department of Conservation and Natural Resources
RA-HERITAGEREVIEW@pa.gov
Bureau of Forestry, Ecological Services Section
Pennsylvania Natural Heritage Program
Rachel Carson State Office Building
P.O. Box 8552
Harrisburg, PA 17105-8552

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

BELTZVILLE MP/NEPA SCOPING EMAILING ADDRESS LIST

U.S. Fish and Wildlife Service
IR1_ESPenn@fws.gov
Pennsylvania Field Office
Endangered Species Section
110 Radnor Rd; Suite 101
State College, PA 16801

PA Game Commission
RA-PGC_PNDI@pa.gov
Bureau of Wildlife Habitat Management
Division of Environmental Planning and Habitat Protection
2001 Elmerton Avenue, Harrisburg, PA 17110-9797

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U.S. ARMY CORPS OF ENGINEERS

News Release

Contacts:
Steve Rochette, Public Affairs Officer (stephen.rochette@usace.army.mil)

USACE to host open house to share info on *Draft* Beltzville Lake Master Plan

PHILADELPHIA (December 22, 2025) – The U.S. Army Corps of Engineers (USACE) will host an open house on January 7, 2026, to share details on a draft revision of the Beltzville Lake Master Plan. The open house will be held from 4-6 p.m. at the Towamensing Township Volunteer Fire Company
(105 Firehouse Rd. Palmerton, PA 18071).

The public open house will cover the proposed changes to the current Beltzville Lake Master Plan. Team members will share instructions on how to submit comments and provide an opportunity for the public to ask questions and provide feedback. A 30-day public comment period will begin on January 7, 2026 and end on February 6, 2026.

Master Plan Overview
The Master Plan is defined as 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 water resource development project. It defines "how" USACE will manage the resources for public use and conservation.

The current Beltzville Lake Master Plan, last approved in 1971, needs revision to address changes in regional land use, population, outdoor recreation trends, and the USACE management policy. Key topics to be discussed in the revised Master Plan include revised land use classifications, new natural and recreational resource management objectives, recreation facility needs, and special issues such as invasive species management and threatened and endangered species habitat.

The Master Plan revision WILL NOT address the technical and operational aspects of the lake related to flood risk management or the water conservation missions of the project.

Submitting Comments & Reviewing Draft Plan:
Comments must be submitted in writing at the open house or digitally via the comment form on the Master Plan Revision webpage or emailed to PDPA-NAP@usace.army.mil:
https://www.nap.usace.army.mil/Missions/Civil-Works/Beltzville-Dam/Beltzville-Dam-Master-Plan/

The webpage will also have digital copies of the draft Master Plan, Environmental Assessment and associated documents, a comment form with instructions, and a downloadable presentation covering the topics highlighted in the open house. These documents will be available for download starting on October 28, 2025.

About Beltzville Lake

Beltzville Lake was constructed by the U.S. Army Corps of Engineers in 1971. The multi-purpose project was authorized by Congress primarily for flood risk management, water supply, and low flow augmentation; and authorized secondarily for water quality and recreation purposes. The Pennsylvania Department of Conservation & Natural Resources manages the 3,002-acre Beltzville State Park surrounding the lake, which attracts numerous visitors each year. The dam is located on Pohopoco Creek 5.2 miles from its confluence with the Lehigh River and 4 miles east of Lehighton, Pennsylvania. Beltzville Dam operates as a system in conjunction with Francis E. Walter Dam, located in White Haven, to reduce flooding in the downstream communities along the Lehigh River. Since its construction in 1971, the dam has prevented more than $77 million in flood damages.

REVISING THE 1971 BELTZVILLE LAKE MASTER PLAN

Public Workshop

07 January 2026

U.S. Army Corps of Engineers, Philadelphia District

File Name

MISSION / PEOPLE / TEAMWORK

US Army Corps of Engineers

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Purpose

- Announce the availability of the draft Beltzville Lake Master Plan revision and accompanying Environmental Assessment.

- Highlight changes proposed in the revised Master Plan compared to the previous 1971 version.

- The draft Master Plan with Environmental Assessment documents are available for 30-day public comment period beginning January 7, 2026 and closing on February 6, 2026.

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Process Followed to Date

- Initial public open house was conducted on October 10, 2024.
- All comments were considered. See Appendix E of the draft Master Plan for comments and Government responses.
- A draft Environmental Assessment (EA) was prepared and is available in the Master Plan Appendix.

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WHAT IS A MASTER PLAN?

- The purpose of a master plan is to establish guidelines for comprehensive management and development of all recreational, natural and cultural resources

- Main focus is stewardship of natural and cultural resources and provision of quality outdoor recreation facilities and opportunities

- Proposed effective life of a Master Plan is 25 years

- Recreational use of the water surface is addressed

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WHAT MASTER PLANS ARE NOT

Master Plans **do not** address in detail the technical aspects of:

- Regional water quality
- Water management for flood risk management
- Water supply or water level management
- Shoreline management (Including boat docks, mowing, or other permits)

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Land Classification Definitions

Source: Engineering Pamphlet (EP) 1130-2-550

Land Classification	Definition
Project Operations	Lands required for the dam, spillway, levees, office, maintenance facilities and other areas that are used solely for project operations.
High Density Recreation	Land developed for intensive recreational activities for the visiting public, including day use areas and campground areas for commercial concessions, and quasi-public development.
Multiple Resource Management Lands	**Low Density Recreation**: Lands with minimal development or infrastructure that support passive public recreational use (e.g., trails, primitive camping, wildlife observation, fishing and hunting).
	Wildlife Management: Lands designated for the stewardship of fish and wildlife resources.
	Vegetative Management: Lands designated for the stewardship of forest, prairie, and other native vegetative cover.
	Inactive and/or Future Recreation Areas: Recreation areas planned for the future or that have been temporarily closed.
Environmentally Sensitive Areas	Areas where scientific, ecological, cultural or aesthetic features have been identified. These areas must be considered by management to ensure they are not adversely impacted.
Mitigation	Lands acquired or designated specifically for offsetting losses associated with development of the project. Lands allocated as separable mitigation lands can only be given this classification.

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Water Surface Classification Definitions

Source: Engineering Pamphlet (EP) 1130-2-550

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

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Proposed Changes in Land & Water Surface Classifications

Prior Land Classifications (1971)	Acres	Proposed Land Classifications (2026)	Acres	Net Difference
Project Operations	340	Project Operations (PO)	282	(58)
Recreation Lands	1,771	High Density Recreation (HDR)	250	(1521)
-	-	Multiple Resource Management Lands (MRML)	0	0
-	-	Low Density Recreation (MRML-LDR)	1,597	1,597
Wildlife Management (MRML-WM)	486	Wildlife Management (MRML-WM)	509	23
Environmentally Sensitive Area (ESA)	-	Environmentally Sensitive Area (ESA)	0	0
LAND TOTAL	**2,597**	**LAND TOTAL**	**2,638**	**41**
Prior Water Surface Classifications (1971)	**Acres**	**Proposed Water Surface Classifications (2025)**	**Acres**	**Net Difference**
Open Recreation	998	Open Recreation	776	(222)
		Restricted	5	5
		No-Wake	191	191
WATER TOTAL	**998**	**WATER TOTAL**	**972**	**(26)**
TOTAL FEE	**3,595**	**TOTAL FEE**	**3,610**	**15**

Acres are approximate based on digitizing the 1971 land and water classification map. Total fee acreage differences from the 1971 totals to the 2026 totals are due to improvements in measurement technology, deposition/siltation, and erosion. Totals also differ due to rounding while adding parcels.

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Management Goals & Resource Objectives

- Goals and objectives were developed during the revision process specific to the following categories:
    - Recreation
    - Natural Resource Management
    - Visitor Information, Education, and Outreach
    - General Management
    - Cultural Resources Management
- A complete description of the revised goals and objectives can be found in Chapter 3 of the draft Master Plan revision.

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National Environmental Policy Act

- The Master Plan Revision process includes compliance with the National Environmental Policy Act (NEPA) of 1969.

- Purpose of NEPA is to:
  - Ensure federal agencies give proper consideration to the environment prior to undertaking a federal action.
  - Involve the Public (scoping) in the decision-making process.
  - Document the process by which agencies make informed decisions.

- NEPA Scoping Process:
  - Opportunity for Public comments and questions on the potential impacts of proposed federal actions.
  - Includes comments by other federal, State, and local governments, and American Indian Tribal Nations.

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NEPA Includes:

- Public exchange of information related to problems to be solved, issues to be addressed, and potential alternatives.
- Identification and evaluation of a broad range of alternatives.
- Identification and quantification of potential impacts.
- Screening of non-relevant issues from analysis.
- Documentation of analysis and coordination through preparation of NEPA documents, such as an Environmental Assessment (EA) or an Environmental Impact Statement (EIS).
- Federal, State, and Public review of NEPA documents.

