

North Springfield Lake Master Plan

Connecticut River Basin

Springfield and Weathersfield, Windsor County, Vermont

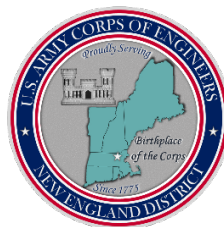
2026

DRAFT REPORT



US Army Corps
of Engineers®
New England District

The North Springfield Lake Master Plan was produced by the U.S. Army Corps of Engineers Regional Planning and Environmental Center (RPEC) for the New England District (NAE).



EXECUTIVE SUMMARY

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

ES.1 PURPOSE

The North Springfield Lake Master Plan (hereafter Plan or Master Plan) is a complete revision of the 2004 *North Springfield Lake Master Plan*. The revision is a framework built collaboratively to guide appropriate stewardship of U.S. Army Corps of Engineers (USACE) administered resources at North Springfield Lake over the next 25 years. The 2004 Master Plan (2004 MP) is nearing its intended 25-year planning horizon and does not reflect the growing population around the lake and regional recreation needs.

North Springfield Lake was authorized as a flood control project for the Black River watershed through the Flood Control Act of 1936. It has been in operation since September 1960. In addition to the primary mission of flood control, 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 from the 2004 MP for all fee lands as a basis for the 2026 North Springfield Lake Master Plan. Due to this more precise measurement technology, discrepancies between the acreages documented in the 2004 plan and the recalculated acres were found. The 2026 North Springfield Lake Master Plan revision reflects the recalculated 2004 MP acres throughout the document. Both the 2004 and 2026 MP acres may differ from the acres on record with the USACE New England District Real Estate Office or those documented within the Water Control Manual for the North Springfield Lake and Dam, which is maintained by the USACE New England 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 North Springfield Lake, Vermont 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. Water management is addressed in the 1999 Connecticut River Basin Master Water Control Manual (MWCM) Appendix C: Black River: North Springfield, the Master Plan acknowledges that fluctuating water level for flood risk management can have a dramatic effect on outdoor recreation, especially at boat ramps and swim beaches.

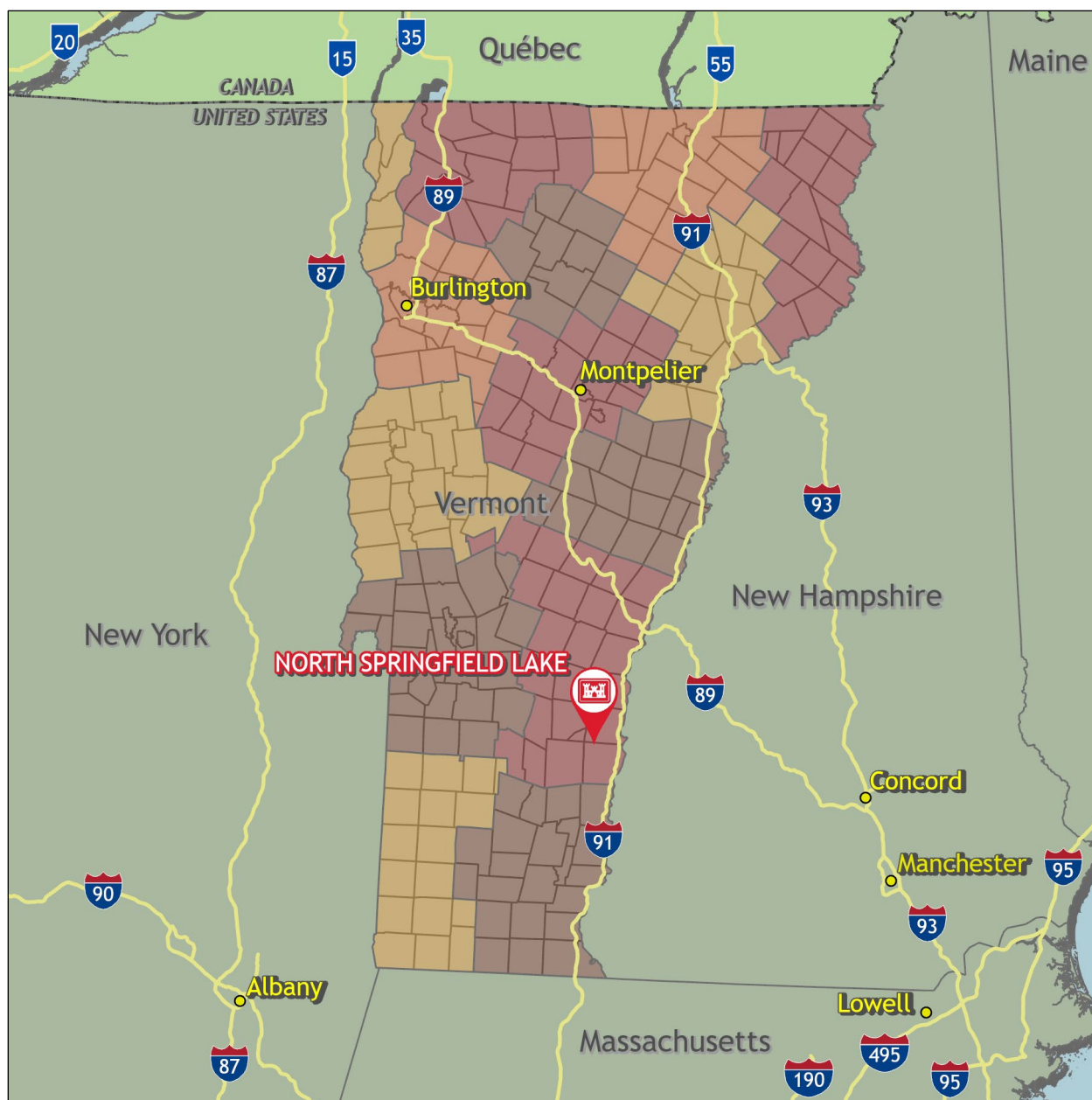


Figure ES.1 Vicinity Map of North Springfield Lake

According to the 1999 Connecticut River Basin MWCM, there are 100 acres of water surface at the permanent pool of 467 feet National Geodetic Vertical Datum (1929) (NGVD29) at North Springfield Lake (USACE, 1999). 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 2004 Master Plan. 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. A draft Environmental Assessment (EA) was prepared in conjunction with the Master Plan to evaluate the impacts of alternatives and can be found in Appendix B.

On April 17, 2025, a public open house was held at the Springfield Town Library in Springfield, Vermont to inform the public of the intent to revise the Master Plan. The public input period remained open for 30 days from April 17, 2025 to May 16, 2025. 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 3 comments for North Springfield Lake. These comments and the USACE response can be found in Appendix E.

A public open house will be held for the North Springfield 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 North Springfield Lake Draft Master Plan. The open house will have 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 North Springfield Lake was reclassified either by a change in nomenclature required by regulation or changes needed to identify actual and projected use. Table ES.1 illustrates the prior and revised land and water classifications, which includes an increase in Project Operations and decrease in High Density Recreation. Multiple Resources Management Lands (MRML), a 2004 Master Plan land classification, was decreased, however this was largely due to the updated naming of this land classification which is reflected in the increase of Low Density Recreation and Wildlife Management. Additionally, there was a significant decrease in acres for ESA. The previous North Springfield Lake Master Plan did not classify water surfaces. The 2026 Master Plan has water classifications for open recreation and restricted water surfaces.

**Table ES.1 Change from 2004 Land and Water Surface Classifications to 2026
Proposed Land and Water Surface Classification**

Prior Land Classifications (2004)	Acres	Proposed Land Classifications (2026)	Acres	Net Difference
Project Operations	98	Project Operations (PO)	143	45
Recreation	16	High Density Recreation (HDR)	8	(8)
Multiple Resources Management Lands (MRML)	1160	Multiple Resource Management Lands (MRML)	0	(1,160)
—	—	Low Density Recreation (MRML-LDR)	408	408
—	—	Wildlife Management (MRML-WM)	660	660
Environmentally Sensitive Area (ESA)	67	Environmentally Sensitive Area (ESA)	0	(67)
LAND TOTAL	1,341	LAND TOTAL	1,219	(122)
Prior Water Surface Classifications (2004)	Acres	Proposed Water Surface Classifications (2026)	Acres	Net Difference
—	—	Open Recreation	120	120
—	—	Restricted	2	2
WATER TOTAL	0	WATER TOTAL	122	122
TOTAL FEE	1,341	TOTAL FEE	1,341	0

*2004 acres are approximate based on digitizing the 2004 land and water classification map. Total fee acreage differences from the 2004 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 2004 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 North Springfield Lake. Chapter 2 consists of an inventory and analysis of North Springfield 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 North Springfield 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).

A draft Environmental Assessment was developed with the Master Plan, which analyzed alternative management scenarios for North Springfield Lake, in accordance with federal regulations including the National Environmental Policy Act of 1969, as amended (NEPA); and the Department of Defense Procedures for Implementing NEPA. The draft EA is a separate document that informs this Master Plan and can be found in its entirety in Appendix B.

The draft EA evaluated two alternatives as follows: 1) No Action Alternative, which would continue the use of the 2004 Master Plan, and 2) Proposed Action Alternative, the adoption and implementation of this Master Plan. The draft 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

North Springfield Lake is located on the Black River in the towns of Springfield and Weathersfield, Vermont. North Springfield Lake is approximately 8.7 miles upstream from the confluence of the Black and Connecticut Rivers, just northwest of the Village of North Springfield adjacent to the Hartness State Airport. The project consists of about 1,384 acres of fee-owned land, and about 376 acres of flowage easement. The project location is shown in Figure 1.1.

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 North Springfield 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 purposes of North Springfield Lake. The New England District first created a Master Plan for the reservoir in May 1961 with the approval of Design Memorandum No. 9. This Plan was later replaced by the approved February 2004 Master Plan. In 1999, USACE discontinued use of the Design Memorandum system as a means of organizing the many phases of civil works projects, therefore, the term “Design Memorandum” is not used in the title of this Master Plan revision.

National USACE missions associated with water resource development projects may include flood risk management, water supply, water quality, navigation, recreation, environmental stewardship, 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.

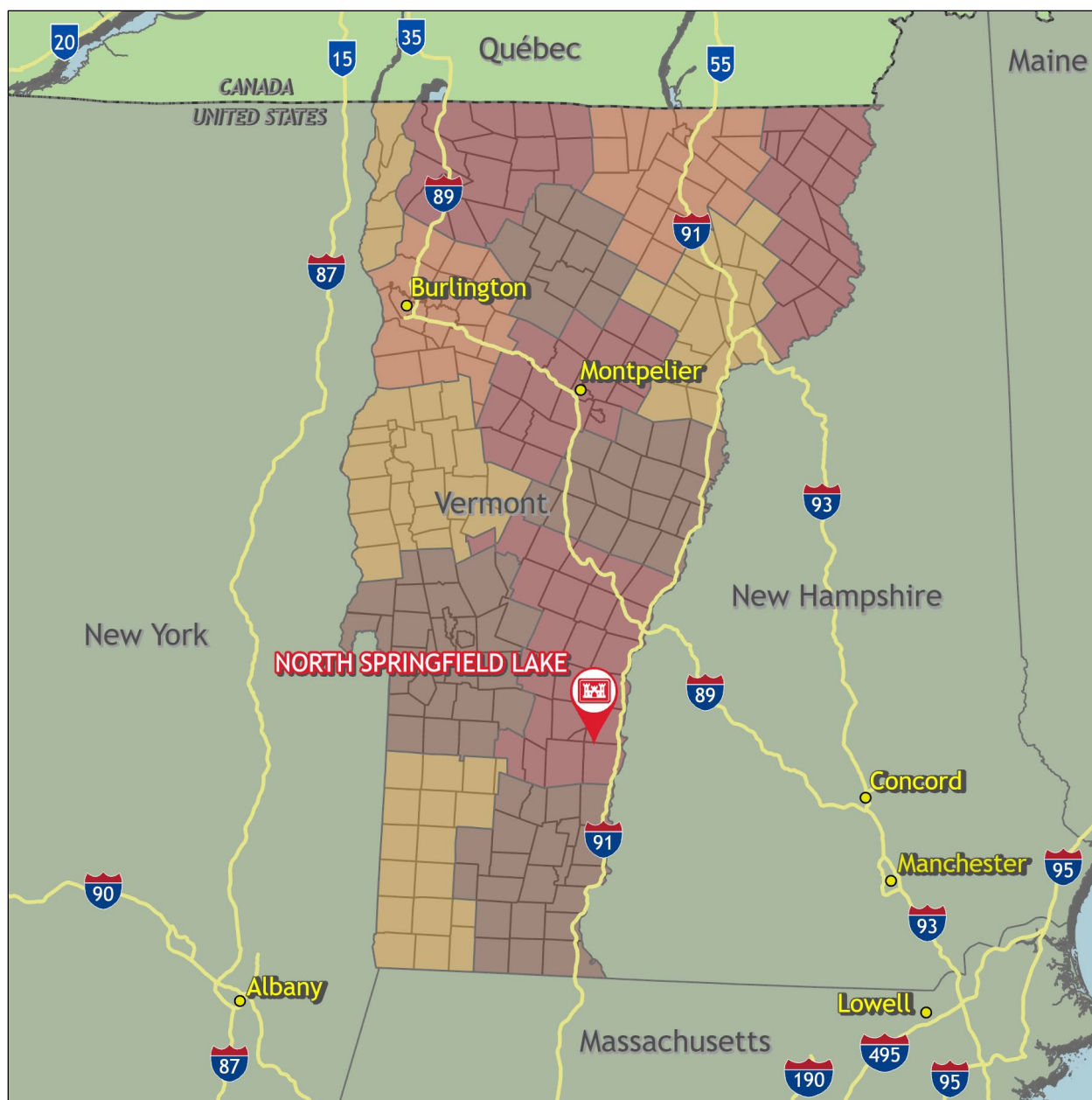


Figure 1.1 North Springfield Lake Vicinity Map

1.2 PROJECT AUTHORIZATION

North Springfield Lake was authorized by the Flood Control Act of 1938, Public Law (PL) 761 75th Congress, 3rd Session, as amended by the Flood Control Act of 1941, Public Law 228, 77th Congress, 1st Session, and the Flood Control Act of 1944, Public Law 534, 78th Congress, 2nd Session. Authorization for the development and use of the reservoir area for public recreational purposes is contained in Section 4 of the Flood Control Act of 1944.

1.3 PROJECT PURPOSE

North Springfield Lake's authorized purpose is flood control. The USACE initiated construction of North Springfield Dam in May 1958 and completed it in November 1960 at a cost of \$6,832,000. North Springfield is one of numerous other projects in the Upper Connecticut River Basin for flood damage reduction and other multiple purposes. North Springfield Lake provides flood damage reduction at downstream communities along the Black River and Connecticut River in Vermont, New Hampshire, Massachusetts and Connecticut. In accordance with Federal Energy Regulatory Commission (FERC) recommendations in the 1940's, approximately 20 percent of the available flood control storage was provided for ultimate hydroelectric power use but was to be for flood control purposes until such time as power facilities were installed. There is no hydroelectric power installed at the project, nor is any planned for in the near future.

North Springfield Lake is a regionally important and valuable natural resource that provides for many popular recreational activities such as: hiking, hunting, fishing, swimming, picnicking, and canoeing. The project maintains a wide variety of habitats through wildlife and forestry management programs that are oriented toward conservation and passive recreation.

In addition to the flood control mission, 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 North Springfield 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 North Springfield 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 North Springfield 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. The North Springfield Lake OMP instead covers these topics. 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 and low flow augmentation purposes of North Springfield 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, and growing demand for recreational access and protection of natural and cultural resources affect North Springfield Lake and the region in general. In response to these escalating pressures and trends, USACE is implementing and adopting a full revision of the 2004 North Springfield 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 Black River originates in the northwestern part of the Black Pond basin in the town of Plymouth, Vermont. The river then follows a southerly course for about 12 miles, of which 4 miles pass through Pauline, Rescue, Echo and Amherst Lakes, to Ludlow, Vermont, where it changes course to an easterly direction for 14 miles. North of Perkinsville, the river takes a southerly course to its mouth where it empties into the headwater pool of the Bellows Falls Power dam on the Connecticut River. The entire length of the river is approximately 39 miles with a uniform drop of 950 feet. The North Branch of the Black River, located along the northeast section of the watershed, has its origin in South Reading, Vermont, and flows in a southerly direction for approximately 10 miles to its confluence with the main river, about three miles upstream of the North Springfield dam. The North Branch has a fall in elevation of approximately 780 feet.

Downstream from North Springfield Lake, the Black River flows through the town of Springfield for a distance of about 8.7 miles to its confluence with the Connecticut River. Major Vermont communities located on the Connecticut River downstream from this confluence include Bellows Falls, Putney, Brattleboro and Vernon. A total of 5 hydroelectric projects are located between the dam and its confluence with the Connecticut River.

North Springfield Lake Dam is a rolled-earth fill embankment with rock slope protection. The outlet works consists of a concrete intake structure that houses three 5-foot by 12-foot slide gates, a gated concrete horseshoe conduit, and a discharge channel. An emergency spillway, cut in rock, is located on the left abutment of the dam, and includes a concrete ogee weir. The project has two permanent impoundments or pools: the “conservation pool” or North Springfield Lake, is located just upstream of the dam structure; and a “recreational pool” called Stoughton Pond, is located approximately three miles upstream of the dam, on the North Branch of the Black River in Weathersfield, Vermont. Stoughton Pond is impounded by North Branch Dam (NBD). The NBD was constructed as part of the project to allow continued east/west access at this location. The outlet from Stoughton Pond is a 21-foot wide concrete weir that leads to a circular metal conduit through the embankment.

The Tolles Hill Dam, also known as the Power Dam, is located within the North Springfield Lake Reservoir area on the Black River. The dam was Constructed in the early 1900s to produce hydropower and consists of mass concrete construction. Power production ceased prior to the construction of North Springfield Dam, which was completed in 1960. The features of the dam include a weir and right abutment hydropower structure. The weir is approximately 100 feet long, 8 feet wide and has a maximum height of approximately 30 feet. The right abutment/hydro power structure includes upper and lower decks, with surge pool, aqueduct and draft tube pit and draft tube pit outlet.

1.6 PROJECT ACCESS

The North Springfield Lake main dam is located one-half mile off Route 106 along Maple Street which runs between Route 106 and Reservoir Road in Springfield, Vermont. The access to the nature area is located off Reservoir Road approximately one-quarter mile north of the main dam.

The Stoughton Pond Recreation Area is situated in Weathersfield, Vermont on Stoughton Pond Road one-half mile from its junction with Route 106. The reservoir's west access area can be found by traveling eastward on Maple Street in Perkinsville for three-quarters of a mile after leaving Route 106.

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. The USACE prepared all DMs and their revisions for North Springfield Lake between 1956 to 1961. These DMs include Hydrology, General, Earthwork – Stage I, General – Supplement, Design Analysis of Mechanical and Electrical Equipment in Intake Structure, Relocations, Real Estate – Part I, Real Estate – Part II, Relocation Town Road No. 22, Master Plan for Reservoir Development, and Concrete Aggregates. A list of the DMs for North Springfield Lake is listed in Table 1.1 and the manuals and reports for North Springfield Lake are listed in Table 1.2.

Table 1.1 North Springfield Lake Design Memoranda

DM No.	Design Memoranda Title	Date Approved
1	Hydrology	January 1957
2	General	January 1957
3	Earthwork-Stage I	April 1957
4	General – Supplement	June 1957
5	Design Analysis of Mechanical and Electrical Equipment in Intake Structure	January 1958
6	Relocations	September 1957
7	Real Estate – Part I	November 1956
7	Real Estate – Part II	May 1957
8	Relocation Town Road No. 22	December 1958
9	Master Plan for Reservoir Development	May 1961
*	Concrete Aggregates	December 1956

*This memorandum was prepared for North Hartland, North Springfield, Ball Mountain and Townshend Dams.

Table 1.2 Manuals and Reports for North Springfield Lake

Subject	Date
Operations and Maintenance (O&M) Manual	1996
Water Control Manual: Black River	July 1999
Emergency Action Plan	February 2019

1.8 PERTINENT PROJECT INFORMATION

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

Table 1.3 General Pertinent Information for North Springfield Lake (USACE, 1999)

Location	
Basin	Connecticut River
Stream	Black River
River Mile	8.7 miles upstream of the confluence of the Black and Connecticut Rivers
County	Windsor County
State	Vermont
Drainage Area	
Above Dam	158 square miles
Dam	
Type	Rolled earth and rockfill
Length	2,940 feet
Height	120 feet
Top Width	30 feet
Spillway	
Type	Conventional side channel with ogee weir
Crest Length	384.0 feet
Crest Elevation	545.5 feet-NGVD29
Maximum Discharge Capacity	117,200 Cubic Feet per Second (CFS)
Outlet Works	
Type	Horseshoe-shaped concrete conduit
Size	12.75 feet
Outlet Pipe Length	659 feet
Service Gate Type	Hydraulic Slide
Service Gate Size	3, 5' x 12'
Downstream Channel Capacity	3,500 Cubic Feet per Second (CFS)

Maximum Conduit Discharge at Spillway Crest	11,900 Cubic Feet per Second (CFS)
Invert Elevation	452.0 feet-NGVD29
Outlet Works	
Type	Circular Corrugated Metal
Size	8.0 feet
Maximum Conduit Discharge at Spillway Crest	1,800 Cubic Feet per Second (CFS)
Invert Elevation	497.0 feet-NGVD29
Real Estate Acquisition	
Fee Purchase	520 ft-NGVD (1,372 acres)
Flowage Easement	550 ft-NGVD (420 acres)

Table 1.4 Pertinent Data for North Springfield Lake (USACE, 1999)

Reservoir Feature	Elevation (ft, NGVD29)	Stage (feet)	Surface Area (acres)	Capacity (acre-feet)	Capacity (inches of runoff)
Invert Elevation	452.0	0.0	0	0	0.0
Permanent Pool	467.0	15.0	100	500	0.06
Spillway Crest	545.5	93.5	1,200	50,200	5.96
Maximum Surcharge	564.8	112.7	1,520	77,000	9.14
Top of Dam	570.0	118.0	-	-	-
Recreation Pool (at Stoughton Pond)	502.0	20.0	65	600	0.07

*Surface acre references within the text of the 2026 Master Plan align with Table 4.1 Change from 2004 Land and Water Surface Classifications to 2026 Land and Water Surface Classification.

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 (USGS, 2020; USGS, 2024). As shown in Figure 2.1, 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. North Springfield Lake is classified by sub-watersheds as follows:

- 01 (HUC 2: Region) – New England Region
- 0108 (HUC 4: Sub-region) – Connecticut
- 010801 (HUC 6: Basin) – Upper Connecticut
- 01080106 (HUC 8: Sub Basin) – Black-River – Connecticut River
- 0108010605 (HUC 10: Watershed) – Black River
- 010801060505 (HUC 12: Sub-watershed) – Black River
- 010801060503 (HUC 12: Sub-watershed) – Twentymile Stream – Black River
- 010801060504 (HUC 12: Sub-watershed) – North Branch Black River

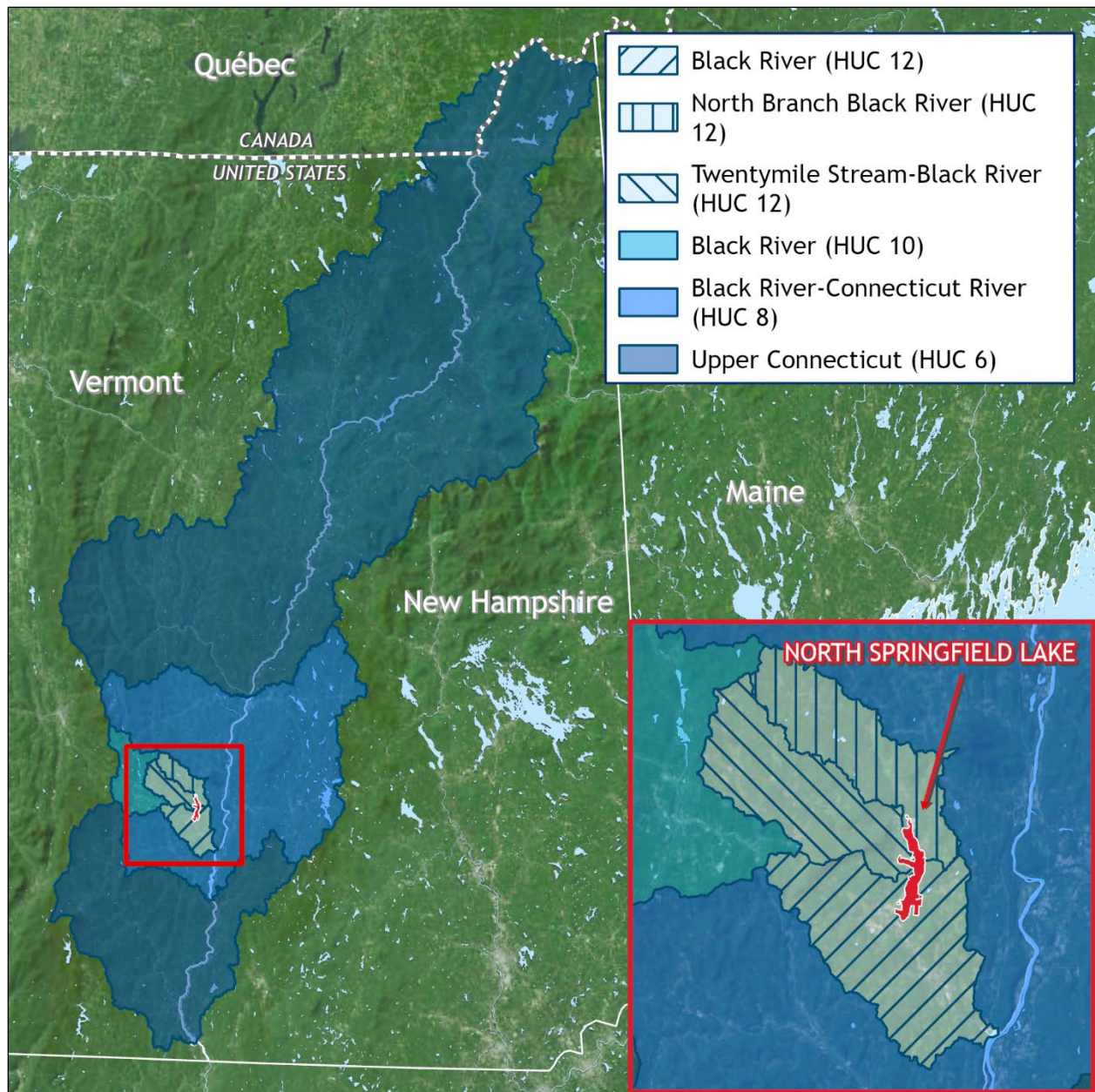


Figure 2.1 Hydrology (HUC 6, 8, 10,12) Map for North Springfield Lake (USGS; USGS, 2019)

2.1.2 Ground Water

The groundwater at North Springfield Lake is limited to New England crystalline-rock aquifers. Igneous, metasedimentary, and metavolcanic rocks, generally confined, characterize the aquifers in Vermont. The well depths of 100-600 feet are common, with the potential for some wells to exceed 800 feet before reaching water. Groundwater generally yields 1- 10 gallons per minute but can exceed 100 gallons per minute. The water is generally suitable for most uses. (Water Resources Division, USGS, 2000). In Windsor County, there are 11,184 wells with 1,460 located wells. The mean yield is

approximately 12 gallons per minute with a maximum reported yield of 500 gallons per minute. The mean depth is approximately 300 feet with a maximum reported depth of 1480 feet. (Vermont Geological Survey, 2010)

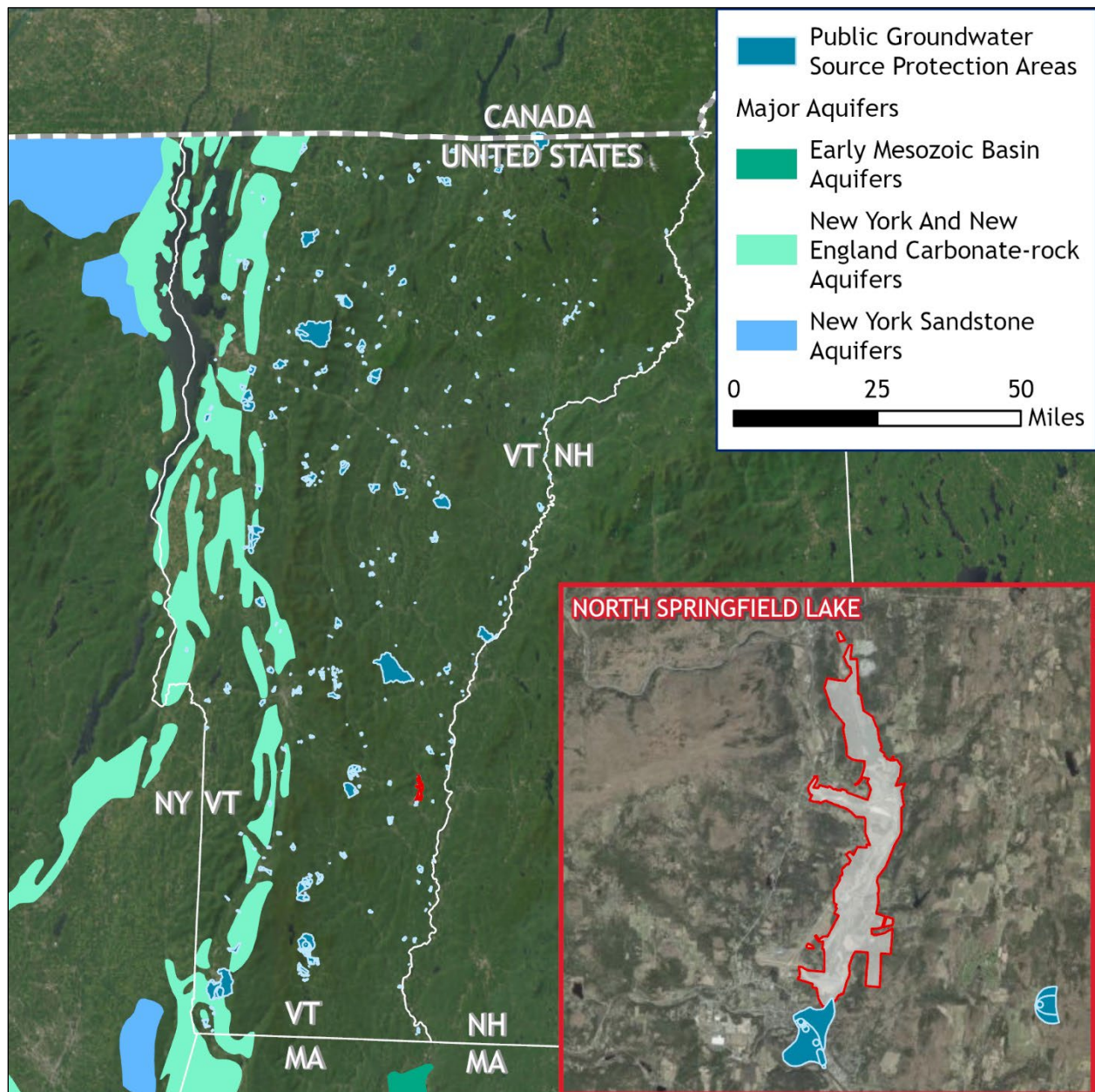


Figure 2.2 Groundwater Map for North Springfield Lake (VCGI, 2024)

2.2 SEDIMENTATION AND SHORELINE EROSION

Over time alluvial sediments have accumulated behind the dam as sedimentation occurs at any impounded waterway. During times of heavy runoff events, high suspended sediment levels can be visually observed entering the reservoir from upstream. Erosion/runoff control will be an integral part of resource management activities. Control measures, including proper layout, improved drainage, minimum

vegetation removal, erosion bars and seeding, will be accomplished in all management and contract work through all phases of the activity. 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.

The permanent pool has helped to minimize shoreline erosion. Project staff regularly monitor erosion and there are currently no concerns for the project site.

2.3 WATER QUALITY

The Vermont Department of Environmental Conservation (VT DEC) classifies surface waters and establishes Water Quality Standards (WQS) in order to manage and protect water quality under the Clean Water Act. Surface waters within the North Springfield Lake federal fee boundary are designated as Class B(2) waters. Class B(2) waters are managed for high quality aquatic habitat and have limited to moderate differences from their natural condition. These waters provide good quality for: aquatic biota and wildlife; aesthetics, boating; fishing; and swimming and other primary contact recreation. Class B(2) waters may be suitable as public water sources with filtration and disinfection or other required treatment. In addition to these classifications, surface waters may be designated as either cold water or warm water fish habitat. The North Springfield Reservoir (North Springfield Lake) is designated as warm water fish habitat, while other surface waters within the federal fee boundary are designated as cold water fish habitat (VT DEC, 2022).

The VT DEC maintains the Vermont Priority Waters List that identifies impaired (Part A) and altered (Part F) surface waters. Impaired waters are segments of surface waters not meeting the WQS. These waters are subject to pollution control requirements under Section 303(d) of the Clean Water Act. Altered waters typically result from flow fluctuation, obstructions, or other water level manipulations associated with hydroelectric facilities, dam operations, water withdrawals from industrial or municipal water supplies, or snowmaking purposes (VT DEC, 2022). There are no impaired surface waters within the North Springfield Lake federal fee boundary. The North Springfield Lake, Stoughton Pond, and Black River downstream of the reservoir, are identified as being altered (Table 2.1). These surface waters are considered altered from dam operations (VT DEC, 2025).

Table 2.1 Altered Waters (Part F) Within the North Springfield Lake Federal Fee Boundary

Waterbody ID	Waterbody	Altered Uses ¹	Problem
VT10-13	Black River, Below North Springfield Lake	AH, ALS	Artificial flow regulation & condition by dam
VT10-13	North Springfield Lake	AH, ALS	Water level fluctuation alters aquatic habitat
VT10-16	Stoughton Pond	AH, ALS	Water level fluctuation alters aquatic habitat

¹ Altered Uses: (AH) Aquatic habitat to support aquatic biota, wildlife, or plant life; (ALS) Aquatic biota and wildlife that may utilize or are present in the waters.

Water quality monitoring has periodically occurred within the North Springfield Lake federal fee boundary. The VT DEC's Watershed Management Division has conducted water quality monitoring, including biological community sampling, within the federal fee boundary (VANR, 2025).

The VT DEC also prepares tactical basin plans to address water quality at a broader level. Tactical basin plans detail goals, objectives, and projects of watersheds in accordance with the Clean Water Act. North Springfield Lake is located within the tactical basin for the Black and Ottauquechee Rivers and Connecticut River direct tributaries (VT DEC, 2023). The plan includes strategies for water quality monitoring, aquatic invasive species control, riparian vegetation protection, and overall water quality improvements (Appendix E).

2.4 AIR QUALITY

The U.S. Environmental Protection Agency (EPA) has set National Ambient Air Quality Standards (NAAQS) for six principal pollutants. These pollutants include ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, particulate matter, and lead. An area is considered to be in attainment when it meets or is below a given standard for a criteria pollutant. The State of Vermont is currently in attainment for all criteria pollutants (EPA, 2025a).

