DCR Watershed Protection Program Updates

MWRA ADVISORY BOARD MEETING

JANUARY 15, 2026

Watershed Protection Program

Watershed Activities guided by the 5-year Watershed Protection Plan

- New Plan approved by DEP in June 2023
- Adopted July 2023
- Plan covers FY 24-28
- DEP completes an annual inspection in each region and issues a report

Watershed Control Programs

Land Acquisition	Watershed Preservation Restrictions	Land Management	Wildlife Management	Public Access Management	Watershed Security
Infrastructure	Watershed Protection Act	Education and Outreach	Water Quality and Hydrologic Monitoring	Watershed Monitoring and Assessment	Aquatic Invasive Species
	Wastewater Management	Stormwater Management	Emergency Response	GIS	

Updates and Projects

FY23 State Hazard Mitigation and Climate Adaptation Plan

ResilientMass Plan

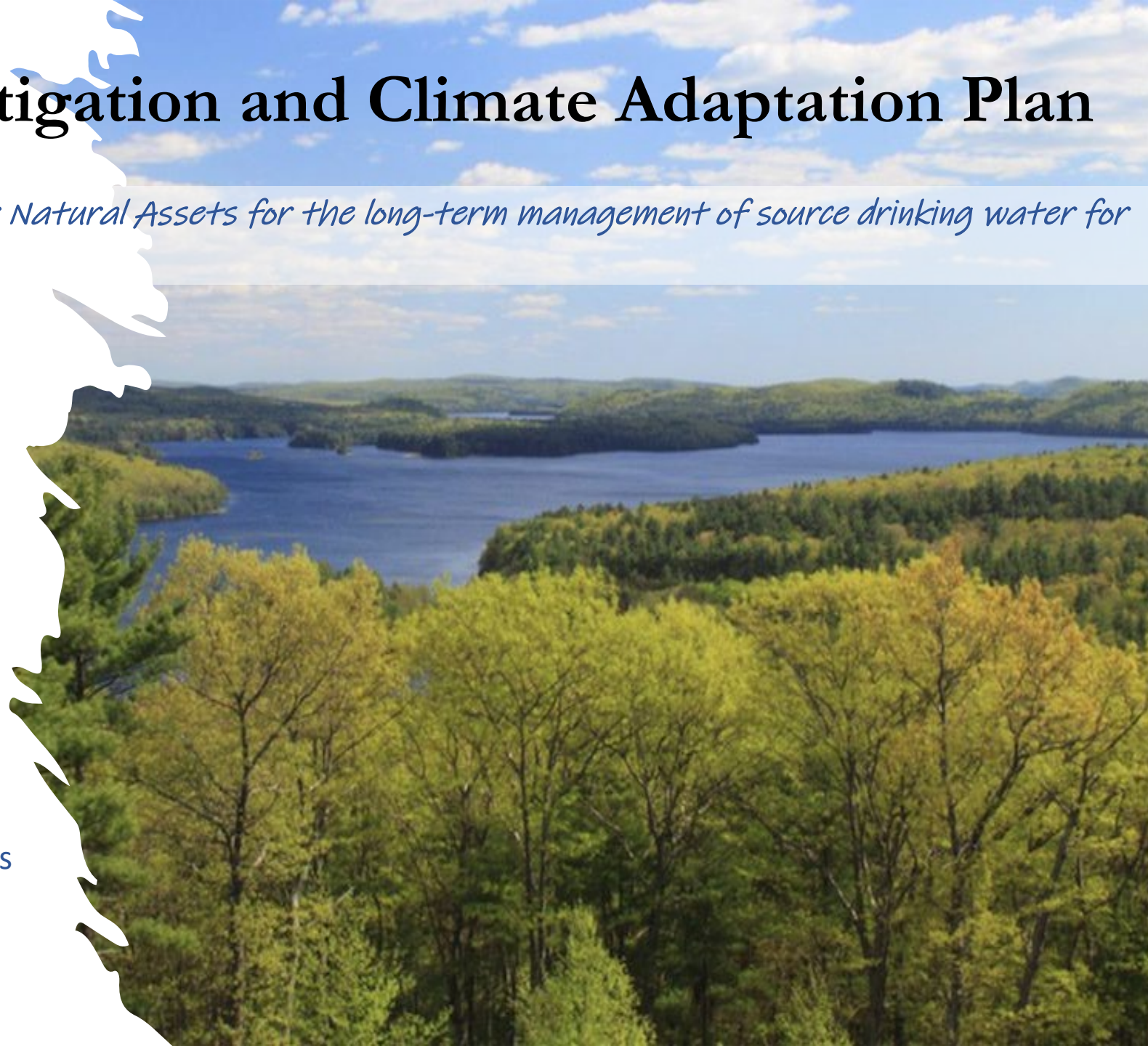
Vulnerability Assessment of Forest and other Natural Assets for the long-term management of source drinking water for the DCR Division of Water Supply Protection.

