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

Forest Management Project Summary

Project Title: Juckett Hill East

DWSP Harvest Permit Number: 1065
DWSP Proposal ID: PE-22-02
DCR Forest Cutting Plan File Number: 024-43059-25

Site Information
Watershed: Quabbin
Town(s): Belchertown
Acres: 53
Nearest Road: Juckett Hill Road
Natural Heritage Atlas overlap: No
Public Drinking Water Supply Watershed: Yes
Forest Types: White Pine/Oak, White Pine
ACEC: N
Soils: Well to moderately well drained, sandy loam
Wetland Resources: N
Vernal Pools: N

Harvest Information
Harvest Start Date: TBD
Harvest End Date: 11/13/2026
Number of Wetland Crossings: 0
Number of Stream Crossings: 0

Best Management Practices Applied
Stream Crossings: N/A
Filter Strips: Y
Wetland Crossings: N/A
Harvesting in Wetlands: N/A

DWSP Forester supervising this harvest
Name: Douglas Hutcheson
Forester License #: 375
Phone #: (413) 237-9713
Email: douglas.hutcheson@mass.gov

NARRATIVE

General Description/Forest Composition/History

The east side of Juckett Hill Road is generally a closed canopy, even aged forest. The soils are well to moderately well-drained sandy loams. The most prevalent canopy species are red, black, scarlet and white oak, along with white pine. Red maple, hickory, black and white birch, and hemlock are also present. A plateau surrounds the high point of the site; downslope topography is mostly mild with occasional steep sections which will be worked conservatively or avoided depending on severity. Three timber harvests were conducted from 1981-1986 in response to the Spongy Moth (*Lymantria Dispar*) outbreak of the early eighties. The harvests were a combination of thinning live and salvaging dead trees.

Site Selection

Historical impacts by spongy moth highlight the need to diversify the vertical structure and species composition that is currently present. Recent disturbance events have begun that process and provide an opportunity to augment and guide that process. The area was most recently impacted by a Spongy Moth outbreak from 2015-2020. The result was heavy mortality of canopy oaks. Emerald ash borer, (*Agrilus planipennis*) arrived at the end of 2019 and many ash trees were showing decline by the fall of 2020. Stagnant growth of canopy white pine has been observed due to white pine needle cast disease, which hinders photosynthetic capacity. Stagnant growth and mortality of white pine regeneration has also occurred, most likely from several funguses and a canker. Droughts in 2015-2016, and fall of 2020, further reduced growth in all species of trees, both in the canopy, the midstory, and the seedling and sapling layer.

Silvicultural Objectives

Oak and pine are the two keystone species in the watershed forest surrounding the Quabbin Reservoir. The primary silvicultural objective is to encourage establishment and growth of a more diverse suite of trees, woody shrubs, and herbaceous plants. The silvicultural systems to be used are group selection, (three openings .6 to .9 acres in size), clearcut with residual trees retained, (four openings 2.0 to 4.2 acres in size) and shelterwood/thinning on 24 acres.

Cultural Resources

There is a foundation and stonewalls located just south of opening # 7. A well is likely nearby but is yet to be identified.

Rare or Endangered Species

There are no NHESP habitats in the treatment area. Moose and deer browse is evident. Bear, turkey, grouse, and coyote are also known to use this area.

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		Case No.	
Date Rec'd		Nat. Hert.	
Earliest Start		Pub. Dr. Wat.	
River Basin		ACEC	
Gen. Obj.			

Site Information

Location

Town: Belchertown
Road: Juckett Hill Road
Acres: 52.8 Proposed Start Date: TBD
Vol. MBF: 98.3 Vol. Cds.: 158 Vol. Tons: 105

Plan Preparer

Name: Douglas Hutcheson DCR-DWSP Forester
Address: 485 Ware Road
Town, State, Zip: Belchertown, MA 01007
Phone: (413) 237-9713
Type of Preparer: Licensed Forerster
*Mass. Forester License #: 375
*Required for land under Ch61, Ch61A or Forest Stewardship

Landowner

Name: MA DCR-DWSP
Mailing Address: 485 Ware Road
Town, State, Zip: Belchertown, MA 01007
Phone: 4133236921
Ch61☐ 61A☐ 61B☐ Stew☐ *Case #
FSC☐ CR☐ CR Holder