2.5 CLIMATE AND GREENHOUSE GASES

2.5.1 Climate

Climate classification systems describe regional climates through various factors. The Köppen-Geiger Climate Classification (KCC) system classifies regions according to vegetation climate zones, precipitation, and temperature. North Springfield Lake has a KCC of Dfa, which is described as a humid continental climate (Belda, Holtanova, Halenka, & and Kalvova, 2014; Kottek, Frieser, Beck, Rudolf, & and Rubel, 2006; NOAA, 2023). This classification is characterized by a humid climate with no dry season and a hot summer. The average temperatures of the warmest months are over 69°F, with the coldest months under 19°F. Rainfall occurs year-round but may be variable (NOAA, 2023; NOAA, 2025).

The National Oceanic and Atmospheric Administration (NOAA)'s National Weather Service monitors climate throughout weather stations in Vermont. The NOAA Online Weather Data tool summarizes local climate data, such as monthly climate normals. The monthly climate normals obtained for North Springfield Lake describe the average precipitation and temperature from 1991-2020. These normals for North Springfield Lake are presented in Figure 2.3.

Monthly Climate Normals (1991–2020) – N SPRINGFIELD LAKE, VT

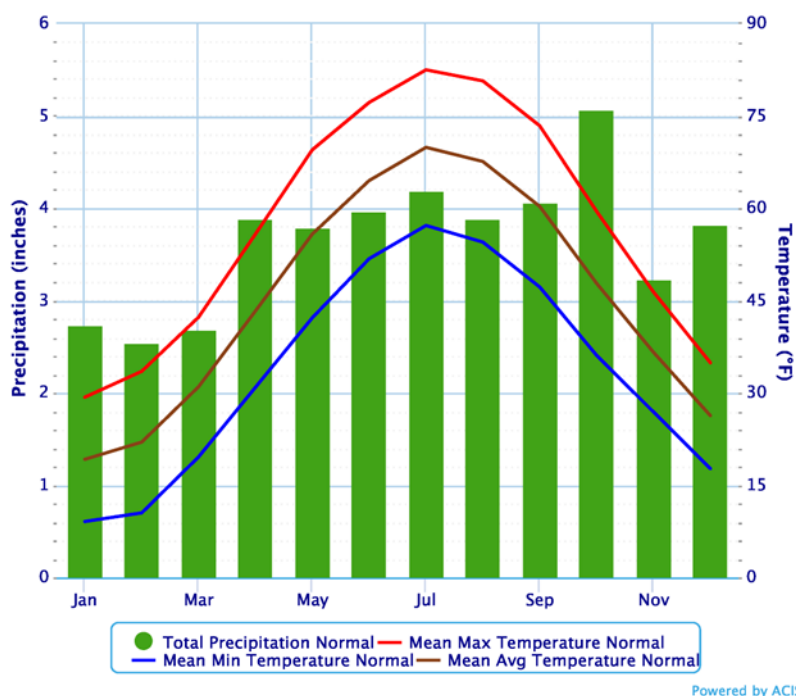


Figure 2.3 Average Monthly Climate for North Springfield Lake, Vermont, 1991-2020 (NOAA, 2025)

2.5.2 Greenhouse Gases (GHG)

The EPA's Greenhouse Gas Reporting Program mandates GHG reporting requirements for certain facilities and suppliers that directly emit GHG (40 CFR 98.1(a)). Examples of GHG facilities include stationary fuel combustion sources (Subpart C), petroleum and natural gas systems (Subpart W), and industrial wastewater treatment (Subpart II) (Table A-3 and A-4 to Subpart A of Part 98, Title 40). The EPA's Facility Level Information on Green House Gases Tool was used to identify GHG reporting facilities. No facilities were identified near the North Springfield Lake federal fee boundary or in Windsor County (EPA, 2025b).

2.6 TOPOGRAPHY, GEOLOGY, AND SOILS

2.6.1 Topography

The Black River watershed drains in a generally southeasterly direction. It is approximately 22 miles long and 12 miles wide with a total drainage area of 204 square miles. About 158 square miles are situated upstream of North Springfield Dam. The reservoir topography is generally steep, wooded hills with predominantly easterly and westerly exposures. A large amount of land at the bottom of the basin is gently rolling fields. In general, the watershed is conducive to rapid runoff. Elevations vary from 3,700 feet mean sea level (msl) at the headwaters to 280 feet msl at the river's confluence with the Connecticut River. There are 4 lakes in the upper portion of the watershed which greatly temper rapid runoff.

The reservoir area itself is generally steep and includes wooded hillsides with predominantly easterly and westerly exposures. A fairly large amount of land in the valley bottom is gently rolling fields. Elevations within the reservoir range from approximately 1,000 feet msl at the tops of the ridges to about 450 feet msl at the dam site.

2.6.2 Geology

East-central Vermont bedrock geology consists primarily of metamorphic rock ranging in age from Lower Devonian to Pre-Cambrian period. North Springfield's underlying base-rock foundations are Paleozoic in origin. The bedrock in the vicinity generally consists of Lower Cambrian quartz-plagioclase-microcline-biotite genus of the Bull Hill member of the Cavendish Formation, Lower Cambrian dolomite of the Cavendish Formation, and Pre-Cambrian biotitic genus of the Mount Holly Complex. Granitic gneiss outcrops occur near the dam.

Surficial geologic deposits in the vicinity of North Springfield Lake are primarily the result of deposition that occurred during the retreat of the Laurentide ice sheet. Surface geology in the basin is composed of varying thickness of glacial till, beach sands, and delta sands as well as post glacial fluvial and recent alluvial sand and gravel and post-glacial swamp, peat, and muck deposits.

2.6.3 Soils

The non-irrigated land capability classification from the Natural Resource Conservation Service (NRCS) shows there are 8 possible general classifications (Class I through Class VIII), but only 6 occur at North Springfield 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 NRCS Web Soil Survey provided the soil class data for project lands in Table 2.2. This data is a standard component of natural resource inventories on USACE lands. This data, however, is not recorded in the USACE Natural Resource Management (NRM) system.

Table 2.2 Soil Classifications at North Springfield Lake

Soil Class	Acreage
Class I	0
Class II	208
Class III	137
Class IV	208
Class V	0
Class VI	43
Class VII	452
Class VIII	98

(Source: NRI Level I Inventory)

The descriptions of the soil and land capability classifications below demonstrate the relative general potential for project lands. The different soils are mapped in Figure 2.4. The NRCS maintains detailed information on all soil types surrounding North Springfield Lake in various websites and datasets.

- 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.

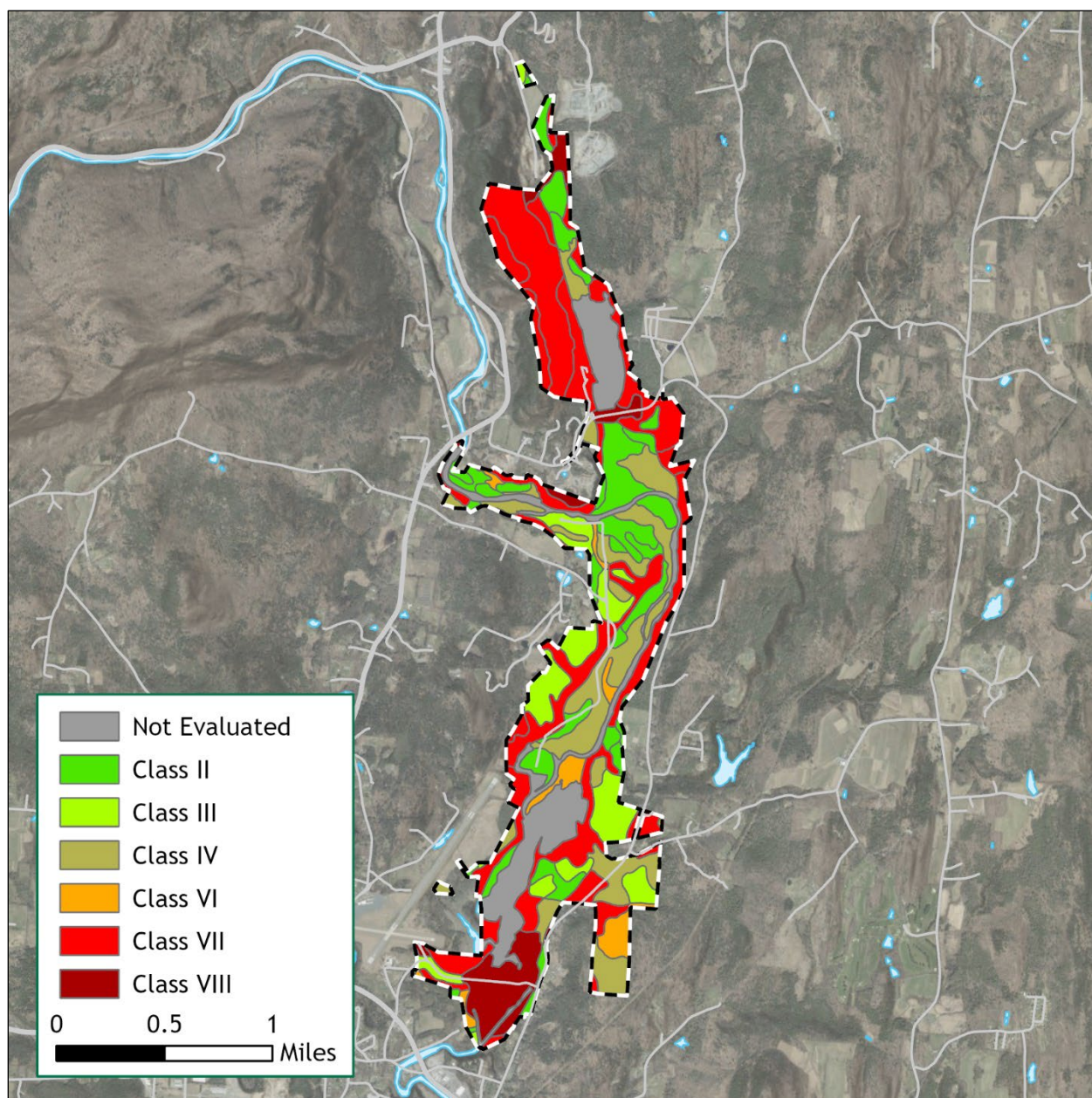


Figure 2.4 Soil Classification Map (NRCS, 2025)

2.6.4 Prime Farmland

Section 1541(b) of the Farmland Protection Policy Act of 1980 and 1995 (7 U.S.C. 4202(b)) requires federal agencies to take into account the adverse effects of federal programs on the preservation of farmland and to consider alternative actions, as appropriate, that could lessen such adverse effects. The NRCS's Web Soil Survey identifies soil map units that meet the definition of prime farmland, unique farmland, or other farmland of statewide or local importance, under Section 1540(c)(1) of the Farmland Policy Act of 1980 and 1995 (7 U.S.C. 4201(c)(1)). Farmland classifications for soil map units within the North Springfield Lake federal fee boundary are presented in Table 2.3 and Figure 2.5. An estimated 411.6 acres are classified as either prime farmland or farmland of statewide importance (NRCS, 2025).

Table 2.3 Prime Farmlands Identified at the North Springfield Lake (NRCS, 2025)

Map Symbol	Map Unit Name	Farmland Classification
5B	Windsor loamy sand, 0 to 8 percent slopes	Farmland of statewide importance
5C	Windsor loamy sand, 8 to 15 percent slopes	Not prime farmland
5D	Windsor loamy sand, 15 to 25 percent slopes	Not prime farmland
5E	Windsor loamy sand, 25 to 60 percent slopes	Not prime farmland
8A	Agawam fine sandy loam, 0 to 3 percent slopes	All areas are prime farmland
8B	Agawam fine sandy loam, 3 to 8 percent slopes	All areas are prime farmland
9B	Ninigret fine sandy loam, 0 to 8 percent slopes	All areas are prime farmland
12D	Tunbridge-Lyman complex, 15 to 35 percent slopes, very rocky	Not prime farmland
12E	Tunbridge-Lyman complex, 35 to 60 percent slopes, very rocky	Not prime farmland
14B	Hinckley sandy loam, 0 to 8 percent slopes	Farmland of statewide importance
18D	Becket fine sandy loam association, 15 to 35 percent slopes, very stony	Not prime farmland

Map Symbol	Map Unit Name	Farmland Classification
20C	Glover-Vershire complex, 3 to 15 percent slopes, very rocky	Not prime farmland
20D	Glover-Vershire complex, 15 to 35 percent slopes, very rocky	Not prime farmland
24	Podunk fine sandy loam, 0 to 3 percent slopes, occasionally flooded	All areas are prime farmland
26C	Buckland loam, 8 to 15 percent slopes, very stony	Not prime farmland
28	Udorthents and Udipsamments	Not prime farmland
29A	Grange very fine sandy loam, 0 to 3 percent slopes	Prime farmland if drained
32B	Urban land-Windsor-Agawam complex, 0 to 8 percent slopes	Not prime farmland
33	Rumney fine sandy loam, 0 to 3 percent slopes, frequently flooded	Farmland of statewide importance, if drained
40	Limerick silt loam, 0 to 2 percent slopes, frequently flooded	Farmland of statewide importance, if drained
41	Saco silt loam, 0 to 2 percent slopes, frequently flooded	Not prime farmland
42F	Lyman-Rock outcrop complex, 25 to 60 percent slopes	Not prime farmland
48	Pits, Sand, and Pits, gravel	Not prime farmland
63E	Monadnock and Berkshire soils, 35 to 60 percent slopes, very stony	Not prime farmland
64B	Colton gravelly sandy loam, 3 to 8 percent slopes	Farmland of statewide importance
64C	Colton gravelly sandy loam, 8 to 15 percent slopes	Not prime farmland
64E	Colton gravelly sandy loam, 25 to 60 percent slopes	Not prime farmland

Map Symbol	Map Unit Name	Farmland Classification
68C	Monadnock and Berkshire soils, 8 to 15 percent slopes	Farmland of statewide importance
70B	Adams loamy sand, 3 to 8 percent slopes	Farmland of statewide importance
70C	Adams loamy sand, 8 to 15 percent slopes	Not prime farmland
70D	Adams loamy sand, 15 to 25 percent slopes	Not prime farmland
70E	Adams loamy sand, 25 to 60 percent slopes	Not prime farmland
71B	Croghan and Sheepscot soils, 0 to 8 percent slopes	Farmland of statewide importance
75B	Urban land-Colton-Croghan complex, 0 to 8 percent slopes	Not prime farmland
W	Water	Not prime farmland

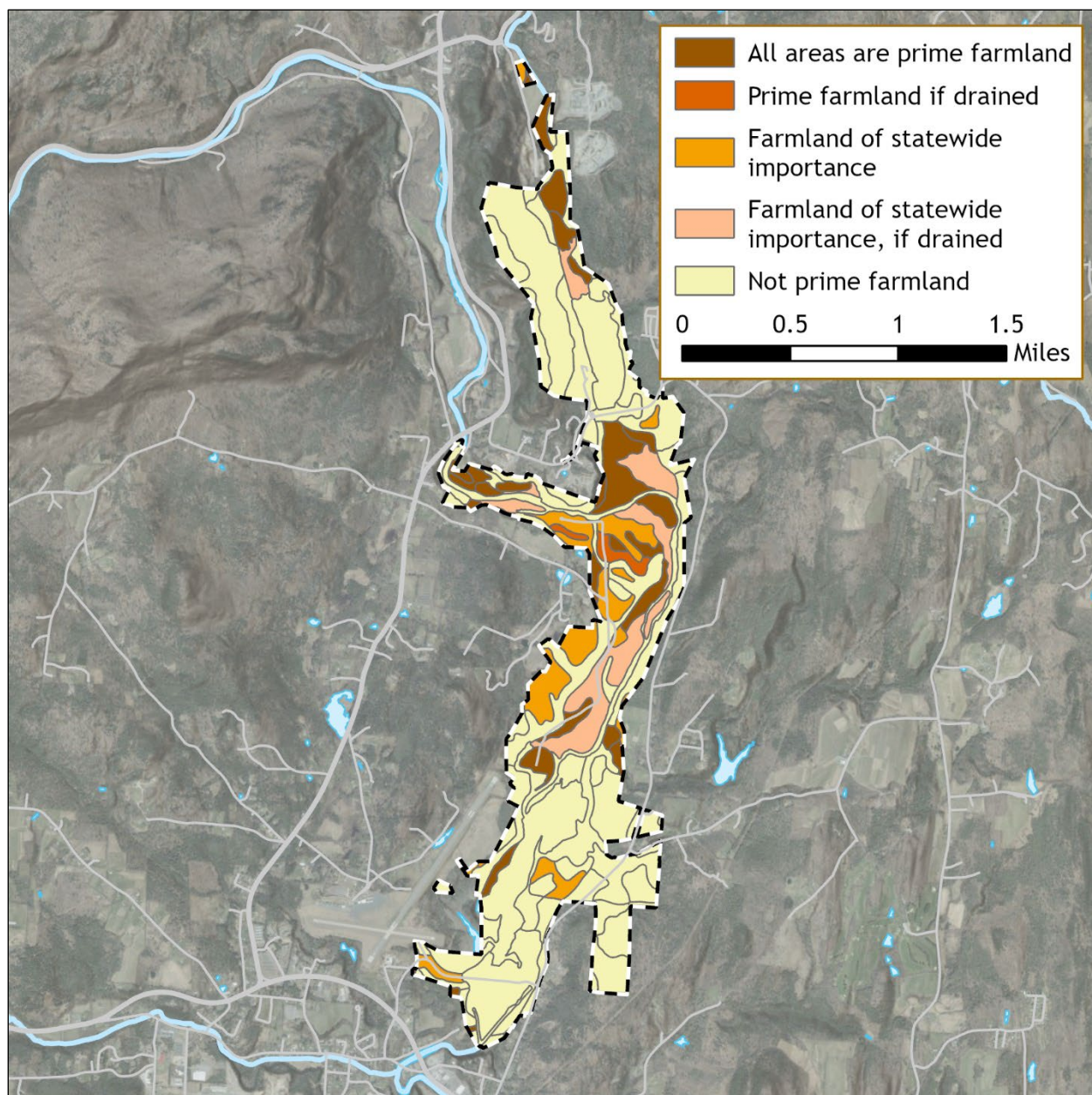


Figure 2.5 Prime Farmland Soils Map (NRCS, 2025)

2.7 NATURAL RESOURCE ANALYSIS

2.7.1 Fish and Wildlife Resources

Wildlife occurring at North Springfield Lake are typical of Windsor County. Tables 2.4, 2.5, and 2.6 list wildlife species that may occur at North Springfield Lake (VDFW, 2025a; VDFW, 2022; USACE, 2004; VANR, 2025).

As described in Section 2.3, the North Springfield Lake is designated as warm water fish habitat, and other surface waters are designated as cold water fish habitat. Table 2.7 lists fish species that may occur at North Springfield Lake and tributaries within the federal fee boundary (USACE, 2004).

Table 2.4 Mammals Species Potentially Occurring within the North Springfield Lake Federal Fee Boundary

Common Name	Scientific Name
American beaver	<i>Castor canadensis</i>
Snowshoe hare	<i>Lepus americanus</i>
River otter	<i>Lontra canadensis</i>
Striped skunk	<i>Mephitis mephitis</i>
Mink	<i>Mustela vison</i>
White-tailed deer	<i>Odocoileus virginianus</i>
Muskrat	<i>Ondatra zibethicus</i>
Fisher	<i>Pekania pennanti</i>
Red fox	<i>Pemphredon foxii</i>
Raccoon	<i>Procyon lotor</i>
Gray squirrel	<i>Sciurus carolinensis</i>
New England cottontail	<i>Sylvilagus transitionalis</i>
Red squirrel	<i>Tamias hudsonicus</i>
Eastern chipmunk	<i>Tamias striatus</i>
Gray fox	<i>Urocyon cinereoargenteus</i>

Table 2.5 Bird Species Potentially Occurring within the North Springfield Lake Federal Fee Boundary

Common Name	Scientific Name
Wood duck	<i>Aix sponsa</i>
Dabbling ducks	<i>Anas</i> spp.
Great blue heron	<i>Ardea herodias</i>
Ring-necked duck	<i>Aythya collaris</i>
Ruffed grouse	<i>Bonasa umbellus</i>
Canada goose	<i>Branta canadensis</i>
Red-tailed hawk	<i>Buteo jamaicensis</i>
Broad-winged hawk	<i>Buteo platypterus</i>

Common Name	Scientific Name
Killdeer	<i>Charadrius vociferous vociferous</i>
Northern flicker	<i>Colaptes auratus</i>
Rock pigeon	<i>Columba livia</i>
American crow	<i>Corvus brachyrhynchos</i>
Bobolink	<i>Dolichonyx oryzivorus</i>
Downy woodpecker	<i>Dryobates pubescens</i>
Pileated woodpecker	<i>Dryocopus pileatus</i>
American kestrel	<i>Falco sparverius</i>
Common loon	<i>Gavia immer</i>
Dark-eyed junco	<i>Junco hyemalis</i>
Hairy woodpecker	<i>Leuconotopicus villosus</i>
Hooded merganser	<i>Lophodytes cucullatus</i>
Wild turkey	<i>Meleagris gallopavo</i>
Song sparrow	<i>Melospiza melodia</i>
Common merganser	<i>Mergus mergansar</i>
Double-crested cormorant	<i>Nannopterum auritum</i>
Pied-billed grebe	<i>Podilymbus podiceps podiceps</i>
Black-capped chickadee	<i>Poecile atricapillus</i>
Eastern bluebird	<i>Sialia sialis</i>
Yellow-bellied sapsucker	<i>Sphyrapicus varius</i>
American goldfinch	<i>Spinus tristis</i>
Tree swallow	<i>Tachycineta bicolor</i>
American robin	<i>Turdus migratorius</i>

Table 2.6 Reptile and Amphibian Species Potentially Occurring within the North Springfield Lake Federal Fee Boundary

Common Name	Scientific Name
Spotted salamander	<i>Ambystoma maculatum</i>
American toad	<i>Anaxyrus americanus</i>
American bullfrog	<i>Aquarana catesbeiana</i>
Common snapping turtle	<i>Chelydra serpentina</i>
Eastern painted turtle	<i>Chrysemys picta</i>
Dusky salamander	<i>Desmognathus fuscus</i>
Ring-necked snake	<i>Diadophis punctatus</i>
Two-lined salamander	<i>Eurycea bislineata</i>
Wood turtle	<i>Glyptemys insculpta</i>
Spring salamander	<i>Gyrinophilus porphyriticus</i>
Gray treefrog	<i>Hyla versicolor</i>
Eastern milksnake	<i>Lampropeltis triangulum</i>
Green frog	<i>Lithobates clamitans</i>
Pickerel frog	<i>Lithobates palustris</i>
Wood frog	<i>Lithobates sylvaticus</i>
Northern watersnake	<i>Nerodia sipedon</i>
Eastern newt	<i>Notophthalmus viridescens</i>
Smooth greensnake	<i>Opheodrys vernalis</i>
Red-backed salamander	<i>Plethodon cinereus</i>

Common Name	Scientific Name
Spring peeper	<i>Pseudacris crucifer</i>
Dekay's brownsnake	<i>Storeria dekayi</i>
Red-bellied snake	<i>Storeria occipitomaculata</i>
Common gartersnake	<i>Thamnophis sirtalis</i>

Table 2.7 Fish Species Potentially Occurring within the North Springfield Lake Federal Fee Boundary

Common Name	Scientific Name
Rock bass	<i>Ambloplites rupestris</i>
Brown bullhead	<i>Ameiurus nebulosus</i>
Longnose sucker	<i>Catostomus catostomus</i>
White sucker	<i>Catostomus commersoni</i>
Chain pickerel	<i>Esox niger</i>
Pumpkinseed	<i>Lepomis gibbosus</i>
Sunfish	<i>Lepomis</i> spp.
Common shiner	<i>Luxilus cornutus</i>
Smallmouth bass	<i>Micropterus dolomieu</i>
Largemouth bass	<i>Micropterus salmoides</i>
Golden shiner	<i>Notemigonus crysoleucas</i>
Spottail shiner	<i>Notropis hudsonius</i>
Rainbow trout	<i>Oncorhynchus mykiss</i>
Yellow perch	<i>Perca flavescens</i>
Brown trout	<i>Salmo trutta</i>
Brook trout	<i>Salvelinus fontinalis</i>
Creek chub	<i>Semotilus atromaculatus</i>
Fallfish	<i>Semotilus corporalis</i>

2.7.2 Vegetative Resources

Ecoregions describe areas with similar ecosystems, through considering factors such as climate, soils, geology, vegetation, and land use (EPA, 2024). Section 2.7.5 describes the ecoregion system and Level III ecoregions at North Springfield Lake. The Level IV ecoregions are smaller scale classifications and were used to describe vegetative resources at North Springfield Lake. North Springfield Lake is located within the Vermont Piedmont EPA Level IV ecoregion.

The Vermont Piedmont ecoregion includes northern and transitional hardwood forests with some hemlock (*Tsuga canadensis*) and hemlock-northern hardwood forests. Common species include beech (*Fagus* spp.), yellow birch (*Betula alleghaniensis*), sugar maple (*Acer saccharum*), red maple (*Acer rubrum*), white ash (*Fraxinus americana*), and basswood (*Tilia* spp.). On warmer southern and western slopes, mesic red oak-northern hardwood forests may be found with red oak (*Quercus rubra*); on drier ridgetops red pine (*Pinus resinosa*) forests and dry oak-hickory-northern hardwood forests may be found. Oak-hickory-northern hardwood forests may include red oak, white oak (*Quercus alba*), shagbark hickory (*Carya ovata*), and white pine (*Pinus strobus*). Land uses for this ecoregion include deciduous and mixed forest,

evergreen forest, pasture/hayland, forestry, rural residential, tourism, and recreation (Griffith, et al., 2009).

The predominant vegetation community throughout North Springfield Lake is white pine forest. This type of hardwood forest is dominant throughout Vermont. Other hardwood community examples at North Springfield Lake include white pine – hemlock forests and mixed wood forests with other northern hardwood species (USACE, 2016). North Springfield Lake includes small areas of state significant natural communities near Stoughton Pond. These communities include dry hemlock-oak forest, dry transition hemlock forest, dry red oak – white pine forest; and red oak - northern hardwood forest (VANR, 2025). Refer to Section 2.7.3, below, for a description of these natural communities.

2.7.3 Threatened and Endangered Species and Essential Fish Habitat

Federally Listed Species

The U.S. Fish and Wildlife Service (USFWS)'s Information for Planning and Consultation (IPaC) tool was used to identify species protected under the Endangered Species Act, Migratory Bird Treaty Act, and the Bald and Golden Eagle Protection Act. An IPaC species list was generated for threatened and endangered species listed under the Endangered Species Act (Appendix C). Table 2.8 describes species protected under the Endangered Species Act (USFWS, 2025a). Birds protected under the Migratory Bird Treaty Act are listed as Birds of Conservation Concern (BCC). BCC species are migratory and non-migratory bird species that have the highest conservation priority as identified by USFWS (USFWS, 2021). Table 2.9 describes those protected under the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act (USFWS, 2025a).

Table 2.8 Federally Listed Threatened and Endangered Species Potentially Occurring within the North Springfield Lake Federal Fee Boundary (USFWS, 2025a)

Common Name	Scientific Name	Federal Status
Monarch butterfly	<i>Danaus plexippus</i>	Proposed Threatened
Northern long-eared bat	<i>Myotis septentrionalis</i>	Endangered
Northeastern bulrush	<i>Scirpus ancistrochaetus</i>	Endangered

Table 2.9 Federally Listed Migratory Birds Potentially Occurring within the North Springfield Lake Federal Fee Boundary (USFWS, 2025a)

Common Name	Scientific Name	Federal Status
Bald eagle	<i>Haliaeetus leucocephalus</i>	Bald and Golden Eagle Protection Act
Bay-breasted warbler	<i>Setophaga castanea</i>	BCC

Common Name	Scientific Name	Federal Status
Bicknell's thrush	<i>Catharus bicknelli</i>	BCC
Black-billed cuckoo	<i>Coccyzus erythrophthalmus</i>	BCC
Bobolink	<i>Dolichonyx oryzivorus</i>	BCC
Canada warbler	<i>Cardellina canadensis</i>	BCC
Cape May warbler	<i>Setophaga tigrina</i>	BCC
Chimney swift	<i>Chaetura pelagica</i>	BCC
Evening grosbeak	<i>Coccothraustes vespertinus</i>	BCC
Lesser yellowlegs	<i>Tringa flavipes</i>	BCC
Olive-sided flycatcher	<i>Contopus cooperi</i>	BCC
Prairie warbler	<i>Setophaga discolor</i>	BCC
Rose-breasted grosbeak	<i>Pheucticus ludovicianus</i>	BCC
Semipalmated sandpiper	<i>Calidris pusilla</i>	BCC
Veery	<i>Catharus fuscescens fuscescens</i>	BCC
Wood thrush	<i>Hylocichla mustelina</i>	BCC

State Listed Species

The Vermont Department of Fish & Wildlife (VDFW) maintains the Vermont Natural Heritage Inventory (VNHI) as a comprehensive database of rare species and significant natural communities (VDFW, 2025b). Species and natural communities are assigned a state rank and/or status. Status describes a species' or communities' listing under the Vermont Endangered Species Law (10 V.S.A. Chapter 123). State ranks characterize the rarity or endangerment of the species or habitat within Vermont (VDFW, 2020). The state ranks include:

- S1 - Very rare. At very high risk of extinction or extirpation due to extreme rarity, very steep declines, or other factors;
- S2 – Rare. At high risk of extinction or extirpation due to very restricted range, very few populations, steep declines, or other factors;
- S3 – Uncommon. At moderate risk of extinction or extirpation due to restricted range, relatively few populations or occurrences, recent and widespread declines, or other factors;
- S4 – Common to uncommon. Locally common or widely scattered to uncommon, but not rare; some cause for long-term concern due to declines or other factors; or stable over many decades and not threatened but of restricted distribution or other factors;
- S5 – Common. Widespread and abundant.

The Vermont Agency of Natural Resource (VANR) Natural Resources Atlas was used to review VNHI data on significant natural communities. There is a small acreage of significant natural communities near Stoughton Pond, which includes: dry transition hemlock forest (S4), dry hemlock-oak forest (S3), dry red oak-white pine forest (S3), and red oak- northern hardwood forest (S4). Dry transition hemlock and dry hemlock-oak forests are found in warmer, dry climatic regions in southern Vermont (VDFW, n.d.a; VDFW, n.d.b). Dry red oak-white pine and red-oak northern hardwood forests are found throughout Vermont, and may occur on warm, dry south-facing slopes (VDFW, n.d.c; VDFW, n.d.d).

Table 2.10 describes the state-listed species potentially occurring within the North Springfield Lake federal fee boundary, as well as their state ranks and status (Attachment A of Appendix B; (VANR, 2025))

Table 2.10 State-Listed Conservation Species Potentially Occurring within the North Springfield Federal Fee Boundary

Taxa	Common Name	Scientific Name	State Ranking	State Status
Birds	Grasshopper sparrow	<i>Ammodramus savannarum</i>	S1	-
	Upland sandpiper	<i>Bartramia longicauda</i>	S2	-
Fishes	Blacknose shiner	<i>Notropis heterolepis</i>	S1	-
Insects	Yellow-banded bumble bee	<i>Bombus terricola</i>	S3	Threatened
	Slender bluet	<i>Enallagma traviatum</i>	S1S2	-
Mammals	Little brown bat	<i>Myotis lucifugus</i>	S1	Endangered
	Northern long-eared bat	<i>Myotis septentrionalis</i>	S1	Endangered
Reptiles	Wood turtle	<i>Glyptemys insculpta</i>	S3	-
Plants	Hay sedge	<i>Carex argyrantha</i>	S1	Endangered
	Prickly hornwort	<i>Ceratophyllum echinatum</i>	S2S3	-
	Nodding trillium	<i>Trillium cernuum</i>	S3	-

Essential Fish Habitat

The NOAA Fisheries Essential Fish Habitat Mapper (EFH) was used to identify EFH-managed species and Habitat of Particular Concern protected under the Magnuson-Stevens Fishery Conservation and Management Act. EFH is broadly defined as “those waters and substrates necessary to fish for spawning, breeding, feeding, or growth to maturity”. EFH for Atlantic salmon (*Salmo salar*) was identified within the Black River; no Habitat of Particular Concern was identified within the North Springfield Lake federal fee boundary (NOAA, 2026).

2.7.4 Invasive Species

Executive Order (EO) 13112, as amended by EO 13751, defines an invasive species as a non-native organism whose introduction causes or is likely to cause economic or environmental harm, or harm to human, animal, or plant health. Invasive species can change community structure, composition, and ecosystem processes. Careful management can minimize these negative impacts. Table 2.11 describes the invasive species present at North Springfield Lake.

Various methods are used to manage invasive species by staff and volunteers at the projects. These methods of control include:

- Biological: use of other living organisms to suppress invasive species
- Chemical: application of registered pesticides for control of targeted species
- Manual: hand pulling, digging, weed wrenching, cutting
- Mechanical: mechanized removal or control of invasive species including mowing, forestry equipment, chainsaws, aquatic harvesting equipment, and/or the use of traps
- Cultural: education, outreach, and other activities to improve public practices on lands and reduce spread of invasive species and/or manipulation of habitats to increase mortality

Table 2.11 Invasive Species Occurring at North Springfield Lake

Common Name	Scientific Name
Norway maple	<i>Acer platanoides</i>
Garlic mustard	<i>Alliaria petiolata</i>
Black alder	<i>Alnus glutinosa</i>
Japanese barberry	<i>Berberis thunbergii</i>
Oriental bittersweet	<i>Celastrus orbiculatus</i>
Autumn olive	<i>Elaeagnus umbellata</i>
Winged <i>Euonymus</i> ; burning bush	<i>Euonymus alatus</i>
Japanese knotweed	<i>Fallopia japonica</i>
European buckthorn; Glossy buckthorn	<i>Frangula alnus</i>
Japanese honeysuckle	<i>Lonicera japonica</i>
Purple loosestrife	<i>Lythrum salicaria</i>
Eurasian water-milfoil ¹	<i>Myriophyllum spicatum</i>
Water parsnip	<i>Pastinaca sativa</i>
Common reed	<i>Phragmites australis</i>
Common buckthorn	<i>Rhamnus cathartica</i>
Multiflora rose	<i>Rosa multiflora</i>
Water chestnut ¹	<i>Trapa natans</i>

2.7.5 Ecological Setting

Ecoregions are used to describe areas with similar ecosystems and in type, quality, and quantity of environmental resources (EPA, 2024). The process of defining ecoregions considers factors such as: climate, soils, geology, vegetation, and land use (Omernik J. M., 1987). Ecoregions use hierarchical classification to describe variation at broad and detailed scales. The Level I and II ecoregions provide a broader description of ecosystems; while the Level III and IV ecoregions provide a more detailed description (Omernik & Griffith, 2014). The Level III ecoregions are used to describe the ecological setting of North Springfield Lake. The Level IV ecoregions are used to describe vegetation resources in Section 2.7.2.