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NEPA RESOURCES

Available on NEPAnet: http://www.NEPA.gov

NEPAnet Includes:

- A Citizen's Guide to NEPA – Having Your Voice Heard
- Council on Environmental Quality Regulations for Implementing NEPA (40 CFR Parts 1500-1508)

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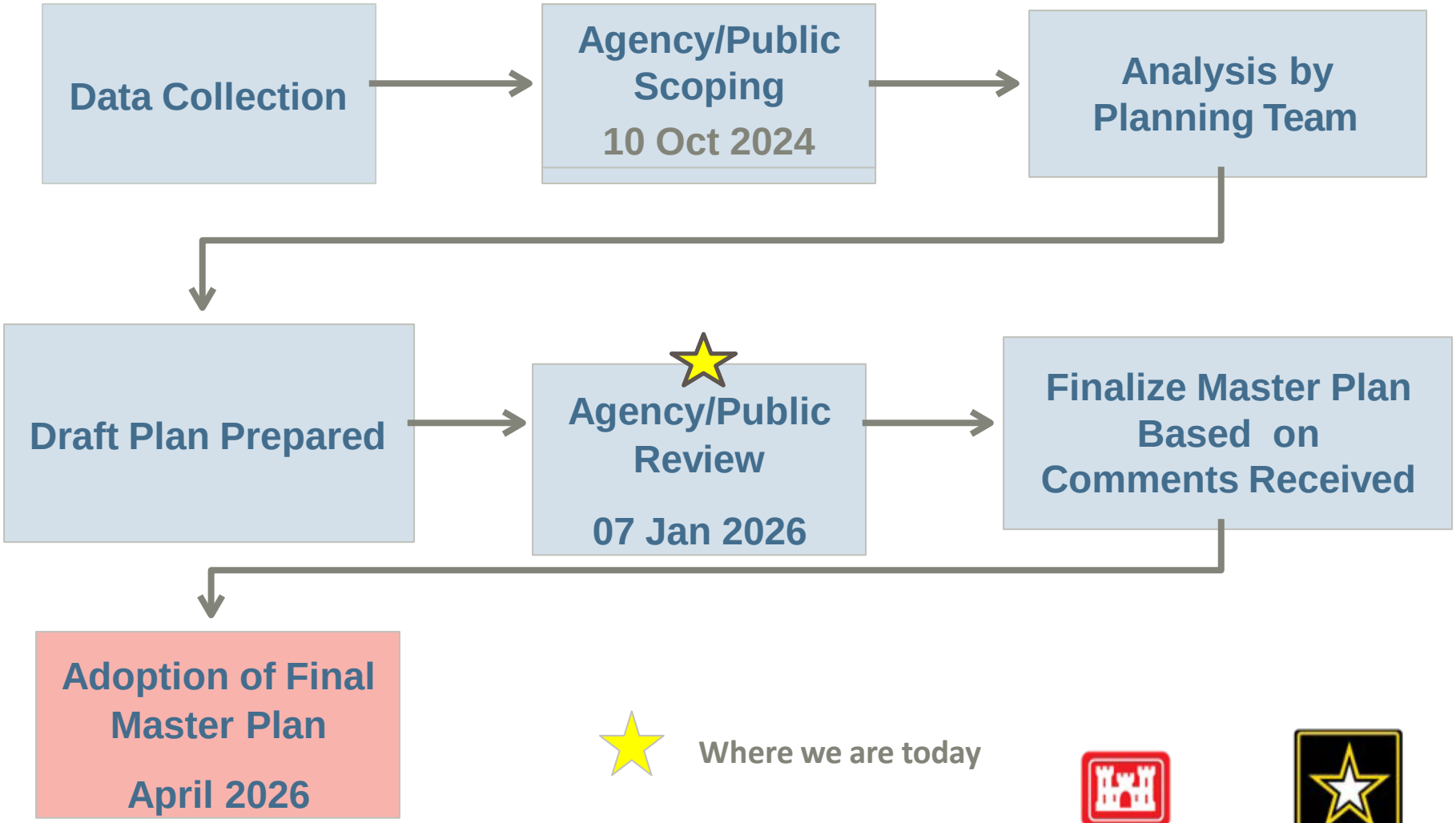
THE MASTER PLAN REVISION PROCESS



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How can you participate?

Review the below documents at website:

www.nap.usace.army.mil/Missions/Civil-Works/Beltzville-Dam/Beltzville-Dam-Master-Plan/

- Public Meeting PowerPoint
- Draft Beltzville Lake Master Plan
- Draft Beltzville Lake Land Classification Map
- USACE Master Planning Policies and Procedures

Submit a comment with your input on the proposed MP revision.

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Beltzville Lake Master Plan Revision Comments

SUBMIT YOUR COMMENTS:

- Using comment forms available at this Public Meeting

- Visit the website and complete the comment box for submittal via email.

By mail: U.S. Army Corps of Engineers
Beltzville Lake
Attn: Josh Dinko, Facility Operations Specialist
2145 Pohopoco Drive
Lehighton, PA 18235

- By email: PDPA-NAP@usace.army.mil

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Sign-In Sheet

Open House

Beltzville Lake, Pennsylvania

Public Draft Presentation of Master Plan Revision

January 7, 2026

Name	Affiliation	Email Address

US Army Corps of Engineers®

Comment Form Instructions
Public Meeting January 7, 2026

Master Plan Revision
Beltzville Lake

The U.S. Army Corps of Engineers is in the process of revising the Beltzville Lake Master Plan. The Master Plan revision will guide the land and recreational management of the federally owned property that make up the flood storage area for the next 25 years. Management activities include protecting natural and cultural resources, providing access to public land and water recreation, protecting the public, and ensuring reservoir and dam operations. Pertinent information and a copy of the current master plan and land use map can be found on the USACE website below. To add your comments, ideas, or concerns about the future land and recreational management for the Master Plan, please submit comments using any of the following methods:

- Fill out and return a comment form available below or at the following website: www.nap.usace.army.mil/Missions/Civil-Works/Beltzville-Dam/Beltzville-Dam-Master-Plan
- Provide comments in an email message or use the comment form and send to: PDPA-NAP@usace.army.mil
- Provide comments in a letter or use comment form and send via mail to:

  USACE Beltzville Lake
  Attn: Josh Dinko, Facility Operations Specialist
  2145 Pohopoco Drive
  Lehighton, PA 18235

- Drop off or mail written comments to the project office at the address above.

The **30-day comment period is January 7 through February 6, 2026**. Please provide written comments via the methods above. Your input into the Master Plan revision and related environmental concerns under the National Environmental Policy Act (NEPA) is key to developing a successful Master Plan for the lake project. Please write your questions, comments, or suggestions in on the next page and mail or e-mail them to the address above during the comment period. **Comments due by February 6, 2026**. Thank you for your participation!

Comment Form
Public Meeting January 7, 2026
Comments due by February 6, 2026

Questions, comments, or suggestions?

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Optional Information (used for mailing list to keep you informed and will not be used for any other purpose):

Name: _____

Affiliation: _____

Address: _____

City:_____ **State:** _____

Zip Code: _____ **Email:** _____

Scan QR Code

APPENDIX C – WILDLIFE DOCUMENTS

TRUST RESOURCES REPORT – USFWS

OFFICIAL SPECIES LIST – USFWS

United States Department of the Interior

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

In Reply Refer To: 12/01/2025 14:09:05 UTC
Project Code: 2025-0114269
Project Name: Beltzville Lake Master Plan Revision (2025)

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

To Whom It May Concern:

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

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

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

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

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

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

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

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

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

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

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

Attachment(s):

- Official Species List

- USFWS National Wildlife Refuges and Fish Hatcheries

OFFICIAL SPECIES LIST

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

This species list is provided by:

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

PROJECT SUMMARY

Project Code: 2025-0114269
Project Name: Beltzville Lake Master Plan Revision (2025)
Project Type: Management Plans Land Management/Restoration
Project Description: This is a Master Plan (MP) revision project for Beltzville Lake. The MP revision would only re-zone the land classifications within the Beltzville Lake federal fee boundary managed by the USACE. No construction or ground-disturbing activities are proposed as part of the MP revision.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@40.86825715,-75.60455497686891,14z

Counties: Carbon County, Pennsylvania

ENDANGERED SPECIES ACT SPECIES

There is a total of 5 threatened, endangered, or candidate species on this species list.