Licensed Timber Harvester**

Name: TBD
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)	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

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

Forest Products

Products to be Harvested*

Species	Mbf/Cds		Mbf/Cds
White Pine	58.2	Red Maple	.5
Red Pine		Sugar Maple	
Pitch Pine		Red Oak	31.8
Hemlock	1.1	Black Oak	5.7
Spruce		White Oak	.2
Other Sftwd.		Other Hdwd.	
White Ash		**Total Mbf**	98.3
Beech		**Cordwood (Cds)**	158
White Birch		**SW Pulp (Tons)**	105
B & Y Birch	.8	**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.

Stand Treatment

Cutting Standards

Indicate location on map	ST-1	ST-2	ST-3	ST-4
Forest Type	WO	WO	WO	
Acres	35.0	12.2	5.6	
Landowner Objective	LT	LT	LT	
Designation of Trees	CT	CT	CT	
Type of Cut	SH	CC	SE	
Source of Regeneration	AD	AD	SE	

Landowner

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) — Date: 12-18-2024

Service Forester

Determination and Status

	Approved	Disapproved	Expires
Cutting Plan	☐	☐	

Signature of Service Forester/Director's Agent — Date

Extension 1☐ 2☐ 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

Codes

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	**Intermediate Harvests:**	
ST	Seed Tree	CT	Commercial Thin
CC	Clear Cut	NT	Non Com Thin
SE	Selection	**Non-Standard Systems:***	
SA	Salvage	HG	Highgrade*
SN	Sanitation	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 Belchertown

File Number

BMPs

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.

Stand 2 is comprised of four individual openings: 2.0, 2.4, 3.6, and 4.2 acres, totaling 12.2 acres. The silvicultural system to be used in these openings is a clearcut with retention. The retained canopy trees within the openings are vigorous, well formed white pine, and red, white, black, and scarlet oak stems, with full canopies prioritized for their seed and mast bearing capacity. Scattered chestnut oak, white and yellow birch, sugar maple, hemlock, and hickory stems are also being retained for species diversity. Where present, large diameter, large limbed, wolf trees will be retained as legacy trees and for wildlife habitat. The future stands that result from these small patch cuts will achieve DWSP's overarching goals of creating an uneven age forest with diverse vertical structure and diverse species across the Quabbin watershed.

Designation of Trees

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.