North Springfield Lake is a part of the Northern Appalachian and Atlantic Maritime Highlands (Northeastern Highlands) Level III ecoregion. Figure 2.6 shows the EPA's Level III ecoregions at North Springfield Lake and surrounding areas while Figure 2.7 shows the EPA's Level IV ecoregions. The following information summarizes this ecoregion from the North American Terrestrial Ecoregions – Level III descriptions document (Wiken, Nava, & Griffith, 2011).

The Northern Appalachian and Atlantic Maritime Highlands ecoregion is the predominant Level III ecoregion in Vermont and is found throughout most of the northern and mountainous parts of New England. Climate for this ecoregion is described as a severe, mid-latitude humid continental climate, characterized by warm summers and snowy, cold winters. Natural vegetation types are primarily mixed hardwood and spruce-fir forests. The hydrology includes numerous perennial, high-gradient streams, larger rivers streams, and glacial lakes. Landforms are hills and mountains with narrow valleys. Soils are relatively nutrient poor and are typically Inceptisols, with moderate soil development, or Spodosols with weathered soils and eluviated organic matter. The geology is varied but is predominantly igneous and metamorphic rocks.



Figure 2.6 EPA Level III Ecoregions of Vermont (EPA, 2013a)

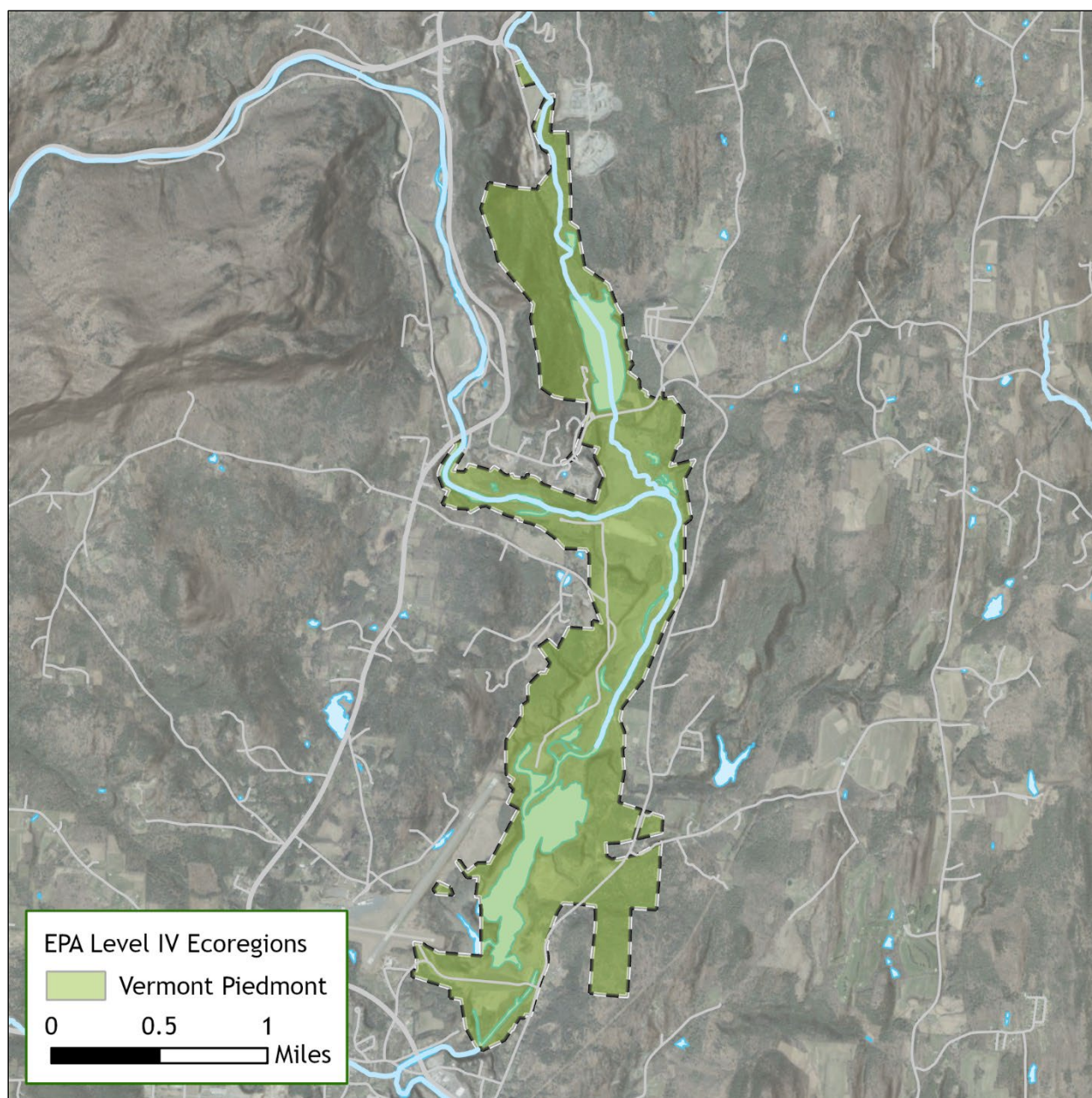


Figure 2.7 EPA Level IV Ecoregion at North Springfield Lake (EPA, 2013b)

2.7.6 Wetlands

The USFWS maintains the National Wetlands Inventory (NWI) as a database for wetlands across the United States. Based on the NWI's GIS data, there are an estimated 415 acres of wetlands present within the North Springfield Lake federal fee boundary (USFWS, 2025b). Figure 2.8 and Table 2.12 display mapped wetlands and provide wetland acreages according to the Cowardian classification system.

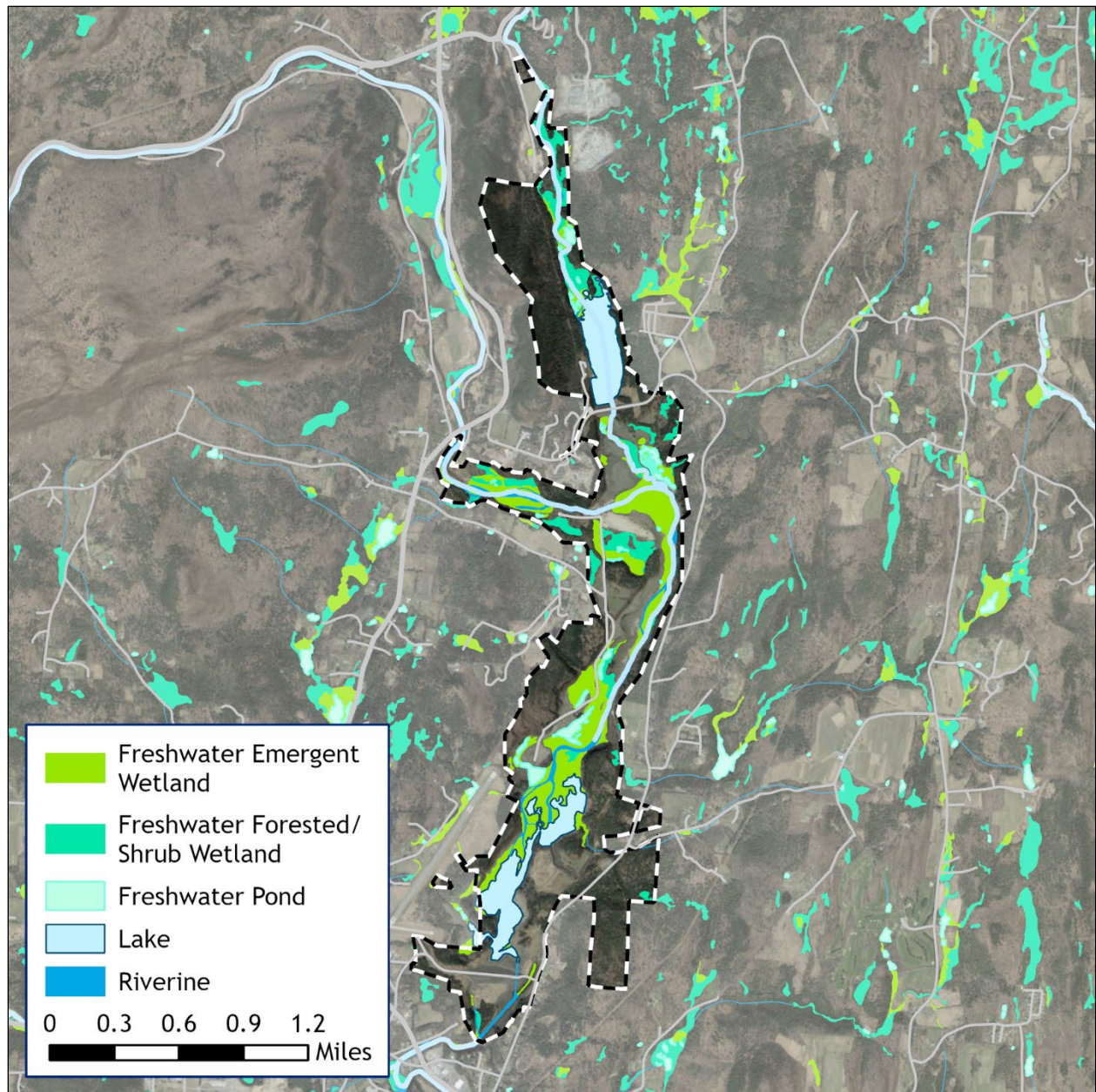


Figure 2.8 Estimated Wetlands within North Springfield Lake (USFWS, 2025b)

Table 2.12 Wetlands at North Springfield Lake (USFWS, 2025b)

Wetland Type	Acreage
Freshwater Emergent Wetland	147
Freshwater Forested/Shrub Wetland	73
Freshwater Pond	23

Wetland Type	Acreage
Lake	107
Riverine	65
TOTAL	415

2.8 HAZARDOUS, TOXIC AND RADIOACTIVE WASTE

The EPA's EnviroMapper tool reports there are approximately 143 EPA listed facilities in a 5-mile buffered area extending from the North Springfield Lake federal fee boundary. There is one Resource Conservation and Recovery Act (RCRA) facility within the federal fee boundary, associated with the North Springfield Dam. The North Springfield Dam is regulated under RCRA as a very small quantity generator for lead (EPA, 2025c). Other facilities within a 5-mile radius are from: RCRA sites; Assessment, Cleanup, and Redevelopment Exchange System sites; Integrated Compliance Information System for Air sites; and Toxic Release Inventory sites. There are no Superfund or Comprehensive Environmental Response, Compensation, and Liability Act sites within a 5-mile radius (EPA, 2025d). Figure 2.9 shows the EnviroMapper sites found within a 5-mile buffer of the North Springfield Lake federal fee boundary.

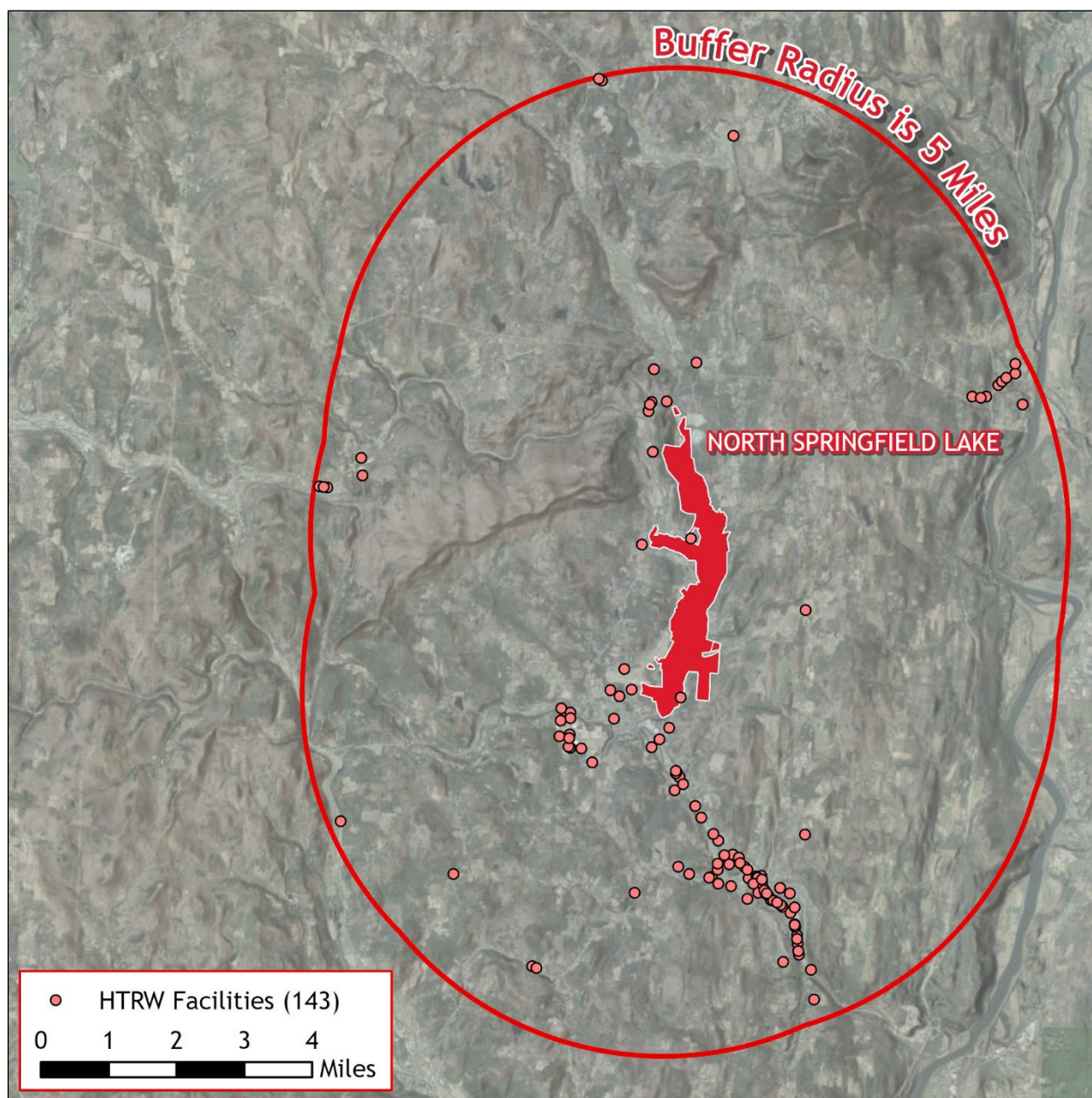


Figure 2.9 EPA EnviroMapper Hazardous, Toxic and/or Radioactive Waste Sites within 5 miles of North Springfield Lake (EPA, 2023; EPA, 2025d)

2.9 HEALTH AND SAFETY

Patrols and routine inspections are regularly conducted by USACE Rangers. Cooperative law enforcement agreements and continuing coordination with local police and Vermont State Police will monitor emergency response to visitor medical and health needs, manage traffic control, provide law enforcement assistance, and offer fire protection. USACE also ensures compliance with rules and regulations governing solid waste, wastewater, and potable water management on USACE fee land, including those areas operated by lessees.

2.10 AESTHETIC RESOURCES

With 1,361 acres of land ranging from forests and fields to wetlands, North Springfield Lake and Stoughton Pond have various recreational opportunities. In the summer, visitors can swim, sunbathe, and picnic at the Stoughton Recreation Area which offers a beach and shelter to rent for day outings. Anglers can try their luck in our lake, pond, or rivers. A boat ramp is available at Stoughton Pond for small boats, canoes and kayaks. North Springfield Lake is also a popular location for canoeists and kayakers to explore the wildlife and the natural beauty the area offers. In the winter, snowmobiling, cross-country skiing, and snowshoeing are popular activities. The staff at North Springfield Lake have recently started grooming cross-country and snowshoeing trails at the West Access off of Maple Street in Perkinsville.

Visitors are attracted to the area by the diversity of geological and natural features that were formed in this area. The area is typical of much of the upland New England physiographic province inasmuch as it displays the character of an ancient plateau dissected by narrow V-shaped valleys. Crystalline igneous and metamorphic rocks underlie remnants of the plateau (at an average elevation of 1,500 feet NGVD) and the valleys are lined with sands and gravels of glacial and more recent fluvial origin.

Many programs are used at North Springfield Lake to benefit the native wildlife species. The installation of bird boxes has created needed nesting sites for tree swallows, wood ducks, and bluebirds. Forest stands are managed to maximize benefits to both trees and animals. The management practices of brushhogging and prescribed burning are used to maintain important open field habitats (USACE, 2023).

2.11 CULTURAL, HISTORICAL, AND ARCHAEOLOGICAL 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 Part 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. 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 NEPA, as applicable. USACE summarizes the guidance provided in these laws in ER and EP 1130-2-540.

2.11.1 Summary of Resources and Previous Investigations

The cultural history of Vermont spans approximately 12,500 years of human occupation. This history is generally divided into pre-contact (prior to Native American contact with Europeans) and post-contact (after Native American contact with Europeans) frameworks that are further subdivided into more specific time periods based on technological variation, settlement patterns, land use, and subsistence and consist of:

Pre-Contact Periods:

- Paleo-Indian Period (10,500 to 8,000 BC)
- Early Archaic Period (8,000 to 5,500 BC)
- Middle Archaic Period (5,500 to 3,000 BC)
- Late Archaic Period (3,000 to 500 BC)
- Early Woodland Period (500 BC to 300 AD)
- Middle Woodland Period (300 to 1,000 AD)
- Late Woodland Period (1,000 to 1500 AD)

Post-Contact Periods:

- Contact and Early Historic (1500 to 1675 AD)
- Colonial (1675 to 1775 AD)
- Federal (1775 to 1830 AD)
- Early Industrial (1830 to 1870 AD)

- Late Industrial (1870 to 1915 AD)
- Modern (1915 AD to Present)

The only cultural resources investigation within the North Springfield project area is an archaeological reconnaissance survey of North Springfield Lake area which was completed in 1982 by Peter Thomas of the Department of Archeology, University of Vermont under contract to the USACE New England Division. The purpose of the reconnaissance level survey was to provide information on the archaeological sensitivity of North Springfield Lake and review possible effects of current project operations on cultural resources. Two primary tasks were completed: background research to review data on known cultural resources; and formulation of a predictive model for the project area. The project area was stratified into zones of expected archaeological sensitivity. Limited subsurface testing was completed only on the fee-owned lands (1,372 acres) to field check the predictive model for prehistoric and historic resources. Historic cultural resources were identified from documentary sources, subsurface testing, and walkover inspections.

A total of 68 historic period archaeological sites were identified during the reconnaissance survey, of which 44 require additional investigations. In addition, a number of areas of high and moderate prehistoric archaeological sensitivity were identified. Note that archaeological site locations are confidential information that are exempt from Freedom of Information Act requirements and cannot be divulged to the general public. Since no assessment can yet be made as to the significance of the 44 known archaeological sites on fee owned land at North Springfield Lake that require additional evaluation; they must be treated as though they are eligible for the National Register until further archaeological investigations are completed.

The archaeological reconnaissance survey identified several zones of high and moderate prehistoric archaeological sensitivity within North Springfield Lake. Comprehensive background research indicates that North Springfield Lake included both riverine and tributary stream/wetland environmental settings with high natural resource potential. Certain sections of North Springfield Lake have physical attributes that appear to be very similar to the locations of previously recorded prehistoric sites in the interior uplands of Vermont. Limited subsurface testing (98 test pits) in areas of high and moderate prehistoric sensitivity failed to identify any prehistoric sites. The lack of prehistoric resources encountered within the project area during the reconnaissance survey can be explained by the limited testing completed during the reconnaissance investigation of North Springfield Lake, and the post-construction deposition of flood sediments in several portions of the project area. However, the testing served to refine the initial sensitivity assessment of the project area. It is estimated that 550 acres of the 1,372 acres of fee-owned land possess moderate prehistoric archaeological sensitivity. The results of the reconnaissance survey suggest that additional, more intensive archaeological survey of these sensitive areas could identify prehistoric sites.

2.11.2 Long-Term Cultural Resource Objectives

The following are a series of cultural resources goals and objectives that have been identified by the USACE as steward of the property:

1. Protect known and documented prehistoric and historic archaeological sites. Measures may include, but not be limited to:
 - a. Avoid known sites, if possible. If resources cannot be avoided, every effort should be made to minimize these impacts. If impacts to significant resources are unavoidable, then further archaeological investigations may be required prior to implementation. In all cases, development activities should be reviewed by a USACE staff archaeologist and may require coordination with the Vermont State Historic Preservation Officer (VT SHPO)
 - b. Monitor the project area for evidence of unauthorized excavation or collection of cultural resources and damage to sites. Known sites should be maintained and preserved as important project resources.
2. Consult with the USACE archaeologist prior to any development or disturbance on USACE property.
3. Support interpretative programs for historic and archaeological resources, where appropriate and in accordance with federal laws and directives.

Finally, any future activities that have a potential to affect cultural resources must comply with Section 106 and 110 of the NHPA, NAGPRA, and ARPA.

2.12 DEMOGRAPHICS AND ECONOMIC RESOURCES

2.12.1 Area of Interest

North Springfield Dam is located on the Black River approximately 8.7 miles upstream of its confluence with the Connecticut River. It is adjacent to the village of North Springfield in Windsor County, Vermont. The North Springfield Lake project area draws most of its visitors from Windsor County and the surrounding counties of Sullivan, Orange, and Grafton. The area of interest, also known as the zone of interest for the socio-economic analysis, covers the counties within a 50-mile radius of the project. This area of interest includes portions of New Hampshire, New York, and Vermont. Data for these states is included to provide regional context to the socioeconomic and demographic conditions of the area of interest.

- Grafton County, NH
- Hillsborough County, NH
- Merrimack County, NH
- Sullivan County, NH
- Washington County, NY
- Addison County, VT
- Orange County, VT
- Rutland County, VT

- Windham County, VT
- Windsor County, VT

2.12.2 Population

The total population in the area of interest in 2023 was estimated to be 1,084,322 (Table 2.13). Table 2.13 shows the Census Bureau's population counts of the states and counties relevant to the area of interest for 2010 and 2020. It also has the 2023 population estimate based on the most recent 5-year American Community Survey and 2050 population projections. The projections are sourced from county specific data for counties in New Hampshire. State-level growth or shrinkage was used to project 2050 population for New York and Vermont where county-level projections through 2050 were not available. The population of the area of interest is expected to have its population grow by 5.9% between 2020 and 2050, at an average annual rate of 0.2% growth. This future population growth is largely concentrated in Hillsborough County, NH (+11.5%) and Merrimack County, NH (+9.5%), and Grafton County, NH (+7.3%). Areas with the most significant population decreases are Cheshire County, NH (-3.5%) and Sullivan County, NH (-2.2%). Although Windsor County, VT, where North Springfield Dam is located, saw an uptick in population growth in 2020 through 2023, it is not projected to experience significant changes to its population before 2050.

Table 2.13 Population Estimates, and Projections (2010, 2020, 2023, 2050)

Geographical Area	2010	2020	2023 Population Estimate	2050 Population Projection
New Hampshire	1,316,470	1,377,529	1,387,834	1,425,109
New York	19,378,102	20,201,249	19,872,319	20,686,329
Vermont	625,741	643,077	645,254	633,264
Cheshire County, NH	77,117	76,458	76,945	73,805
Grafton County, NH	89,118	91,118	91,759	97,777
Hillsborough County, NH	400,721	422,937	424,732	471,369
Merrimack County, NH	146,445	153,808	155,018	168,475
Sullivan County, NH	43,742	43,063	43,529	42,121
Washington County, NY	63,216	61,302	60,883	62,774
Addison County, VT	36,821	37,363	37,497	36,793
Orange County, VT	28,936	29,277	29,594	28,830
Rutland County, VT	61,642	60,572	60,484	59,648
Windham County, VT	44,513	45,905	45,913	45,205
Windsor County, VT	56,670	57,753	57,968	56,872
Area of Interest Total	1,048,941	1,079,556	1,084,322	1,143,668

Source: Sources: U.S. Census Bureau, (2010), RACE, Decennial Census; U.S. Census Bureau, (2020), RACE, Decennial Census; U.S. Census Bureau, 2018-2023 American Community Survey 5-Year Estimates; NH Department of Business and Economic Affairs, State, County, and Municipal Population Projections: 2020-2050; UVA Weldon Cooper Center, Total Populations for the U.S., the 50 States, and the District of Columbia: Census 2020 and Projections 2030-2050

The distribution of the population by sex (Table 2.14) is approximately 49.95% male and 50.05% female. The area of interest has a higher concentration of men compared to the four states. Every county in the area of influence has a higher proportion of men to women compared to the national average the national average of 49.1% male and 50.9% female and five of the eleven counties have a male majority. Figure 2.10 shows the distribution by age group for the area of interest and surrounding states. The area of interest has relatively fewer 25-to-34-year-olds and relatively more 65-to-74-year-olds than the states.

Table 2.14 Population Estimate By Sex (2023)

Geographical Area	Male	Female
New Hampshire	692,568	695,266
New York	9,702,417	10,169,902
Vermont	320,321	324,933
Cheshire County, NH	37,894	39,051
Grafton County, NH	45,512	46,247
Hillsborough County, NH	212,913	211,819
Merrimack County, NH	77,233	77,785
Sullivan County, NH	21,858	21,671
Washington County, NY	31,286	29,597
Addison County, VT	18,641	18,856
Orange County, VT	14,809	14,785
Rutland County, VT	30,251	30,233
Windham County, VT	22,727	23,186
Windsor County, VT	28,531	29,437
Area of Interest Total	541,655	542,667

Source: U.S. Census Bureau, 2018-2023 American Community Survey 5-Year Estimates

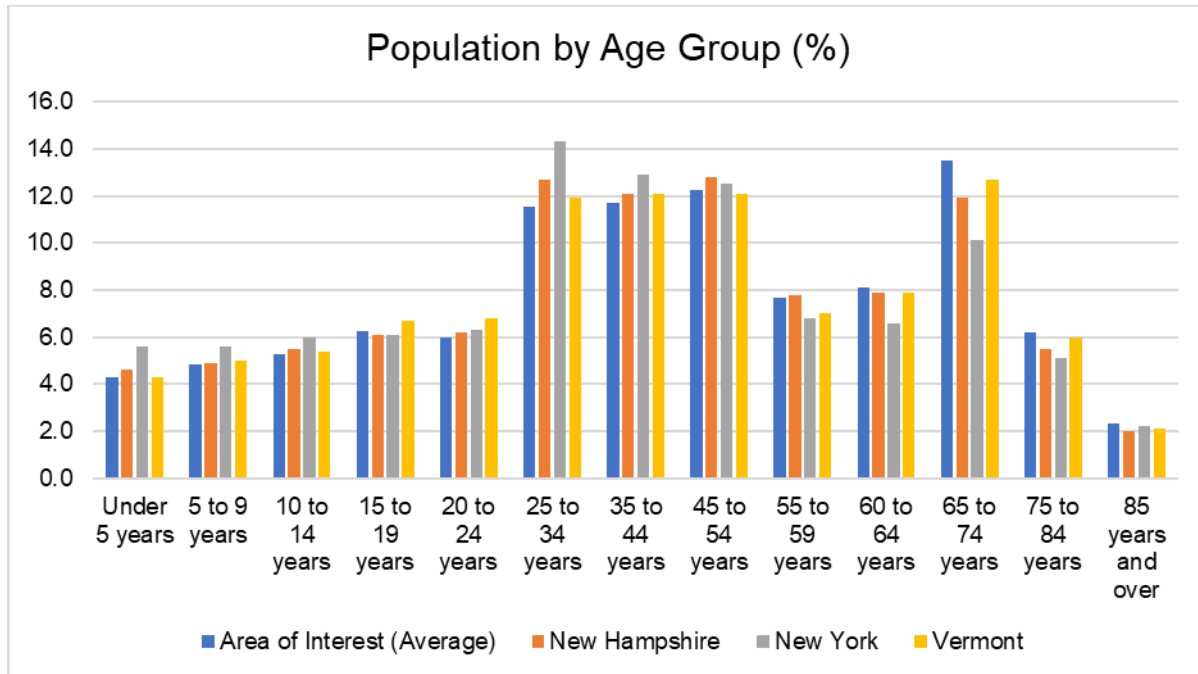


Figure 2.10 Percent of Population by Age Group

Population by race and Hispanic Origin is displayed in Table 2.15. The area of interest is approximately 87% White, 4.78% Hispanic or Latino, 1.6% Black, 0.08% American Indian or Alaskan Native, 2.5% Asian, 0.02% Native Hawaiian/Other Pacific, 0.35% Some other race, and 3.67% two or more races. By comparison, the state of New Hampshire's demographic makeup is 87.5% White, 4.5% Hispanic or Latino, 1.38% Black, 0.08% American Indian or Alaskan Native, 2.57% Asian, 0.02% Native Hawaiian/Other Pacific, 0.37% Some Other Race, and 3.52% Two or More Races. New York's is 53.4% White, 19.6% Hispanic or Latino, 13.6% Black, 0.19% American Indian or Alaskan Native, 8.83% Asian, 0.03% Native Hawaiian/Other Pacific, 0.9% Some Other Race, and 3.42% Two or More Races. Vermont's is 90.6% White, 2.49% Hispanic or Latino, 1.16% Black, 0.14% American Indian or Alaskan Native, 1.63% Asian, 0.02% Native Hawaiian/Other Pacific, 0.34% Some Other Race, and 3.66% Two or More Races. The area of interest has a significantly higher proportional population that is White and significantly lower population proportions of Hispanic or Latino, Black, Asian, American Indian and Alaskan Native, and Native Hawaiian or Pacific Islanders than the national average. It is consistent with the demographic distributions of the states of New Hampshire and Vermont.

Table 2.15 Population Estimate by Race/ Hispanic Origin (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
New Hampshire	1,214,784	62,758	19,214	1,078	35,730	254	5,176	48,840
New York	10,608,842	3,898,652	2,708,094	37,212	1,754,957	6,220	178,956	679,386
Vermont	584,421	16,058	7,453	900	10,503	97	2,183	23,639
Cheshire County, NH	70,705	1,904	568	77	532	10	151	2,998
Grafton County, NH	80,860	2,603	1,137	104	3,185	30	392	3,448
Hillsborough County, NH	343,814	35,041	9,811	264	17,941	35	1,781	16,045
Merrimack County, NH	140,450	4,083	2,314	196	2,508	35	315	5,117
Sullivan County, NH	39,951	871	357	7	238	9	121	1,975
Washington County, NY	54,541	1,790	1,415	44	376	20	593	2,104
Addison County, VT	33,828	1,184	326	24	695	32	109	1,299
Orange County, VT	27,633	506	104	41	153	1	106	1,050
Rutland County, VT	56,412	1,279	375	2	333	0	49	2,034
Windham County, VT	41,617	1,383	372	30	569	0	107	1,835
Windsor County, VT	53,759	1,294	310	47	606	0	63	1,889
Area of Interest Total	943,570	51,938	17,089	836	27,136	172	3,787	39,794

Source: U.S. Census Bureau, 2018-2023 American Community Survey 5-Year Estimates

2.12.3 Education and Employment

Table 2.16 displays the highest level of education attained by the population ages 25 and over. In the area of interest, 2.1% of the population have less than a 9th grade education; another 4.6% have between a 9th and 12th grade education; 28.7% have at least a high school diploma or equivalent; 16.7% have some college education; 9.5% have an associate degree; 22.7% have a bachelor's degree; and 15.7% have a graduate or professional degree.

In New Hampshire, 1.9% of the population have less than a 9th grade education; another 4.1% have between a 9th and 12th grade education; 27% have at least a high school diploma or equivalent; 17.3% have some college education; 10% have an associate degree; 24.1% have a bachelor's degree; and 15.7% 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; 14.9% 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 Vermont, 1.7% of the population have less than a 9th grade education; another 3.6% have between a 9th and 12th grade education; 27.3% have at least a high school diploma or equivalent; 16.1% have some college education; 8.5% have an associate degree; 24.7% have a bachelor's degree; and 18% have a graduate or professional degree.

Table 2.16 Population Estimate by Highest Level of Educational Attainment, Population 25 Years of Age and Older (2023)

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
New Hampshire	1,009,222	18,815	41,182	272,558	174,285	100,544	243,501	158,337
New York	13,996,138	836,124	862,413	3,437,438	2,081,783	1,242,877	3,083,769	2,451,734
Vermont	462,996	7,970	17,356	126,179	74,580	39,542	114,217	83,152
Cheshire County, NH	55,245	928	2,393	17,325	9,996	5,093	11,867	7,643
Grafton County, NH	65,956	1,038	2,989	17,026	10,406	4,924	14,290	15,283
Hillsborough County, NH	304,990	7,973	13,420	78,060	52,335	29,314	77,518	46,370
Merrimack County, NH	112,062	1,903	5,140	31,608	18,571	12,167	24,877	17,796
Sullivan County, NH	32,858	889	2,021	12,160	4,580	3,181	6,261	3,766
Washington County, NY	45,248	1,303	3,079	18,041	7,968	5,251	5,649	3,957
Addison County, VT	26,242	359	927	7,596	3,982	1,970	6,605	4,803
Orange County, VT	22,081	429	732	6,991	3,348	2,517	4,452	3,612
Rutland County, VT	45,064	703	2,123	14,826	7,860	4,440	9,081	6,031
Windham County, VT	34,190	290	1,482	9,767	5,853	2,317	7,673	6,808
Windsor County, VT	43,890	690	1,550	12,446	7,019	3,790	10,840	7,555
Area of Interest	787,826	16,505	35,856	225,846	131,918	74,964	179,113	123,624

Source: U.S. Census Bureau, 2018-2023 American Community Survey 5-Year Estimates

Employment by sector is presented in Figure 2.11 and Table 2.17. Figure 2.11 shows that the largest percentage of the area of interest is employed in the Educational Services, Health Care, and Social Assistance sector at 25.6%. 12.4% of the populations works in Manufacturing, 12.1% works in Retail Trade, 11.2% works in Professional, Scientific, Management, Administrative, and Waste Management Services, 7.7% works in Arts, Entertainment, Recreation, Accommodation, and Food services, 7.6% works in Construction, 5.5% works in Finance, Insurance, Real Estate, Rental, and Leasing, 4.3% works in Other Services Excluding Public Administration, 3.9% works in Public Administration, and 3.9% works in Transportation, Warehousing, and Utilities, 2% works in Information, 1.4% works in Agriculture, Forestry, Fishing, Hunting, and Mining.

