

Massachusetts Department of Conservation and Recreation
Division of Water Supply Protection, Office of Watershed Management
Forest Management Project Summary

Project Title: Greenwich Plains Road

DWSP Harvest Permit Number: 1063

DWSP Proposal ID: HA-22-5

DCR Forest Cutting Plan File Number: 309-42804-24

Site Information

Watershed: Quabbin

Town(s): Ware

Acres: 34.8

Nearest Road: Greenwich Plain Road

Natural Heritage Atlas overlap?: No

Public Drinking Water Supply Watershed?: Yes

Forest Types: white pine and white pine hardwoods

ACEC?: No

Soils: Canton fine sandy loam, Charlton-Hollis

Wetland Resources: None though an intermittent brook starts just north of the northeast corner of the lot.

Vernal Pools: Two

Harvest Information

Harvest Start Date: TBD

Harvest End Date: TBD

Number of Wetland Crossings: None

Number of Stream Crossings: 0

Best Management Practices Applied

Stream Crossings: None

Filter Strips: Variable width filter strips used.

Wetland Crossings: There are no wetland crossings.

Harvesting in Wetlands: There is no harvesting in wetlands.

DWSP Forester supervising this harvest

Name: Steven Wood

Forester License #: 257

Phone #: 413 213-7944

Email: steven.wood@mass.gov

NARRATIVE

General Description/Forest Composition/History:

The stone walls on this lot attest to its history of being cleared for agriculture, mostly for pasture. When the farmland was abandoned, probably in the late 19th or early 20th century, it reverted to forest. Aerial photo from 1926 shows this area as wooded. Most of the overstory is estimated to be 95-110 years old. A few of the older trees here in 1926 were damaged or blown down by the 1938 hurricane.

The primary tree species present are white pine (77% of Basal Area) and mixed oaks (predominately red oak (7% of BA). Other hardwoods include black and paper birch, red maple, aspen, ash, and hickories. Hemlock occurs in small groups, mainly as suppressed mid-story trees on the northeastern section.

Site Selection:

The primary goal of the watershed forest management program is to create and maintain a forest that provides high quality drinking water to current users and future generations. To achieve this, DWSP has determined that the forest should contain a diversity of species in various stages of development (seedlings through large legacy trees). In addition, the forest should be vigorous; actively growing and regenerating. A forest in this condition is resilient to and can quickly recover from small- or large-scale disturbances such as diseases, insect infestations, ice storms and hurricanes. This area is mostly even-aged white pine with small (mainly 0.1-0.5 acre) openings created by harvests in 2006 and 2008. 2023 regeneration survey showed these openings are 100% regenerated with black birch and are likely to retain that composition till management or natural disturbance changes that. The current harvest will create larger open areas which should regenerate to a more diverse mix of species but at the least will create another age class of vigorously growing seedlings and sprouts and will further release the previously established regeneration.

Silvicultural Objectives:

A goal of this harvest is to build on the work started in 1990 by continuing the process of establishing new tree seedlings and providing space for existing regeneration to expand and grow. The diversity of native species present in overstory is being maintained by reserving groups and individuals of some of the dominate, healthy and vigorous individuals of all species present, notably red and white oak, hickory, white birch and white pine. This combination of structural and species diversity builds resistance and resilience into the forest.

Guided by the principles stated above, the primary purpose of this harvest is the establishment of a new age class by harvesting part of the overstory in small groups, up to 2 acres in size, in order to foster regeneration. Groups were placed according to our guidelines. Areas where there were clusters of trees that were declining or had weak stem form, often due to insects, diseases, or storm damage, were specifically targeted to be harvested. Where there were groups of regeneration created from the previous cuts these were expanded upon by creating a new abutting group.

Wherever possible wildlife habitat features were maintained and protected, such as snags (dead trees) and trees with cavities or nests. Exceptional individuals of all species present were retained in the stand for seed and to enhance diversity.