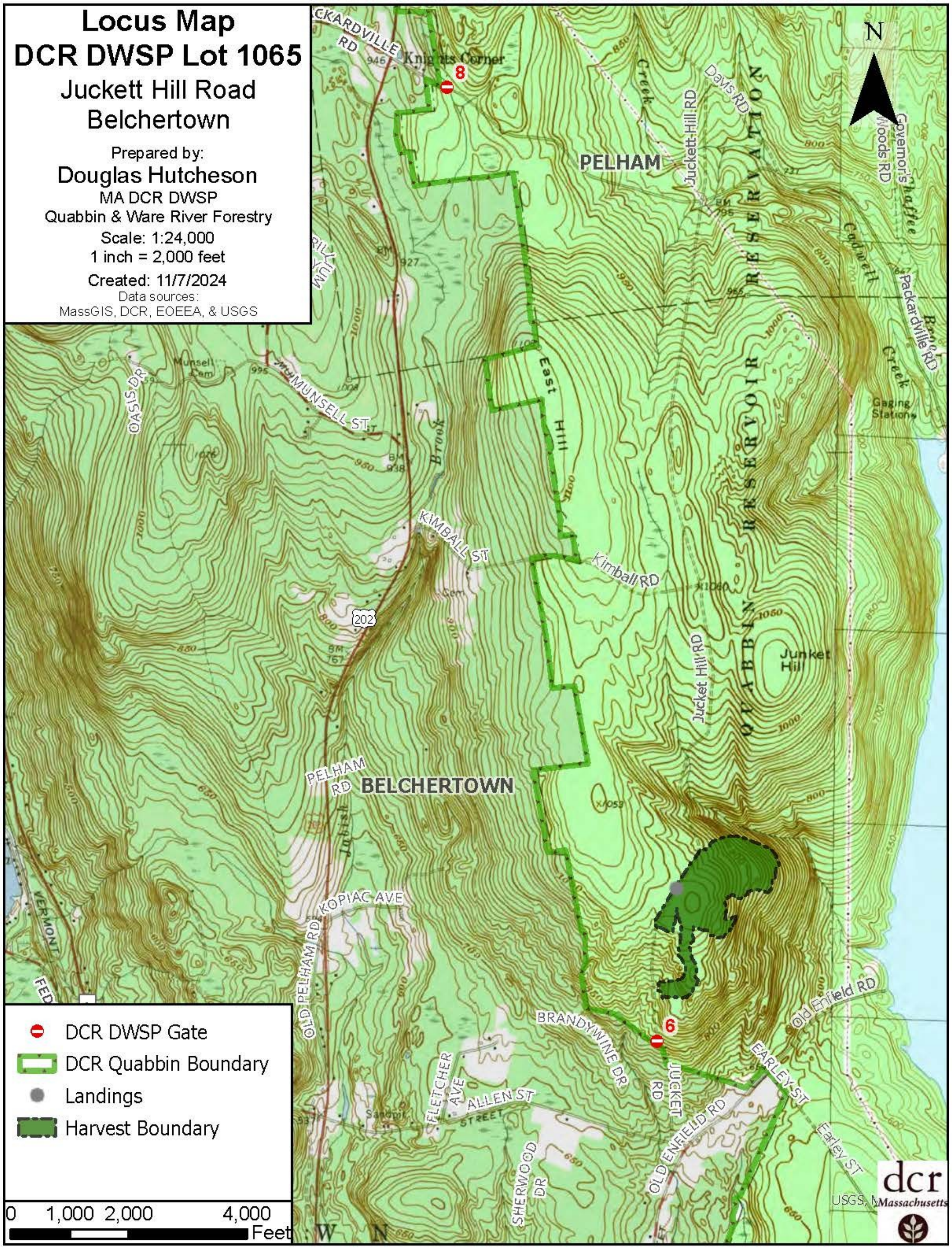
	Describe Trees to be Cut			Describe Trees to be Left			% BA/AC	
Stand No.	Species	Size	Quality	Species	Size	Quality	Cut	Left