The need for a watershed-wide Climate Change Vulnerability Assessment (CCVA) is outlined in the Division's 2023 Watershed Protection plan.

System relies heavily on the rivers, streams, forested watersheds, aquifer systems, wetlands, and other natural features.

Utilizing the latest climate data, DWSP completed an assessment of the sensitivity, resiliency and adaptive capacity of these natural assets.

A vulnerability assessment of our natural assets will help to prioritize the resiliency actions needed to help ensure reliable source water in perpetuity.



CCVA Project Objectives:

- Identify and assess the condition of DWSP forest and other natural assets.
  - ponds, rivers, streams, aquifers, and other associated upland features such as soils, watershed forests, and wetlands

- Evaluate the vulnerability of watershed forests and other natural assets in the context of the exposure to extreme weather and climate effects, and adaptive capacity.
  - Analyze the vulnerability of assets to risk projections.
    - *precipitation, temperature, extreme weather (snow, ice, wind), wildfire, drought, landslides, and other available projections.*

Overall Goal: This project will proactively identify the vulnerability of our natural assets at the sub-watershed scale

Asset management planning approach

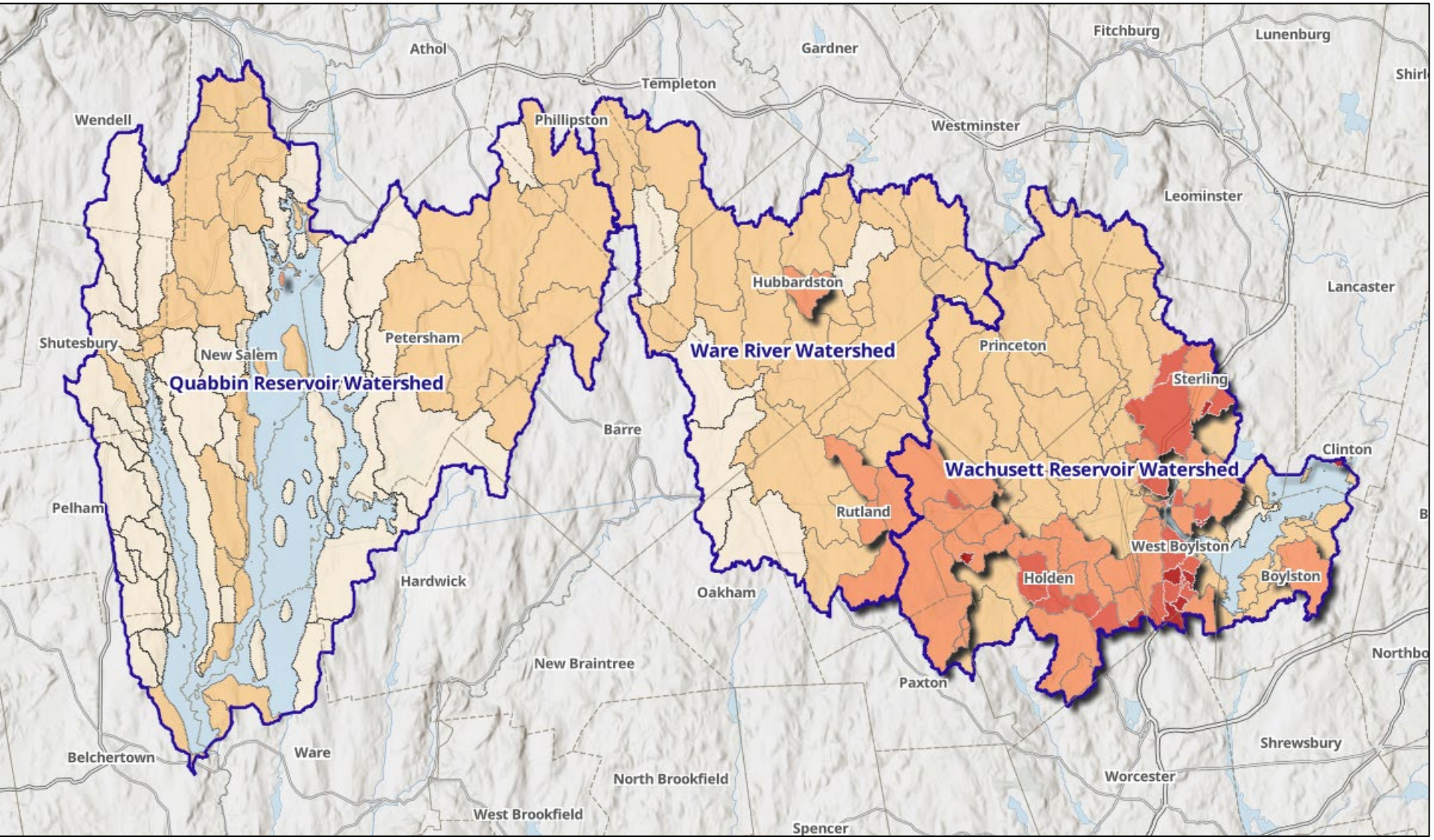
- *Enhance forest and other natural asset resilience.*
- *Implement climate adaptation strategies.*
- *Guide the prioritization of capital planning decisions and designs.*

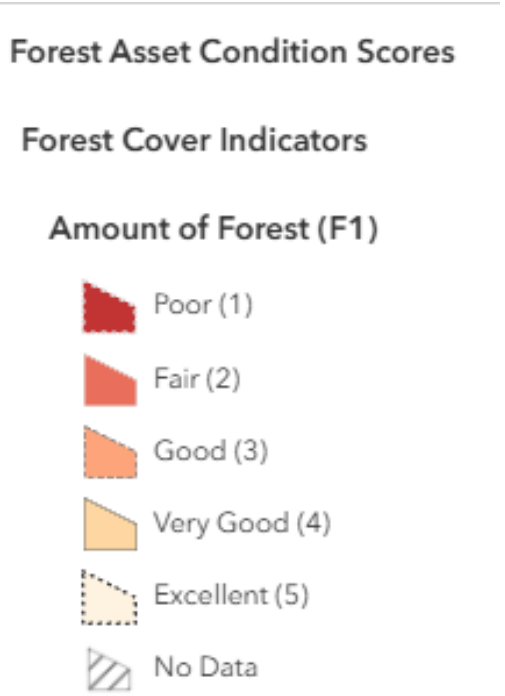
Natural Asset Inventory, Condition Assessment and Overall Vulnerability Calculation

- Determine which natural assets are critical to public water supply.
- Define the appropriate level of detail for tracking and assessing the condition of those natural assets.
- Describe the current state of natural assets based on current available data.
- Identify what additional data is needed to track and assess the condition of the natural assets considering projected climate change scenarios.
- Apply predicted Climate Change scenarios to current condition to determine Overall Vulnerability in the short term (2030) and long-term (2070)

CCVA Dashboard- Percent forest cover

Area of Subbasin Covered by Forest: A high amount of forest cover indicates better biodiversity, improved water quality, and greater resilience to disturbances.