Cultural Resources:

Stone walls are numerous throughout this area. There are many breaks and barways in these walls and they can be used as crossing points for skid trails to protect the stone walls during the harvest, as was done in the past. This is in keeping with DWSP's standard practice, which dictates that every effort is made to keep existing cultural resources intact. Otherwise, this area has been determined not to be culturally or archeologically sensitive based on a review by the DCR Archaeologist.

Rare or Endangered Species:

There is a vernal pool within the northwest section of the lot and another one abutting the lot to the northeast. Both were created when gravel/rock was removed, probably during creation of Goodnough Dike. Both have BMP's and filter strips consistent with our current guidelines. The lot contains no other critical habitats or known rare or endangered species. These uplands are also home to a variety of wildlife including bobcat, deer, turkey, coyote, and moose.

FIGURES

Figure 1. Forest Cutting Plan

Forest Cutting Plan

and Notice of Intent under M.G.L.
Chapter 132 – The Forest Cutting
Practices Act, 304 CMR 11.00
(Effective Date: 3/15/16)

For DCR Use Only:

File Number 309-42804-24 Case No. —
Date Rec'd 6/13/24 Nat. Hert. Y, No Imp.
Earliest Start 6/28/24 Pub. Dr. Wat. Quabbin
River Basin Chicopee ACEC No
Gen. Obj. LT

Site Information

Location

Town Ware DWSP Lot 1063
Road Greenwich Plains Rd.
Acres 34.8 Proposed Start Date TBD
Vol. MBF 340.8 Vol. Cds. 182 Vol. Tons 379

Plan Preparer

Name Steven J. Wood
Address DCR, Div. of Water Supply Protection
485 Ware Road
Town, State, Zip Belchertown, MA 01007
Phone (413) 213-7944
Type of Preparer MA Licensed Forester
*Mass. Forester License # 257
*Required for land under Ch61, Ch61A or Forest Stewardship

Landowner

Name DCR, Division of Water Supply Protection
Mailing Address 485 Ware Rd.
Town, State, Zip Belchertown, MA 01007
Phone (413) 213-7903
Ch61 ☐ 61A ☐ 61B ☐ Stew ☐ *Case #
FSC ☐ CR ☐ CR Holder

Licensed Timber Harvester**

Name _____
Address _____
Town, State, Zip _____
Phone _____
Mass. Lic. Harvester # _____
**This information may be supplied after the plan is approved, but before work begins.

Best Management Practices

Stream Crossings

Indicate location on map	SC-1	SC-2	SC-3	SC-4
Type of Crossing				
Existing Structure				
Type of Bottom				
Bank Height (ft)				
Stabilization				

Wetland Crossings

Indicate location on map	WC-1	WC-2	WC-3	WC-4
Length of Crossing				
Mitigation				
Stabilization				

Filter Strips

Indicate location on map	FS-1	FS-2	FS-3	FS-4
Width (50', 100', or VA)				

Harvesting in Wetlands

Indicate location on map	HW-1	HW-2	HW-3	HW-4
Forest Type (see pg 2)				
Acres to be Harvested				
Resid. Basal Area (>50%)				

Service Forester Comments

No NHESP impact - see attached letter.

Codes

Type of Preparer	Type of Crossing	Stabilization	Mitigation	Type of Bottom
LF Mass. Lic. For.	CU Culvert	SE Seed	FR Frozen	LE Ledge
TH Lic. Tim. Har	BR Bridge	MU Mulch	DR Dry	ST Stony
TB Timber Buyer	FO Ford	CO Corduroy	OT Other	MU Mud
LO Landowner	PO Poled	ST Stone		GR Gravel
OT Other	OT Other	HB Hay Bales		OT Other
		OT Other		

Note:
Applicant must provide DCR with all relevant information before plan may be approved and cutting may begin. Some forestry activities, such as prescribed burning and pesticide or fertilizer application may require additional permits. Consult MA Forestry BMP Manual for further information.