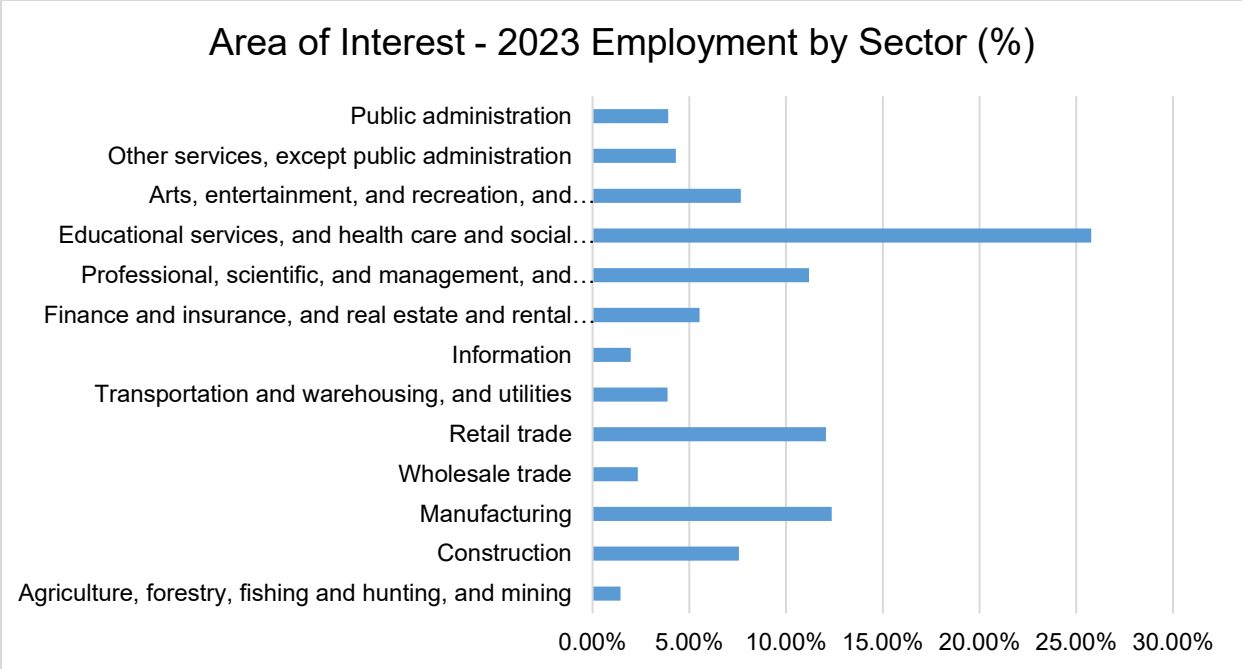


Figure 2.11 Area of Interest Employment by Sector (2023)

Source: U.S. Census Bureau, 2018-2023 American Community Survey 5-Year Estimates

Table 2.17 Annual Average Employment by Sector (2023)

Employment Sector	New Hampshire	New York	Vermont	Cheshire County, NH	Grafton County, NH	Hillsborough County, NH	Merrimack County, NH
Civilian employed population 16 years and over	745,100	9,568,411	337,258	39,357	46,065	239,049	81,079
Agriculture, forestry, fishing and hunting, and mining	5,444	52,954	8,700	496	751	961	800
Construction	53,231	549,110	26,223	2,937	2,664	17,547	6,136
Manufacturing	95,347	554,587	34,263	5,543	4,397	34,715	7,942
Wholesale trade	17,518	187,705	5,597	1,765	753	5,154	2,618
Retail trade	88,948	924,784	37,341	5,307	4,335	29,517	9,885
Transportation and warehousing, and utilities	29,972	547,156	10,848	1,720	1,453	10,810	2,695
Information	14,702	265,249	5,848	660	739	5,318	1,760
Finance and insurance, and real estate and rental and leasing	48,464	769,593	16,399	2,296	1,728	15,851	4,408
Professional, scientific, and management, and administrative and waste management services	90,017	1,234,322	32,756	2,778	5,188	31,914	9,102
Educational services, and health care and social assistance	181,955	2,790,946	96,388	10,464	15,698	54,732	20,104
Arts, entertainment, and recreation, and accommodation and food services	58,340	796,182	30,810	2,412	4,600	16,153	6,076
Other services, except public administration	31,389	440,780	15,290	1,439	2,207	9,421	4,069
Public administration	29,773	455,043	16,795	1,540	1,552	6,956	5,484

Source: U.S. Census Bureau, 2018-2023 American Community Survey 5-Year Estimates

Employment Sector	Sullivan County, NH	Washington County, NY	Addison County, VT	Orange County, VT	Rutland County, VT	Windham County, VT	Windsor County, VT	Area of Interest
Civilian employed population 16 years and over	20,877	28,381	19,868	15,846	28,696	23,444	28,815	571,477
Agriculture, forestry, fishing and hunting, and mining	284	960	1,117	785	583	652	824	8,213
Construction	1,319	2,368	1,921	1,648	2,397	2,237	2,081	43,255
Manufacturing	2,929	3,715	2,230	1,278	3,015	2,215	2,674	70,653
Wholesale trade	562	451	199	176	596	496	596	13,366
Retail trade	3,201	3,815	2,098	1,851	3,703	2,408	2,789	68,909
Transportation and warehousing, and utilities	659	1,108	722	493	1,087	728	693	22,168
Information	624	334	293	230	332	422	586	11,298
Finance and insurance, and real estate and rental and leasing	919	1,164	771	691	901	1,393	1,445	31,567
Professional, scientific, and management, and administrative and waste management services	1,803	2,569	1,741	1,063	2,773	2,150	2,877	63,958
Educational services, and health care and social assistance	6,001	6,423	5,763	4,923	8,055	6,483	8,640	147,286
Arts, entertainment, and recreation, and accommodation and food services	1,325	2,281	1,393	1,085	2,937	2,312	3,230	43,804
Other services, except public administration	752	1,315	899	801	1,288	1,223	1,230	24,644
Public administration	499	1,878	721	822	1,029	725	1,150	22,356

Source: U.S. Census Bureau, 2018-2023 American Community Survey 5-Year Estimates

A summary of the civilian labor force in the area of interest is displayed in Table 2.18. In 2023, the area of interest had an unemployment rate of 3.43% This is lower than the unemployment rates of New York (6.20%) and Vermont (3.70%) and higher than that of New Hampshire (3.40%).

Table 2.18 Labor Force, Employment and Unemployment Rates (2023, Annual Averages)

Geographic Area	Civilian Labor Force	Number Employed	Number Unemployed	Unemployment Rate %
New Hampshire	771,014	745,100	25,914	3.40%
New York	10,200,538	9,568,411	632,127	6.20%
Vermont	350,073	337,258	12,815	3.70%
Cheshire County, NH	40,682	39,357	1,325	3.30%
Grafton County, NH	47,453	46,065	1,388	2.90%
Hillsborough County, NH	247,287	239,049	8,238	3.30%
Merrimack County, NH	83,671	81,079	2,592	3.10%
Sullivan County, NH	21,364	20,877	487	2.30%
Washington County, NY	29,998	28,381	1,617	5.40%
Addison County, VT	20,649	19,868	781	3.80%
Orange County, VT	16,304	15,846	458	2.80%
Rutland County, VT	29,931	28,696	1,235	4.10%
Windham County, VT	24,496	23,444	1,052	4.30%
Windsor County, VT	29,956	28,815	1,141	3.80%
Area of Interest	591,791	571,477	20,314	3.43%

Source: U.S. Census Bureau, 2018-2023 American Community Survey 5-Year Estimates (Averages)

2.12.4 Households, Income, and Poverty

Table 2.19 displays the number of households and average household sizes in the state and area of interest. There were approximately 432,545 households in the area of interest with an average household size of 2.38.

Table 2.19 Number of Households and Average Household Size (2023)

Geographic Area	Total Households	Average Household Size
New Hampshire	551,186	2.44
New York	7,668,956	2.51
Vermont	269,466	2.30
Cheshire County, NH	30,519	2.39
Grafton County, NH	36,107	2.35
Hillsborough County, NH	167,732	2.48
Merrimack County, NH	60,445	2.46
Sullivan County, NH	16,079	2.66

Geographic Area	Total Households	Average Household Size
Washington County, NY	24,254	2.40
Addison County, VT	14,638	2.34
Orange County, VT	12,790	2.27
Rutland County, VT	25,448	2.30
Windham County, VT	19,660	2.24
Windsor County, VT	24,873	2.29
Area of Interest	432,545	2.38

Source: U.S. Census Bureau, 2018-2023 American Community Survey 5-Year Estimates

The median household incomes in the area of interest range from \$64,778 in Rutland County, VT to \$100,436 in Hillsborough County, NH in 2023, as displayed in Table 2.20. The average median household income of the area's counties was \$80,139. Per capita income in the area of interest was \$43,772 in 2023, lower than the per capita income of New Hampshire (\$50,867), New York (\$49,520), and Vermont (\$44,365).

Table 2.20 Median and Per Capita Income (2023)

Geographic Area	Median Household Income (All)	Per Capita Income
New Hampshire	\$95,628	\$50,867
New York	\$84,578	\$49,520
Vermont	\$78,024	\$44,365
Cheshire County, NH	\$81,001	\$41,683
Grafton County, NH	\$84,021	\$49,835
Hillsborough County, NH	\$100,436	\$52,243
Merrimack County, NH	\$93,944	\$47,056
Sullivan County, NH	\$75,929	\$41,921
Washington County, NY	\$72,342	\$35,496
Addison County, VT	\$88,478	\$43,524
Orange County, VT	\$77,328	\$41,343
Rutland County, VT	\$64,778	\$38,902
Windham County, VT	\$68,021	\$42,142
Windsor County, VT	\$75,247	\$47,344
Area of Interest	\$80,139	\$43,772

Source: U.S. Census Bureau, 2018-2023 American Community Survey 5-Year Estimates

Table 2.21 displays the percentage of persons and families whose incomes fell below the poverty level in the past twelve months as of 2023. Within the area of interest, Rutland County, VT and Windham County, VT had the greatest share of people with incomes below the poverty level at 12%. Hillsborough County, NH had the lowest percentage of people at 6.5% In terms of families below the poverty level, Merrimack County, NH has the lowest percentage with 3.7% and Washington County, NY has the

highest with 7.5%. Comparatively, New Hampshire has the lowest families below the poverty line with 4.4%, while New York has the highest with 9.8%.

Table 2.21 Percent of Families and People Whose Income in the Past 12 Months is Below the Poverty Level (2023)

Geographic Area	All Families	All People
New Hampshire	4.40%	7.20%
New York	9.80%	13.70%
Vermont	5.70%	10.30%
Cheshire County, NH	5.30%	8.90%
Grafton County, NH	5.90%	10.10%
Hillsborough County, NH	4.10%	6.50%
Merrimack County, NH	3.70%	7.10%
Sullivan County, NH	7.00%	10.80%
Washington County, NY	7.50%	10.80%
Addison County, VT	4.20%	7.40%
Orange County, VT	5.50%	9.40%
Rutland County, VT	7.20%	12.00%
Windham County, VT	6.00%	12.00%
Windsor County, VT	4.40%	8.70%
Area of Interest	5.53%	9.43%

Source: U.S. Census Bureau, 2018-2023 American Community Survey 5-Year Estimates

2.13 RECREATION FACILITIES, ACTIVITIES, AND NEEDS

2.13.1 Visitation Profile

North Springfield 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. At North Springfield 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 2.22 provides total visitation and specific area visitation of the Dam Access, East Access, Stoughton Pond Boat ramp, Stoughton Pond Recreation Area, and West Access by year for FY2019-2023. Visitation numbers are impacted by several factors including counting methodology, flooding, drought, COVID-19, and other environmental factors. Overall visitation hit a peak in 2021 with 78,898 and has been slowly decreasing with visitation in 2023 at 41,707. The largest contributors of visits are the East Access and Dam Access areas.

Table 2.22 North Springfield Lake Total Visitation FY2019-2023

	2019	2020	2021	2022	2023
Dam Access	10,007	8,431	10,694	11,529	11,540
East Access	21,337	17,250	34,445	14,736	16,995
Stoughton Pond Boat Ramp	2,468	2,467	8,039	1,964	720
Stoughton Pond Recreation Area	10,132	3,722	8,491	8,582	4,035
West Access	11,478	7,094	17,229	13,256	8,417
TOTAL VISITATION	55,422	38,964	78,898	50,067	41,707

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

Area of Interest

The visitation market area, or area 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 a 50-mile radius based on visitation records for North Springfield Lake.

2.13.2 Recreation Areas and Facilities

Recreation at North Springfield Lake is managed by the USACE. Of great importance to the lake's area of interest are the existing and future recreational opportunities. The majority of usage involves swimming, sunbathing, picnicking, hunting, fishing, sightseeing, snowmobiling, cross-country skiing, hiking, and nature walking. From the paved walking trail on North Springfield Dam, sightseers, photographers, birdwatchers, and walkers have a panoramic view of Mount Ascutney and Hawks Mountain. Located within the project land of North Springfield Lake are the Stoughton Pond Recreation Area and two passive recreation areas. Stoughton Pond is a day use recreation area with a sandy beach and swimming area, picnic sites with charcoal grills, change house and restrooms. A boat ramp is also available for small boats, canoes, and kayaks.

Due to the type of facilities available at the project, it is common for the recreation areas to experience a high level of usage during weekends when the weather is hot and sunny. Table 2.23 lists the various recreational facilities at North Springfield Lake. These areas do not include camping, lodging, showers, marinas, or fishing facilities. Each recreation area is more specifically described in Chapter 5.

Table 2.23 Recreation Facilities at North Springfield Lake

Recreation Area	Managed	Boat Ramps	Picnic Areas	Playground	Swimming Area	Trails
Dam Access	U					M
East Access	U		A			H, S, M
Stoughton Pond Boat Ramp	U	X	A			S, M
Stoughton Pond Recreation Area	U		G, GS	X	X	I
West Access	U					S, CC, M

Source: USACE Corps Lakes website (USACE, n.d.)

U USACE Managed	<u>Picnic</u>	<u>Trails</u>
X Exists at Lake	A Picnic Area	H Hiking Trails
	G Group Picnic	I Hiking Trails-Interpretive
	GS Group Picnic Shelter	S Snow Mobile Trails
		M Multipurpose Trails
		CC Cross Country Skiing Trails

Hunting, Trapping, and Fishing

Hunting, trapping, and fishing are permitted at North Springfield Lake in accordance with applicable federal, State, and local laws except in areas designated by the Division Engineer. Trapping requires a free permit from the USACE. Currently, no game stocking program is in effect on the project. The fifty-acre Stoughton Pond is stocked with rainbow trout and has a developing largemouth bass population. Brook trout are available in the feeder streams. There are also extensive fishing areas on the 75-acre lake and along five miles of streams.

Day Use and Picnicking

North Springfield Lake offers many day use recreation opportunities. Visitors can enjoy. Bird watching can be enjoyed throughout the project lands, but a popular day use area for this activity is the East Access recreation area. Stoughton Pond is also a popular day use area with picnic sites, grills, and a covered shelter that can be reserved in advance.

Boating

The Stoughton Pond boat ramp is available to be used by canoes and small boats only, due to siltation. The Pond has a five-mile per hour speed limit. A cartop launch is available at the West Access Recreation Area.

Trails

North Springfield Lake provides visitors the opportunity to access multiuse trails at several locations at the project. Motorized vehicles are not allowed on any trails at North Springfield Lake.

East Access Nature Area Self-Guiding Trail System

The East Access Trail System is located on the east side of North Springfield Lake reservoir area. This trail system overlooks the lake and was originally developed by the Ascutney Mountain Audubon Society in cooperation with the USACE. There are three major, marked trails – the “Blue”, “Red” and “Green” trails.



Photo 2.1 Nature Area Trail Head

Source: USACE

Branch Brook Trail

The Branch Brook trail derives its name from a tributary of the Black River that flows south into Stoughton Pond. Starting in the hills of Reading, Vermont, it meanders 14 miles through a valley rich with agricultural and historical heritage. There is much to see and do along this trail. In addition to a pleasant hike; swimming, wildlife viewing, accessing secluded fishing locations or simply immersing oneself in nature are a few possibilities. This is a shared-use trail for pedestrians, bicyclists, and equestrians.

The trail parallels a portion of the former Branch Brook Road that was removed during the construction of the North Springfield Flood Control Dam and the surrounding

flood plain between 1957-1960. It follows the shoreline of Stoughton Pond for nearly 1.25 miles, connecting Branch Brook Road in Amsden with the recreation area at Stoughton Pond. Hikers can access this trail from either the north at the end of Branch Brook Road or from the south from the Stoughton Pond recreation area. Vehicle parking is available at both locations.

Crown Point Road

A portion of the former Crown Point Road, which at the time of the French and Indian War connected Fort #4 in Charlestown, New Hampshire and Fort Crown Point in Crown Point, New York can be traversed. Markings are seen in white paint upon trees to be used for navigation and trail junctions are marked with directions and distances. The Crown Point Road sections of the trail are marked with white paint.

Multipurpose-Use Trails

Many multi-use trails have been established throughout the project area with the primary uses being hiking, biking, equestrian, and snowmobiling. The snowmobile trails are connected into a larger system of trails on private land abutting the project.

Additional trails at North Springfield Lake include the Sand Hill Trail accessed from the Stoughton Pond Recreation Area, and the Green's Hill Trail accessed from the West Access Recreation Area..



Photo 2.2 Snowmobiles on trails at North Springfield

Source: USACE

2.13.3 Recreation Analysis

The 2024 Vermont Statewide Comprehensive Outdoor Recreation Plan (SCORP): *Move Forward Together Vermont* was prepared by the Department of Forests, Parks, and Recreation (FPR) and the Vermont Outdoor Recreation Economic Collaborative (VOREC) along with many public and private partners across the state (FPR and VOREC, 2024). The SCORP serves to address emerging issues in Vermont outdoor recreation and set priority areas to serve as the foundation for action over the next five years. The vision is to “Foster Healthy and Vibrant Communities through Outdoor Recreation” with the following three themes:

- **Stewardship** – emphasize the importance of supporting Vermont’s physical recreational assets as well as the organizations and people who manage them.
- **Wellness** – focus on supporting the people who recreate.
- **Economic Development** – address outdoor recreation as a tool to create a sustainable and vibrant future.

To implement these themes, the SCORP identified a total of 19 priority actions.

In order to gain an understanding of statewide participation trends, several surveys were conducted to support the development of the SCORP. Data was collected from an outdoor recreation user survey distributed in Spring 2024. The North Springfield Mountain MP highlights the Representative Panel Survey to describe results from a statistically representative sample of Vermonters. Some highlights of the participation trends include:

- 92.8% of Vermont residents have engaged in outdoor recreation with 58.2% recreated at least once a week.
- Activities like walking (87%), swimming (54%), hiking (54%), gardening (40%), and playground activities (38%) were the top activities by Vermonters.
- Vermonters sought outdoor experiences to enhance their mental well-being (3.92), relax and recharge (3.92), and find peace in natural surroundings (3.92). Results are based on a scale of one to five, with one being ‘not at all important’ to five being ‘extremely important’.
- Regarding barriers to outdoor recreation, Vermonters were concerned about the high cost of gear, equipment, and/ or appropriate clothing (3.61), engaging in competing interests during free time (3.15), worries about sanitation and lack of facilities (3.11) and high entrance fees (3.05). Results are based on a scale of one to five, with one being ‘strongly disagree’ and five being ‘strongly agree’.
- The top camping-related investment priorities were state parks and public developed campgrounds (3.22), cabins or yurts (3.1), and drive-in tents (3.04). Results are based on a scale of one to five, with one being “very low priority” to five being “very high priority.”
- The top program investment priorities were seniors’ activity centers (3.4), community gardens (3.38), and outdoor sports programs for youth (3.35). Results are based on a scale of one to five, with one being “very low priority” to five being “very high priority.”

- The top health and wellness investments were programs that help Senior Vermonters to stay active outdoors (3.71), outdoor recreation projects that serve low-income and historically underserved populations (3.7), and program that address mental and physical health needs through outdoor activities (3.65). Results are based on a scale of one to five, with one being “very low priority” to five being “very high priority.”

Although the following results do not represent a statistically representative sample of any population group, it can yield meaningful insights into the similarities and differences of Vermonters:

- 65% of survey responders with a disability themselves or having someone in the household with a disability say that the disability hampers their ability, or ability of others in the household to recreate outdoors in Vermont.
- From those, 40% say that some accommodation or assistance could be offered to help improve outdoor recreational experiences.
- Younger generations tended to prioritize investments in outdoor events and concerts while the older generation prioritized activity centers and programs specific to seniors.
- Rural respondents had a top constraint to avoid places where dogs are off-leash and a top constraint for urban/ suburban respondents was not having time to recreate due to work.
- Lower income respondents, or less than \$40,000 household income, were constrained by cost of gear/ equipment use/ entrance fees, and overall trip costs for outdoor recreation.

The USACE recognizes the importance of recreation to the local community and the State of Vermont, and the importance that USACE managed land can play in providing access. Information from the SCORP including the survey results and the statewide goals and objectives were considered when developing the goals and objectives for this Master Plan. See Chapter 3 for the resource goals and objectives developed for the North Springfield Lake Master Plan.

2.13.4 Recreation Carrying Capacity

No recreation carrying capacity studies have been conducted at North Springfield Lake. 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, North Springfield Lake experiences low visitation. This trend is expected to continue based on regional population projections. The USACE will apply appropriate best management practices including site management, regulating visitor behavior, and modifying visitor behavior as needed to adapt to changes in usage.

2.14 REAL ESTATE

The North Springfield Lake project consists of approximately 1,384 acres of fee simple land and 376 acres of easements. 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 North Springfield Lake include leases, licenses, easements, permits, and others which include the following:

- 4 Easements
- 3 Licenses
- 0 Leases
- 0 Permits

The demand for real estate outgrants at North Springfield 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 New England 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 North Springfield 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 North Springfield 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 implemented 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 trespasses 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

3.1 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.

3.2 RESOURCE GOALS

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

GOAL A. Provide the best management practices to respond to regional needs, resource capabilities and suitability, 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 demands created by the project itself while sustaining the project’s natural resources.

GOAL D. Recognize the particular qualities, characteristics, and potentials of the project.

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

In addition to the above goals, USACE management activities are guided by USACE-wide Environmental Operating Principles (EOPs) 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.

3.3 RESOURCE OBJECTIVES

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

- Vermont Wildlife Action Plan
- Vermont 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 North Springfield Lake to the greatest extent possible. Tables 3.1 through 3.4 list the objectives for North Springfield 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.	*		*	*	*
Support and provide technical guidance to potential lease partners on the management of recreation facilities in accordance with public demand. Examples include universally accessible fishing docks and playground equipment in day use.	*		*		
Ensure consistency with USACE Natural Resource Management (NRM) Strategic Plan.					*
Monitor the Vermont 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 North Springfield 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.	*	*		*	*
Manage high density and low-density recreation lands in ways that balance visitor uses 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 partners to identify the needs for 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.	*	*		*	*
Protect and restore important native habitats such as previous or abandoned farmlands, 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 as Birds of Conservation Concern.	*	*		*	*

*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 include history, project purposes (flood risk management, 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.	*	*		*	*
Monitor and enforce Title 36 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 North Springfield 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, 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 North Springfield 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 2004 Master Plan to the 2026 Master Plan Revision.

The previous land-use categories identified in the 2004 Master Plan were as follows:

- **Project Operations:** Project Operations acres are those where USACE-operated facilities are located, including the dam and outlet works, operations buildings, and spillway as well as any maintenance and laydown areas. Incidental recreation often occurs within these Operation Areas but are ancillary to the primary purpose of project operations for flood risk management.
- **Recreation Lands:** Land developed for intensive recreational activities by the visiting public.
- **Multiple Resources Management (MRM):** Lands managed for one or more of, but not limited to, the following activities:
 - Recreation – Low Density

- Wildlife Management General
- Vegetative Management
- Inactive and/or Future Recreation Areas
- **Environmentally Sensitive Area (ESA):** Areas where scientific, ecological, cultural or aesthetic features have been identified.

**Table 4.1 Change from 2004 Land and Water Surface Classifications to 2026
Proposed Land and Water Surface Classification**

Prior Land Classifications (2004)	Acres	Proposed Land Classifications (2026)	Acres	Net Difference
Project Operations	98	Project Operations (PO)	143	45
Recreation	16	High Density Recreation (HDR)	8	(8)
Multiple Resources Management Lands (MRML)	1,160	Multiple Resource Management Lands (MRML)	0	(1,160)
—	—	Low Density Recreation (MRML-LDR)	408	408
—	—	Wildlife Management (MRML-WM)	660	660
Environmentally Sensitive Area (ESA)	67	Environmentally Sensitive Area (ESA)	0	(67)
LAND TOTAL	1,341	LAND TOTAL	1,219	(122)
Prior Water Surface Classifications (2004)	Acres	Proposed Water Surface Classifications (2026)	Acres	Net Difference
—	—	Open Recreation	120	120
—	—	Restricted	2	2
WATER TOTAL	0	WATER TOTAL	122	122
TOTAL FEE	1,341	TOTAL FEE	1,341	0

*2004 acres are approximate based on digitizing the 2004 land and water classification map. Total fee acreage differences from the 2004 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 North Springfield Lake were established after considering public comments and input from key stakeholders, including elected officials, and city and county governments. Additionally, information from the Vermont 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 143 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."

There are 8 acres at North Springfield Lake classified as HDR. The 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 lands at North Springfield Lake with this classification.

Environmentally Sensitive Areas (ESA)

ESAs include scientific, ecological, cultural, and aesthetic features identified and in need of preservation. At North Springfield Lake, there are 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 1,068 acres of MRML lands at North Springfield Lake. The following sections describe 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 408 acres under this land classification at North Springfield Lake.

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 use 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 660 acres of land included in this classification at North Springfield 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 North Springfield 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 North Springfield Lake.

4.2.4 Water Surface Classifications

The water surface at North Springfield is managed through the North Springfield Lake Water Safety Management Plan established and updated by project staff. 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 approximately 50 acres of water surface at the recreation pool of 502 feet NGVD29 at Stoughton Pond; approximately 70 acres of water surface at the permanent pool of 467 feet NVGD29 at North Springfield Lake; and approximately 2 acres of water surface below the North Springfield Lake dam.

Open Recreation

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 120 acres of open recreation water surface at North Springfield Lake.

Restricted

Restricted water surfaces include those areas where recreational boating is prohibited or restricted for project operations, safety, and security purposes. The areas include the water surface immediately surrounding the outlet structure and downstream below the dam in the area immediately surrounding the flood control gates. There are 2 acres of Restricted water surface at North Springfield 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 no acres of designated no-wake water surface at North Springfield 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. North Springfield 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 North Springfield Lake, Flowage Easement lands are the major type of easements present, however, there is one drainage ditch easement present.. A flowage easement, in general, grants to the government the perpetual right to occasionally flood/inundate land during flood risk management operations and to prohibit construction of habitable structures and restrict placement of other structures without prior written approval of the government. According to the USACE New England District Real Estate Office, USACE owns 1,384 acres of land in fee for the project and holds flowage easements on 376 acres at North Springfield 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 North Springfield Lake are Project Operations, High Density Recreation, Environmentally Sensitive Areas (ESA) 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 North Springfield Lake Operational Management Plan (OMP).

5.2 PROJECT OPERATIONS

Project Operations are land associated with the dam, spillway, dikes, project office, maintenance facilities, and other areas solely for the operation of the project. There are 143 acres of lands under this classification, all of which are managed by the USACE. The management plan for the Project Operations area is to continue providing physical security necessary to ensure sustained operations of the dam and related facilities, including restricting public access to hazardous locations near the dam and spillway. Limited and passive recreation use such as bank fishing and hiking is currently allowed within some areas classified as Project Operations, but USACE considers this use to be incidental and may prohibit such use without notice for project operational or security needs. Dam Access is found within the PO area at North Springfield Lake. Public vehicular traffic is currently not allowed on the road traversing the crest of the dam. USACE maintains the road across the dam structure.

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.

Dam Access

The Dam Access has walking path access and trail access. There is a parking area on the west end of the dike. The North Springfield Lake main dam is located one-half mile off Route 106 along Reservoir Road in Springfield, Vermont.



Photo 5.1 North Springfield Dam Access

Source: USACE



Photo 5.2 Side View of the Dam

Source: USACE

5.3 HIGH DENSITY RECREATION

North Springfield Lake has 8 acres developed for intensive recreational activities for the visiting public, including day use areas, boat launches, and access points, which are all managed by the USACE. 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, sports 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 Vermont SCORP and previous visitation data, activities such as walking, hiking, and playground activities remain the most favorite and are common activities that can be undertaken at North Springfield Lake (see Section 2.13.3). Seeking opportunities to improve facilities and providing access to outdoor recreation activities in response to public demand are important to the USACE recreation goals of North Springfield 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 North Springfield Lake includes 1 main recreation area along with a boat ramp. All of these are currently managed by the USACE. There are currently no areas leased or outgranted to other entities. The USACE will continue to review requests and ensure compliance with applicable laws and regulations for proposed activities in all USACE-operated 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 North Springfield 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.

Stoughton Pond Recreation Area

Stoughton Pond Recreation Area is the only developed recreation area at the project. The area includes picnic sites, a beach, parking area, a restroom building, a change-house, and a picnic shelter. One boat ramp is located at the northern end of the main pool.

The park and all its facilities are open from May to September. The park is also open to pedestrians during the rest of the year. However, restrooms are closed during those off-season dates.



Photo 5.3 Stoughton Pond Recreation Area

Source: USACE



Photo 5.4 View of North Springfield

Source: USACE

Stoughton Pond Boat Ramp

The Stoughton Pond Boat Ramp is located northeast of the pond off Plains cemetery Road. The parking lot can accommodate approximately 6 to 8 vehicles and trailers. This site provides water access for small boats, canoes, and kayaks.

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 North Springfield Lake under this classification.

5.5 ENVIRONMENTALLY SENSITIVE AREAS

Environmentally Sensitive Areas (ESA) 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. At North Springfield Lake, there are no acres designated for ESAs.

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 North Springfield Lake, LDR lands are generally associated with primitive access points including trails and non-powered boating access points. 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 408 acres classified as Low Density Recreation.

East Access

East Access on Reservoir Road in Weathersfield, Vermont, is a 70-acre multiuse recreation and wildlife area on the eastern side of the project. It features a network of trails. Parking is available in the recreation parking area, the Sand Hill lot, and the East Access parking area for year-round recreation.

West Access

West access includes a cartop launch and access to multiple trails. The reservoir's west access area can be found by traveling eastward on Maple Street in Perkinsville for three-quarters of a mile after leaving Route 106.

5.6.2 Wildlife Management

These are lands designated for the stewardship of fish and wildlife resources and are managed by USACE and Vermont Department of Fish and Wildlife. There are currently 660 acres of land under this classification at North Springfield 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 (FWCA) (Public Law 85-624). Future management plans for wildlife areas include continued cooperation with partners and managing and improving wildlife management areas under this land classification.

There are 3 potentially occurring federally listed species, along with 16 potentially occurring federally listed migratory birds, and 11 potentially occurring state-listed species that could utilize habitat within the North Springfield Lake. 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 2.8 and 2.9) 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 North Springfield 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 North Springfield Lake.

5.7 WATER SURFACE

There are approximately 122 acres of water surface at the permanent pool of 467 feet NGVD29 at North Springfield Lake. Buoys are managed by USACE 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 water-based recreation, managing 12 million acres of land and water 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 North Springfield 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 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

North Springfield 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 North Springfield 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 COORDINATION 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 New England District takes its responsibilities for consultation on a government-to-government basis very seriously. The USACE determined that the Master Plan revision would have no potential to affect cultural resources, and consultation under the laws above (NHPA, etc.) was not required. The USACE coordinated with the Elnu Abenaki Tribe and Wampanoag Tribe of Gay Head (Aquinnah) on developing best practices and ensuring areas of Tribal concern were addressed in the Master Plan. The Narragansett Tribe will be added to this coordination during the draft release phase. This exchange of knowledge from developing the Master Plan will allow USACE staff to better engage with Tribes on future projects at North Springfield Lake and will likely lead to more efficient reviews and better outcomes meeting objectives for both parties. Any future activities that have a potential to affect cultural resources must comply with Section 106 and 110 of the NHPA, NAGPRA, and ARPA, and USACE would consult with the Tribes as appropriate.

6.4 PRIVATE ACTIVITIES AND SHORELINE MANAGEMENT

It is the policy of the USACE to protect and manage shorelines of all civil works water resource development projects to promote the safe and healthful use of these shorelines by the public while maintaining environmental safeguards to ensure a quality resource for use by the public. The objectives of all management actions will be to achieve a balance between permitted private uses and resource protection for general public use. Public pedestrian access to and exit from these shorelines shall be preserved. The New England District generally does not permit private exclusive use by adjacent landowners. Private exclusive use (often called private shoreline use) is defined in ER 1130-2-406 as “Any action, within the context of this rule Title [36 CFR 327.30], which gives a special privilege to an individual or group of individuals on land or water at a Corps project, that precludes use of those lands or waters by the general public, is considered to be private shoreline use.” The Master Plan does not concern private use of federal property; instead private use is managed per guidance in ER 1130-2-406 at the discretion of the New England District and project manager. See Section 2.14 for more information about Real Estate including outgrants, trespass, and encroachment.

6.5 FUTURE PROJECT MODIFICATIONS

The Tolles Hill Dam is in various stages of light to moderate degradation including to the right abutment hydropower structure. Removal of the structure will be required in the future as the structure continues to degrade, subject to funding and feasibility study. Public access on and around the structure is strictly prohibited due to safety concerns.

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 North Springfield Lake. An integral part of this effort is gathering public comments 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 North Springfield 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 North Springfield Lake Master Plan.

The USACE began planning to revise the North Springfield Lake Master Plan in the spring of 2024. The objectives for the Master Plan revision are to (1) revise land classifications to reflect changes in USACE land management policies since the 2004 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 April 17, 2025, a public open house was held at the Springfield Town Library in Springfield Vermont to inform the public of the intent to revise the Master Plan. The public input period remained open for 30 days from April 17, 2025 to May 16, 2025. 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 3 comments for North Springfield Lake. 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 (Finding of No Significant Impact).

7.4 TRIBAL COORDINATION

In 2025, the USACE coordinated 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 notified in 2025 prior to the initial Open House:

- Elnu Abenaki Tribe
- Wampanoag Tribe of Gay Head (Aquinnah)

For the Draft Master Plan and Environmental Assessment, in addition to the recognized Tribal Nations above, the Narragansett Tribe were also notified of the Open House and the availability of the draft document.