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

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

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

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

MAMMALS

NAME	STATUS
Indiana Bat *Myotis sodalis* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5949	Endangered
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
Tricolored Bat *Perimyotis subflavus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10515	Proposed Endangered

INSECTS

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

FLOWERING PLANTS

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

CRITICAL HABITATS

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

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

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

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

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

IPAC USER CONTACT INFORMATION

Agency: Army Corps of Engineers
Name: blake westmoreland
Address: 2000 Fort Point Road
City: Galveston
State: TX
Zip: 77550
Email blake.e.westmoreland@usace.army.mil
Phone: 4097663927

Introduction

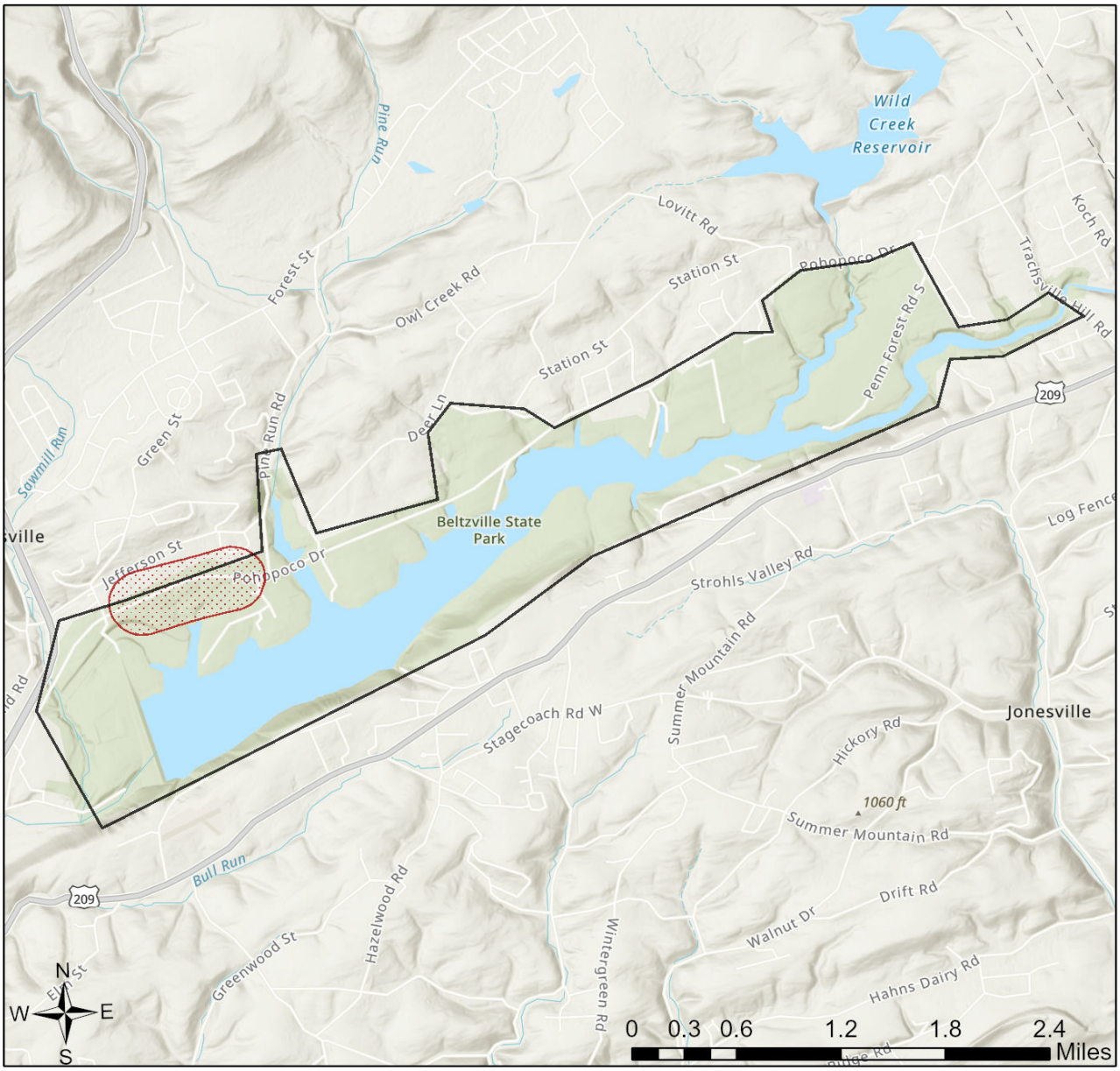
This Conservation Planning Report compiles names, descriptions, maps, locations, measurements, links and references for Natural Heritage Areas (core and supporting habitats), Important Bird Areas, State Lands, and agency designated water resources that are coincident with an area of interest defined by the user of the Pennsylvania Conservation Explorer tool. For an overview and additional details, please be sure to visit the website at www.naturalheritage.state.pa.us and download the applicable County Natural Heritage Inventory report(s).

Site Area: 3,707.94 acres
County(s): Carbon
Township/Municipality(s): FRANKLIN; TOWAMENSING
Quadrangle Name(s): CHRISTMANS; LEHIGHTON; PALMERTON; POHOPOCO MOUNTAIN
Watersheds HUC 8: Lehigh
Watersheds HUC 12: Beltzville Lake-Pohopoco Creek; Wild Creek
Decimal Degrees: 40.868712 N, -75.601686 W
Degrees Minutes Seconds: 40° 52' 7.3617" N, 75° 36' 6.710" W

SEARCH RESULT SUMMARY

Conservation Planning Category	Detected Area Summary
Natural Heritage Areas	1 site
Protected Lands	2 tracts; 3,436.79 acres
Class A Streams	7.51 miles

Beltzville Reservoir USACE



Core Habitats

Area of Interest

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

Natural Heritage Areas

Natural Heritage Areas (NHAs) are sites that have been identified as critical habitat for species or natural communities of concern. This dataset is designed to identify, map and discuss areas that support species of concern, exemplary natural communities, and broad expanses of intact natural ecosystems that support components of Pennsylvanias native species biodiversity. These areas are prioritized based upon their ecological qualities and provided with recommendations regarding their management and protection. Most of the existing NHAs have been developed through PNHPs County Natural Heritage Inventories -- systematic studies of the critical biological resources of a county.

Natural Heritage Site Name	Description	Reference
Beltzville Lake Vernals	An "Ephemeral Fluctuating Pool Natural Community" identified at Beltzville State park.	Link

State Lands

These include lands managed by the Department of Natural Resources (DCNR) Bureau of Forestry (BOF) for long-term forest health and native plant conservation; Pennsylvania Game Commission (PGC) for hunting, trapping and fishing; and DCNR Bureau of State Parks (BSP) for healthful outdoor recreation and environmental education.

Name	Wild Area Type	Wild Area Name	Manager	Total Acres
Beltzville State Park	None	NA	BSP	3549.00

Protected Lands

Protected lands or conservation areas are locations which receive protection, through legal or other means, because of their recognized natural, ecological and/or cultural values.

Name	Description	Owner	Website	Total Acres
Wild Creek		The Nature Conservancy Pennsylvania/Delaware	Link	14002.00

Chapter 93 Exceptional Value Streams

These are streams that are designated exceptional value (EV) by the Pennsylvania Department of Environmental Protection (DEP) under Chapter 93 of the Pennsylvania Code. Chapter 93 sets water quality standards based on water uses which are to be protected by DEP in implementing its authority under the Clean Streams Law and other statutes that authorize protection of surface water quality.

Existing Use

Use Description	Segments	Total Miles
EV(EXCEPTIONAL VALUE)	6	0.00

Designated Use

Use Description	Segments	Total Miles
EV(EXCEPTIONAL VALUE)	5	0.00

Class A Streams

These are streams with populations of naturally reproducing trout of sufficient size and abundance to support a long-term and rewarding sport fishery.

Stream Name	Total Miles
Pohopoco Creek	2.85
Sawmill Run	4.66

For additional information about the Pennsylvania Natural Heritage Program, visit the website at www.naturalheritage.state.pa.us or you can email your questions and comments to RA-HeritageReview@pa.gov.

APPENDIX D – PERTINENT LAWS

- Antiquities Act of 1906, Public Law 59-209, 34 Stat. 225, 54 U.S.C. Sections 320301-320303: 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.
- Historic Sites Act of 1935, Public Law 74-292, 49 Stat. 666, 16 U.S.C. Sections 461-467: Declares it to be a national policy to preserve for (in contrast to protecting from) the public historic (including prehistoric) sites, buildings, and objects of national significance. This act provides both authorization and a directive for the Secretary of the Interior, through the National Park Service, to assume a position of national leadership in the area of protecting, recovering, and interpreting national archeological historic resources. It also establishes an "Advisory Board on National Parks; Historic Sites, Buildings, and Monuments, a committee of eleven experts appointed by the Secretary to recommend policies to the Department of the Interior".
- Flood Control Act of 1938, Public Law 75-761: This act authorizes the construction, repair, and preservation of certain public works on rivers and harbors for navigation, flood control, and for other purposes.
- Bald and Golden Eagle Protection Act, as amended, 16 U.S.C. Sections 668-668d: This Act prohibits anyone, without a permit issued by the Secretary of the Interior, from taking bald eagles, including their parts, nests, or eggs. The Act provides criminal penalties for persons who take, possess, sell, purchase, barter, offer to sell, transport, export or import, at any time or any manner, any bald eagle [or any golden eagle], alive or dead, or any part, nest, or egg thereof. The Act defines “take” as pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or disturb.
- Flood Control Act of 1944, Public Law 78-534: 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.
- River and Harbor Act of 1946, Public Law 79-525: This act authorizes the construction, repair, and preservation of certain public works on rivers and harbors for navigation, flood control, and for other purposes.
- Flood Control Act of 1954, Public Law 83-780: This act authorizes the construction, maintenance, and operation of public parks and recreational facilities in reservoir areas under the control of the Department of the Army and authorizes the Secretary of the Army to grant leases of lands in reservoir areas deemed to be in the public interest.
- Fish and Wildlife Coordination Act, Public Law 85-624: This act, as amended, sets down the general policy that fish and wildlife conservation shall receive equal consideration with other project purposes and be coordinated with other features of water resource development programs. Opportunities for improving fish and wildlife

resources and adverse effects on these resources shall be examined along with other purposes which might be served by water resources development.