If Other (OT) is used in any category an explanation must be given on an attached narrative page

Products to be Harvested*

Species	Mbf/Cds		Mbf/Cds
White Pine	299.1 M	Red Maple	4.8 M
Red Pine		Sugar Maple	
Pitch Pine		Red Oak	15.4 M
Hemlock		Black Oak	14.2 M
Spruce		White Oak	0.8 M
Other Sftwd.		Other Hdwd.	
White Ash	3.5 M	Total Mbf	340.8
Beech		Cordwood (Cds)	182
White Birch		SW Pulp (Tons)	379
B & Y Birch	3.0 M	HW Pulp (Tons)	
Black Cherry		Chips (Tons)	

*Note: Volumes indicated in the Plan are as reported by the plan preparer and have not been independently verified by the service forester upon approval. **Mbf** = thousand board feet.

Cutting Standards

Indicate location on map	ST-1	ST-2	ST-3	ST-4
Forest Type	WP	WH		
Acres	27.8	7.0		
Landowner Objective	LT	LT		
Designation of Trees	CT	CT		
Type of Cut	SE	SH		
Source of Regeneration	AD	AD		

Landowner Signature

The most important information on a cutting plan is the Landowner's objective, as this will determine which trees will be harvested and which will remain; **this decision will also determine the future condition of the forest for decades to come.** After having read the Massachusetts Forest Cutting Plan Information Sheet on page one, indicate your objective by checking the appropriate box below.

☒ **LT – Long-term Forest Management**

Planned management of the forest to achieve one or more of the following objectives: produce immediate and maximize long-term income, enhance wildlife habitat, improve recreational opportunities, protect soil and water quality, or produce forest specialty products.

☐ **ST - Short-term Harvest**

Harvest of trees with the main intention of producing short-term income with minimal consideration given to improving the future forest condition, which often results in a forest dominated by poor quality and low value species.

I (we) have read the Massachusetts Cutting Plan Information Sheet, and am aware of my (our) management options.

I (we) hereby certify that I (we) have the legal authority to carry out the operation described above.

I (we) certify that I (we) have notified the Conservation Commission in the town in which the operation is to take place and the abutters of record within two hundred feet of the area to be harvested.

I (we) understand that the volumes in this plan have not been independently verified by the service forester upon approval and will report final values and volumes to the Director or his/her agent if the final figures differ from those reported.

Signature of landowner(s)

6/6/2024

Date

Determination and Status

Approved Disapproved Expires

Cutting Plan



6/13/26

Signature of Service Forester/Director's Agent

6/28/24

Date

Extension



Expires

Ser. For. Ints.

Amendment

App 1

Dis 1

App 2

Dis 2

Final Report and Comments

I hereby certify that the afore described Forest Cutting Plan and all relevant statutes have been substantially complied with.

Signature of Service Forester/Director's Agent

Date

Forest Types

WP White Pine HK Hemlock OM Mixed Oak
WK WP/Hem HH Hem/Hdwd RM Red Maple
WH WP/Hdwd BC Blck Cherry BE Beech
WO WP/Oak BB Bee/Bir/Map SF Spruce/Fir
RP Red Pine OH Oak/Hdwd SM Sugar Maple
SR Red Spruce OR N Red Oak PP Pitch Pine

Designation of Trees

CT Cut Tree
LT Leave Tree
SB Stand Boundary
OT Other
Landowner Objective
LT Long-term Mgt.
ST Short-term Har.

Type of Cut

SH Shelterwood
ST Seed Tree
CC Clear Cut
SE Selection
SA Salvage
SN Sanitation

Intermediate Harvester:

CT Commercial Thin
NT Non Com Thin
Non-Standard Systems:
HG Highgrade*
DL Diameter Limit*
OT Other*

Source of Regeneration

AD Advanced
SE Natural Seed
PL Plant
CO Coppice
DS Direct Seed
OT Other

*If Other (OT) or a non-standard system is used an explanation must be given on attached narrative page

Forest Cutting Plan

Narrative Page (Effective Date: 3/15/16)

Use this page to provide further explanation or if Other (OT) was used in any category on pages 3 or 4.