CHAPTER 8 – SUMMARY OF RECOMMENDATIONS

8.1 SUMMARY OVERVIEW

The preparation of this Master Plan for North Springfield 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 coordination 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 North Springfield 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 2024 Vermont SCORP, 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 North Springfield 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. The USACE coordinated 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 comments, examining recreational trends, and considering regional natural resource management priorities, USACE team members reclassified the federal lands and waters associated with North Springfield 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 2004 Land and Water Surface Classification to 2026
Proposed Land and Water Surface Classification**

Prior Land Classifications (2004)	Acres	Proposed Land Classifications (2026)	Acres	Net Difference
Project Operations	98	Project Operations (PO)	143	45
Recreation	16	High Density Recreation (HDR)	8	(8)
Multiple Resources Management Lands (MRML)	1160	Multiple Resource Management Lands (MRML)	0	(1,160)
—	—	Low Density Recreation (MRML-LDR)	408	408
—	—	Wildlife Management (MRML-WM)	660	660
Environmentally Sensitive Area (ESA)	67	Environmentally Sensitive Area (ESA)	0	(67)
LAND TOTAL	1,341	LAND TOTAL	1,219	(122)
Prior Water Surface Classifications (2004)	Acres	Proposed Water Surface Classifications (2026)	Acres	Net Difference
—	—	Open Recreation	120	120
—	—	Restricted	2	2
WATER TOTAL	0	WATER TOTAL	122	122
TOTAL FEE	1,341	TOTAL FEE	1,341	0

*2004 acres are approximate based on digitizing the 2004 land and water classification map. Total fee acreage differences from the 2004 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 8.2 Changes and Justifications for Proposed Land Classifications ⁽¹⁾

Land Classification	Description of Changes ⁽²⁾	Justification
Project Operations (PO)	Net increase in Project Operations lands from 98 to 143 acres.	The increase in PO was largely due to the reclassification of areas near the dam previously classified as Recreation Areas and MRML. All lands classified as PO are managed and used primarily in support of critical operational requirements related to the primary mission of flood risk management.
High Density Recreation (HDR)	Net decrease in HDR from 16 acres to 8 acres.	The majority of this change is by name only. Approximately 4 acres previously classified as MRML were reclassified as HDR to define current management of these acres. Approximately 3 acres previously classified as Recreation were reclassified to HDR.
MRML – Low Density Recreation (LDR)	Net increase in LDR from 0 acres to 408 acres.	The 2004 Master Plan classified 1,160 acres as MRML. A total of 408 acres under this previous classification were reclassified as MRML-LDR. These acres are in the central portion of the project encompassing acres which are currently managed as LDR.
MRML – Wildlife Management (WM)	Net increase from 0 acres to 660.	The 2004 MP did not include the MRML-WM classification. Instead, it included MRML-WM within the basic MRML classification. This is the largest contributing factor to the increase in MRML-WM. Approximately 597 acres previously classified as MRML were reclassified as MRML-WM. The remainder of the acres within MRML-WM were previously classified as Recreation and are currently managed as WM with no plans to construct recreation facilities in this area.

Land Classification	Description of Changes ⁽²⁾	Justification
Environmentally Sensitive (ESA)	Net decrease in ESA acres from 67 to 0 acres.	Approximately 4 acres previously classified as ESA were reclassified as PO. Additionally, approximately 62 acres previously classified as ESA were reclassified as WM near the North Branch of the Black River, south of Stoughton Pond.
Water Surface	Net increase in Water Surface from 0 acres to 122 acres.	The 2004 MP did not define the water surface, therefore the change in water surface acres is due to more precise mapping of the shoreline using available LiDAR data.

(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.

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

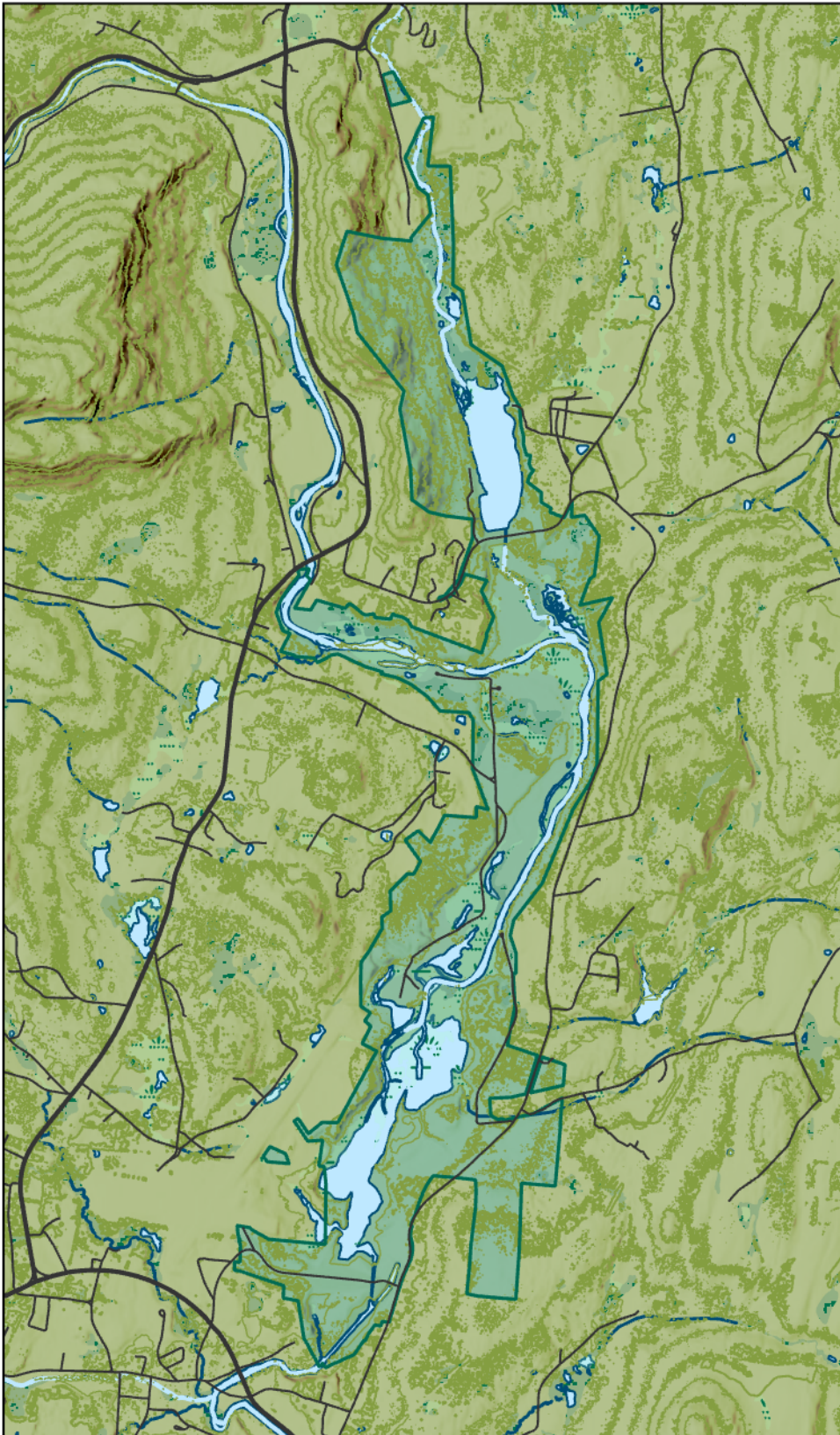


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NORTH SPRINGFIELD LAKE

2026 MASTER PLAN REVISION

SHEET INDEX (MAP 0.1)



Sheet Index

0.1 *Sheet Index*

1.1 *Land Classification*

2.1 *Land Classification Changes*

3.1 *Land Classification - Index
Overview*

3.2 - 3.3 *Land Classification -
Indices 1 -2*

3.4 - 3.5 *Land Classification
Changes - Indices 1 -2*

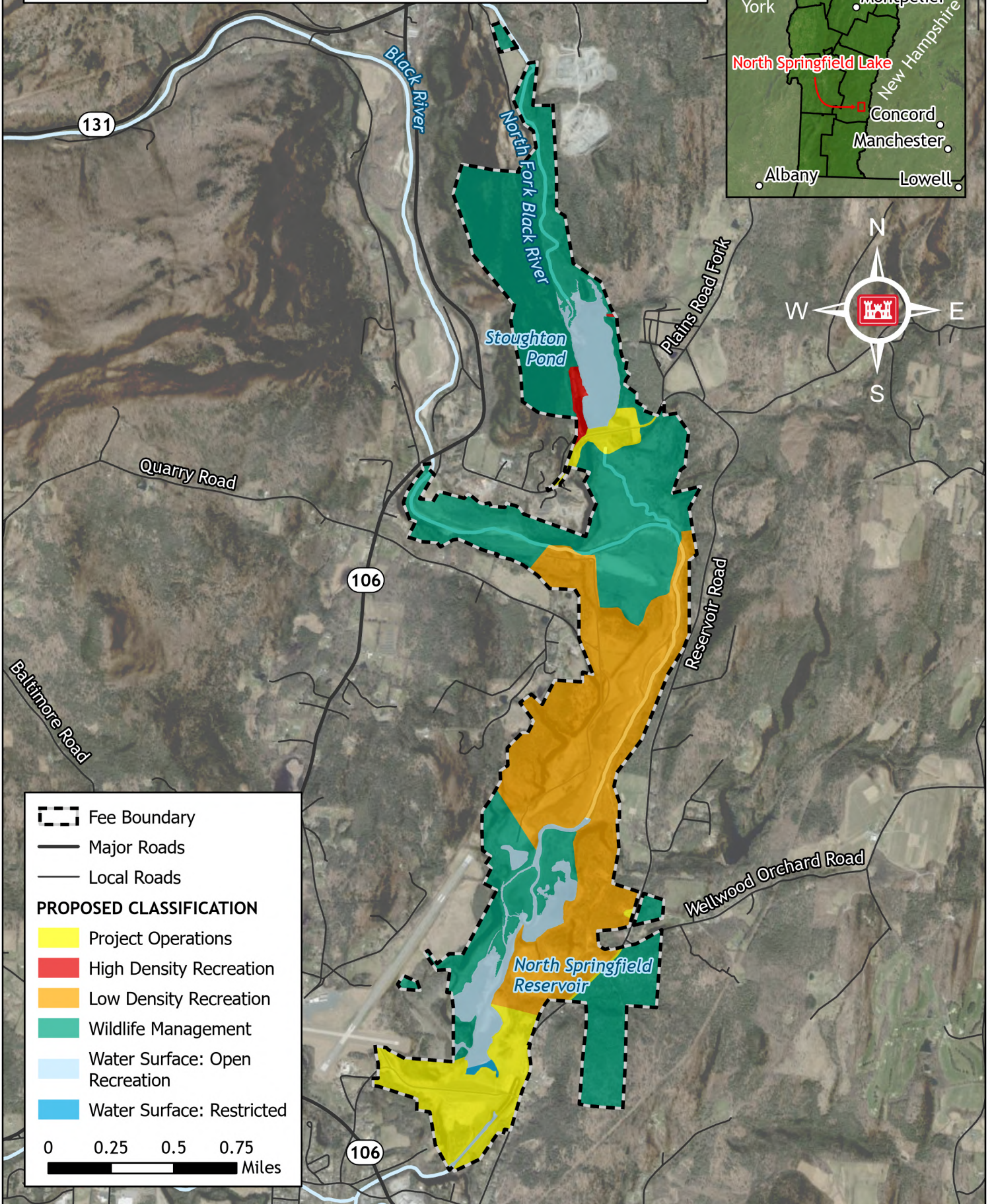
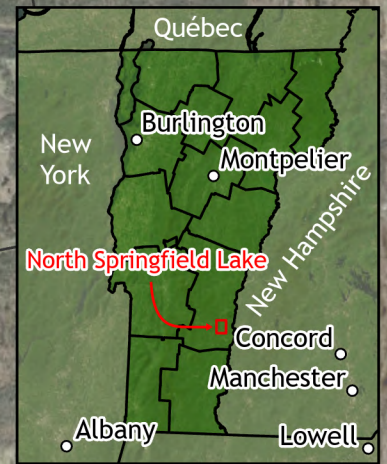
4.1 *Recreation Overview*



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2026 MASTER PLAN REVISION - LAND CLASSIFICATIONS (MAP 1.1)



Fee Boundary

Major Roads

Local Roads

PROPOSED CLASSIFICATION

Project Operations

High Density Recreation

Low Density Recreation

Wildlife Management

Water Surface: Open
Recreation

Water Surface: Restricted

0 0.25 0.5 0.75
 Miles



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NORTH SPRINGFIELD LAKE

2026 MASTER PLAN REVISION - CHANGES FROM 2004 MASTER PLAN (MAP 2.1)

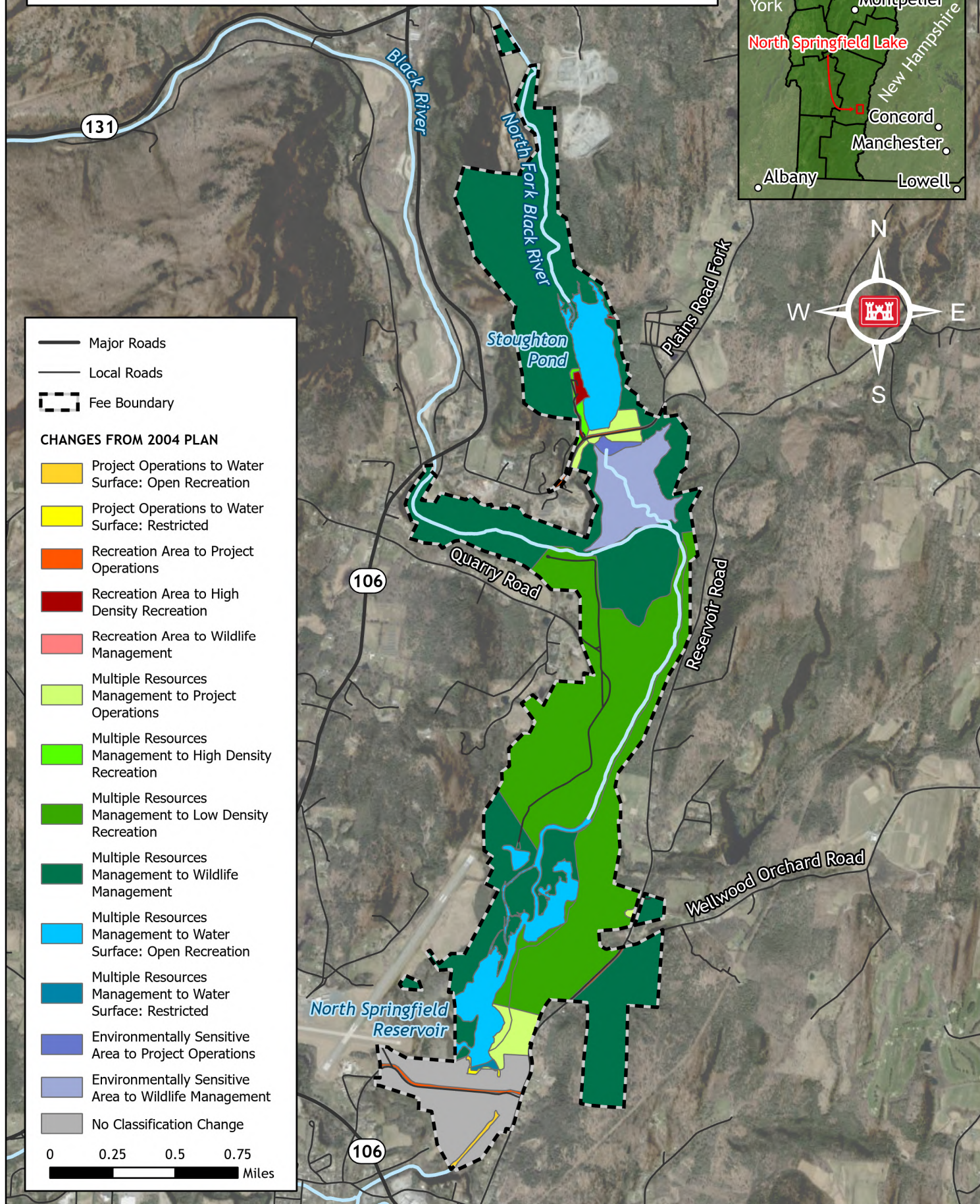


- Major Roads
- Local Roads
- Fee Boundary

CHANGES FROM 2004 PLAN

- Project Operations to Water Surface: Open Recreation
- Project Operations to Water Surface: Restricted
- Recreation Area to Project Operations
- Recreation Area to High Density Recreation
- Recreation Area to Wildlife Management
- Multiple Resources Management to Project Operations
- Multiple Resources Management to High Density Recreation
- Multiple Resources Management to Low Density Recreation
- Multiple Resources Management to Wildlife Management
- Multiple Resources Management to Water Surface: Open Recreation
- Multiple Resources Management to Water Surface: Restricted
- Environmentally Sensitive Area to Project Operations
- Environmentally Sensitive Area to Wildlife Management
- No Classification Change

0 0.25 0.5 0.75
Miles



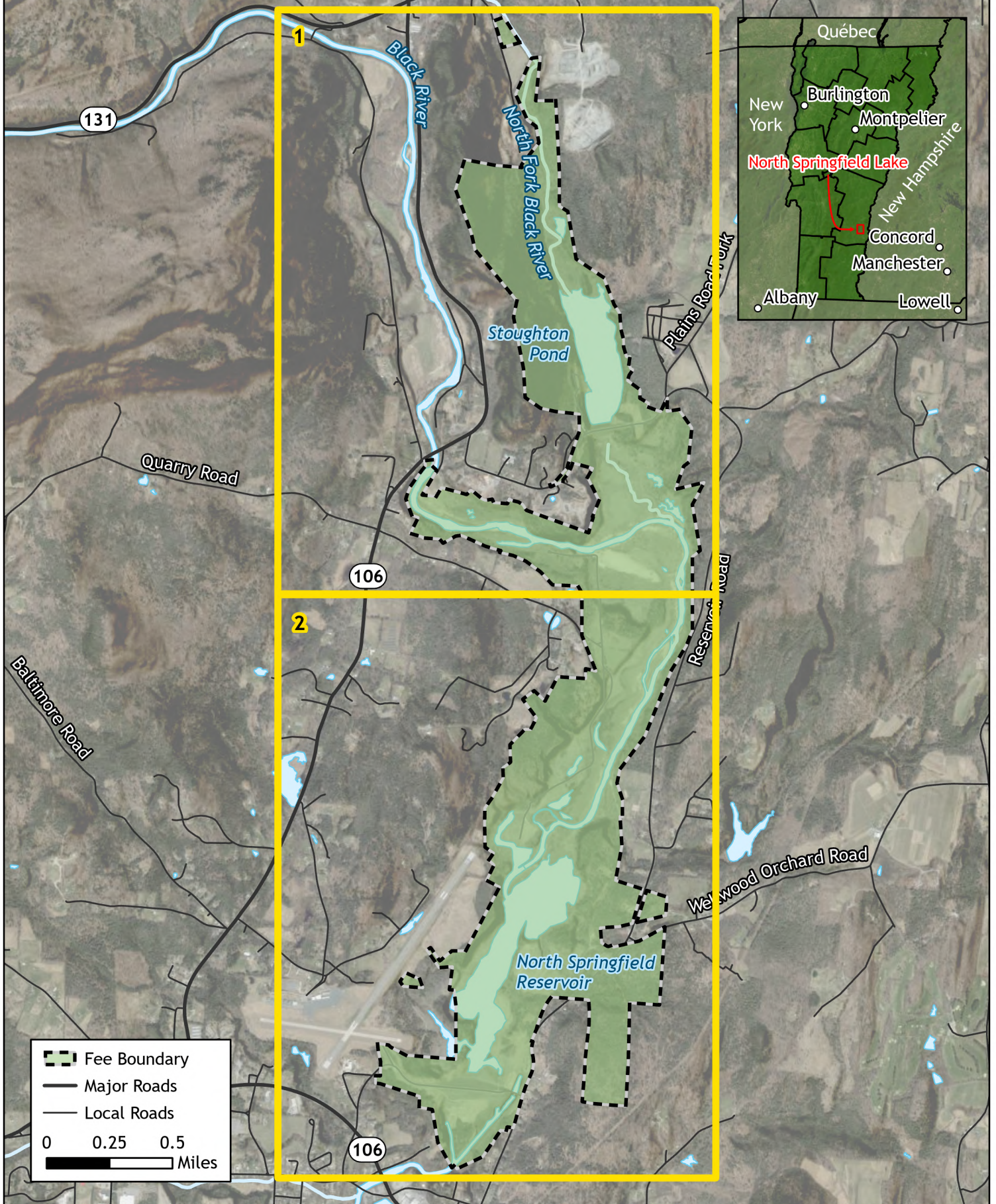


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2026 MASTER PLAN REVISION - LAND

CLASSIFICATION - INDEX OVERVIEW (MAP 3.1)

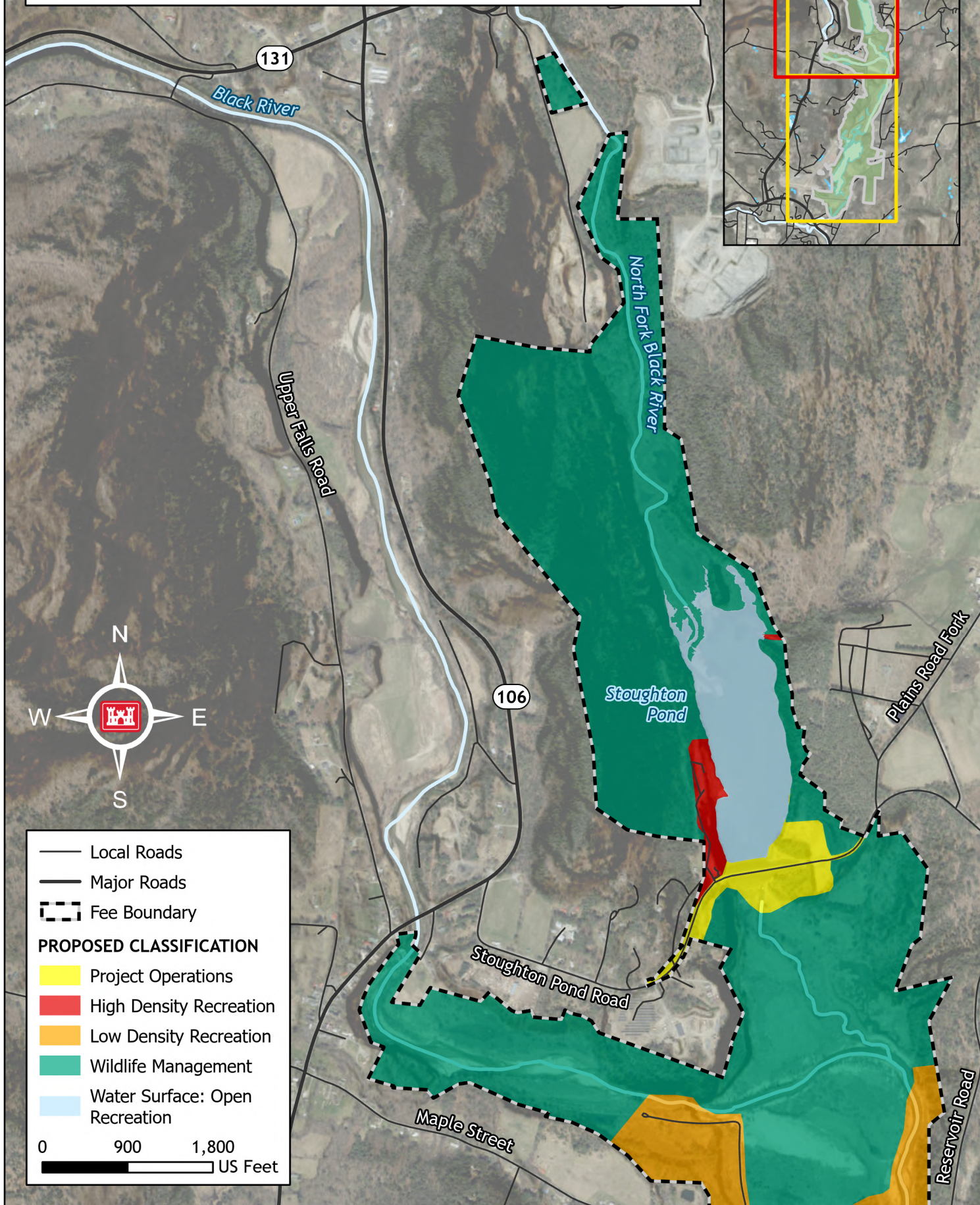
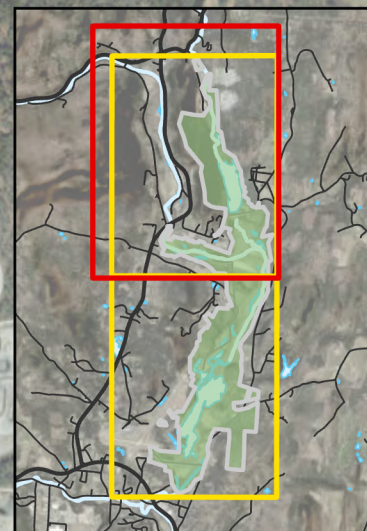




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2026 MASTER PLAN REVISION - LAND CLASSIFICATION - INDEX 1 (MAP 3.2)

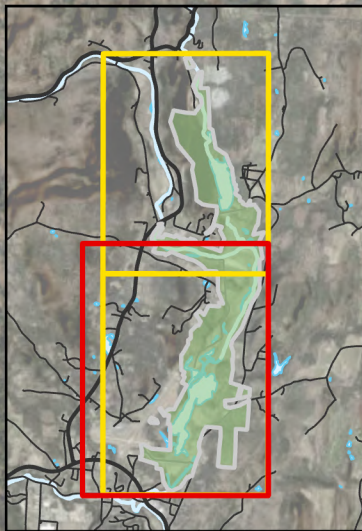




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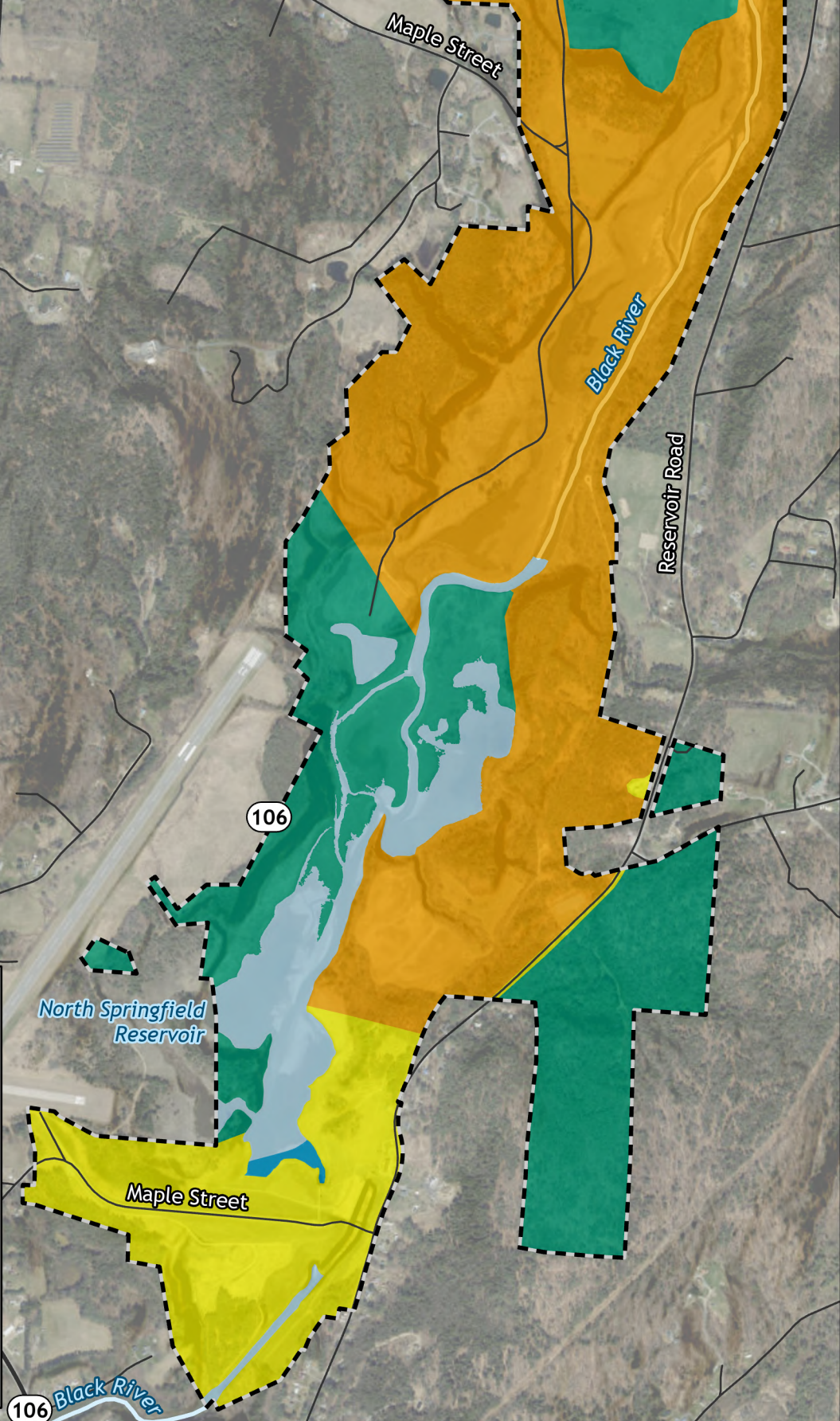
NORTH SPRINGFIELD LAKE

2026 MASTER PLAN REVISION - LAND
CLASSIFICATION - INDEX 2 (MAP 3.3)



- Local Roads
- Major Roads
- Fee Boundary
- PROPOSED CLASSIFICATION**
- Project Operations
- Low Density Recreation
- Wildlife Management
- Water Surface: Open Recreation
- Water Surface: Restricted

0 900 1,800
US Feet

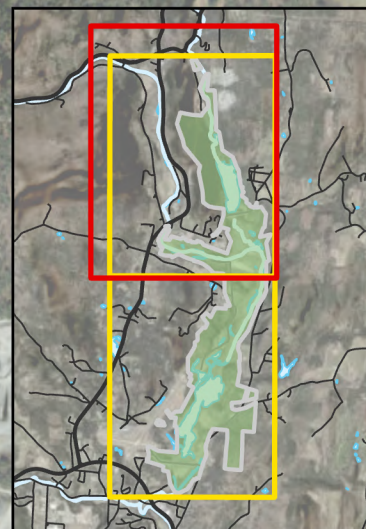




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New England District

NORTH SPRINGFIELD LAKE

2026 MASTER PLAN REVISION - CHANGES FROM 2004 PLAN - INDEX 1 (MAP 3.3)

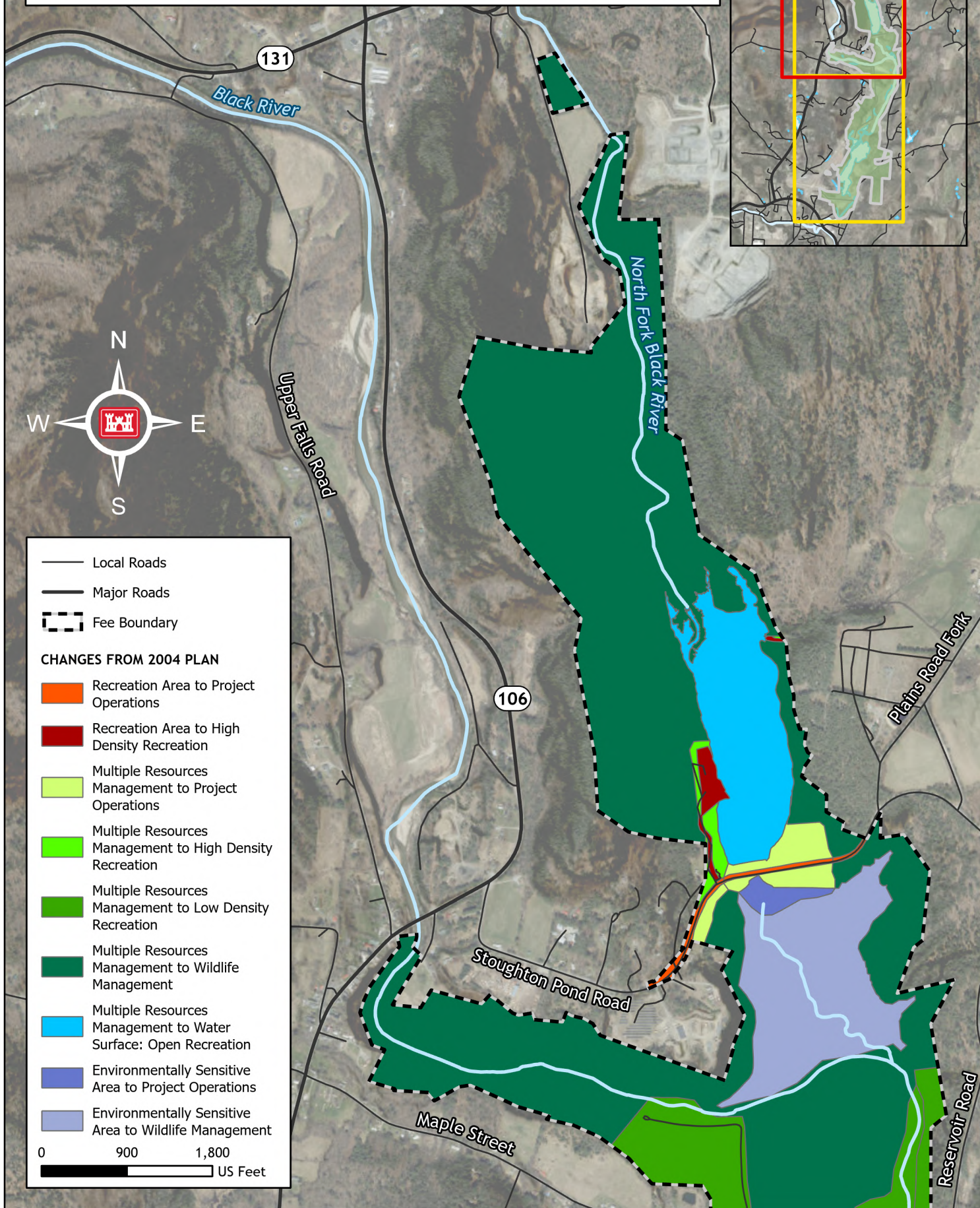


- Local Roads
- Major Roads
- Fee Boundary

CHANGES FROM 2004 PLAN

- Recreation Area to Project Operations
- Recreation Area to High Density Recreation
- Multiple Resources Management to Project Operations
- Multiple Resources Management to High Density Recreation
- Multiple Resources Management to Low Density Recreation
- Multiple Resources Management to Wildlife Management
- Multiple Resources Management to Water Surface: Open Recreation
- Environmentally Sensitive Area to Project Operations
- Environmentally Sensitive Area to Wildlife Management