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

- River and Harbor Act of 1962, Public Law 87-874: This act authorizes the construction, repair, and preservation of certain public works on rivers and harbors for navigation, flood control, and for other purposes.

- Land and Water Conservation Fund Act of 1965, Public Law 88-578: This act established a fund from which U.S. Congress can make appropriations for outdoor recreation. This law 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 88-29: Authorized the Secretary of the Interior to inventory and classify outdoor recreation needs and resources and to prepare a comprehensive outdoor recreation plan taking into consideration the plans of the various Federal agencies, State, and other political subdivisions. It also states that the federal agencies undertaking recreational activities shall consult with the Secretary of the Interior concerning these activities and shall carry out such responsibilities in general conformance with the nationwide plan.

- Federal Water Project Recreation Act, Public Law 89-72: This act requires that not less than one-half the separable costs of developing recreational facilities and all operation and maintenance costs at Federal reservoir projects shall be borne by a non-Federal public body. A HQUSACE/OMB implementation policy made these provisions applicable to projects completed prior to 1965.

- Water Resources Planning Act, Public Law 89-80: 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.

- Solid Waste Disposal Act, as amended, Public Law 89-272, 42 U.S.C. Sections 6901 et seq.: This act authorized a research and development program with respect to solid-waste disposal. It proposes (1) to initiate and accelerate a national research and development program for new and improved methods of proper and economic solid-waste disposal, including studies directed toward the conservation of natural resources by reducing the amount of waste and unsalvageable materials and by recovery and utilization of potential resources in solid waste; and (2) to provide technical and financial assistance to State and local governments and interstate agencies in the planning, development, and conduct of solid-waste disposal programs.

- National Historic Preservation Act of 1966, Public Law 89-665, 54 U.S.C. Sections 300101 et seq.: 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.
- Flood Control Act of 1968, Section 210, Public Law 90-483: Restricted collection of entrance fee at USACE lakes and reservoirs to users of highly developed facilities requiring continuous presence of personnel.
- National Environmental Policy Act of 1969 (NEPA), Public Law 91-190, 42 U.S.C. Sections 4321 et seq.: 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. It is Section 102 that requires consideration of environmental impacts associated with Federal actions. Section 101 of NEPA requires the federal government to use all practicable means to create and maintain conditions under which man and nature can exist in productive harmony.

  Specifically, Section 101 of NEPA declares:

  - Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations
  - Assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings
  - Attain the widest range of beneficial uses of the environment without degradation risk to health or safety or other undesirable and unintended consequences
  - Preserve important historic, cultural, and natural aspects of our national heritage and maintain wherever possible an environment which supports diversity and variety of individual choice
  - Achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities
  - Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources
- River and Harbor Act of 1970 and Flood Control Act of 1970, Public Law 91-611: Establishes the requirement for evaluating the economic, social, and environmental impacts of projects.

- Public Law 92-347: This act revises Public Law 88-578, the Land and Water Conservation Fund Act of 1965, to require Federal agencies to collect special recreation user fees for the use of specialized sites developed at Federal expense and to prohibit the USACE from collecting entrance fees to projects.
- Federal Water Pollution Control Act Amendments of 1972, Public Law 92-500: The Federal Water Pollution Control Act of 1948 (PL 845, 80th U.S. Congress), as amended in 1961, 1966, 1970, 1972, 1977, and 1987, 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."
- Federal Environmental Pesticide Control Act of 1972, Public Law 92-516, 86 Stat. 973, 7 U.S.C. Sections 136 et seq.: 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 93-81: This law amends Section 4 of the Land and Water Conservation Fund 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.
- Endangered Species Act of 1973, Public Law 93-205, 16 U.S.C. Sections 1531 et seq.: 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.
- Water Resources Development Act of 1974, Public Law 93-251: Section 107 of this law establishes a broad Federal policy which makes it possible to participate with local governmental entities in the costs of sewage treatment plan installations.
- Archeological and Historic Preservation Act of 1974, Public Law 93-291: 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. This amends the Reserve Salvage Act of 1960 (PL-86-523).
- Public Law 93-303: This law amends Section 4 of the Land and Water Conservation Fund 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.
- Safe Drinking Water Act, Public Law 93-523: 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: Expands the role of the Advisory Council on Historic Preservation. Section 201 amends Section 106 of the National Historical Preservation Act of 1966 to say that the Council can comment on activities which will have an adverse effect on sites either included in or eligible for inclusion in the National Register of Historic Places.
- Clean Water Act of 1977, as amended, Public Law 95-217: This Act amends the Federal Water Pollution Control Act Amendments of 1972 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.
- American Indian Religious Freedom Act, Public Law 95-341: The Act protects the rights of Native Americans to exercise their traditional religions by ensuring access to sites, use and possession of sacred objections, and the freedom to worship through ceremonials and traditional rites.
- Endangered Species Act Amendments of 1978, Public Law 95-632: This law amends the Endangered Species Act 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 Section 102 of NEPA.
- Archeological Resources Protection Act of 1979, Public Law 96-95: This Act protects archeological resources and sites that are on public and tribal lands and that 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.
- Supplemental Appropriations Act, 1983, Public Law 98-63: This Act authorized the USACE Volunteer Program. The United States Army Chief of Engineers may accept the services of volunteers and provide for their incidental expenses to carry out any activity of the USACE, except policymaking or law or regulatory enforcement.
- Water Resources Development Act of 1986, Public Law 99-662: Provides for the conservation and development of water and related resources and the improvement and rehabilitation of the Nation's water resources infrastructure.
- North American Wetland Conservation Act of 1989, Public Law 101-233: This act directs the conservation of North American wetland ecosystems and requires agencies to manage their lands for wetland/waterfowl purposes to the extent consistent with missions.
- Americans with Disabilities Act of 1990 (ADA), PL101-336, as amended by the ADA Amendments Act of 2008 (PL110-325): This law prohibits discrimination based on

disabilities in, among others, the area of public accommodations and requires reasonable accommodations for persons with disabilities.

- Native American Graves Protection and Repatriation Act, Public Law 101-601: This act requires Federal agencies to return Native American human remains and cultural items, including funerary objects and sacred objects, to their respective peoples.
- Water Resources Development Act (WRDA) of 1992 PL 102-580: This act authorizes the USACE to accept contributions of funds, materials and services from non-Federal public and private entities to be used for managing recreational sites and facilities and natural resources.
- Omnibus Reconciliation Act of 1993, Public Law 103-66: Day use fees - authorizes the USACE to collect fees for the use of developed recreational sites and facilities, including campsites, swimming beaches and boat ramps.
- WRDA 1996, PL 104-303: authorizes recreation and fish and wildlife mitigation as purposes of a project, to the extent that the additional purposes do not adversely affect flood control, power generation, or other authorized purposes of a project.
- Omnibus Parks and Public Lands Management Act of 1996, Public Law 104-333: This act created an advisory commission to review the current and anticipated demand for recreational opportunities at lakes or reservoirs managed by the Federal Government and to develop alternatives to enhance such opportunities for such use by the public.
- Neo-tropical Migratory Bird Conservation Act of 2000, Public Law106-147: This act promotes the conservation of habitat for neo-tropical migratory birds.