Landowner

DCR/DWSP

Town

Ware

File Number

BMPs

Designation of Trees

Use this Section to provide further explanation or if Other (OT) was used in any category in the Best Management Practices Section on Page 3.

Cut trees marked with blue paint, orange paint on some save trees. Harvest boundary and protected areas marked with double stripe paint or pink flagging. Area has been cut several times previously with groups of mostly black birch but also some white pine and other hardwoods established. ST-1 has existing openings to about an acre created from irregular shelterwood. These will be expanded upon with groups of better formed, vigorous WP, RO, WO and HI retained scattered throughout stand as seed sources, carbon storage, age and diversity structure. St-2 has a more even shelterwood like overstory. Harvest in this stand will leave a more regularly spaced overstory of the same species individually and in groups. Note very heavy seed year in 2023 for WP, RM and SM. Buffer strips were left around the 2 vernal pools.

Use this Section to describe the types of trees to be harvested and/or retained if Other (OT) was used for "Designation of Trees" in the Stand Treatment Section on page 4. Additional narrative description may be added on a separate page.

Stand No.	Describe Trees to be Cut			Describe Trees to be Left			% BA/AC	
	Species	Size	Quality	Species	Size	Quality	Cut	Left

Regeneration & Future Condition

Use this Section to describe how Chapter 132 requirements will be met if a non standard system (HG, DL, or OT) was used for the "Type of Cut" in the Cutting Standards Section on page 4.

Stand No.

Source of
Regeneration
(ex. AD, SE)

How will Regeneration be obtained/protected?
If using AD - Describe the species present and how the regeneration will be protected
If using SE - Describe the source of the seed and the number of seed trees/acre

Stand No.

Desired Future Condition
Describe what the stand is expected to look like five years from the harvest, including the condition of the overstory & understory