0 900 1,800
US Feet

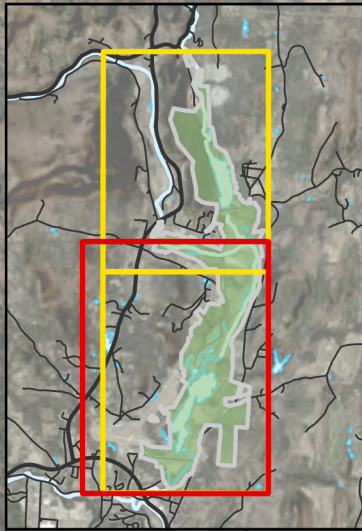




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NORTH SPRINGFIELD LAKE

2026 MASTER PLAN REVISION - CHANGES FROM 2004 PLAN - INDEX 2 (MAP 3.5)



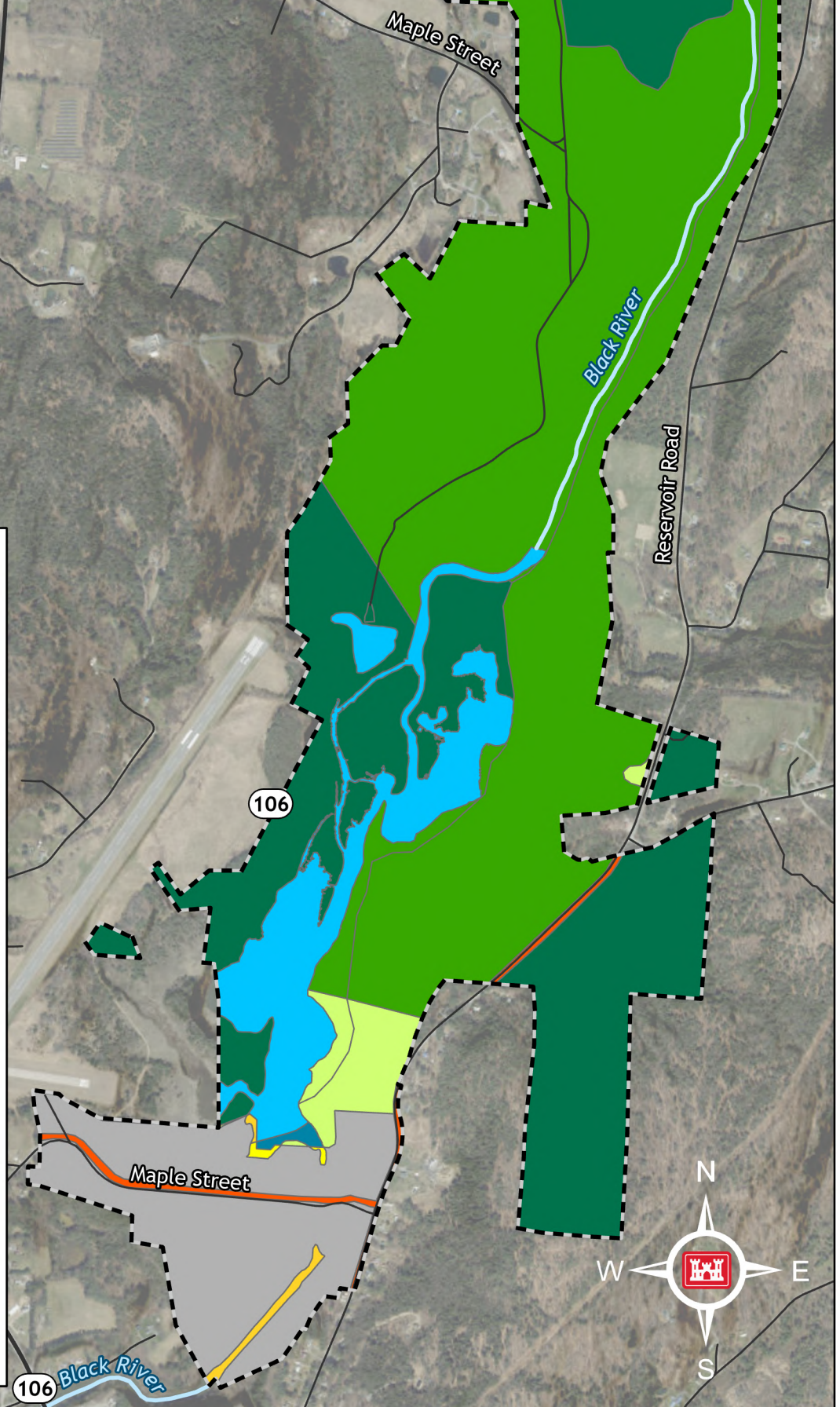
106

- Local Roads
- Major Roads
- Fee Boundary

CHANGES FROM 2004 PLAN

- Project Operations to Water Surface: Open Recreation
- Project Operations to Water Surface: Restricted
- Recreation Area to Project Operations
- Recreation Area to Wildlife Management
- Multiple Resources Management to Project Operations
- Multiple Resources Management to Low Density Recreation
- Multiple Resources Management to Wildlife Management
- Multiple Resources Management to Water Surface: Open Recreation
- Multiple Resources Management to Water Surface: Restricted
- Environmentally Sensitive Area to Wildlife Management
- No Classification Change

0 900 1,800
US Feet



106

Maple Street

106

Black River

Reservoir Road





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NORTH SPRINGFIELD LAKE

2026 MASTER PLAN REVISION -
RECREATION OVERVIEW (MAP 4.1)



- Project Office
- Dam
- Swimming Beach
- Restroom
- Picnic Shelter
- Picnic Area
- Boat Launch
- Canoe and Kayak Launch
- Nature Viewing Area
- Fishing Access
- Hiking Trailhead
- Snowmobile Trailhead
- Parking Area
- Blue Trail
- Branch Brook Trail
- Crown Point Trail
- Dam Walking Path
- Green Trail
- Green's Hill Trail
- Multipurpose Trail
- Red Trail
- Sand Hill Trail
- Major Roads
- Local Roads
- Dams and Dikes
- Fee Boundary

0 0.25 0.5 0.75 Miles

Stoughton Pond
Recreation Area

Stoughton Pond
Boat Ramp

Fisherman's
Parking

West Access

North Springfield
Dam Parking

East Access

North Springfield
Lake Project Office



APPENDIX B – NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) DOCUMENTATION

Draft Environmental Assessment (EA) and Finding of No
Significant Impact (FONSI)

**North Springfield Lake
Master Plan**

**Windsor County, Vermont
E6-O-1768493355**



**US Army Corps
of Engineers** ®
New England District

July 2026

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List of Acronyms

CFR	Code of Federal Regulations
EA	Environmental Assessment
EFH	Essential Fish Habitat
EO	Executive Order
ESA	Environmentally Sensitive Area
FONSI	Finding of No Significant Impact
HDR	High Density Recreation
HTRW	Hazardous, Toxic, and Radioactive Waste
IPaC	Information for Planning and Consultation
MP	Master Plan
MRML	Multiple Resource Management Lands
MSA	Magnuson-Stevens Fishery Conservation and Management Act
NAGPRA	Native American Graves Protection and Repatriation Act
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NRHP	National Register of Historic Places
PO	Project Operations
SHPO	State Historic Preservation Office
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
VANR	Vermont Agency of Natural Resources
VT DEC	Vermont Department of Environmental Conservation
VT DFW	Vermont Department of Fish and Wildlife
VT FPR	Vermont Department of Forests, Parks, and Recreation
WM	Wildlife Management

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FINDING OF NO SIGNIFICANT IMPACT
2026 North Springfield Lake Master Plan Revisions
Windsor County, Vermont
E6-O-1768493355

The U.S. Army Corps of Engineers (USACE), New England District, proposes to revise, adopt, and implement the North Springfield Lake Master Plan, as required by Engineering Regulation 1130-2-550 and Engineering Pamphlet 1130-2-550. North Springfield Dam is a rolled earth fill embankment dam that provides flood risk management to the Upper Connecticut River Basin. The Flood Control Act of 1938, as amended, authorized North Springfield Lake and Dam (referred to hereafter as “North Springfield Lake”) as a part of the Upper Connecticut River Basin flood control system. The Flood Control Act of 1944, as amended, authorized the development of North Springfield Lake for recreation.

The North Springfield Lake Master Plan is a strategic land use management document that guides the efficient, cost-effective, comprehensive management, development, and use of recreation, natural resources, and cultural resources located at North Springfield Lake. The Master Plan and supporting documentation provide an inventory and analysis of goals, objectives, and recommendations for USACE lands and waters at North Springfield Lake, with input from the public, stakeholders, and subject matter experts.

USACE has completed an Environmental Assessment (EA) for this project in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended. USACE is fully revising the 2004 Master Plan 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 EA, incorporated herein by reference, evaluated two alternatives: the Proposed Action and No Action Alternative. Under the No Action Alternative, no federal action would be undertaken to adopt and implement the North Springfield Lake Master Plan and the USACE would continue to manage North Springfield Lake’s natural resources as set forth in the 2004 MP.

The Proposed Action consists of adopting and implementing the North Springfield Lake Master Plan, replacing the 2004 Master Plan. The North Springfield Lake Master Plan includes the classification of all federal fee lands and water surface areas along with updated resource goals and objectives. The land classifications include Project Operations, High Density Recreation, Low Density Recreation, and Wildlife Management. Water surface area classifications include Open Recreation and Restricted areas.

I find that based on the evaluation of environmental effects discussed in the EA, this action is not a major federal action significantly affecting the quality of the environment. The EA includes an evaluation of the affected environment and the geographical context and intensity of the reasonably foreseeable effects of the action.

The effects of the proposed action relative to significance criteria are summarized below. None are implicated to warrant a finding of NEPA significance.

- (i) The degree to which the action may adversely affect public health and safety. The project is expected to have no effects on public health and safety.
- (ii) The degree to which the action may adversely affect unique characteristics of the geographic area such as historic or cultural resources, parks, Tribal sacred sites, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas. The project will have no potential for adverse impacts to unique characteristics of the geographic area such as Tribal sacred sites, prime farmlands, wild and scenic rivers, or ecologically critical areas. The project will have no potential for adverse impacts on historical and cultural resources.
- (iii) Whether the action may violate relevant Federal, State, Tribal, or local laws or other requirements or be inconsistent with Federal, State, Tribal, or local policies designed for the protection of the environment. The action will not violate federal, state, tribal or local laws or policies for the protection of the environment.
- (iv) The degree to which the potential effects on the human environment are highly uncertain. The effects are not uncertain. USACE has revised numerous master plans.
- (v) The degree to which the action may adversely affect resources listed or eligible for listing in the National Register of Historic Places (NRHP). The project will have no potential for adverse effects on historic properties eligible or listed on the NRHP.
- (vi) The degree to which the action may adversely affect an endangered or threatened species or its habitat, including habitat that has been determined to be critical under the Endangered Species Act of 1973. The project will have no effect on any federal or state threatened or endangered species or designated critical habitat for such species.
- (vii) The degree to which the action may adversely affect rights of Tribal Nations that have been reserved through treaties, statutes, or Executive Orders. The project will not adversely affect rights of Tribal Nations that have been reserved through treaties, statutes, or Executive Orders.

Based on my review and evaluation of the environmental effects as presented in the EA, I have determined that the implementation and adoption of the 2026 North Springfield Lake Master Plan is not a major federal action significantly affecting the quality of the environment, an Environmental Impact Statement is not required and will not be prepared, and the NEPA process is concluded.

I certify that the resulting EA represents the following: the USACE's good-faith effort to prioritize documentation of the most important considerations and factors required by NEPA within the congressionally mandated page limits and timeline; that this prioritization reflects the USACE's expert judgment; the document is substantially complete; that any considerations addressed briefly or left unaddressed were, in the USACE's judgment, comparatively not of a substantive nature that meaningfully informed the consideration of environmental effects and the resulting decision on how to proceed; and that in the USACE's judgment the analysis contained therein is adequate to inform and reasonably explain the USACE's final decision regarding the proposed federal action.

DRAFT

Date

TBD

Colonel, Corps of Engineers
District Engineer

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SECTION 1: INTRODUCTION

The U.S. Army Corp of Engineers (USACE), New England District, has prepared this Environmental Assessment (EA) to analyze the potential environmental effects associated with the adoption and implementation of the North Springfield Lake Master Plan (MP). This MP is a programmatic document subject to evaluation under the National Environmental Policy Act (NEPA) of 1969, as amended, and all appropriate federal and state environmental regulations, laws, and executive orders.

The 2026 MP is a strategic land use management plan that provides direction to preserve, conserve, restore, maintain, manage, and develop all natural, cultural, and recreational resources of a USACE water resource project, which includes all government-owned lands in and around a reservoir. It is a vital tool for responsible stewardship and sustainability of the project's natural, cultural, and recreational resources. The 2026 MP 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 2026 MP.

1.1 PROJECT LOCATION AND SETTING

North Springfield Lake is a multi-purpose reservoir located along the Black River in North Springfield, Vermont, in the Upper Connecticut River Basin. Construction of North Springfield Dam was completed in 1960. The dam is a part of seven flood risk management dams within the Upper Connecticut River Basin. North Springfield Lake was authorized in 1938 for flood risk management and in 1944 for recreation. North Springfield Lake's project lands span approximately 1,219 acres total, with a lake surface area of 100 acres. North Springfield Lake's drainage area is 204 square miles. For more information on North Springfield Lake, please refer to Chapter 1.5 of the 2026 MP.

1.2 PURPOSE AND NEED

The 2026 MP is intended to serve as a comprehensive land and recreation management plan with an effective life of approximately 25 years. The purpose of the 2026 MP is to ensure that the conservation and sustainability of the land, water, and recreational resources at North Springfield Lake comply with applicable environmental laws and regulations and to maintain quality lands for future public use. Engineer Pamphlet 1130-2-550 requires a revision of an MP that no longer serves its intended purpose due to a combination of age and substantial changes to the project. Therefore, the revised MP is being adopted and implemented to provide effective guidance in USACE decision-making.

SECTION 2: PROPOSED ACTION AND ALTERNATIVES

During the alternative development process, different land classifications were evaluated for each parcel of USACE land. Land classifications were determined by primary use alongside the 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. The goals for the 2026 MP include the following:

GOAL A. Provide the best management practices to respond to regional needs, resource capabilities and suitability, 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 demands created by the project itself while sustaining the project's natural resources.

GOAL D. Recognize the particular unique, characteristics, and potentials of the project.

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

In addition to the above goals, USACE management activities are guided by USACE-wide 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 were developed to support the goals of the 2026 MP, USACE Environmental Operating Principles, and applicable national performance measures. Resource objectives are consistent with authorized project purposes, federal laws and directives, regional needs, resource capabilities, and public consideration. Recreational and natural resources carrying capacities were considered alongside state planning documents, including Vermont's Wildlife Action Plan, Tactical Basin Plans, and the Statewide Comprehensive Outdoor Recreation Plan. Refer to Chapter 3 of the 2026 MP for a description of the resource objectives.

During the alternative development workshop, project lands were classified to identify how a given parcel of land shall be used now and in the foreseeable future. Land classifications to be used are defined as follows:

- **Project Operations (PO):** Lands required for operation of the dam, spillway, dikes, offices, maintenance facilities, and other areas used solely for the operation of North Springfield Lake. These lands allow for limited recreational use such as public access to the shoreline for fishing or hiking along the top of the dikes, but the primary classification of PO will take precedent over other uses.
- **High Density Recreation (HDR):** Lands developed for intensive recreational activities for the visiting public including day use areas and campgrounds. These areas could also be for commercial concessions and quasi-public development.
- **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.
 - Low Density Recreation (LDR): Lands with minimal development or infrastructure that supports passive recreational use (primitive camping, fishing, hunting, trails, wildlife viewing, etc.)
 - Wildlife Management (WM): Lands designated for stewardship of fish and wildlife habitat that permit passive recreation unless restrictions are necessary to protect sensitive species or promote public safety.
- **Water Surface:** Allows for surface water zones.
 - Restricted: Water areas restricted for project operations, safety, and security.
 - Open Recreation: Water areas available for year-round or seasonal water-based recreational use

2.1 NO ACTION ALTERNATIVE

The No Action Alternative serves as a basis for comparison to the anticipated effects of the Proposed Action Alternative. Under the No Action Alternative, USACE would not adopt and implement the 2026 MP. USACE would continue to manage North Springfield Lake's natural resources as set forth in the 2004 MP. The 2004 MP classified the majority of federal fee lands as MRML, with 1,160 acres. Other land classifications include PO, ESA, and Recreation Area (USACE, 2004; Figure 1).

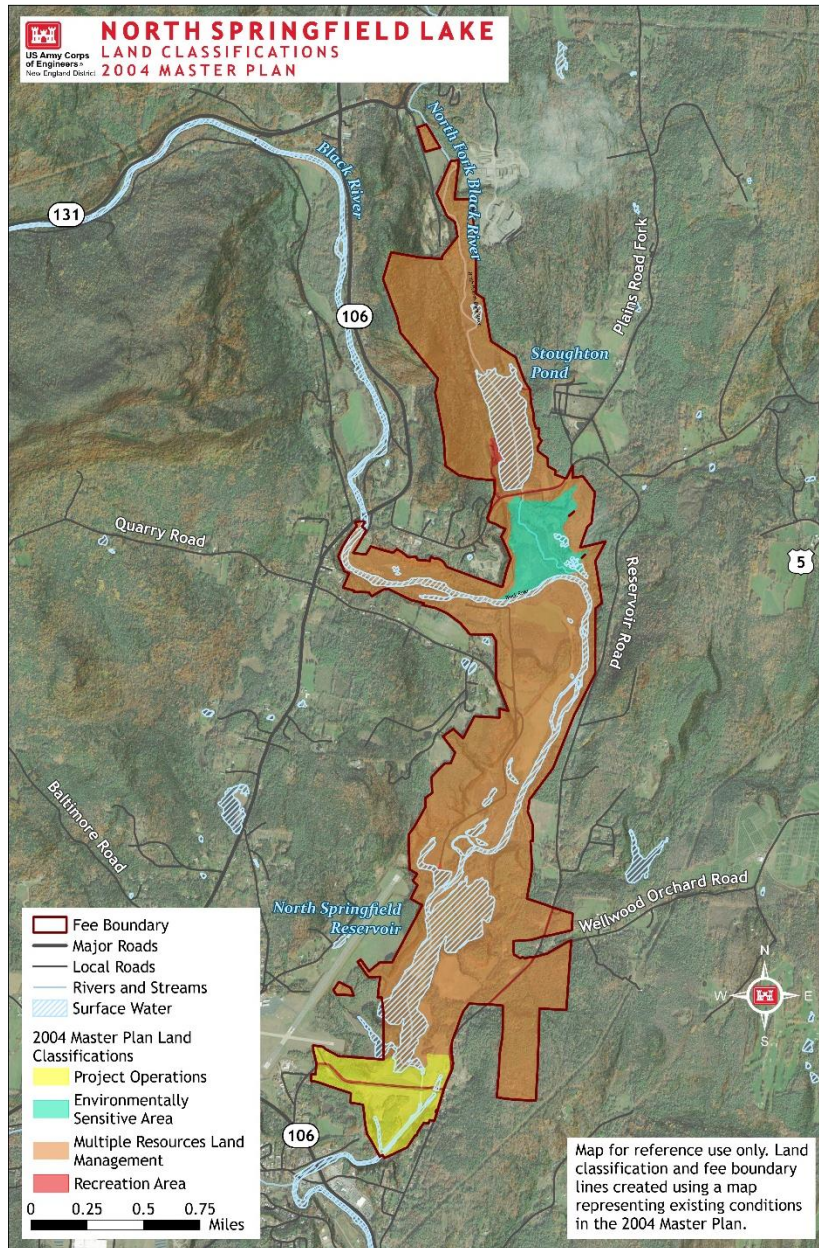


Figure 1. 2004 MP Land Classifications

2.2 PROPOSED ACTION ALTERNATIVE

Under the Proposed Action, USACE will adopt and implement the 2026 MP, replacing the 2004 MP. The 2026 MP will classify all federal fee land at North Springfield Lake into land management categories. The 2026 MP would also classify all water surface areas into Open Recreation and Restricted water surfaces. The Proposed Action will meet regional stewardship 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.

Table 1 provides a summary of the proposed 2026 MP land and water surface classifications. Refer to Section 2.0, above, for descriptions of proposed classifications.

Table 1. 2004 and 2026 Proposed Land and Water Surface

Prior Land Classifications (2004)	Acres	Proposed Land Classifications (2026)	Acres	Net Difference
Project Operations	98	Project Operations (PO)	143	45
Recreation	16	High Density Recreation (HDR)	8	(8)
Multiple Resources Management Lands (MRML)	1160	Multiple Resource Management Lands (MRML)	0	(1,160)
—	—	Low Density Recreation (MRML-LDR)	408	408
—	—	Wildlife Management (MRML-WM)	660	660
Environmentally Sensitive Area (ESA)	67	Environmentally Sensitive Area (ESA)	0	(67)
LAND TOTAL	1,341	LAND TOTAL	1,219	(122)
Prior Water Surface Classifications (2004)	Acres	Proposed Water Surface Classifications (2026)	Acres	Net Difference
—	—	Open Recreation	120	120
—	—	Restricted	2	2
WATER TOTAL	0	WATER TOTAL	122	122
TOTAL FEE	1,341	TOTAL FEE	1,341	0

*2004 acres are approximate based on digitizing the 2004 land and water classification map. Total fee acreage differences from the 2004 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.

SECTION 3: AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This section describes the natural, cultural, and social resources found within the North Springfield Lake fee boundary and the environmental consequences of the No Action and Proposed Action Alternatives. A description of the existing conditions of resources can be found in Chapter 2 of the 2026 MP. Reasonably foreseeable impacts are evaluated in terms of type, context, intensity, and duration, and can be either beneficial or adverse as a result of the action.

3.1 LAND USE

Please refer to Chapter 4.2 of the 2026 MP for existing land use information in and around North Springfield Lake.

3.1.1 No Action Alternative

The No Action Alternative will result in moderate, adverse long-term impacts on land use. Under the No Action Alternative, the 2026 MP would not be implemented, and existing land use management would not reflect current and future needs, and existing land use management would not meet operational and recreational needs. As a result, land use management would be inefficient due to conflicting guidance and management of USACE lands.

3.1.2 Proposed Action

The Proposed Action will result in moderate, long-term beneficial impacts to land use. Under the Proposed Action the 2026 MP would be implemented. The objectives for the 2026 MP describe current and foreseeable land uses while considering expressed public opinion, regional goals and trends, and USACE policies that have evolved to meet day-to-day operational needs. The majority of the reclassifications will maintain and improve current land use management.

The 2004 MP land classifications included Project Operations lands, Recreation, MRML, and ESA. Descriptions of the 2026 MP land classifications changes can be found below, and Table 1 shows the land classification differences expressed as acreages.

Project Operations (PO)

The Proposed Action will result in a net increase in PO, resulting from the reclassification of Recreation and MRML lands near the dam. PO lands are managed and used primarily in support of critical operational requirements related to the primary missions of flood risk management and water conservation. PO lands include those associated with the dam, spillway, levees, project office, maintenance facilities, and other areas solely for project operations.

Potential future actions for PO lands include routine operations and maintenance and facility upgrades. Future opportunities will meet USACE sustainability objectives and environmental stewardship objectives (e.g., invasive species control, wildlife management) as appropriate.

High Density Recreation (HDR)

The Proposed Action will result in a net decrease of HDR, from the updated naming of land classifications and from the reclassification of MRML and Recreation lands. The 2004 MP included 4 acres of MRML and 3 acres of HDR that were reclassified to HDR to reflect current management. Potential future actions for HDR lands include the maintenance and improvement of existing facilities through partnerships and other funding options.

MRML - Wildlife Management (WM)

The Proposed Action will result in a net increase of WM, resulting from the updated MRML land classifications and reclassification of Recreation lands. The 2004 MP designated MRML lands, but did not designate any as MRML-WM lands. Due to the updated MRML land classifications, approximately 597 acres of MRML acres were reclassified to WM. Changes in WM also result from approximately 63 acres of Recreation lands. These areas were reclassified to WM to reflect current and projected use for natural resources management, such as wildlife management, with no future development for recreation facilities. Potential future actions for WM lands include continued cooperation with partners and managing, maintaining and improving trails, connecting to regional trail networks, and providing additional access including small, natural surface parking where feasible.

Environmentally Sensitive Area (ESA)

The Proposed Action will result in a net decrease of ESA. Approximately 4 acres of ESA lands were reclassified as PO. The remaining ESA lands were reclassified to WM to reflect current and projected use. The 2026 MP does not propose ESA lands.

Water Surface Areas

The Proposed Action will result in a net increase of Water Surface. The 2004 MP did not designate water surface areas. The Proposed Action will designate all water surface areas as either Open Recreation or Restricted.

3.2 WATER RESOURCES

Please refer to Chapters 2.1, 2.3, and 2.7.6 in the 2026 MP for more information on existing conditions for hydrology (including surface and ground water), water quality, and wetlands, respectively.

3.2.1 No Action Alternative

The No Action Alternative will result in no impacts to water resources. Under the No Action Alternative, the 2026 MP would not be implemented. As a result, there would be no changes to existing water resources.

3.2.2 Proposed Action

The Proposed Action will result in minor, beneficial impacts to water resources due to the 2026 MP's updated resource objectives. Implementation of the 2026 MP would result in natural resource management objectives that are expected to impact water resources. Impacts include objectives that beneficially impact surface waters or wetlands (e.g. riparian zones, wetlands). The following natural resource management objectives may provide minor, beneficial impacts:

- Manage lands and waters to reduce the spread of invasive, non-native, and aggressively spreading native species.
- Protect and restore important native habitats such as previous or abandoned farmlands, 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.

3.3 AIR QUALITY

For more information on existing conditions for air quality at North Springfield Lake, please refer to Chapter 2.4 in the 2026 MP.

3.3.1 No Action Alternative

The No Action Alternative will result in no changes to existing air quality at North Springfield Lake. The 2004 MP would remain in compliance with the Clean Air Act, as amended, as no project activities would result in the contribution of criteria pollutants.

3.3.2 Proposed Action

The Proposed Action will result in no changes to existing air quality at the project and in the region. The 2026 MP would not implement any actions (i.e., ground disturbing activities) that will result in impacts to criteria pollutants and would therefore remain in compliance with the Clean Air Act.

3.4 CLIMATE AND GREENHOUSE GASES

For more information on existing conditions for climate at North Springfield Lake, please refer to Chapter 2.5 in the 2026 MP.

3.4.1 No Action Alternative

The No Action Alternative would result in no impacts to climate. Under the 2004 MP, there would be no changes to existing climate at North Springfield Lake.

3.4.2 Proposed Action

The Proposed Action will result in no impacts to climate and greenhouse gases as the Proposed Action will not result in changes to air quality. The 2026 MP does not include activities which would contribute to a detectable change in emissions in the region.

3.5 TOPOGRAPHY, GEOLOGY, AND SOILS

Please refer to Chapter 2.6 of the 2026 MP for more information on existing conditions for topography, geology, and soils at North Springfield Lake.

3.5.1 No Action Alternative

The No Action Alternative will have no impacts to topography, geology, or soils. Under the No Action Alternative, the 2004 MP would remain effective and no benefits to topography, geology, and soils would result from land reclassification. No ground disturbing activities would take place that could potentially affect topography, geology, or soils resources.

3.5.2 Proposed Action

The Proposed Action will have no impacts to topography, geology, or soils. No ground disturbing activities would take place that could potentially affect topography, geology, or soils at North Springfield Lake.

3.6 NATURAL RESOURCES

For existing conditions on natural resources (including fish and wildlife resources and vegetation resources), refer to Chapters 2.7.1, 2.7.2, 2.7.5, and 2.7.6 of the 2026 MP.

3.6.1 No Action Alternative

The No Action Alternative will result in minor, adverse long-term impacts to natural resources. Under the No Action Alternative, the 2026 MP would not be implemented, and land management would not be updated to reflect current natural resources management policies and needs at North Springfield Lake.

3.6.2 Proposed Action

The Proposed Action will result in moderate, long-term beneficial impacts to natural resources. Under the Proposed Action, the 2026 MP would be implemented, and land management policies would be updated to reflect current needs and natural resource requirements. The 2026 MP resource goals and objectives include natural resource management objectives which aim to further enhance, conserve, and protect natural resources, including Species of Greatest Conservation Need and state and federally listed species. The Proposed Action also includes an increase in WM (+660 acres) lands. WM lands will be actively managed for the stewardship of fish and wildlife resources.

3.7 THREATENED AND ENDANGERED SPECIES AND ESSENTIAL FISH HABITAT

The Endangered Species Act of 1973, as amended, provides a means to conserve threatened and endangered species. An endangered species is 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. Species may be considered endangered or threatened because of any of the following factors (16 U.S.C 1533(a)(1)):

- (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; and
- (5) other natural or human-induced factors affecting continued existence.

In addition, the U.S. Fish and Wildlife Service (USFWS) identifies species that are candidates for listing as a result of identified threats to their continued existence. Proposed species are those that have been proposed in the Federal Register to be listed under Section 4 of the Endangered Species 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. An official species list was obtained from the USFWS's Information for Planning and Consultation tool (IPaC) on January 16, 2026 (Attachment A). Threatened and Endangered species as well as Migratory Bird Treaty Act, and Bald and Golden Eagle Act species are described in Table 2 and Table 3.

Table 2. Federally Listed Threatened and Endangered Species Potentially Occurring at North Springfield Lake

Common Name	Scientific Name	Federal Listing Status
Monarch Butterfly	<i>Danaus plexippus</i>	Proposed Threatened
Northern long-eared bat	<i>Myotis septentrionalis</i>	Endangered
Northeastern bulrush	<i>Scirpus ancistrochaetus</i>	Endangered

Table 3. Federally Listed Migratory Bird Species Potentially Occurring at North Springfield Lake

Common Name	Scientific Name
Bald eagle ¹	<i>Haliaeetus leucocephalus</i>
Bay-breasted warbler	<i>Setophaga castanea</i>
Black-billed cuckoo	<i>Coccyzus erythrophthalmus</i>
Bobolink	<i>Dolichonyx oryzivorus</i>
Canada warbler	<i>Cardellina canadensis</i>
Cape May warbler	<i>Setophaga tigrina</i>
Chimney swift	<i>Chaetura pelagica</i>
Evening grosbeak	<i>Coccothraustes vespertinus</i>
Lesser yellowlegs	<i>Tringa flavipes</i>
Olive-sided flycatcher	<i>Contopus cooperi</i>
Prairie warbler	<i>Setophaga discolor</i>
Rose-breasted grosbeak	<i>Pheucticus ludovicianus</i>
Semipalmated sandpiper	<i>Calidris pusilla</i>
Veery	<i>Catharus fuscescens fuscescens</i>
Wood thrush	<i>Hylocichla mustelina</i>

¹ Species protected under the Bald and Golden Eagle Act

A list of state-listed rare, threatened, and endangered species was obtained from the Vermont Department of Environmental Conservation (VT DEC) (Attachment A). Table 4 provides a summary of state-listed species potentially occurring at North Springfield Lake, as well as their state ranks and status. Status describes a species' or communities' listing under the Vermont Endangered Species Law (10 V.S.A. Chapter 123). State ranks characterize the rarity or endangerment of the species or habitat within Vermont (VDFW, 2020). The state ranks include:

- S1 - Very rare. At very high risk of extinction or extirpation due to extreme rarity, very steep declines, or other factors;
- S2 – Rare. At high risk of extinction or extirpation due to very restricted range, very few populations, steep declines, or other factors;
- S3 – Uncommon. At moderate risk of extinction or extirpation due to restricted range, relatively few populations or occurrences, recent and widespread declines, or other factors;
- S4 – Common to uncommon. Locally common or widely scattered to uncommon, but not rare; some cause for long-term concern due to declines or other factors; or stable over many decades and not threatened but of restricted distribution or other factors;
- S5 – Common. Widespread and abundant.

In addition to state-listed species, North Springfield Lake includes a small acreage of state significant natural communities near Stoughton Pond. These communities include: dry transition hemlock forest common to uncommon (S4) habitat, dry hemlock-oak forest uncommon (S3) habitat, dry red oak-white pine forest uncommon (S3) habitat, and red oak- northern hardwood forest common to uncommon (S4) habitat. Dry transition hemlock and dry hemlock-oak forests are found in warmer, dry climatic regions in southern Vermont (VDFW, n.d.a; n.d.b). Dry red oak-white pine and red-oak northern hardwood forests are found throughout Vermont, and may occur on warm, dry south-facing slopes (VDFW, n.d.c; n.d.d)

Table 4. State-Listed Conservation Species Potentially Occurring within the North Springfield Lake Federal Fee Boundary

Taxa	Common Name	Scientific Name	State Ranking	State Status
Birds	Grasshopper sparrow	<i>Ammodramus savannarum</i>	S1	-
	Upland sandpiper	<i>Bartramia longicauda</i>	S2	-
Fishes	Blacknose shiner	<i>Notropis heterolepis</i>	S1	-
Insects	Yellow-banded bumble bee	<i>Bombus terricola</i>	S3	Threatened
	Slender bluet	<i>Enallagma traviatum</i>	S1S2	-
Mammals	Little brown bat	<i>Myotis lucifugus</i>	S1	Endangered
	Northern long-eared bat	<i>Myotis septentrionalis</i>	S1	Endangered
Reptiles	Wood turtle	<i>Glyptemys insculpta</i>	S3	-
Plants	Hay sedge	<i>Carex argyrantha</i>	S1	Endangered
	Prickly hornwort	<i>Ceratophyllum echinatum</i>	S2S3	-
	Nodding trillium	<i>Trillium cernuum</i>	S3	-

The Magnuson-Stevens Fishery Conservation and Management Act (MSA), as amended, promotes the conservation and protection of fisheries resources of the United States, and facilitates long-term protection of Essential Fish Habitat (EFH). Section 305(b)(2) of the MSA requires Federal agencies to consult with the National Oceanic & Atmospheric Administration (NOAA)'s National Marine Fisheries Service (NMFS) on actions that may adversely affect EFH (16 U.S.C. 1855(b)(2)). EFH is broadly defined as “those waters and substrates necessary to fish for spawning, breeding, feeding, or growth to maturity”. The NOAA Fisheries EFH Mapper was used to identify EFH-managed species and Habitat of Particular Concern within the project area. EFH for Atlantic salmon (*Salmo salar*) was identified within the Black River; no Habitat of Particular Concern was identified within the North Springfield Lake federal fee boundary (NOAA, 2026).

3.7.1 No Action Alternative

The No Action Alternative will result in no impacts to threatened and endangered species and EFH for federally listed species. The No Action Alternative would have no effect on threatened and endangered species and migratory birds. Federally threatened and endangered species and state conservation species would continue to be managed under the existing 2004 MP. The No Action Alternative would not adversely affect EFH for Atlantic salmon.

3.7.2 Proposed Action

The Proposed Action will result in no impacts to federal and state-listed species. USACE has made a no effect determination for the Proposed Action for all federally listed or proposed threatened, endangered, or candidate species that may occur within North Springfield Lake. The implementation of the 2026 MP would not result in construction or ground-disturbing activities. No direct or indirect impacts would occur to federal and state-listed species.

The Proposed Action would not affect any species or suitable habitat that may occur within North Springfield Lake. Any future activities that could potentially result in impacts to federally listed species will be coordinated with USFWS under Section 7 of the Endangered Species Act.

The Proposed Action would not adversely affect Atlantic Salmon EFH. No direct or indirect impacts would occur to EFH, as the 2026 MP would not result in construction or ground-disturbing activities. Any future activities that could potentially result in adverse effects to EFH for federally managed species will be consulted with NMFS under Section 305(b)(2) of the MSA.

3.8 INVASIVE SPECIES

Refer to Chapter 2.7.4 for information on the existing condition of invasive species at North Springfield Lake in the 2026 MP.

3.8.1 No Action Alternative

The No Action Alternative will have a minor, long-term adverse effect on invasive species management. The 2026 MP would not be implemented, and the project would continue to utilize the 2004 MP. As a result, no changes to existing conditions would occur and land management would not be compatible with current invasive species management needs.