APPENDIX E – PUBLIC COMMENT

INITIAL PUBLIC SCOPING (OCTOBER 10, 2024 to NOVEMBER 9, 2024)

COMMENT	RESPONSE
Hi,I live very close to the park and have lived here for 40 years.The reason i moved to where i live was because i could hike through the park to the lake.I hike , kayak and canoe at the lake all through the year.I have seen many changes to the area and the park over the years.I like the way the park has been managed with the limited staff.The amount of visitors to the park since i moved here has gotton out of control to the point that the people that live here are no longer using to park because of the amount of visitor from out of town and state.There are two things i would like to see happen to help what is going on.One is i feel there should be a charge per car at least on the weekends for vistors from out of the area.This money could be used to maintain the park and pay for a life gaurd.The second thing that i really hope you will consider is limiting the horse power to 9.9 hp on the boats for safety reasons.Most fisherman that have boats have a big motor and a small 9.9 hp motor that allows them to use the boats at other lake that have the 9.9 limit.It would also allow people with sail boats to enjoy the lake with out being knocked around by the wakes caused by the big boats.If you can't cut down on the hp then i feel you should limit the big boats to stay only above the no wake zone and use the main boat launch and leave preachers camp launch for the smaller boats only.There is not enougf park staff to control the large crowds they are over welmed.	Non-concur. User fees are not addressed in the Master Plan. Additionally, PA DCNR State Park law does not authorize the collection of fees for day use activities per the Conservation and Natural Resources Act of Jun. 28, 1995, P.L. 89, No. 18. USACE does not enforce boating laws at Beltzville Lake. Boating laws and regulations are enforced by PFBC. PFBC is the agency that would implement horsepower and capacity restrictions should those options be implemented in the future. There are currently no plans to change horsepower regulations at Beltzville Lake.
Thank you for managing Beltzville Lake, a precious natural resource. My family and I live in Palmerton and we have a few comments about the changes made regarding overcrowding. First, there does not seem to be a capacity monitor on crowding at Beltzville Lake - when the park hits capacity, that is it for the day and the park is "closed." However, people often depart in the afternoon, freeing up space. My family and I have previously enjoyed spending the late afternoon weekends at the lake, but with the current rules, even if there are parking spots open in the later afternoon, no one else may be allowed in given that it technically hit capacity earlier in the day. I recommend more flexibility in capacity monitoring to allow for others to be allowed in at later times. Second, there does not seem to be any priority for	1.) Non-concur. Once capacity is reached, access is closed and no new visitors are allowed to enter. Allowing additional visitors creates a greater impact on the area which cannot be supported by the current infrastructure. Additionally, by closing gates once capacity has been reached, this allows for local traffic and emergency traffic vehicles to continue to move without issues. There are no plans to change this policy due to the reasons noted. 2.) Non-concur. Memorial Day weekend and continuing through

COMMENT	RESPONSE
local vs. outsider entrances to the park. This has drastically limited enjoyment of locals like us to our precious lake. I recommend adopting a small entry fee for non-locals or finding another means to preserve access for locals on our treasured summer weekends. It is such a terrible shame that the Evergreen trailhead, which is just minutes from our home, is closed all weekend during the summer. During the week our work schedules prohibit us from hiking on the lake and we LOVED walking at Evergreen on the weekends, something we can no longer do during the summer months. Third, if there is more capacity for canoe/kayak racks at Preacher's Camp, that would be great. Sometimes we see what looks like empty racks for long periods of time and wish we could use that space (we are on the long waiting list). These are suggested areas for improvement. Thank you for managing our beautiful lake!	Labor Day, a number of trailhead parking lots including the Wild Creek, Evergreen, Cove, and Christman trailheads are closed from sunset on Friday through Monday morning each week. The closures are in effect to prevent further damage and degradation to the resource. User fees are not addressed in the Master Plan. Additionally, PA DCNR State Park law does not authorize the collection of fees for day use activities per the Conservation and Natural Resources Act of Jun. 28, 1995, P.L. 89, No. 18. Title 36 of the Code of Federal Regulations, Chapter III, Section 327 prohibits private and exclusive use, therefore USACE will not restrict use of public lands based on place of residence. 3.) Concur. USACE and DCNR are open to expanding the canoe/kayak racks in this area and will continue to discuss this possibility.
We would like to see the dead end off Old Mill Road repaired. It is a great place for locals to walk. Especially in the summer when Beltzville is full. The road is in terrible shape. Rebar sticks up in some of the holes which can flatten tires. Also, we have a beautiful covered bridge in the park that is in need of a new roof and other repairs.	Concur. USACE has identified this area as needing improvement. USACE and PA DCNR are currently coordinating plans to improve the area once funds are received. PA DCNR requested and received funds to restore the bridge and improvements are in progress. Additional funds requested for repairs.
As a life long resident of Towamensing township and an ardent conservationist, I would like to see access to the park more restrictive to non residents. It’s clear there is a very well defined difference in how residents and non residents care for and use the park. On weekends thousands of non residents descend on the park and completely trash any area they can access. This is followed be a large team of local volunteers the de ends on these same areas during the week and clean up	Non-concur. User fees are not addressed in the Master Plan. Additionally, PA DCNR State Park law does not authorize the collection of fees for day use activities per the Conservation and Natural Resources Act of Jun. 28, 1995, P.L. 89, No. 18. Title 36 of the Code of Federal Regulations, Chapter III, Section 327 prohibits

COMMENT	RESPONSE
the mess. This has been the routine for years during the summer. it's time to change this behavior and charge a $100 deposit for an assigned use area to be refunded upon verification that the assign use location is clean and undamaged. I'm sure the clean up volunteers would rather verify a spot is clean, rather than pick up other peoples garbage.	private and exclusive use, therefore USACE will not restrict use of public lands based on place of residence.
The friends of Beltzville are in their third year of our Concervation Project. Each Fall Park Maintenance remove invasives in a designated area. Friends of Beltzville purchase native trees and shrubs as well as four foot welded wire to protect the plantings. Each plant is labeled with common and botanical names. Friends maintain these areas through the growing season. it would be highly educational and beneficial if an interpretive sign could be erected in this area. People need to know the impact of this project on insects, wildlife, and biodiversity of our Park. Thank you.	Concur. USACE is exploring signs which meet current sign standards.
My wife and I are both disabled vets and can't even use Beltzville because it's so overrun and full of illegal activity. The answer is not camping sites. The rangers do little to control the issues now. I can't imagine how much worse it will get with the addition of camping sites.	Noted. There are currently no plans to expand camping at Beltzville Lake.
Additional features that may warrant inclusion in Master Plan or other document updates (if not already mentioned): a) handicap accessible facilities at Preacher's Camp boat launch b) environmental education center, c) boat rental concession, d) solar panels downstream of embankment, e) firing range in spillway used by regional law enforcement, f) water intake constructed by local fire company at Pine Run boat launch. Also include elimination of 2 COE residences and barn that were burned down for training local fire companies. Other items to consider include potential for hydropower development, planting of chestnut trees, use of COE area by National Guard/Army Reserve for training purposes, triathlon events, Hollywood Movie Productions (The Last Airbender) May also include mention of conducting facility tours, fossil	Concur. A thru D and F. Non-concur. E. The construction of a firing range at Beltzville Lake does not align with existing and future management strategies for the lake.

COMMENT	RESPONSE
hunting in spillway and fire/rescue training at tower, conduit/stilling basin and spillway bridge	
The only issue that concerns us is the occasional drawdowns of Beltzville dam. F.E. Walter Dam releases are publicized, and we wonder why we aren't informed as well when there is a release of water. If memory serves, the last release was drastic (November of 2016). I still have photos of the shoreline at that time, and it is hard to believe it's the same lake. We heard that this is done to push the salt water back down the Delaware River and bay. You do what needs to be done, obviously, but please keep residents informed ahead of time so we don't wonder what happened to our lake.	Non-concur. Water management activities are not covered under the Master Plan. The releases referenced are contracted water supply releases as directed by the Delaware River Basin Commission. Water supply is a congressionally authorized purpose of Beltzville Dam. These releases are directed for salinity repulsion in the Delaware Bay. All releases are posted daily (Monday-Friday) on the Beltzville Lake Facebook page, www.facebook.com/beltzvilledam. Additionally, weekend flow information is posted on www.nap-wc.usace.army.mil/nap/index.html. The NAP Public Affairs Office routinely provides press releases for Beltzville Lake water management activities to local news outlets.
My husband and I recently retired and bought a pontoon boat in late August. We are new to boating so we have been taking it out at Beltzville since it is the only place nearby that we can take it because of the gas motor. We only go during the week since we heard the weekends are very busy at the boat docks. I feel it sometimes even gets busy during the week because there are only two docks at Pine Run boat launch that can be used and we have to wait for others to disembark and go get their trailer. I would like to see the park have more boat docks/launches if possible.	Non-concur. USACE and PA DCNR do not have plans to increase the boat launches or docks at Beltzville Lake. Infrastructure at both locations noted do not warrant or allow for additional docks. Additionally, this would increase the number of boats on the lake and would likely exceed capacity. There are plans to replace the existing docks in these areas.