1	≤50%	**Minimally forested**
2	> 50%, ≤ 65%	**Moderately forested:**
3	> 65%, ≤ 80%	**Well forested:**
4	>80%, ≤95%	**Very well forested:**
5	>95%	**Fully forested:**

Forests as Climate Solutions

Governor implemented a pause to look at whether Commonwealth's forestry practices were climate-friendly

Climate Forestry Committee review practices and issued report January 2024;EEA issued report outlining practices in June 2024

Staff participated in 3 groups this year– monitoring, forest dashboard, reserves

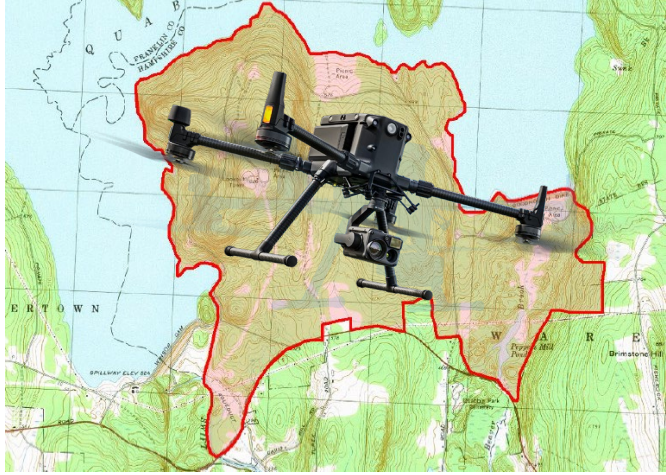
Staff working on identification of reserves and on providing better public communication regarding land management

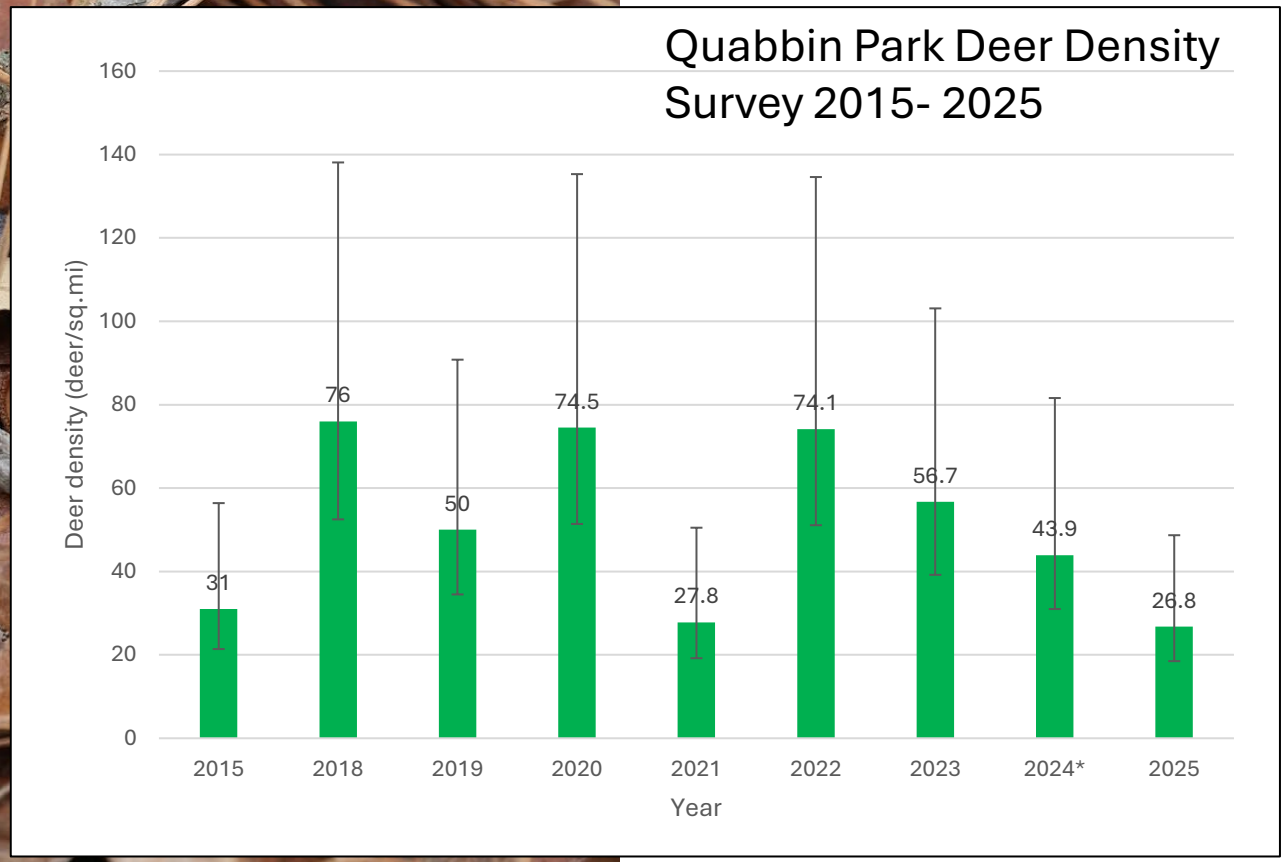
massDOT
Massachusetts Department of Transportation
Aeronautics Division