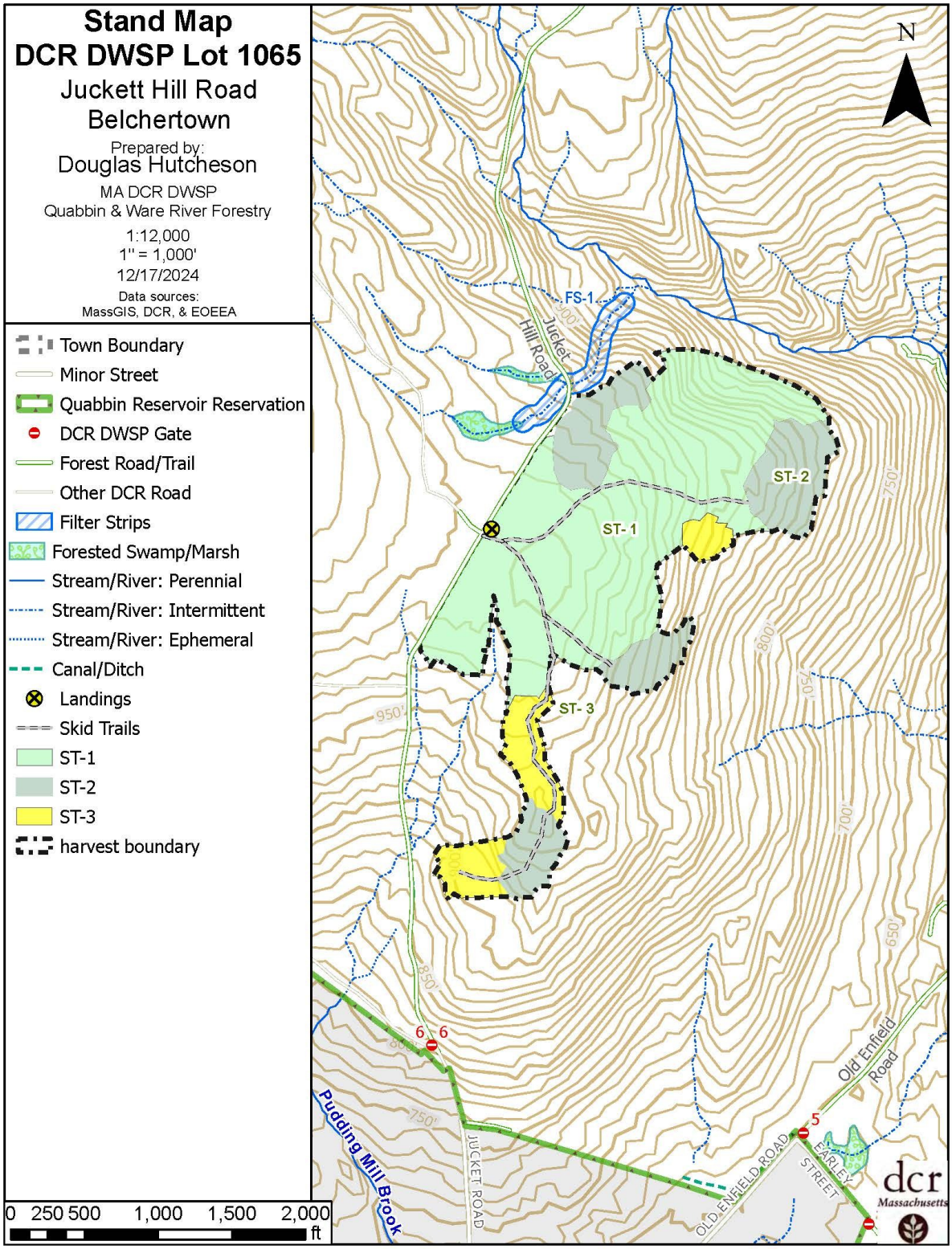
Regeneration & Future Condition

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


Locus Map
DCR DWSP Lot 1065
Juckett Hill Road
Belchertown
Prepared by:
Douglas Hutcheson
MA DCR DWSP
Quabbin & Ware River Forestry
Scale: 1:24,000
1 inch = 2,000 feet
Created: 11/7/2024
Data sources:
MassGIS, DCR, EOEEA, & USGS
DCR DWSP Gate
DCR Quabbin Boundary
Landings
Harvest Boundary
0 1,000 2,000 4,000
Feet
N
PELHAM
BELCHERTOWN
QUABBIN RESERVATION
Juckett Hill RD
Jucket Hill RD
Davis RD
Kimball RD
KIMBALL ST
MUNSELL ST
OASIS DR
East Hill
Junket Hill
PELHAM RD
KOPIAC AVE
OLD PELHAM RD
BRANDYWINE DR
JUCKET RD
OLD ENFIELD RD
Old Enfield RD
EARLEY ST
Earley St
FLETCHER AVE
ALLEN ST
SHERWOOD DR
Packardville RD
Woods RD
Gaging Station
202
8
6
dcr
Massachusetts


Stand Map
DCR DWSP Lot 1065
Juckett Hill Road
Belchertown
Prepared by:
Douglas Hutcheson
MA DCR DWSP
Quabbin & Ware River Forestry
1:12,000
1" = 1,000'
12/17/2024
Data sources:
MassGIS, DCR, & EOEEA
Town Boundary
Minor Street
Quabbin Reservation
DCR DWSP Gate
Forest Road/Trail
Other DCR Road
Filter Strips
Forested Swamp/Marsh
Stream/River: Perennial
Stream/River: Intermittent
Stream/River: Ephemeral
Canal/Ditch
Landings
Skid Trails
ST-1
ST-2
ST-3
harvest boundary
N
FS-1
Juckett Hill Road
ST- 1
ST- 2
ST- 3
750'
800'
950'
700'
650'
850'
6
6
5
Pudding Mill Brook
JUCKET ROAD
OLD ENFIELD ROAD
EARLEY STREET
Old Enfield Road
dcr
Massachusetts
0 250 500 1,000 1,500 2,000
ft