COMMENT	RESPONSE
I enjoy having Beltzville in my backyard and would like to keep seeing it thrive. I would like to see some kind of nature trail added to the park - similar to what is at Raystown - Hillside Nature Trail. This is something that I would even like to be included with. I think with so many families visiting the park, this would be a good opportunity to educate the public about the value of Nature. I would also be interested in removing invasive species from the woods. Many of the people do not understand the impact of the invasives and i think there is an opportunity to educate people. I would NOT like to see camping added to Beltzville.	Noted. PA DCNR currently offers several multi-use trails. See Ch. 5 for a full description of all trails at the lake. There are currently no plans to expand the existing trails. Invasive species control is one of the many management objectives for USACE reservoirs. At Beltzville Lake there are programs to remove certain invasives, but overall eradication is difficult. USACE, PA DCNR, and PA GC will continue to manage for invasive species as funding allows.
Please add a handicap accessible trail. Paved or packed stone for wheelchair.	Noted. PA DCNR and USACE is committed to exploring future opportunities to install accessible trails and facility as funding allows.
1. Campground Consideration: Please refrain from adding any campground, as they may lead to further degradation of land resources. 2. Signage Improvements: o Increase signage around the land to clearly indicate that it is PA State Game Lands, DCNR Parks, Lake is Fish and Boat, and Army Corps areas. o Include signs in Spanish, using concise language to communicate rules (e.g., “No Swimming – Not a State Park”). In Game Lands Area. o Add signs explaining why Wild Creek is closed on weekends due to its sensitive habitat and the negative impacts of overuse. o Educate visitors about the effects of social trails on the understory and wildlife. 3. Regulating Jet Skis: Address the dangers posed by jet skis and their contribution to land erosion; consider restrictions to protect natural resources. 4. Increased Patrols:	1.) Campground Consideration: Concur. There are currently no plans to add campsites at Beltzville Lake. 2.) Signage Improvements: Noted. 3.)Regulating Jet Skis: Noted. Jet ski operation is currently under review at Beltzville State Park. 4.)Increased Patrols: Noted. Visitor Safety is a priority to USACE and PA DCNR. While USACE does not provide patrol within the Beltzville State Park due to the State Park lease agreement terms, PA DCNR will continue to work with additional agencies to support visitor safety objectives. 5.) Parking and Recreation Areas: Concur. There are currently no plans to expand parking at Beltzville Lake. 6.) Visitor Education: Noted. USACE has interpretive signage posted within the Visitor's Center to educate visitors regarding litter. A recycling dumpster is located at the Beltzville State Park

COMMENT	RESPONSE
Request support from all agencies to enhance patrol presence during busy summer weekends to monitor park use. 5. Parking and Recreation Areas: Avoid expanding parking lots or recreational areas, as current infrastructure struggles to handle existing overuse. 6. Visitor Education: Implement educational programs for park visitors, hunters, and fishermen about the impacts of litter. Explore options for recycling within the park. 7. Invasive Species Management: Support Friends of Beltzville in their efforts to remove invasive species and plant native flora, with signs highlighting the importance of these actions. 8. Infrastructure Support: Upgrade outdated facilities, including bathrooms, EIC, and office spaces, to better serve park visitors. 9. Area Restrictions: Consider gating areas (game lands) frequently used for grilling, alcohol consumption, and swimming, as they are not intended for such activities and lack adequate patrol on summer weekends. 10. Staff Support: Request the Army Corps to provide visible staff support to assist the Game Commission and Fish Commission in managing the park. 11. Volunteer Collaboration: Acknowledge and build on the recent volunteer efforts from Canine Water Rescue to enhance safety in the park and beach areas.	maintenance building. Individual cans would be difficult to maintain as volunteers and staff are not currently able to support. 7.) Invasive Species Management: Noted. Multiple groups manage for invasive species at Beltzville Lake. More information can be found in Ch. 2 regarding invasive species management. Invasive species control is one of the many management objectives for USACE reservoirs. 8.) Infrastructure Support: Noted. USACE constructed Beltzville Lake based on existing conditions at the time. Increasing infrastructure capacity would bring in more visitation which would over-crowd the area even further. Infrastructure can currently support the existing visitation. Infrastructure rehabilitation is ongoing and as funding allows. 9.) Area Restrictions: Non-concur. The closure or gating of areas would not improve the illegal access and use of the areas referenced. PAGC and USACE have discussed this strategy previously. Many of these areas have already been restricted. 10.) Staff Support: Non-concur. USACE at Beltzville Lake does not receive funding for additional Park Rangers and cannot support a physical presence as requested. PA DCNR does the patrol and enforcement. USACE assists the PAGC in efforts such as fish stocking, surveys, food plots and more. USACE funding at Beltzville lake is through the Environmental Business Line and not the Recreation Business Line.

COMMENT	RESPONSE
	11.) Volunteer Collaboration: Noted. PA DCNR has supported of the group referenced and will continue to support the Canine Water Rescue group in the future.
1. Status of originally planned additions such as Twinflowers camp ground and Trinity Gorge Day Use Area need to be updated. Any planned changes due to increased demand need to be identified. 2. downstream facilities (vault latrine) has been removed. 3.Model airplane flight area needs to be included. 4. any other features to be enhanced or added need to be identified (ie. fossils , disc golf) 5. Soccer field used bu Towamensing Twp. needs to be identified. It's apparent exclusive use seems to be contrary to federal policy concerning areas open to all on equal terms. 6. State Park currently closes secondary recreation sites and Corps of Engineers office parking lot during period of heavy usage (summer weekends). This is contrary to State's commitment to operate and maintain project recreational features. 7. Project real estate requirements should be reevaluated in light to state plans for future development (specifically Twinflowers campground area)	1.) Noted. There are no plans to expand day use to camping at Beltzville Lake. Land classifications for these areas have been updated to reflect land use. 2.) Concur. 3.) Concur. 4.) Concur. 5.) USACE concurs that the area will be identified in updated Master Plan mapping. USACE does not concur with the statement that the fields are exclusive use. The soccer field referenced is used by multiple groups on weekends per a set schedule coordinated with PA DCNR (Arbon United, Towamensing Township). The fields are open to all individuals outside of these previously scheduled activities. 6.) Non-cnoncur. PA DCNR does close secondary recreation sites on summer weekends as well as USACE parking areas because visitors utilize these areas well beyond their intended use. The impact to these areas creates additional stress on natural resources in the area. USACE visitors center and public restrooms are not open on the weekends. The referenced parking lot supports these areas during the weekdays. 7.) Non-concur. There are no future plans to expand camping at Beltzville Lake.

COMMENT	RESPONSE
I attended the Beltzville Lake open house last night with my wife. We spoke to you regarding several issues that concern us about the park operations and future changes we have heard about. As you suggested, I am sending our concerns to you via email to get them on record. First is the summer weekend and holiday mass influx of people that come to the park. As discussed last night with you, the real issue started in 2020. That year the amount of people vastly over ran the true capacity of the entire park and shed light on the inability of the DCNR to monitor and control the amount of people. As I told you last night it was actually scary for us to attempt to drive on Pohopoco Dr. with these people disregarding all traffic safety laws and people just standing in the middle of the street. At the end of that year the park officials (DCNR& ACE) started to gate off the parking lots along Pohopoco. We definitely appreciated that as it helped somewhat. The next year up to the current year was much better but still needs additional controls put in place. The issues as we see them are: • Overcrowding at the park entrance with cars attempting to enter. This creates a very unsafe traffic condition on Pohopoco Dr. and once the park reaches capacity Pohopoco becomes a very dangerous road from Harrity to Trachsville. The reason is the people trying to get into the park and then once they are turned away when it reaches capacity these cars do not obey any basic traffic laws or safety regulations. They just pull over anywhere they want, even in the middle of the road and sometimes very abruptly. Once partially pulled over they will congregate in the middle of the road. This truly makes Pohopoco very dangerous to travel on. Also it puts a lot of unneeded traffic in our neighborhood! Part of this is because these people are trying to find another way to get to the lake, any way they can. I have personally observed them attempting to park on private property (i.e. front lawns), pulled over on the side of the road with the car ¾ still on Pohopoco. They definitely like the parking lots that do not have gates across them, they are the lots across from Beltsville Estates (Tar Rd.), I think it is #416. It is the lot that the neighbor was mugged in.	* Overcrowding - Noted. Once capacity is reached, access is closed and no new visitors are allowed to enter. Allowing additional visitors creates a greater impact on the area which cannot be supported by the current infrastructure. Additionally, by closing gates once capacity has been reached, this allows for local traffic and emergency traffic vehicles to continue to move without issues. There are no plans to change this policy due to the reasons noted. * Additional camping and cabins - Noted. There are currently no plans to add campsites at Beltzville Lake. * Safety - Concur. Visitor Safety is a priority to USACE and PA DCNR. While USACE does not provide patrol within the Beltzville State Park due to the State Park lease agreement terms, PA DCNR will continue to work with additional agencies to support visitor safety objectives.