3.8.2 Proposed Action

The Proposed Action will result in minor, long-term beneficial impacts to invasive species management. The reclassification of lands and improvement of resource management objectives associated with implementation of the 2026 MP will allow for more effective invasive species management. PO lands will implement invasive species control and management as appropriate. WM lands will pursue various invasive species programs, as available, including: early detection and prevention of introduction and spread of aquatic invasive species; and invasive plant species management. In addition to land reclassification, the 2026 MP includes natural resources management objectives which promote the management of lands and waters to reduce the spread of invasive, non-native, and aggressively spreading native species.

3.9 HAZARDOUS, TOXIC, AND RADIOACTIVE WASTE

For information on the existing conditions of Hazardous, Toxic, and Radioactive Waste (HTRW) at North Springfield Lake, please refer to Chapter 2.8 of the 2026 MP.

3.9.1 No Action Alternative

The No Action Alternative will result in no impacts to HTRW resources. Under the No Action Alternative, the 2026 MP would not be implemented and there would be no changes to the existing 2004 MP.

3.9.2 Proposed Action

The Proposed Action will result in no impacts to HTRW resources. Under the Proposed Action, the 2026 MP would be implemented, and no construction or ground-disturbing activities would occur. As a result, no impacts to HTRW resources would occur within or in the immediate vicinity of North Springfield Lake.

3.10 HEALTH AND SAFETY

For information on the existing conditions of health and safety at North Springfield Lake, please refer to Chapter 2.9 of the 2026 MP.

3.10.1 No Action Alternative

The No Action Alternative will result in no impacts to health and safety. Under the No Action Alternative, the 2026 MP would not be implemented and there would be no changes to the existing 2004 MP.

3.10.2 Proposed Action

The Proposed Action will result in no impacts to health and safety. The implementation of the 2026 MP will result in no construction or ground-disturbing activities that may impact health and safety.

3.11 AESTHETIC RESOURCES

For information on the existing conditions of aesthetic resources at North Springfield Lake, please refer to Chapter 2.10 of the 2026 MP.

3.11.1 No Action Alternative

The No Action Alternative will result in no impacts on aesthetic resources. No revisions to the 2004 MP would occur, and no changes would occur to existing aesthetic resources.

3.11.2 Proposed Action

The Proposed Action may result in minor, long-term beneficial impacts to aesthetic resources. Benefits to aesthetic resources may occur due to less disturbance of aesthetic natural areas. The 2026 MP also includes natural resources management objectives to reduce activities which disturb the scenic beauty and aesthetics of the lake.

3.12 CULTURAL, HISTORICAL, AND ARCHAEOLOGICAL RESOURCES

Chapter 2.11 of the 2026 MP provides prehistoric and historic background discussions for the North Springfield Lake area as well as a summary regarding previous cultural resources investigations.

3.12.1 No Action Alternative

The No Action Alternative will result in no impacts to existing cultural, historical, or archaeological resources. North Springfield Lake would continue to be managed according to the 2004 Master Plan. No impacts on cultural, historical, or archaeological resources is anticipated as a result of implementing the No Action Alternative.

3.12.2 Proposed Action

The Proposed Action of adopting and implementing the revised MP has no potential to cause effects to historic properties. Impacts to historic properties and cultural and archaeological resources were considered throughout the MP revision process and during the refinement of land use reclassifications. This MP revision does not propose, authorize, or permit any ground disturbing activities. The changes in this MP revision, including changes in land use classifications, do not have the potential to effect historic properties, even assuming such historic properties were present.

Therefore, USACE has complied with its obligations under the NHPA, as amended. A copy of the draft EA will be provided to the Elnu Abenaki Tribe, the Wampanoag Tribe of Gay Head (Aquinnah), the Narragansett Indian Tribe, and the Vermont State Historic Preservation Officer (SHPO).

3.13 SOCIOECONOMICS AND DEMOGRAPHICS

For more information on the existing conditions of socioeconomics and demographics, please refer to Chapter 2.12 of the 2026 MP.

3.13.1 No Action Alternative

The No Action Alternative will result in no impacts to existing socioeconomics or demographics. The 2026 MP would not be implemented, and North Springfield Lake would continue management under the 2004 MP.

3.13.2 Proposed Action

The Proposed Action will result in no impacts to existing socioeconomics or demographics. Under the Proposed Action the 2026 MP would be implemented. The 2026 MP would result in no construction or changes that would affect local socioeconomic or demographic factors. No activities proposed in the 2026 MP would impact the changes the local economy or local populations in any perceivable way.

3.14 RECREATION

For information on the existing conditions of recreation and the zone of influence for North Springfield Lake, please refer to Chapter 2.13 of the 2026 MP.

3.14.1 No Action Alternative

The No Action Alternative would result in moderate, long-term adverse impacts to recreation. The 2026 MP would not be implemented, and North Springfield Lake would continue management under the 2004 MP. As a result, the 2004 MP would not reflect current recreation needs at North Springfield Lake.

3.14.2 Proposed Action

The Proposed Action would result in moderate, long-term beneficial impacts to recreation. The 2026 MP would update recreation policies and goals and increase recreation land classifications. The 2026 MP would result in an increase in LDR lands, and a decrease in HDR lands. These land classification changes reflect current recreation needs and ultimately provide updated and more effective land management in the context of recreation and recreational access to the public.

SECTION 4: COMPLIANCE WITH ENVIRONMENTAL LAWS

This EA has been prepared to satisfy the requirements of all applicable federal environmental laws, regulations, and executive orders. The adoption and implementation of the 2026 MP is consistent with USACE's Environmental Operating Principles. The following is a list of applicable environmental laws and regulations that were considered in the planning of this project and the status of compliance with each:

Federal Statutes

1. *Archaeological Resources Protection Act of 1979, as amended, 16 U.S.C 470aa et seq.*

Compliance: The Proposed Action will not result in any ground disturbing activities.

2. *Preservation of Historic and Archeological Data Act of 1974, as amended, 54 U.S.C 312501 et seq.*

Compliance: In progress. A copy of the draft EA will be released to the SHPO, Elnu Abenaki Tribe, Narraganset Indian Tribe, and the Wampanoag Tribe of Gay Head (Aquinnah).

3. *American Indian Religious Freedom Act of 1978, 42 U.S.C 1996.*

Compliance: The Proposed Action will not impede access by Native Americans to sacred sites, possession of sacred objects, and the freedom to worship through ceremonials and traditional rites. A copy of the draft EA will be released to the Elnu Abenaki, Narragansett Indian Tribe, and the Wampanoag Tribe of Gay Head (Aquinnah).

4. *Clean Air Act, as amended, 42 U.S.C 7401 et seq.*

Compliance: Existing reservoir operation and maintenance is compliant with the Clean Air Act and will not change with the 2026 MP. A General Conformity Determination is not required since the emissions of either alternative are negligible at best and are otherwise *de minimis*.

5. *Clean Water Act of 1977 (Federal Water Pollution Control Act Amendments of 1972), 33 U.S.C 1251 et seq.*

Compliance: A state water quality certification pursuant to Section 401 of the Clean Water Act is not required for the 2026 MP. There will be no change in the existing management of the reservoir that will impact water quality, but minor, long-term benefits to water quality are expected from the Proposed Action.

6. *Endangered Species Act of 1973, as amended, 16 U.S.C. 1531 et seq.*

Compliance: Current lists of threatened or endangered species were obtained through the USFWS IPaC on January 16, 2026. USACE made a no effect determination for the monarch butterfly, northern long-eared bat, and the northeastern bulrush; therefore, no further consultation with USFWS is required.

7. *Fish and Wildlife Coordination Act, as amended, 16 U.S.C. 661 et seq.*

Compliance: In-progress. USACE will provide a copy of the draft EA to USFWS and VT DFW.

8. *Migratory Bird Treaty Act of 1918, as amended, 16 U.S.C. 703 et seq.*

Compliance: The Proposed Action will not result in any take of any species protected under the Migratory Bird Treaty Act.

9. *National Historic Preservation Act of 1966, as amended, 54 U.S.C. 300101 et seq.*

Compliance: USACE has determined that the Proposed Action is primarily administrative and does not have the potential to impact historic properties at North Springfield Lake. Pursuant to 36 Code of Federal Register (CFR) 800.3(a)(1), USACE has satisfied its responsibilities to consider the effects of the Proposed Action on historic properties and has no further obligations under Section 106 of the NHPA. USACE remains in compliance with Section 106 of the NHPA.

10. *Native American Graves Protection and Repatriation Act (NAGPRA), 25 U.S.C 3001-3013, 18 U.S.C 1170*

Compliance: Regulations implementing NAGPRA will be followed if discovery of human remains and/or funerary items occur during implementation of this project.

11. *National Environmental Policy Act of 1969, as amended, 42 U.S.C 4321 et seq.*

Compliance: In-progress. Preparation of an EA signifies partial compliance with NEPA. Full compliance shall be noted at the time the FONSI is issued.

12. *Bald and Golden Eagle Protection Act, 16 U.S.C. 668 et seq.*

Compliance: The Proposed Action does not involve take, sale, purchase, or transport of any Bald or Golden Eagles.

13. *National Invasive Species Act (NISA), as amended, 16 U.S.C. 4701 et seq.*

Compliance: The Proposed Action will not promote or cause the introduction or spread of invasive species into waters of the United States.

14. *Magnuson-Stevens Fishery Conservation and Management Act, 16 U.S.C. 1801 et seq.*

Compliance: North Springfield Lake includes EFH for Atlantic salmon. The Proposed Action will not adversely affect EFH, therefore no consultation with the NMFS is required.

Executive Orders (EO)

1. *EO 11593, Protection and Enhancement of the Cultural Environment, 13 May 1971*

Compliance: In-progress. A copy of the draft EA will be released to the Vermont's SHPO.

2. *EO 11988, Floodplain Management, 24 May 1977 amended by EO 12148, 20 July 1979.*

Compliance: The Proposed Action will have no impacts to existing floodplains at North Springfield Lake.

3. *EO 11990, Protection of Wetlands, 24 May 1977*

Compliance: This Proposed Action does not propose construction or future activities in wetlands.

4. *EO 13007, Indian Sacred Sites, 24 May 1996*

Compliance: Access to and ceremonial use of Indian sacred sites by Indian religious practitioners will be allowed and accommodated. No adverse effects to the physical integrity of such sacred sites will occur.

5. *EO 13045, Protection of Children from Environmental Health Risks and Safety Risks. 21 April 1997*

Compliance: The Proposed Action will not create a disproportionate environmental health or safety risk for children.

6. *EO 13112, Invasive Species, 8 December 2016.*

Compliance: The Proposed Action will not promote or cause the introduction or spread of invasive species.

7. *EO 13175, Consultation and Coordination with Indian Tribal Governments, 6 November 2000*

Compliance: In-progress. Consultation with Indian Tribal Governments, where applicable, and consistent with executive memoranda, DOD Indian policy, and USACE Tribal Policy Principles signifies compliance.

8. *EO 13186, Migratory Bird Conservation, 10 January 2001*

Compliance: The Proposed Action would not result in a measurable negative effect on migratory bird populations.

Executive Memoranda

1. *Memorandum for the Heads of Agencies from CEQ, Analysis of Impacts on Prime or Unique Agricultural Lands in Implementing NEPA, 11 August 1980*

Not applicable. The 2026 MP does not impact Prime Farmland present on North Springfield Lake project lands.

2. *Memorandum for the Heads of Executive Departments and Agencies from the President of the United States, Memorandum on Government-to-Government Relations with Native American Tribal Governments, 29 April 1994.*

Compliance: In-progress. The USACE will release the draft EA to Federally Recognized Indian Tribes.

SECTION 5: PUBLIC AND AGENCY COORDINATION

In accordance with NEPA of 1969, as amended, the USACE initiated public involvement and agency scoping activities to solicit input on the proposed revision of the 2004 MP, as well as identifying any issues related to the Proposed Action.

An initial public open house was held for the North Springfield Lake Master Plan revision at the Springfield Town Library, 43 Main Street, Springfield, VT 05156 on April 17, 2025, from 4:00-6:00 p.m. The purpose of this open house was to provide attendees with information regarding the MP revision process as well as to provide them with the opportunity to provide initial comments on the Proposed Action. The initial comment period remained open for 30 days from April 17, 2025, to May 16, 2025. During the 30-day comment period, USACE received 3 comments. These comments and their USACE responses can be found in Appendix E of the 2026 MP.

The draft 2026 MP and EA will be released to the public, tribes, and agencies for another 30-day comment period. The USACE will hold a public open house following the release of the draft 2026 MP and EA. Comments received during this period will be included within Appendix E. Appendix A to this EA will be updated to include: the news release; agency coordination letters; tribal coordination letters; and any agency or tribal comments. Appendix E will include all comments received for the 2026 MP. The draft EA will be coordinated with the following agencies and stakeholders:

Federal

National Oceanic and Atmospheric Administration (NOAA), National Marine Fisheries Service (NMFS)
U.S. Environmental Protection Agency
U.S. Fish and Wildlife Service

State

Vermont Agency of Natural Resources (VANR):

Vermont Department of Environmental Conservation (VT DEC)

Vermont Department of Forests, Parks, and Recreation (VT FPR)

Vermont Department of Fish and Wildlife (VDFW)

Vermont Division for Historic Preservation, State Historic Preservation Officer (SHPO)

Tribes

Elnu Abenaki Tribe
Wampanoag Tribe of Gay Head (Aquinnah)
Narragansett Indian Tribe

SECTION 6: REFERENCES

- National Oceanic and Atmospheric Administration. (2026). Essential Fish Habitat Mapper. Accessed on March, 31, 2026, from <https://www.habitat.noaa.gov/apps/efhmapper/?page=NEMA-Map>
- U.S. Army Corps of Engineers (USACE). (2004). North Springfield Lake Master Plan.
- Vermont Agency of Natural Resources (VANR). (2025). Natural Resources Atlas. Accessed on October 7, 2025, from <https://anrmaps.vermont.gov/websites/anra5/>
- Vermont Department of Fish and Wildlife (VDFW). (2020). Explanation of Legal Status and Information Ranks. *Vermont Natural Heritage Inventory*. Accessed on October 7, 2025, from <http://vtfishandwildlife.com/document/explanation-legal-status-and-information-rankspdf>
- VDFW. (n.d.a). Dry Transition Hemlock Forest. Accessed on December 8, 2025, from <http://vtfishandwildlife.com/conservation-planning/natural-community-fact-sheets/dry-transition-hemlock-forest>
- VDFW. (n.d.b). Dry Hemlock-Oak Forest. Accessed on December 8, 2025, from <http://vtfishandwildlife.com/conservation-planning/natural-community-fact-sheets/dry-hemlock-oak-forest>
- VDFW. (n.d.c). Dry Red Oak-White Pine Forest. Accessed on December 8, 2025, from <http://vtfishandwildlife.com/conservation-planning/natural-community-fact-sheets/dry-red-oak-white-pine-forest>
- VDFW. (n.d.d). Red Oak- Northern Hardwood Forest. Accessed on December 8, 2025, from <http://vtfishandwildlife.com/conservation-planning/natural-community-fact-sheets/red-oak-northern-hardwood-forest>

ATTATCHMENT A – COORDINATION



NEWS RELEASE

BUILDING STRONG®

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March 23, 2025
Release No. MA 2025-008

USACE to host Host North Springfield Lake Master Plan Open House April 17

CONCORD, Mass. – The U.S. Army Corps of Engineers (USACE) will host an open house on Thursday, April 17, 2025, to kick off a process to revise the 2004 North Springfield Lake Master Plan. The open house will be held from 4:00-6:00 p.m. at the Springfield Town Library, 43 Main Street, Springfield, VT 05156.

During the open house session, there will be no formal presentation. The public is invited to visit at any point during the 4:00-6:00 p.m. time frame 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 North Springfield Lake Master Plan, last approved in 2004, 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.

Initial Comments

An initial 30-day comment period will begin April 17, 2025, and end May 16, 2025. 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 web page: www.nae.usace.army.mil/missions/recreation/north-springfield-lake/north-springfield-lake-master-plan/.

The web page also contains a presentation which will be running 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 July 2026).

About North Springfield Lake

North Springfield Lake is located on the Black River in the towns of Springfield and Weathersfield, Vermont. North Springfield Lake is approximately 8.7 miles upstream of the confluence of the Black and Connecticut Rivers, just northwest of the Village of North Springfield adjacent to the Hartness State Airport. The project consists of 1,372 acres of fee-owned land, and 376 acres of flowage easement.

North Springfield Lake is a unit of the Comprehensive Plan for Flood Control in the Upper Connecticut River Basin. Construction of the North Springfield Lake dam and reservoir began in May 1958 and was completed in November 1960 at a cost of \$6,832,000. The project is one of numerous other projects in the Comprehensive Plan for flood damage reduction and other multiple purposes within the Connecticut River Basin. North Springfield Lake provides flood damage reduction at downstream communities along the Black River in Springfield and Connecticut River in Vermont, New Hampshire, Massachusetts and Connecticut.

North Springfield Lake Dam is a rolled-earth fill embankment with rock slope protection. The outlet works consist of a concrete intake structure that houses three 5-foot by 12-foot slide gates, a gated concrete horseshoe conduit, and a discharge channel. An emergency spillway, cut in rock, is located on the left abutment of the dam, and includes a concrete ogee weir. The project has two permanent impoundments or pools: the “conservation pool” or North Springfield Lake, is located just upstream of the dam structure; and the North Branch Dam, also called Stoughton Pond, located approximately three miles upstream of the dam, on the North Branch of the Black River in Weathersfield, Vermont. This dam was constructed as part of the project to allow continued east/west access at this location.

The outlet from Stoughton Pond is a 21-foot-wide concrete weir that leads to a circular metal conduit through the embankment. At its normal elevation (467 feet N.G.V.D.), North Springfield Lake has a maximum depth of 15 feet. Stoughton Pond, normally at an elevation of about 502 feet N.G.V.D., has a maximum depth of about 20 feet. At spillway crest elevation (545.5 feet N.G.V.D.), the flood storage reservoir at the project would encompass 1,200 acres and extend about 4.5 miles upstream of the dam. This reservoir has a storage capacity of 50,200 acre-feet (about 16.6 billion gallons of water), which is equivalent to 5.93 inches of runoff from the contributing 158 square mile drainage area. While the main purpose of North Springfield Lake was to provide flood risk management, over the years the Lake and Stoughton Pond have become a recreational draw for nearby visitors. With multi-use trails, picnic area, swimming beach, boat launch, the lake can accommodate all kinds of outdoor enthusiasts across all seasons.

The U.S. Army Corps of Engineers manages the natural resources at North Springfield Lake Lake for multiple uses: flood risk management, natural resources management, and outdoor recreation. The outdoor sports enthusiast can hunt, fish and boat at North Springfield Lake and Stoughton Pond. The natural environment of project reflects the diverse nature and beauty of Vermont. The glacially formed topography showcase the forested mountains and ridges the river valleys below and home to all types of flora and fauna. All project lands and waters are under the jurisdiction of CFR Title 36 regulations, state, and local laws.

-End-



US Army Corps
of Engineers®

Comment Form Instructions
Public Meeting April 17, 2025

Master Plan Revision North Springfield Lake

The U.S. Army Corps of Engineers is in the process of revising the North Springfield 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:

<https://www.nae.usace.army.mil/missions/recreation/north-springfield-lake/north-springfield-lake-master-plan/>

- Provide comments in an email message or use the comment form and send to: CENAE-NorthSpringfieldLake@usace.army.mil
- Provide comments in a letter or use comment form and send via mail to:
USACE North Springfield Lake
c/o Project Manager
98 Reservoir Road
Springfield, VT 05156
- Drop off or mail written comments to the project office at the address above.

The **30-day comment period is April 17 through May 16, 2025**. 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 May 16, 2025**. Thank you for your participation!

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Scan QR Code



**DEPARTMENT OF THE ARMY
US ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
696 VIRGINIA ROAD
CONCORD MA 01742-2751**

March 24, 2025

Planning Division
Environmental Branch

Mr. Timothy Timmermann
Office of Environmental Review
EPA New England-Region 1
5 Post Office Square, Suite 100
Mail Code OEP 06-3
Boston, MA 02109-3912

Dear Mr. Timmermann:

The U.S. Army Corps of Engineers, New England District (USACE) is proposing revisions to the 1977 North Springfield Lake Master Plan. North Springfield Lake is a multi-purpose project located on the Black River in Springfield and Weathersfield, Vermont. Project construction was completed in 1960. The project is authorized for flood control in the Upper Connecticut River Basin through the Flood Control Act of 1938. The project is authorized for development and use of the reservoir area for flood risk management, natural resources management, and outdoor recreation through the Flood Control Act of 1944. The purpose of this letter is to invite you or a member of your staff to an informational open house, and solicit your initial comments on the North Springfield Lake Master Plan.

The current North Springfield Lake Master Plan, last approved in 2004, needs revision to address changes in regional land use, population, outdoor recreation trends, and USACE management policy. A land classification map is enclosed to show current land classifications under the 2004 North Springfield Lake Master Plan (Attachment 1). 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 will not address the technical and operational aspects of the lake related to flood risk management or the water conservation missions of the project.

USACE will be preparing an Environmental Assessment (EA) to address impacts to the environment. An open house will occur on April 17, 2025 to gather preliminary comments on the proposed action. The open house will be held from 4:00 – 6:00pm at the Springfield Town Library, 43 Main Street, Springfield, Vermont 05156. The purpose of the open house is to explain the master plan process, general schedule, and gather initial feedback.

Additional information on the North Springfield Lake Master Plan can be found at <https://www.nae.usace.army.mil/missions/recreation/north-springfield-lake/north-springfield-lake-master-plan/>.

USACE is requesting preliminary comments on the proposed action within 30 days of the open house. Comments should include any concerns that need to be addressed during the master plan process specifically with regards to all applicable EPA authorities. A virtual interagency meeting will be available upon request. If you or your staff have any questions about the master plan or require additional information, please contact the lake manager, Jason Farnsworth, at [REDACTED] or by email at [REDACTED] or the project biologist, Kelsie Dakessian, at [REDACTED] or by email at [REDACTED]

Sincerely,

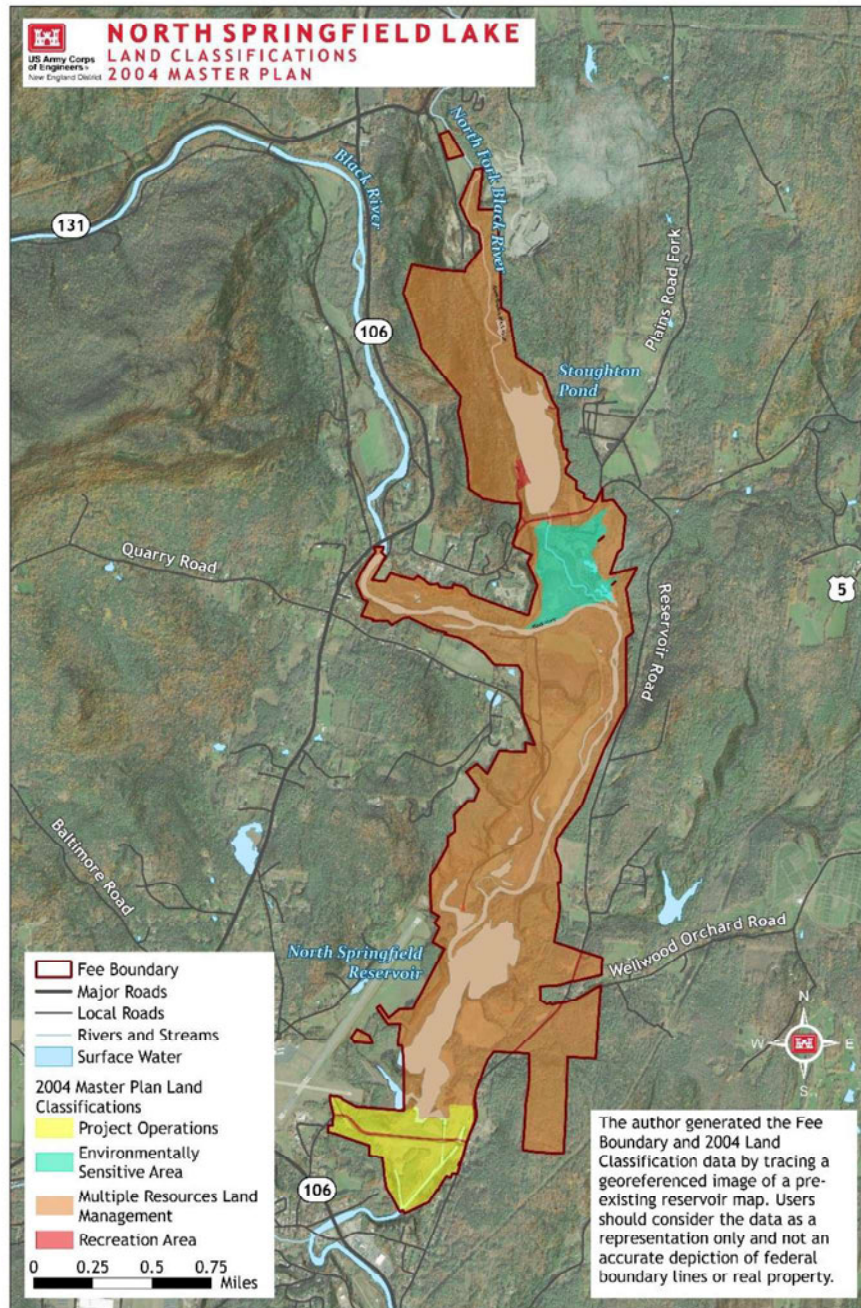


Richard B. Loyd
Chief, Environmental Branch

Enclosure

Attachment 1

2004 North Springfield Lake Master Plan Classifications





**DEPARTMENT OF THE ARMY
US ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
696 VIRGINIA ROAD
CONCORD MA 01742-2751**

March 24, 2025

Planning Division
Environmental Branch

Audrey Mayer, Supervisor
New England Field Office
U.S. Fish and Wildlife Service
Ecological Services
70 Commercial Street, Suite 300
Concord, Massachusetts 03301-5087

Dear Dr. Mayer:

The U.S. Army Corps of Engineers, New England District (USACE) is proposing revisions to the 2004 North Springfield Lake Master Plan. North Springfield Lake is a multi-purpose project located on the Black River in Springfield and Weathersfield, Vermont. Project construction was completed in 1960. The project is authorized for flood control in the Upper Connecticut River Basin through the Flood Control Act of 1938. The project is authorized for development and use of the reservoir area for flood risk management, natural resources management, and outdoor recreation through the Flood Control Act of 1944. The purpose of this letter is to invite you or a member of your staff to an informational open house, and solicit your initial comments on the North Springfield Lake Master Plan.

The current North Springfield Lake Master Plan, last approved in 2004, needs revision to address changes in regional land use, population, outdoor recreation trends, and USACE management policy. A land classification map is enclosed to show current land classifications under the 2004 North Springfield Lake Master Plan (Attachment 1). 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 will not address the technical and operational aspects of the lake related to flood risk management or the water conservation missions of the project.

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Additional information on the North Springfield Lake Master Plan can be found at <https://www.nae.usace.army.mil/missions/recreation/north-springfield-lake/north-springfield-lake-master-plan/>.

USACE is requesting preliminary comments on the proposed project within 30 days of the open house. Comments should include any concerns that need to be addressed relative to the Endangered Species Act and the Fish and Wildlife Coordination Act. A virtual interagency meeting will be available upon request. If you or your staff have any questions about the master plan or require additional information, please contact the lake manager, Jason Farnsworth, at [REDACTED] or by email at [REDACTED]; or the project biologist, Kelsie Dakessian, at [REDACTED] or by email at [REDACTED].

Sincerely,



Richard B. Loyd
Chief, Environmental Branch

Enclosure

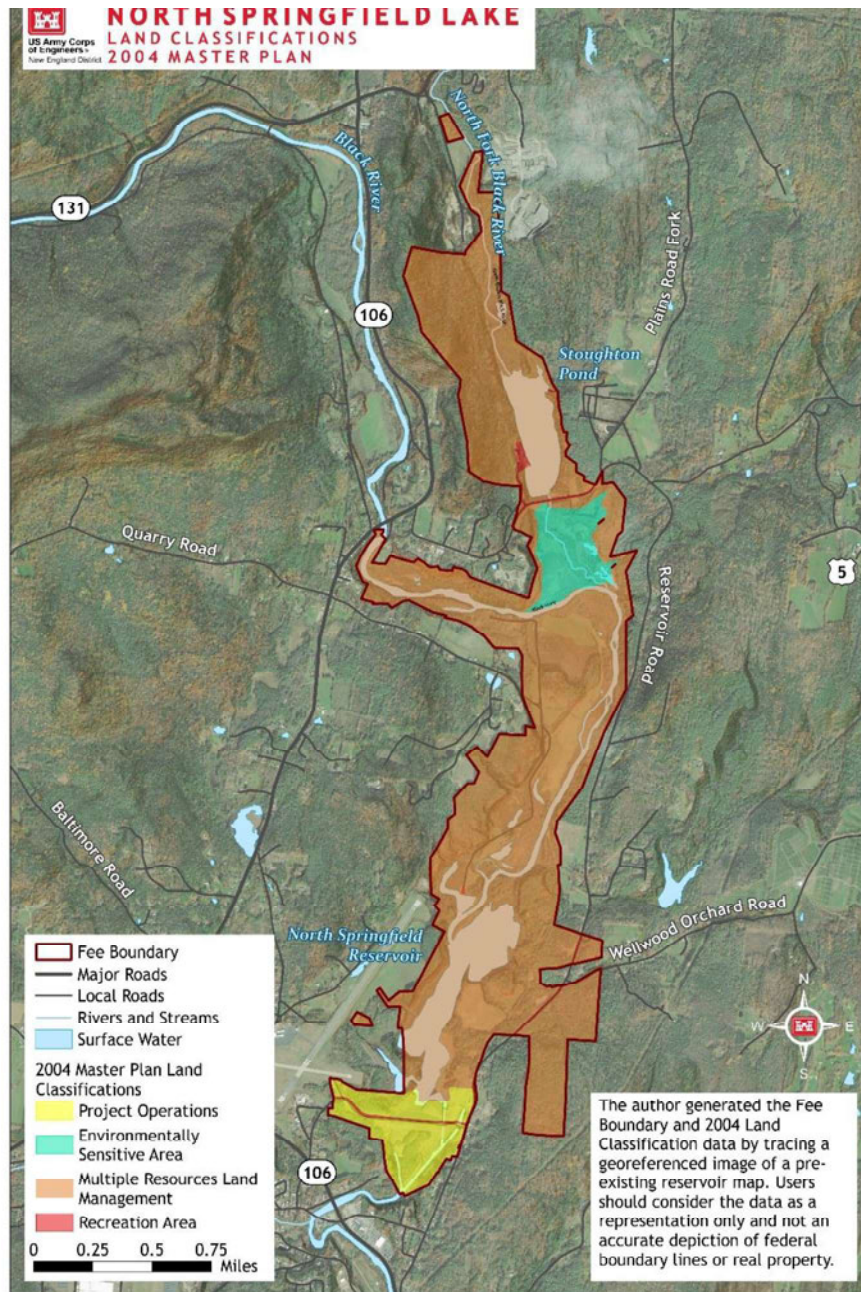
Copies Furnished:

New England Ecological Services Field Office: newengland@fws.gov

David Simmons: david_simmons@fws.gov

Attachment 1

2004 North Springfield Lake Master Plan Classifications





**DEPARTMENT OF THE ARMY
US ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
696 VIRGINIA ROAD**

March 24, 2025

Planning Division
Environmental Branch

Mr. Jason Batchelder, Commissioner
Agency of Natural Resources
Department of Environmental Conservation
Davis Building – 3rd Floor
One National Life Drive
Montpelier, VT 05620-3522

Dear Mr. Batchelder:

The U.S. Army Corps of Engineers, New England District (USACE) is proposing revisions to the 2004 North Springfield Lake Master Plan. North Springfield Lake is a multi-purpose project located on the Black River in Springfield and Weathersfield, Vermont. Project construction was completed in 1960. The project is authorized for flood control in the Upper Connecticut River Basin through the Flood Control Act of 1938. The project is authorized for development and use of the reservoir area for flood risk management, natural resources management, and outdoor recreation through the Flood Control Act of 1944. The purpose of this letter is to invite you or a member of your staff to an informational open house, and solicit your initial comments on the North Springfield Lake Master Plan.

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USACE is requesting preliminary comments on the proposed project within 30 days of the open house. A virtual interagency meeting will be available upon request. If you or your staff have any questions about the master plan or require additional information, please contact the lake manager, Jason Farnsworth, at [REDACTED] or by email at [REDACTED]; or the project biologist, Kelsie Dakessian, at [REDACTED] or by email at [REDACTED].