dcr
Massachusetts

Using Thermal Imagery to Estimate Deer Density in Quabbin Park

Ken MacKenzie
Director of Natural Resources




Quabbin Park Deer Density Survey 2015- 2025
Deer density (deer/sq.mi)
160
140
120
100
80
60
40
20
0
31
76
50
74.5
27.8
74.1
56.7
43.9
26.8
2015
2018
2019
2020
2021
2022
2023
2024*
2025
Year

Quabbin Administration Window Replacement

Quabbin Administration Window Replacement

Old Stone Church Project


BALLARD
CAT

Welcome to

The Old Stone Church

dcr
Massachusetts

A symbol of resilience through a changing landscape, this landmark endured fire, flood, and collapse. It serves as a monument to the buildings that were removed from the Nashua River Valley to create the Wachusett Reservoir.

Wachusett Reservoir, along with the Quabbin Reservoir and Ware River, are the unfiltered source of high-quality water for the Massachusetts Water Resources Authority water supply system for over 3.1 million people.

HOURS

Dawn - Dusk:
1 hour before sunrise
to 1 hour after sunset

PARKING

Parking available
at access gates.
Do not block gates.

EMERGENCY CALL 911

Wachusett Ranger Station: 978-365-3000
MA State Police Holden: 508-829-1400
MEMA 24-Hour Dispatch: 508-820-2078
"See Something, Say Something"

GROUP PERMITS

Groups larger than 25 people must first obtain a permit.
Weddings over 25 people are not allowed.
Contact (508) 792-7806

ACTIVITIES

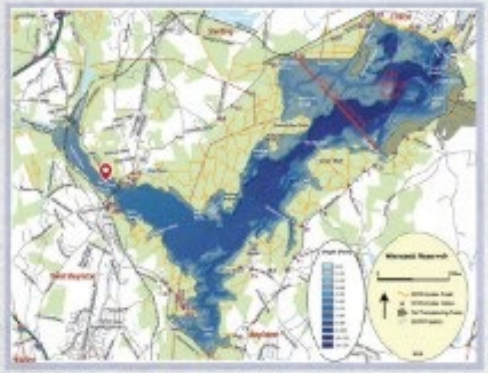
Enter only through designated gates.
Shoreline fishing, in season, only in designated areas (see map)

Passive Recreation	Scenic Views
Cross country skiing	Hiking

PROHIBITED ON WATERSHED PROPERTY

Any activity that pollutes the water supply
Any bodily contact with the water
No access on frozen surface of the reservoir
Disposing of human waste, trash, or litter
Transport or disposal of invasive or other plant/fish/wildlife

Alcoholic beverages	Motorized vehicles
Swimming or bathing	Smoking or building fires/grills
Dogs/domestic animals	Hunting
Metal Detectors	Magnet Fishing
Underwater Drones	Drones/UAV



FISHING ACCESS

Shoreline fishing only is allowed through the following areas (see map).