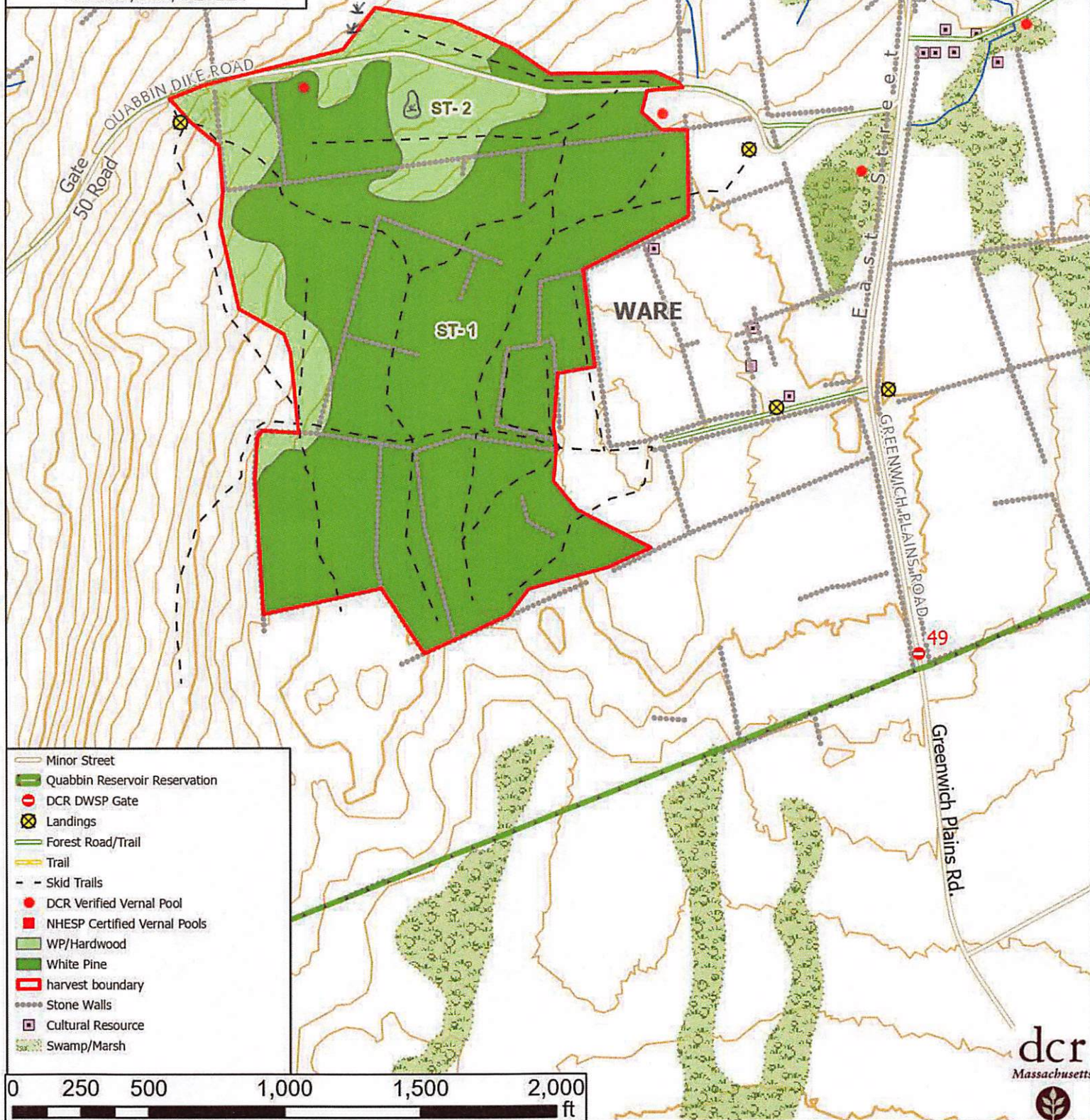
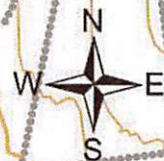
Stand Map

Quabbin Lot 1063

Greenwich Plains Rd.

Ware, MA

Prepared by:
Steven J. Wood
MA DCR DWSP
Quabbin & Ware River Forestry
Scale: 1:6,000
1 inch = 500 feet
Created: 12/7/2023
Data sources:
MassGIS, DCR, & EOEEA