COMMENT	RESPONSE
I sent a picture to the PGC person with 3 cars parked and about 10 people with coolers heading down to the lake. And on that day the swimming area wasn't even closed yet. I did not receive a response. I have even witnessed two men carrying a jet ski across the farm field from that lot. Also the lots on both sides of Pohopoco just past the big dip in the road going toward the main boat ramp. I would think there are at least a couple ways to combat this, like making people sign up on line for reservation each weekend and have them put their driver's license information and vehicle license plate number in. That way once capacity is reached no more reservations are accepted. Also enforcing the no alcohol/drug rules of the park would help deter people from coming just to abuse the park. The DCNR should be checking all cars entering for alcohol in their coolers and for valid driver's license, registration and insurance. I know they are required. This should be posted on the WEB site and FB page so there are no surprises and on a sign at the ACE driveway or before that. Also adding gates or even yellow no trespassing tape across the parking lots I mentioned would help, and definitely towing cars that cross the tape would even help more. • The plan to add camping and cabins to the park is of great concern to us. Because of the lack of alcohol abuse enforcement at the park justifies our concern that these sites will turn into a free for all. I know you said the citations for alcohol in the park have been at an all-time high over the past couple years, the pictures I continue to see posted on line of the continued abuse says something different. I assume the tickets are given out, the alcohol is put away and when the DCNR ranger leaves the alcohol is back out and flowing. I also assume the tickets are never paid. A way to curb this completely is to implement the requirements I mention above and add that if someone has an unpaid ticket they are denied access to the park. Also DCNR rangers should be patrolling the areas of the park when people are on the beach area and boat ramps. Also all boats and jet skis should be checked for current registration and insurance as required. As for the proposed camping sites,	

COMMENT	RESPONSE
there should be sufficient DCNR rangers on site whenever campers are utilizing the camp sites to enforce all rules. If this is not the path forward, then the plan for camping sites should be scrapped. We did appreciate you listening to our concerns and understand that ACE is only one part of this property but I think all departments involved with overseeing the entire property needs to ensure that all rules are enforced, safety is the first concern and that this operation does not disrupt the lives of the residents surrounding the Beltzville Lake property. This has not been the case since 2020. The safeguards and enforcements that will correct the issues need to be put in place! As we discussed last night, before 2020 the only weekends that were somewhat of an issue where the 3 holiday weekends during the summer and the park even did a much better job of enforcement. We have also discussed the park with our neighbors many times and they are in line with these issues and probably more.	
Beltzville does not need to expand its facilities to accommodate more visitors. The park is already overrun with unsavory characters that cannot be controlled or patrolled by available park supervision. Beltzville does not need a campground built to attract even more unsavory characters encouraging them to stay for longer periods of time. Day use facilities are plenty so visitors are forced to leave at the end of the day, mostly back to New York and New Jersey which are the places from which majority of visitors hail, not the ABE/ LV or local area which is originally specified in the MP of 1971. The park is so overrun by visitors that local roads are no longer equipped to handle the increased volume of traffic, and local traffic laws are being broken on a consistent basis. The state park must have sufficiently lower funding now than in 1971, because there are not enough rangers to control the unruly crowds or to manage trash disposal (there certainly is not one trash can per four picnic tables available and able to be emptied by state employees as specified in the MP), or to even enforce the simplest, most basic rules. Funding	Noted. There are currently no plans to expand camping or day use areas at Beltzville Lake. USACE does not enforce boating laws at Beltzville Lake. Boating laws and regulations are enforced by PFBC. PFBC is the agency that would implement horsepower and capacity restrictions should those options be implemented in the future. There are currently no plans to change horsepower regulations at Beltzville Lake. Title 36 of the Code of Federal Regulations, Chapter III, Section 327 prohibits private and exclusive use, therefore USACE will not restrict use of public lands based on place of residence.

COMMENT	RESPONSE
needs to go to more personnel to manage the chaos that already exists at the park, not to the expansion of facilities. The park will benefit more by leaving the land in its natural state for the enjoyment of visitors rather than constructing a new campground or more facilities. There also needs to be a cap on the size of boat motors allowed to use the lake. And it would be very beneficial if local/ PA residents would have priority use of the park over out of state visitors.	
i. Incompatibilities. The original Master Plan for the Beltzville project contained incompatibilities. Flood control, recreation, water supply, even hydroelectric generation were all mentioned. If recreational facilities are built along the shore, they may be flooded. If water releases are called for to help to prevent salt water intrusion on the Delaware River, the boat ramps and beach may be left high and dry. If a town wanted to tap into the lake for its drinking water supply, the E.coli bacteria and the oil from the boats can be a problem. At the time Beltzville Dam was constructed the Corps had to justify the cost. By estimating a dollar amount for flood control, water supply, recreation, and electrical generation, the project could easily be justified. Fifty years later Beltzville continues to have incompatibility problems. Birders want a quiet park where they can hear warblers; canoeists and kayakers want a peaceful lake; jet ski operators and water skiers want the freedom to run high-powered water craft; day use visitors want to swim and grill; hunters and people who fish hope to pursue their sports without interference. Conflict seems inevitable. Any master plan revision should consider the best ways to minimize these conflicts. In some cases (the use of jet skis, for example), the simple answer would be to prohibit certain activities. 2. Coordination issues. I am a member of the Towamensing Township Historical Commission. As a Commission we have identified certain artifacts or sites within the project	1.) Incompatibilities: Concur. Competing interests ongoing due to the multi-use of the project.- see chapter 6. 2.) Coordination Issues: Noted. This area is leased to PGC where larger maintenance equipment is stored. The barn was unsafe. PGC is responsible for the maintenance and upkeep of the leased area. The barn referenced was determined to not have historical significance through a determination process by USACE and PGC and would have been costly to repair, therefore a new barn was constructed. USACE and PA DCNR communicate with the agencies referenced on a regular basis. 3.) Protecting Nature: No camping is proposed. USACE agrees that illegal campfires should not be condoned. Shoreline management is a priority for USACE and several mitigation approaches have been implemented over the years. 4.) Agriculture: Concur. USACE has multiple agricultural leases with individuals around the lake. The lease agreements define the approved methods for application and farming practices and are approved by USACE before implementation. The use of sewage sludge is not permitted by USACE and regulated by the EPA.

COMMENT	RESPONSE
boundaries as historically important, including the Buck Covered Bridge (although it now rests in Franklin Township), the David Guion house site, the Christman Farm cow bridge, and a number of other sites. Imagine our shock when one day we found the Willard Stout barn, a traditional Pennsylvania Dutch bank barn over 100 years old, had been leveled to the ground. When we went to the Beltzville State Park office to ask how this could have happened, we were told that the Pennsylvania Game Commission made that decision. We never received a reply from the Game Commission when we inquired about this action. There was, evidentially, no input from the Corps, the Park, the Fish and Boat Commission (a barrel of oil leaked during the demolition), or the local populace. A large number of stakeholders are involved or concerned with the Park and its environs, including federal, state, and local governments. Four agencies are directly involved: the Corps, DCNR, the Game Commission, and the Fish and Boat Commission. In addition, there are at least three governmental bodies concerned with project activities: Towamensing Township, Franklin Township, and Carbon County. For example, when overflow visitors are directed to Mauch Chunk Lake Park, that has a direct effect on the County Park. Finally, the Bethlehem Municipal Water Authority main water conduit crosses the bottom of the lake. Any master plan revision should address the need for coordination, or at least consultation, between these various governmental agencies. 3. Protecting nature. In any discussion of the future of the project, the need to protect the natural features of the park should receive the highest priority. When visitors crowd the Wild Creek Falls area in numbers that damage mature hemlock trees or picnickers build illegal campfires in wooded areas, that is unacceptable. When the wake from jet skis and boats pulling water skis erodes the shoreline or the roar frightens aquatic birds, that is unacceptable.	USACE cannot provide guidance to acres not included within the fee boundary. 5.) Destructive Activities: Overnight camping is not permitted.

COMMENT	RESPONSE
With development increasing around the project area periphery, the need to protect the natural spaces in the park increases. We certainly do not need an overnight campground with the attendant air and water pollution it would bring. Any revision should have as its number one priority the protection of the natural resources of the project. 4. Agriculture. The Corps has had very little concern for agricultural activities. At least ten prosperous family farms were taken for the project, even though the lake itself did not impact the fields or farm buildings on those farms. Now some of those fields are leased for agricultural purposes. This is a reasonable policy and does not interfere with recreational or nature-related visitor activities. In fact, observing hay baling or chisel plowing may help visitors better understand the workings of Pennsylvania agriculture. The Master Plan revisions should make agricultural activities more transparent and visitor-friendly. The rental policy should be publicized and made available to remaining area farmers. The use of sewage sludge with its PFAS and potentially harmful pharmaceuticals should be prohibited on Corps lands, including the fields farmed by the Game Commission. 5. Destructive activities. Overnight camping should not be permitted on any part of the project area. That type of camping brings with it fires, trash, drinking, noise, and air and water pollution. Beltzville Lake is popular with kayakers, canoeists, and the people who like to fish from boats. It is a relatively small lake, and there is really no ptace for large power boats. It certainly is no place for water skis, jet skis or drunken boaters. An upper limit should be placed on the horsepower of any power boats on the lake. Every stakeholder within the purview of the Master Plan should cooperate in preventing activities that are destructive to the natural or human resources.	

