Quabbin Reservoir Watershed System Public Access Management Plan 2017 Update







Quabbin Reservoir

Facts and Figures

Year Built: 1939

■ Dam Length: 2,640 feet

Volume Capacity: 412 billion gallons

Surface Area: 39.4 sq miles/24,469 acres

Watershed Area: 187 square miles

Shoreline: 118 miles

Length: 18 miles

Maximum Width: 3 miles

Mean Width: 1.5 miles

Maximum Depth: 151 feet

Mean Depth: 45 feet

Four Lost Towns

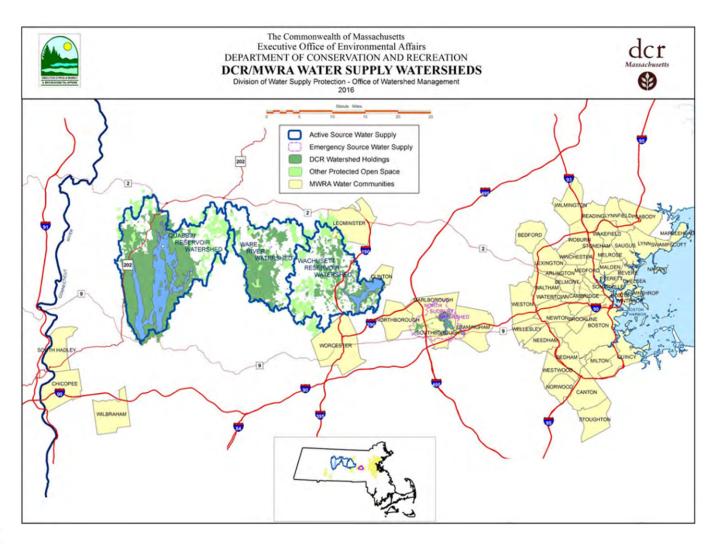
Enfield, Prescott, Dana, Greenwich

"Accidental Wilderness"





Watershed System





DWSP Mission

...construct, maintain and operate a system of watersheds, reservoirs, water rights and rights in sources of water supply [to] supply thereby a sufficient supply of pure water to the Massachusetts Water Resources Authority, and [to] utilize and conserve said water and other natural resources to protect, preserve and enhance the environment of the Commonwealth and to assure the availability of pure water for future generations.



DWSP Ownership

	Watershed	DWSP Fee	DWSP WPR	Other Protected	Total Protected	Land Area	Off- Water- shed	Reservoir
Active System	Quabbin Reservoir	53,915	3,684	15,362	72,961	95,466	4,301	24,469
	Ware River	23,516	1,078	7,430	32,024	61,737		N/A
	Wachusett	17,233	2,531	12,446	32,210	70,678	636	4,122
	Reservoir							
	Total	94,664	7,293	35,238	137,195	227,881		28,591
Emergency	Sudbury	2,381	0	1,715	4,096	16,350		1,432
System	and Foss							
	Reservoirs							

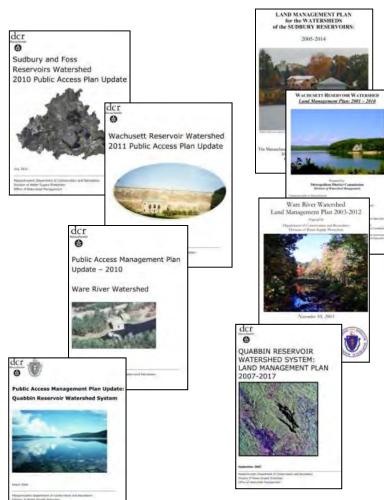
All figures in acres

Ownership as % of Watershed Land Area

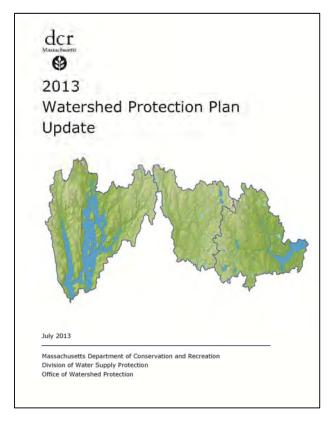
					DWSP
		DWSP	Other	Total	Controlled Including
	Watershed	Controlled	Protected	Protected	Reservoirs
Active System	Quabbin	60.3%	16.1%	76.4%	68.5%
	Reservoir				
	Ware River	39.8%	12.0%	51.9%	39.8%
	Wachusett	28.0%	17.6%	45.6%	31.9%
	Reservoir				
	Total	44.6%	15.5%	60.2%	50.9%
Emergency	Sudbury and Foss	14.6%	10.5%	25.1%	21.4%
System	Reservoir				