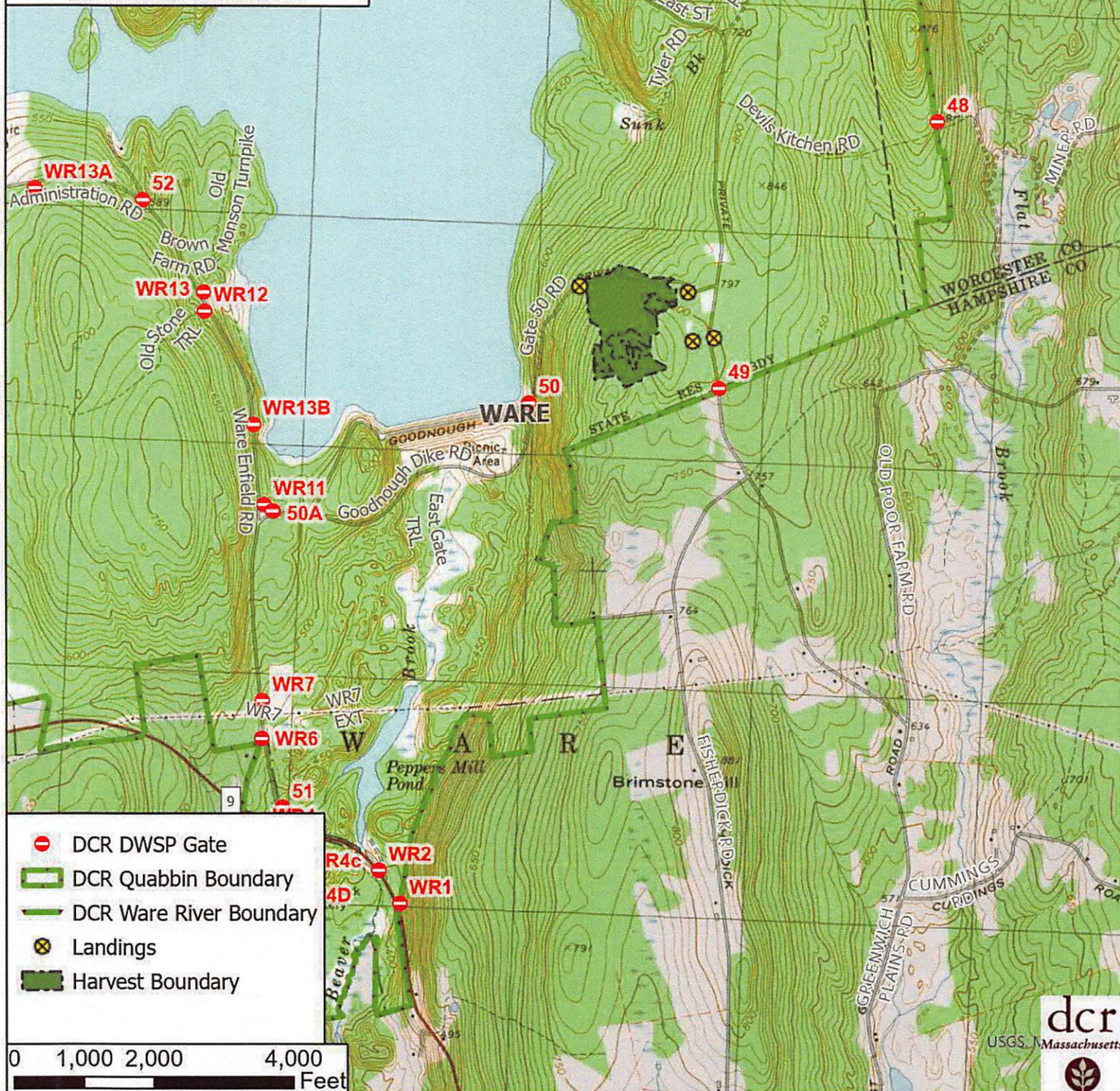


Locus Map

Quabbin Lot 1063

Greenwich Plains Road Ware, MA

Prepared by:
Steven J. Wood
MA DCR DWSP
Quabbin & Ware River Forestry
Scale: 1:24,000
1 inch = 2,000 feet
Created: 12/4/2023
Data sources:
MassGIS, DCR, EOEEA, & USGS



dcr



COMMONWEALTH OF MASSACHUSETTS

Department of Conservation and Recreation

Division of State Parks and Recreation

FILE # 309-42804-24

FOREST CUTTING PLAN CERTIFICATE

Post this in a conspicuous place within the area in which the harvesting operation is to take place.

This certifies that DCR-DWSP 485 Ware Rd, Belcherstown, MA in accordance with the
(Name of Owner) (Address) 01007

provision of M.G.L. Chapter 132, Section 40-46, filed in Amherst F.O. with the Dept. of Conservation
and Recreation, Division of State Parks and Recreation, a Notice of Intent to cut forest products upon the
DWSP 1063 lot.

Approval Date 6/28/24

Director's Agent Jacob Macko

DCR Phone No. (857) 202-2824

ISSUED BY:

A handwritten signature in black ink, appearing to read "Priscilla Geigis".

Priscilla E. Geigis, Director
Division of State Parks and Recreation