Sincerely,

 Digitally signed by
LOYD.RICHARD.B.1
274669540
Date: 2025.03.24
15:04:54 -04'00'

Richard B. Loyd
Chief, Environmental Branch

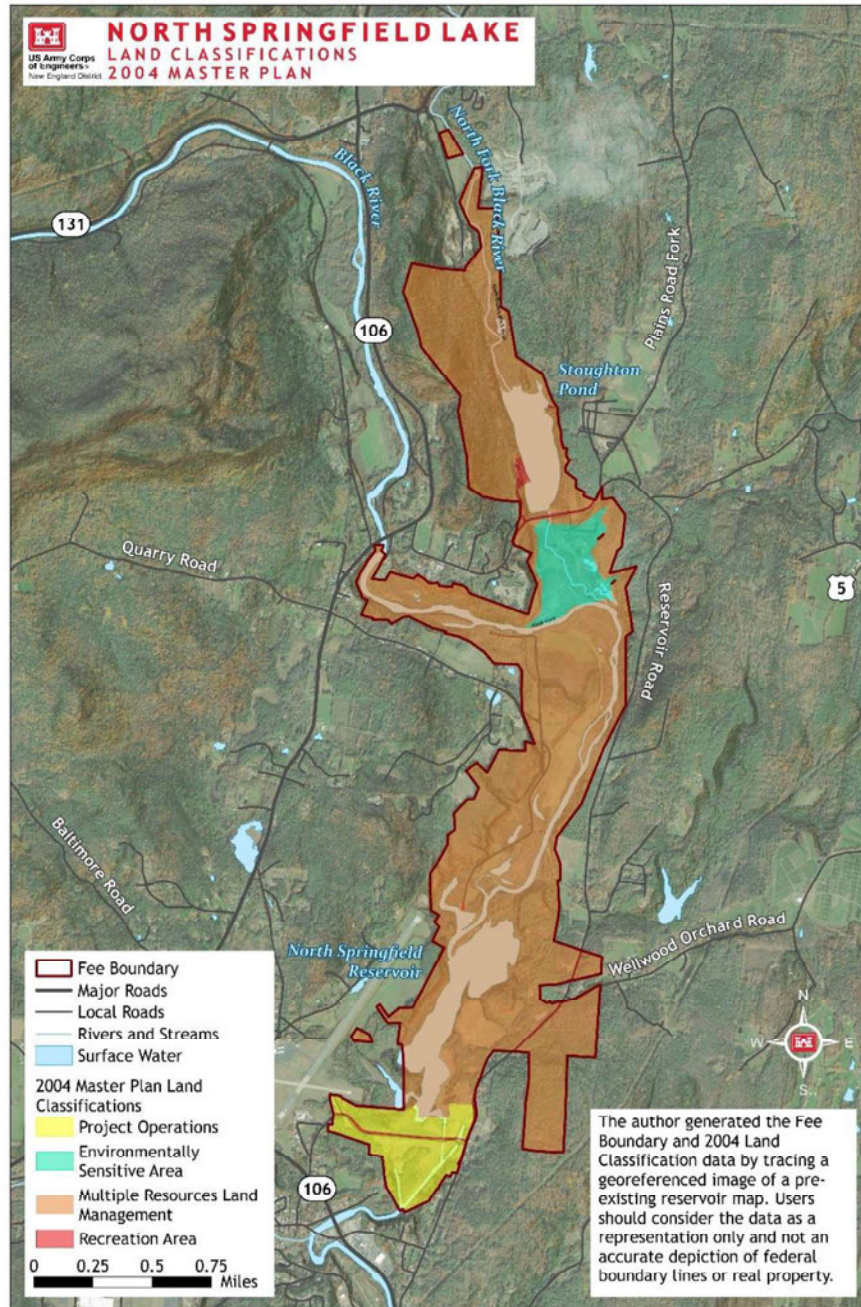
Enclosure

Copies Furnished:

Steve Hanna — [REDACTED]
Betsy Simard — [REDACTED]
Eric Davis — [REDACTED]
Jeff Crocker — [REDACTED]

Attachment 1

2004 North Springfield Lake Master Plan Classifications



State of Vermont**Department of Environmental Conservation**

Springfield Regional Office
100 Mineral Street, Suite 303
Springfield, VT 05156-3168

Marie Levesque Caduto
Watershed Planner

www.dec.vermont.gov/water-investment

Agency of Natural Resources

[cell] [REDACTED]

[Email] [REDACTED]

TO: USACE North Springfield Lake
Project Manager
98 Reservoir Road
Springfield, VT 05156

FROM: Marie Levesque Caduto, Watershed Planner, VT Dept. of Environmental Conservation

DATE: 05/14/2025

SUBJECT: USACE North Springfield Lake Master Plan Update

Project Background: North Springfield Lake dam located in Springfield, VT and the North Branch/Stoughton Pond dam located in Weathersfield, VT are within Vermont Watershed Planning Basin 10 – [Black and Ottauquechee Rivers and Connecticut River Direct Tributaries](#). Vermont's Tactical Basin Plans target strategies and prioritize resources to those actions that will have the greatest influence on surface water protection or restoration. Basin-specific water quality goals, objectives, strategies, and projects described in these Plans aim to protect public health and safety ensure public use and enjoyment of Vermont waters and their ecological health as set forward in the Vermont Surface Water Management Strategy and the Vermont Water Quality Standards.

Beyond the benefits of the flood control functions of these dams, the waters and lands are important assets in the Black River watershed for water quality protection, wildlife habitat and recreation, their management and use are of interest to the State. Following are Watershed Planning Program comments and concerns for consideration in the development of the updated North Springfield Lake Master Plan.

Comments on development of the North Springfield Lake Master Plan:**Providing riparian habitats –**

The river corridor above, between and below the North Springfield and Stoughton Pond dams provide habitat for a number of Rare, Threatened and Endangered species and Species of Greatest Conservation Need. These habitats should be maintained in a natural condition to support the natural community types and specialized habitat needs of the resident animal and plant populations.

These include:

- Federal and State Endangered Northern Long-eared Bat
- State Endangered Little Brown Bat
- Wood Turtle G2G3, S3, SC, SGCN, RSGCN
- Blacknose Shiner G5, S1, SGCN
- Upland Sandpiper G5, S2B, SGCN
- Grasshopper Sparrow G5, S1B, SGCN
- Yellow-banded Bumble Bee G3G4, S3, SGCN, RSGCN

- Slender Bluet G5, S1S2, SGCN
- Nodding Trillium G5, S3
- Spotted Wintergreen G5, S3
- Prickly Hornwort G4, S2S3
- Hay Sedge G5, S3

Numerous uncommon odonate (dragonfly) species also inhabit this area.

Protection of these communities should be a priority in the Master Plan. Restoration of degraded sites and careful management of flows to promote natural conditions should be exercised during all non-flood conditions.

Additional habitat management to benefit grassland and shrubland birds is recommended. Management of field habitat with periodic mosaic mowing, native shrub species enhancement and field invasive control would all support a diversity of bird species and enhance recreational birding.

303d Listed Impaired Waters – [Waters altered by flow regulation](#)

Stoughton Pond and North Springfield Reservoir are both listed as Altered due to water level fluctuations that impact aquatic habitat. Listed as “Water level fluctuation - USACOE dam; no conservation flow based on any biological/water quality criteria.” To address this water quality impairment and improve sediment transport, non-flood operations flow management should work toward run-of-river flows.

Water Quality in the lake is marginal:

	<u>Shoreland</u>	<u>AIS</u>	<u>Mercury</u>	<u>WQ Status</u>
NORTH SPRINGFIELD RESERVOIR	Fair	Poor	Fair	Poor
STOUGHTON POND	Fair	Poor	Fair	Poor

Both lakes are rated as being mesotrophic though there may be an increasing trend in North Springfield lake.

The North Springfield Lake is the only lake in Basin 10 with both invasive Water chestnut (*Trapa natans*). Both lakes have Eurasian watermilfoil (*Myriophyllum spicatum*). USACE’s program to control Water chestnut has been largely successful and should be continued to ensure it does not return.

- A spread prevention program such as a boat launch Greeter Program should be established at both lakes.
- Japanese knotweed is pervasive throughout the Corps lands as it thrives in disturbed areas. The continued control program for knotweed is essential.

Tactical Basin Plan Strategies related to North Springfield Lake lands –

Strategies included in the 2021 TBP include:

- Support and enhance the riparian buffer and floodplain plantings throughout the landscape
 - Establishing and maintaining riparian vegetation and protecting riparian buffers from the impacts of recreation should be included in all project development plans
- Improve flow management at hydroelectric and flood control facilities to address water quality impairment, sediment transport and to benefit downstream species
 - During non-flood operations flow management should work to improve the temperatures and sediment transport in the Black and North Branch Rivers.
- Establish AIS Greeter Programs and support and promote AIS control projects
 - as suggested above
- Work to control riparian and aquatic invasive plants
 - as suggested above
- Monitor habitat conditions & effects of stressors on habitats; restore critical habitats or ameliorate threats when/where opportunities arise to secure/restore numbers of SGCN populations & targeted abundance levels

Recreation –

Erosion is observable from gravel roads and trails adjacent to the rivers and stream on North Springfield lands. Stormwater control practices should be implemented to mitigate soil loss into these waters and riparian buffers should be installed and maintained in these locations.

Trails near and within sensitive rare, threatened or endangered species habitat should not allow access through and into the habitat to access the water. Strategies to block access to these areas should be implemented.

Continued monitoring of water quality at the swimming beach should continue for bacteria and cyanobacteria to protect public health.

The car-top boating access to the Black River at North Springfield is in need of regular maintenance To ensure safe access. Establishing parking closer to the river would be a welcome addition.



**DEPARTMENT OF THE ARMY
US ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
696 VIRGINIA ROAD**

March 24, 2025

Planning Division
Environmental Branch

Ms. Andrea Shortsleeve, Commissioner
Vermont Fish and Wildlife Department
1 National Life Drive
Davis 2
Montpelier, VT 05620-3702

Dear Ms. Shortsleeve:

The U.S. Army Corps of Engineers, New England District (USACE) is proposing revisions to the 1977 North Springfield Lake Master Plan. North Springfield Lake is a multi-purpose project located on the Black River in Springfield and Weathersfield, Vermont. Project construction was completed in 1960. The project is authorized for flood control in the Upper Connecticut River Basin through the Flood Control Act of 1938. The project is authorized for development and use of the reservoir area for flood risk management, natural resources management, and outdoor recreation through the Flood Control Act of 1944. The purpose of this letter is to invite you or a member of your staff to an informational open house, and solicit your initial comments on the North Springfield Lake Master Plan.

The current North Springfield Lake Master Plan, last approved in 2004, needs revision to address changes in regional land use, population, outdoor recreation trends, and USACE management policy. A land classification map is enclosed to show current land classifications under the 2004 North Springfield Lake Master Plan (Attachment 1). 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 will not address the technical and operational aspects of the lake related to flood risk management or the water conservation missions of the project.

USACE will be preparing an Environmental Assessment (EA) to address impacts to the environment. An open house will occur on April 17, 2025 to gather preliminary comments on the proposed action. The open house will be held from 4:00 – 6:00pm at the Springfield Town Library, 43 Main Street, Springfield, Vermont 05156. The purpose of the open house is to explain the master plan process, general schedule, and gather initial feedback.

Additional information on the North Springfield Lake Master Plan can be found at <https://www.nae.usace.army.mil/missions/recreation/north-springfield-lake/north-springfield-lake-master-plan/>.

USACE is requesting preliminary comments on the proposed action within 30 days of the open house. Comments should include any concerns that need to be addressed during the master plan process relative to the Fish and Wildlife Coordination Act. A virtual interagency meeting will be available upon request. If you or your staff have any questions about the master plan or require additional information, please contact the lake manager, Jason Farnsworth, at [REDACTED] or by email at [REDACTED];

[REDACTED] or the project biologist, Kelsie Dakessian, at [REDACTED] or by email at [REDACTED].

Sincerely,



Richard B. Loyd
Chief, Environmental Branch

Enclosure

Copies Furnished:

Tyler Brown - [REDACTED]

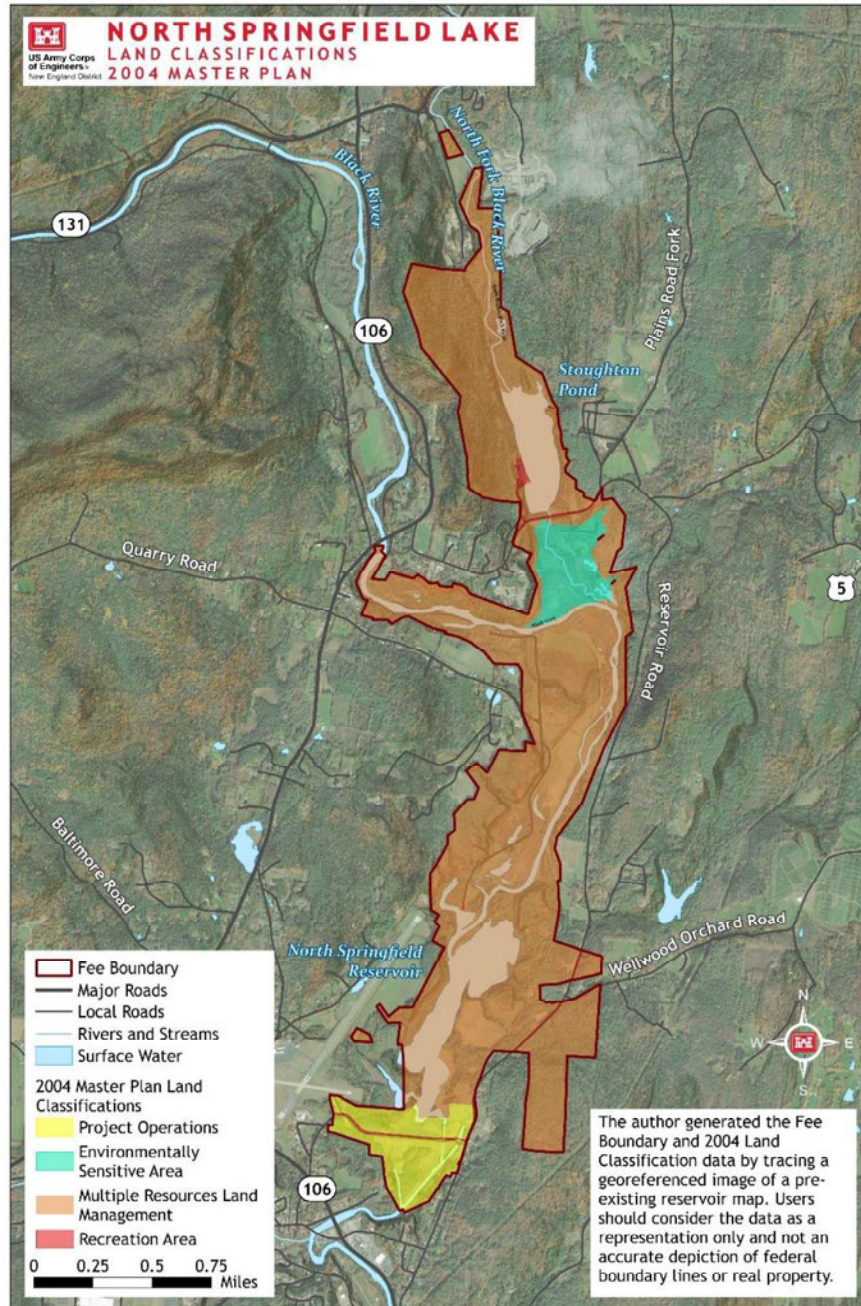
Ryan Smith - [REDACTED]

Lael Will - [REDACTED]

Courtney Buckley - [REDACTED]

Attachment 1

2004 North Springfield Lake Master Plan Classifications





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

March 27, 2025

Laura V. Trieschmann
State Historic Preservation Officer
Vermont Division for Historic Preservation
1 National Life Drive
Montpellier, Vermont 05620

Dear Ms. Trischmann:

The U.S. Army Corps of Engineers (USACE) will host an open house on Thursday, April 17, 2025, to kick off a process to revise the 2004 North Springfield Lake Master Plan. The open house will be held from 4:00-6:00 p.m. at the Springfield Town Library, 43 Main Street, Springfield, VT 05156.

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 North Springfield Lake Master Plan, last approved in 2004, needs revision to address changes in regional land use, population, outdoor recreation trends, and the USACE management policy.

An initial 30-day comment period will begin April 17, 2025, and end May 16, 2025. The Vermont Division for Historic Preservation\ 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 web page:

www.nae.usace.army.mil/missions/recreation/north-springfield-lake/north-springfield-lake-master-plan/.

Please send your requests for additional information to Thomas Lesinski, Archaeologist, Environmental Branch, at [REDACTED]. If you wish to discuss this via telephone, you can reach Mr. Lesinski at [REDACTED].

Sincerely,

Robert Morrow
Chief, Environmental Branch
Regional Planning and Environmental Center



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

March 27, 2025

Ms. Bettina Washington
Tribal Historic Preservation Officer
Wampanoag Tribe of Gay Head – Aquinnah
20 Black Brook Road
Aquinnah, Massachusetts 02535

Dear Ms. Washington:

The U.S. Army Corps of Engineers (USACE) will host an open house on Thursday, April 17, 2025, to kick off a process to revise the 2004 North Springfield Lake Master Plan. The open house will be held from 4:00-6:00 p.m. at the Springfield Town Library, 43 Main Street, Springfield, VT 05156.

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 North Springfield Lake Master Plan, last approved in 2004, needs revision to address changes in regional land use, population, outdoor recreation trends, and the USACE management policy.

An initial 30-day comment period will begin April 17, 2025, and end May 16, 2025. The Wampanoag Tribe of Gay Head – Aquinnah 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 web page:

www.nae.usace.army.mil/missions/recreation/north-springfield-lake/north-springfield-lake-master-plan/.

Please send your requests for additional information to Thomas Lesinski, Archaeologist, Environmental Branch, at [REDACTED]. If you wish to discuss this via telephone, you can reach Mr. Lesinski at [REDACTED].

Sincerely,

Robert Morrow
Chief, Environmental Branch
Regional Planning and Environmental Center



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

April 2, 2025

Mr. Roger Longtoe Sheehan
Chief
Elnu Abenaki Tribe
5243 VT Route 30
Jamaica, Vermont 05343

Dear Mr. Sheehan:

The U.S. Army Corps of Engineers (USACE) will host an open house on Thursday, April 17, 2025, to kick off a process to revise the 2004 North Springfield Lake Master Plan. The open house will be held from 4:00-6:00 p.m. at the Springfield Town Library, 43 Main Street, Springfield, VT 05156.

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 North Springfield Lake Master Plan, last approved in 2004, needs revision to address changes in regional land use, population, outdoor recreation trends, and the USACE management policy.

An initial 30-day comment period will begin April 17, 2025, and end May 16, 2025. The Elnu Abenaki Tribe 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 web page: www.nae.usace.army.mil/missions/recreation/north-springfield-lake/north-springfield-lake-master-plan/.

Please send your requests for additional information to Thomas Lesinski, Archaeologist, Environmental Branch, at [REDACTED]. If you wish to discuss this via telephone, you can reach Mr. Lesinski at [REDACTED].

Sincerely,

Robert Morrow
Chief, Environmental Branch
Regional Planning and Environmental Center

APPENDIX C – WILDLIFE DOCUMENTS

OFFICIAL SPECIES LIST – USFWS



United States Department of the Interior



FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 3301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104

In Reply Refer To:
Project Code: 2026-0037383
Project Name: North Springfield Lake Master Plan

01/16/2026 14:44:24 UTC

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:

Updated 4/12/2023 - Please review this letter each time you request an Official Species List, we will continue to update it with additional information and links to websites may change.

About Official Species Lists

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. Federal and non-Federal project proponents have responsibilities under the Act to consider effects on listed species.

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 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. 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 by returning to an existing project's page in IPaC.

Endangered Species Act Project Review

Please visit the “**New England Field Office Endangered Species Project Review and Consultation**” website for step-by-step instructions on how to consider effects on listed

species and prepare and submit a project review package if necessary:

<https://www.fws.gov/office/new-england-ecological-services/endangered-species-project-review>

NOTE Please do not use the **Consultation Package Builder** tool in IPaC except in specific situations following coordination with our office. Please follow the project review guidance on our website instead and reference your **Project Code** in all correspondence.

Northern Long-eared Bat - (Updated 4/12/2023) The Service published a final rule to reclassify the northern long-eared bat (NLEB) as endangered on November 30, 2022. The final rule went into effect on March 31, 2023. You may utilize the **Northern Long-eared Bat Rangewide Determination Key** available in IPaC. More information about this Determination Key and the Interim Consultation Framework are available on the northern long-eared bat species page:

<https://www.fws.gov/species/northern-long-eared-bat-myotis-septentrionalis>

For projects that previously utilized the 4(d) Determination Key, the change in the species' status may trigger the need to re-initiate consultation for any actions that are not completed and for which the Federal action agency retains discretion once the new listing determination becomes effective. If your project was not completed by March 31, 2023, and may result in incidental take of NLEB, please reach out to our office at newengland@fws.gov to see if reinitiation is necessary.

Additional Info About Section 7 of the Act

Under section 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to determine whether projects may affect threatened and endangered species and/or designated critical habitat. If a Federal agency, or its non-Federal representative, determines 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 Federal agency also may need to consider proposed species and proposed critical habitat in the consultation. 50 CFR 402.14(c)(1) specifies the information required for consultation under the Act regardless of the format of the evaluation. 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/service/section-7-consultations>

In addition to consultation requirements under Section 7(a)(2) of the ESA, please note that under sections 7(a)(1) 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. Please contact NEFO if you would like more information.

Candidate species that appear on the enclosed species list have no current protections under the ESA. The species' occurrence on an official species list does not convey a requirement to

consider impacts to this species as you would a proposed, threatened, or endangered species. The ESA does not provide for interagency consultations on candidate species under section 7, however, the Service recommends that all project proponents incorporate measures into projects to benefit candidate species and their habitats wherever possible.

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>

<https://www.fws.gov/library/collections/bald-and-golden-eagle-management>

Please feel free to contact us at **newengland@fws.gov** with your **Project Code** in the subject line if you need more information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat.

Attachment(s): Official Species List

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

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

This species list is provided by:

New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 3301-5094
(603) 223-2541

PROJECT SUMMARY

Project Code: 2026-0037383

Project Name: North Springfield Lake Master Plan

Project Type: Land Management Plans - NWR

Project Description: The Proposed Action includes the classification of all federal fee lands and water surface areas at North Springfield Lake to replace the 2004 land classifications. The Proposed Action also designates water surface area classifications, which were not designated in the 2004 Master Plan. The Proposed Action also includes updated resource goals and objectives, including those for natural resources management, recreation, and cultural resources. The proposed land classifications include Project Operations, High Density Recreation, Low Density Recreation, and Wildlife Management. Water surface area classifications include Open Recreation and Restricted areas.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@43.3654638,-72.49655217963348,14z>



Counties: Windsor County, Vermont

ENDANGERED SPECIES ACT SPECIES

There is a total of 3 threatened, endangered, or candidate species on this species list.

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

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

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

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

MAMMALS

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

INSECTS

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

FLOWERING PLANTS

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

CRITICAL HABITATS

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

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

IPAC USER CONTACT INFORMATION

Agency: Army Corps of Engineers

Name: Kelsie Dakessian

Address: 696 Virginia Road

City: Concord

State: MA

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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.
- 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.
- An Act to provide for the protection of forest cover for reservoir areas under the jurisdiction of the Secretary of the Army and the Chief of Engineers, 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.
- Outdoor Recreation Planning and Development Act, 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.
- 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.
 - To restore the Golden Eagle program to the Land and Water Conservation Fund Act, 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."
 - 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).
- An act to amend the Land Water Conservation Fund Act, as amended, to provide for collection of special recreation use fees at additional campgrounds, and for other purposes, 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.
- An Act to amend the Land and Water Conservation Fund Act of 1965, as amended, to establish the National Historic Preservation Fund, and for other purposes, 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 Law 106-147: This act promotes the conservation of habitat for neo-tropical migratory birds.

APPENDIX E – PUBLIC COMMENT

INITIAL PUBLIC SCOPING (April 17, 2025 to May 16, 2025)

AGENCY COMMENTS

COMMENT	RESPONSE
VT Dept. of Environmental Conservation (VT DEC): Providing riparian habitat - The river corridor above, between and below the North Springfield and Stoughton Pond dams provide habitat for a number of Rare, Threatened and Endangered species and Species of Greatest Conservation Need. These habitats should be maintained in a natural condition to support the natural community types and specialized habitat needs of the resident animal and plant populations... Protection of these communities should be a priority in the Master Plan. Restoration of degraded sites and careful management of flows to promote natural conditions should be exercised during all non-flood conditions. Additional habitat management to benefit grassland and shrubland birds is recommended. Management of field habitat with periodic mosaic mowing, native shrub species enhancement and field invasive control would all support a diversity of bird species and enhance recreational birding.	Noted. Significant natural communities were considered during the Alternatives Development Workshop. The 2026 MP includes resource objectives to protect and restore native habitats, including the protection and restoration of special or rare plant species. Noted. Annual maintenance and field mowing to maintain early successional habitat is ongoing.

COMMENT	RESPONSE
VTDEC: 303(d) Listed impaired Waters - Stoughton Pond and North Springfield Reservoir are both listed as Altered due to water level fluctuations that impact aquatic habitat. Listed as "Water level fluctuation - USACOE dam; no conservation flow based on any biological/water quality criteria." To address this water quality impairment and improve sediment transport, non-flood operations flow management should work toward run-of-river flows. The North Springfield Lake is the only lake in Basin 10 with both invasive Water chestnut (<i>Trapa natans</i>). Both lakes have Eurasian watermilfoil (<i>Myriophyllum spicatum</i>). USACE's program to control Water chestnut has been largely successful and should be continued to ensure it does not return. A spread prevention program such as a boat launch Greeter Program should be established at both lakes. Japanese knotweed is pervasive throughout the Corps lands as it thrives in disturbed areas. The continued control program for knotweed is essential.	Noted. Section 2.3 of the 2026 MP describes Priority Waters at North Springfield Lake. The Master Plan does not address flood control operations at North Springfield Lake. Concur. The 2026 MP includes resource objectives to manage lands and waters to reduce the spread of invasive, non-native, and aggressively spreading native species. Noted. The 2026 MP includes resource objectives to manage lands and waters to reduce the spread of invasive, non-native, and aggressively spreading native species.
VTDEC: Tactical Basin Plan Strategies Related to North Springfield Lake lands: 1. Support and enhance the riparian buffer and floodplain plantings throughout the landscape. Establishing and maintaining riparian vegetation and protecting riparian buffers from the impacts of recreation should be included in all project development plans 2. Improve flow management at hydroelectric and flood control facilities to address water quality impairment, sediment transport and to benefit downstream species. During non-flood operations flow management should work to improve the temperatures and sediment transport in the Black and North Branch Rivers. 3. Establish AIS Greeter Programs and support and promote AIS control projects as suggested above.	1. Noted. The 2026 Master Plan does not include any plans for establishment of riparian buffers. This document does include resource objectives to protect and restore native habitats. See Ch 3 for additional details. 2. Noted. The MP does not address flood control or flow management at North Springfield Lake. 3. Noted. USACE is open to further discussion on partnering with organizations to support this program. 4. Concur. The 2026 MP includes resource objectives to manage lands and waters to reduce the spread of invasive, non-native, and aggressively spreading native species. The 2026 MP includes resource objectives to protect and restore native habitats, including the protection and

COMMENT	RESPONSE
4. Work to control riparian and aquatic invasive plants as suggested above 5. Monitor habitat conditions & effects of stressors on habitats; restore critical habitats or ameliorate threats when/where opportunities arise to secure/restore numbers of SGCN populations & targeted abundance levels	restoration of special or rare plant species 5. Noted. Significant natural communities were considered during the Alternatives Development Workshop. The 2026 MP includes resource objectives to protect and restore native habitats, including the protection and restoration of special or rare plant species
VTDEC: Recreation – 1. Erosion is observable from gravel roads and trails adjacent to the rivers and stream on North Springfield lands. Stormwater control practices should be implemented to mitigate soil loss into these waters and riparian buffers should be installed and maintained in these locations. 2. Trails near and within sensitive rare, threatened or endangered species habitat should not allow access through and into the habitat to access the water. Strategies to block access to these areas should be implemented. 3. Continued monitoring of water quality at the swimming beach should continue for bacteria and cyanobacteria to protect public health. 4. The car-top boating access to the Black River at North Springfield is in need of regular maintenance to ensure safe access. Establishing parking closer to the river would be a welcome addition.	1. Noted. The 2026 Master Plan does not include any plans for establishment of riparian buffers. This document does include resource objectives to protect and restore native habitats. See Ch 3 for additional details. 2. Noted. The 2026 MP includes resource objectives to protect and restore native habitats, including the protection and restoration of special or rare plant species 3. Noted. Currently monitoring and will continue as long as official swim beach area. 4. Noted. The location of the ramp combined with the water flow makes regular maintenance a challenge at this location. USACE will continue to monitor and consider options for future improvements as funding is available.

GENERAL STAKEHOLDER COMMENTS

COMMENT	RESPONSE
Ascutney Mountain Audubon Society (AMAS) appreciates the work the Army Corp does to maintain the natural area around and in the floodplain of North Springfield Lake in Vermont. Our organization and our members use the area for birding, walking, fishing, and kayaking. We	1)Noted. Annual contract to control. Funding is an issue. It is a priority. Some mechanical control takes place as well. 2.) Noted. Some native shrubs and pollinator projects have been planted. USACE is open to working with

COMMENT	RESPONSE
have the following recommendations for the next Master Plan: 1) Further control of invasive vegetation. Invasives negatively affect wildlife by excluding native plants that provide food and shelter. Past efforts by the Corps to control Japanese knotweed within riparian corridors and water chestnut in the North Branch have been largely successful but may be needed to periodically keep this invasive in check. 2) Plant native shrubs. Native shrubs are important to control soil erosion and to provide important food and shelter for wildlife. 3) Maintenance of fields for wildlife. There are acres of open fields within the project area. Mosaic mowing, delayed mowing, and maintenance recommendations made by NRCS to enhance old fields or open grasslands are important to protect habitat for a suite of birds and pollinators. <i>Reference: NRCS 647 Early Successional Habitat Development/Management (Old Field Management) and NRCS Conservation Programs & Practices for Grassland Bird Wildlife Habitat.</i> 4) Improve the public's access to the waters of North Springfield Lake and Stoughton Pond. The old boat ramp at North Springfield Lake is essentially "land locked" and no longer enables the public's access to the main lake. As alternate access the Corps provides car-top access for canoes, kayaks and other non-motorized water craft. AMAS encourages the Corps to make improvements to the car-top access to improve the ease and safety of persons getting onto and off the water at this site. Over the past years North Springfield Lake has experienced changes due to sediment deposition following recent significant flood events, such as tropical storm Irene, which have made the lake less conducive to motorized boat use. AMAS does not see this as a negative development but rather has increased habitat for wildlife and provides a more pleasurable recreational experience. With regard to Stoughton Pond, AMAS's only recommendation is that the access road to the boat launch be serviced as necessary to eliminate bumps and potholes.	volunteers groups to add native shrubs. Lacking funds. 3.)Noted. Pollinator projects, annual maintenance and field mowing to maintain early successional habitat are ongoing. 4.) North Springfield Lake (old boat ramp completely silted in), cartop access improved to the best of USACE abilities. Stoughton Pond - This area is within an oxbow of the river and it is challenging to put permanent fixes in place to resolve the issues for the long term. 5.) Noted. 6.) Noted. USACE is open to further discussion on partnering with organizations to support various programs.

COMMENT	RESPONSE
5) North Springfield Lake has long been home to a nesting pair of Bald Eagles which has been successful in more years than not at fledging young. The current nest is visible from the dam and the eagle's presence on the lake and the greater Springfield area are valued by the public. The current nest tree has a predator guard. This should be maintained as needed, and should the eagles relocate their nest to another tree, a predator guard should be provided. 6) For many years AMAS had a lease with the Corps that enabled our group to setup and maintain the Eleanor Ellis Nature Area including The Gathering Place lookout. Our lease has since expired. We request a meeting with the Corps within the year (2025) to discuss re-establishing a cooperative arrangement but on a more limited scale, such as maintenance of The Gathering Place infrastructure and restoring the view of the lake from the lookout.	
Hello, I am submitting comments for the Master Plan revision on behalf of the Springfield Trails and Rural Economy Committee. The ST&RE is a town-appointed committee that promotes connections between the developed portions of the town and destinations of natural, scenic, and recreational interest. The committee supports the current Master Plan commitment to “the continued maintenance and growth of recreational opportunities with input from the local community.” We request that the revision maintain this goal. We also respectfully suggest that the USACE coordinate with the Springfield Trails and Rural Economy committee regarding the maintenance of the existing recreational trails and the development of new trails. As an avid walker and user of the paths around the lake, walking the trails is the highlight of my workday and brings a sense of calm even on stressful days - I am so glad to have access to this area and grateful to live so close. 1. Enhance Trail Connectivity and Accessibility a. Expand and maintain trails to create a clear and complete loop around the lake and the loop	1. Enhance Trail Connectivity and Accessibility a. Non-concur. Current staffing and maintenance prohibit expansion of trails at North Springfield Lake. b. Noted. Staff at North Springfield Lake are currently working on enhanced trail maps at trailheads. c. Non-concur. USACE has no input on the labeling for Google Maps. 2. Maps and signage a. thru d. Noted. USACE staff at North Springfield Lake are currently working on updating trail maps available to the public. USACE is open to partnering with local groups and volunteers to help support the trail system and other signage noted. 3. Community engagement and communication 3.a. Noted. USACE welcomes the general public into the project office to address questions about project maintenance. Kiosk improvements are

COMMENT	RESPONSE
around Stoughton Pond—the trail can be tough to follow sometimes and I have ended up in someone's backyard. b. Improve the trail conditions and signage at the Springweather trails c. Update images and information for corresponding recreation areas on google maps and ensure they are up to date and the markers are in the correct location. 2. Maps and signage a. Update current maps to be more user-friendly and have walking and boating maps and mileage posted at kiosks for people to plan out routes. Including mileage for different routes makes it easy and enjoyable for new visitors to have a nice walk. b. Historical signage along trails or near kiosks highlighting the area's historical significance, such as the Crown Point Military Road and local indigenous history. c. Environmental signage talking about the plants and animals native to the area as well as how the river might have looked before the dam was built d. Directional Signage on Route 10/River Road to Springweather Dam with recreation icons if possible. 3.Community engagement and communication a. Improve communication about maintenance and upgrades to the area - for instance, the trees that were taken down last year along the walking path, posting some kind of information about what is happening and why, either on social media or on the kiosk areas. b. Volunteer Programs: Establish volunteer opportunities for trail maintenance and clean-up events. c. Establish relationship and best method of communication to work with the Army Corp of Engineers/Springfield Dam staff with ST&RE committee and Springfield Recreation Department to promote trail network	planned for the near future at North Springfield Lake. 3.b. thru d. Noted. USACE is open to further discussion on partnering with organizations to support various programs. USACE communicates with the Recreation Department and will continue to do so in the future.

COMMENT	RESPONSE
Encourage Springfield Recreation Department and Edgar May Health & Recreation to host more events on the trails at the Springfield Dam Thank you!	

DRAFT MASTER PLAN PUBLIC COMMENTS

Section to be added after draft release.

APPENDIX F – ACRONYMS

ACHP	Advisory Council on Historic Preservation
ARPA	Archeological Resources Protection Act
BCC	Birds of Conservation Concern
CFS	Cubic Feet per Second
DM	Design Memorandum
EA	Environmental Assessment
EFH	Essential Fish Habitat
EO	Executive Order
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
FPR	Department of Forests, Parks, and Recreation
FWCA	Fish and Wildlife Coordination Act
GHG	Greenhouse Gases
GIS	Geographical Information Systems
HDR	High Density Recreation
HQ	USACE Headquarters (also HQUSACE)
HUC	Hydrologic Units Code
IPaC	Information for Planning and Consultation
KCC	Köppen-Geiger Climate Classifications
LDR	Low Density Recreation
LEED	Leadership in Energy and Environmental Design
MP	Master Plan or Master Planning
MRML	Multiple Resource Management Lands
MSL	Mean Sea Level
MWCM	Master Water Control Manual
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act
NBD	North Branch Dam
NEPA	National Environmental Policy Act
NGVD/NGVD29	National Geodetic Vertical Datum (1929)
NHPA	National Historic Preservation Act
NOAA	National Oceanic and Atmospheric Administration
NRCS	Natural Resource Conservation Service
NRHP	National Register of Historic Places
NRM	Natural Resource Management
NWI	National Wetlands Inventory
O&M	Operations and Maintenance
OMB	Office of Management and Budget
OMP	Operational Management Plan
PL	Public Law

PO	Project Operations
RCRA	Resource Conservation and Recovery Act
RPEC	Regional Planning and Environmental Center
SCORP	Statewide Comprehensive Outdoor Recreation Plan
SHPO	State Historical Preservation Officer
TCP	Traditional Cultural Properties
U.S.	United States (also US)
USACE	United States Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VANR	Vermont Agency of Natural Resources
VCGI	Vermont Center for Geographic Information
VDFW	Vermont Department of Fish and Wildlife
VM	Vegetative Management
VNHI	Vermont Natural Heritage Inventory
VOREC	Vermont Outdoor Recreation Economic Collaborative
VT DEC	Vermont Department of Environmental Conservation
WQS	Water Quality Standards