COMMENT	RESPONSE
It is such that there are many locations and resources throughout the state that are designated for the use and enjoyment of its residents. However, this is not true at Beltzville Lake. Over the years, the situation at the lake has become increasingly dangerous. This is not only true for the attendees to the lake, but for the local residents and the resources and wildlife within the park and surrounding area. There are numerous accidents, drowning, crime, drugs, etc. It has clearly become an unmanageable situation and there is absolutely no reason why local taxpayers and residents should suffer at the hands of visitors who do not care about what happens because they do not live in this community. They have damaged the environment through pollution and participating in illegal activities. I live off Pohopoco Drive and I cannot even travel down my own road on the weekends in the summer, nor take advantage of the beautiful lake that is just five minutes from my home. I don't understand why we are taking on the burden from mismanagement of this property. It is my sense that if something is not done to control the crowds and the abuse of the property, it's irrelevant about what your plans are for the futore because that land will become a wasteland and cease to exist for its original purpose	Noted. Visitor safety is a priority to USACE and PA DCNR. While USACE does not provide patrol within the Beltzville State Park due to the State Park lease agreement terms, PA DCNR will continue to work with additional agencies to support visitor safety objectives.
I am concerned about the following: 1)Traffic on Pohoco Drive that prevents emergency vehicles getting through. 2) Alcohol and drug udages- visitors leaving the park drunk or high. 3) Swimming, picnicing, and partying in undesignated areas. 4) Constant loud music 5) Not enough patrolling of the park by Park Rangers throughout the day. Tend to hang at the gate (entrance). 6) Destruction of the environment (garbage in particular). 7) Campgrounds - if they become a reality who will monitor them or will they become a "free-for-all" like the park.	Noted. Visitor safety is a priority to USACE and PA DCNR. While USACE does not provide patrol within the Beltzville State Park due to the State Park lease agreement terms, PA DCNR will continue to work with additional agencies to support visitor safety objectives. There are currently no plans to add campsites at Beltzville Lake.
I am providing comment as a citizen of Franklin Township and also as the Fire Chief of the Franklin Township Volunteer Fire Company, which services the western area of the dam and most of the day area of Beltzville State Park. 1. One of my main concerns is access to the operational land area of the dam in the event of an emergency. We	Beltzville Lake Project Manager reached out to the commentor and met in person to further discuss the comment submitted. 1) Access - Concur. Access to the area referenced was provided to

COMMENT	RESPONSE
are unable to access some of the gates because of issues with keys. We just feel that it would save considerable time and effort to have access to the areas surrounding the breast and spillways. A water related incident in the area around the breast or lower cove areas could require some quick access, which we currently do not have. If keys are a problem, we could suggest some strategically located knox boxes, which are security boxes that hold keys that can be securely accessed by using a fire company master key. These boxes are in service nation wide. Just something to think about. 2. Another major concern is Old Mill Road, from where it turns from Township road to the breast of the dam. The road is in deplorable condition and needs repairs. I don't believe much has been done to the roadway since the dam was constructed. Our trucks are taking a beating while driving on the road. The small bridge that crosses the Sawmill Run probably hasn't been inspected since the 70's. We take some pretty heavy trucks over the bridge and are concerned that the bridge could have structural issues. We had a rescue near the discharge pipe of the dam many years ago and access was required with our trucks. Our trucks have only gotten larger and heavier since then so this is a concern. 3. The State Park portion of the dam has become a problem over the last few years due to overcrowding. A possible suggestion would be to install a second beach area to the east of the Pine Run boat launch. There would be a lot involved in such a venture but it is a possible suggestion to help alleviate congestion and traffic problems around the park. Traffic is a major concern for emergency vehicle access. Enough said.	the commentor during the discussion. 2) Road repairs - Concur. USACE has identified this area as needing improvement. USACE and PA DCNR are currently coordinating plans to improve the area once funds are received. 3) Second beach area - Non-concur. There are currently no plans to add additional beach areas at Beltzville Lake.
Lehighton, PA is my hometown and I've lived in the area practically my entire life. I worked at Beltsville State Park in the early 2000's when I was a teenager in the maintenance department during the summer. The park from as long as I can remember always had an overpopulation problem that was never addressed. The facilities needed updates back when I was working there. In July, I went out there on a Sunday afternoon to walk around and enjoy the day. I was unable to enter the park because there was 6 officers parked at	Overcrowding - Noted. Once capacity is reached, access is closed and no new visitors are allowed to enter. Allowing additional visitors creates a greater impact on the area which cannot be supported by the current infrastructure. Additionally, by closing gates once capacity has been reached, this allows for local traffic and emergency traffic

COMMENT	RESPONSE
the entrance of the park blocking car from entering the park. "The parks closed" one officer told me as I rolled my window down and try to get an explanation as to why I was being denied entry. I thought to myself, In my own hometown, I'm being prevented from entering my hometown state park! I did 5 years active duty in the Army to come home to my hometown state park being guarded as if it's the Demilitarized Zone of North Korea! I went to the park office irate and spoke to {NAME REDACTED} the park manager later the next week. {NAME REDACTED} told me there was infrastructure issues that the bathrooms can't handle the capacity of people on the weekends. I knew this to be an issue 25 years ago when I worked there. Why has this not been addressed? {NAME REDACTED} tells me: "its above his paygrade". I left there unhappy with the cliché answers they seeming tell everyone that inquires about the issues there. I called up the DCNR and spoke to two higher level park employees. One being {NAME REDACTED} and the other being a guy by the name of {NAME REDACTED} whose last name I cant recall. {NAME REDACTED} deflects all the questions I have and give me the same basic answers Which infuriates me! It seems to me, from my military experience, that nobody in these positions want to step on anybody else's toes to get the job done to make the necessary changes needed to fix the infrastructure problems. They all seem to have the same basic response to my questions. "It's not that easy!", "That's above my paygrade." and on and on and on! Fix the damn problems! Get off your {REDACTED} and take initiative and fix the infrastructure problems so the bathrooms don't run out of water and people end up {REDACTED} in the lake! It's a beautiful lake with lots of potential. I love Beltsville state park. I've been going there since I was a child. I have fond memories there and would like to keep those memories in my mind without the current situation I've had with the park. Changes need to be made.	vehicles to continue to move without issues. There are no plans to change this policy due to the reasons noted. Infrastructure Support: Noted. USACE constructed Beltzville Lake based on existing conditions at the time. Increasing infrastructure capacity would bring in more visitation which would over-crowd the area even further. Infrastructure can currently support the existing visitation. Infrastructure rehabilitation is ongoing and as funding allows.
AGENCY COMMENTS	
Pennsylvania Fish and Boat Commission	Letter and USACE response included at the end of Appendix E.

COMMENT	RESPONSE
United States Environmental Protection Agency, US EPA Mid-Atlantic Region	Letter and USACE response included at the end of Appendix E.

DRAFT MASTER PLAN PUBLIC COMMENTS

Section to be added after draft release.

APPENDIX F – ACRONYMS

AQI	Air Quality Index
CFS	Cubic Feet per Second
CRMP	Cultural Resources Management Plan
DM	Design Memorandum
EA	Environmental Assessment, NEPA Document
EOP	Environmental Operating Principles
EP	Engineering Pamphlet
EPA	United States Environmental Protection Agency
ER	Engineering Regulation
ESA	Environmentally Sensitive Area
°F	Degrees Fahrenheit
FONSI	Finding of No Significant Impact
FWCA	Fish and Wildlife Coordination act of 1958
GIS	Geographical Information Systems
HDR	High Density Recreation
HPMP	Historic Properties Management Plan
HQ	USACE Headquarters (also HQUSACE)
IPaC	Information for Planning and Consultation
LDR	Low Density Recreation
LEED	Leadership in Energy and Environmental Design
MP	Master Plan or Master Planning
MWCM	Master Water Control Manual
MRML	Multiple Resource Management Lands
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act, 1970
NGVD/NGVD29	National Geodetic Vertical Datum (1929)
NHPA	National Historic Prevention Act
NRHP	National Register of Historic Places
NRCS	Natural Resource Conservation Service
NRHP	National Registry of Historic Places
NWI	National Wetland Inventory
O&M	Operations and Maintenance
OMB	Office of Management and Budget
OMP	Operations Management Plan for a specific lake Project
PA DCNR	Pennsylvania Department of Conservation and Natural Resources
PL	Public Law
PO	Project Operations
RPEC	Regional Planning and Environmental Center
SCORP	Statewide Comprehensive Outdoor Recreation Plan
SGCN	Species of Greatest Conservation Need
SHPO	State Historical Preservation Office
TCP	Traditional Cultural Properties
U.S.	United States (also US)
USGCRP	U.S. Global Change Research Program

USACE	United States Army Corps of Engineers
USFWS	U. S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VM	Vegetative Management Area