Route 70 - Gates 6 to 10A

Route 140 - Gates 27 to 28

Route 12/110 - Gates 23 to the posted limit at the start of the North Dike (Gate 30)

West Boylston: Thomas, Oakdale, and Stillwater Basins

FISHING REGULATIONS

Fishing season opens first Saturday in April (providing no ice is present)

Shore fishing only.

No swimming, boating or wading

Ice fishing is not permitted.

Possession of a valid Massachusetts fishing license is required by individuals 15 years or older.

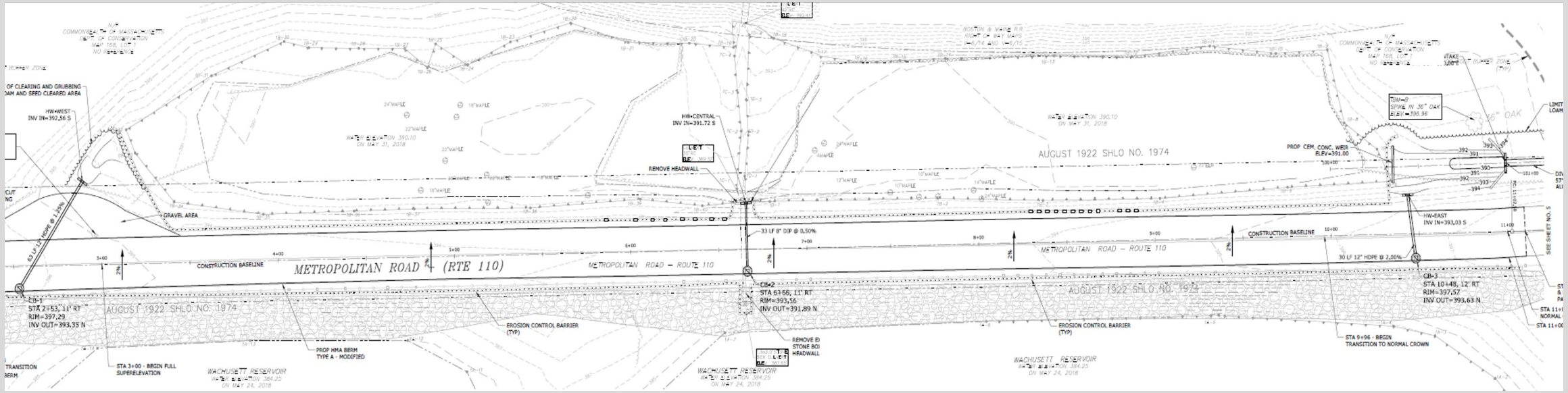
For additional information visit the Public Access Rules for Wachusett Reservoir
mass.gov/dcr/wachusettfish

The water, forests, and wildlife thank you for protecting clean drinking water!

Route 110 Sterling

Route 110 Sterling

- **Route 110**
  - **Currently**
    - **Runoff sheet flows from half road directly to reservoir**
    - **Remaining runoff and area alongside railroad line flow through a cross culvert beneath Rt. 110**
  - **Proposed**
    - **Super-elevate road**
    - **Eliminate cross culvert**
    - **Construct diversion pipe**



Clever Watershed Protection Outreach

Upcoming Efforts

- Additional Drone Work
- Forest Mapping
- Updated Terrestrial Invasive Species Plan
- Continued Work on Swollen Bladderwort at Quabbin

Questions?