DWSP Plans









Watershed Protection Plan: 5 years [Next revision: 2018]

Public Access Plans: 5-10 years [Next revision: Quabbin - in process]

Land Management Plans: 10 years [Next revision: Comprehensive – in process]

Other Reports/Studies: Work Plan [annual]; Water Quality [annual]; Environmental Quality

Assessments [5-year cycle]; Gulls, Invasive Species, others [as needed]

Purpose of a Public Access Plan

- Explain policies and procedures related to public access management within each drinking water supply watershed managed by DWSP.
- Outline control and monitoring mechanisms used to mitigate possible negative impacts from general and specific public access activities.





Quabbin Public Access Plan History

Quabbin and Ware River Watersheds Recreation and Public Access Policy and Plan METROPOLITAN DISTRICT COMMISSION

1988: First Public Access Plan for Ouabbin/Ware

dcr

MDC Public Access Plan 1998: First update, Quabbin only dcr **Public Access Management Plan Update: Quabbin Reservoir Watershed System** MDC Public Across Plan - Qualifia Reservoir Watershed System - January 1998 Massachusetts Department of Conservation and Recreation Division of Water Supply Protection

2006: Second Quabbin update



chusetts Department of Conservation and Recreation

Division of Water Supply Protection

2017: Third Quabbin **Update**

Internal DWSP working group formed in 2015 to draft update, includes: Regional Director, Asst. Regional Director, Interpretative Services, Watershed Rangers, Watershed Foresters, Geographic Information Systems, and Environmental Planning



Public Access Concerns

- There is an inherent conflict between water supply protection and public demand for access to these resources.
- Any human activity on or near water supply source waters can introduce disease-causing agents or pollutants to the water supply.
- DWSP factors into its management that the source water protection program provided for MWRA's water supply must meet strict state and federal oversight guidelines as it services one of the few unfiltered drinking water supplies in the nation.
- DWSP recognizes that their reservoirs and the lands surrounding them are valuable environmental resources of the Commonwealth that are attractive to watershed residents and the general public.

DWSP, whose primary responsibility is water supply protection, views its public access plans as a blueprint for determining the levels of access that may be reasonably allowed without risking water supply safety, security, or re-directing DWSP resources.





Laws and Regulations

- Federal and State Oversight
 - US Safe Drinking Water Act/Surface Water Treatment Rule/Interim Enhanced Surface Water Treatment Rule
 - State Surface Water Supply Regulations (310 CMR 22.00)
 - MA DEP inspects Quabbin Reservoir operations annually
- DWSP Specific Laws and Regulations
 - Kelly-Wetmore Act (Chapter 737 of the Acts of 1972)
 - MWRA Enabling Act (Chapter 372 of the Acts of 1984)
 - Watershed Management General Laws (MGL c. 92A½)
 - Water Supply Protection Trust (MGL c. 10, § 75)
 - Watershed Protection Regulations (313 CMR 11.00)



Unfiltered Water Supplies

- 1986 update to the Safe Drinking Water Act (SDWA), required drinking water supplies that utilized surface water to be filtered.
- An exemption to this expensive requirement could be obtained through a filtration waiver if a water supplier could prove to the EPA that it satisfactorily protects the water and keep it suitable for drinking without this treatment.
- The vast majority of surface drinking water supplies in the United States – 7,310 out of 7,400 – have filtration plants
- DCR/MWRA system is one of five large US cities that are unfiltered: Boston, New York, San Francisco, Portland (OR), and Seattle.
- DCR meets DEP's "Measures of Success" to maintain the filtration waiver, with programs covering the following topics:
 - Watershed Control
 - Public Access/ Recreation
 - Wildlife Management

- Infrastructure Improvements
- In-lake Problems
- Sampling
- System Operation/ Maintenance

- Staffing
- EmergencyPlanning/Response
- Education/ Multi-town Coordination



Unfiltered Water Supplies Public Access Rules

City	Water Supply Watershed	Ownership	Hunting	Boating	Bicycling	Swimming	Dogs	Shoreline Fishing	 Walking¹
Portland, OR	Bull Run	96% US Forest Service; 4% City of Portland	No	No	No	No	No	No	No
Seattle, WA	Cedar River	99.8% City of Seattle	No	No	No	No	No	No	No
	Tolt River (filtered)	70% City of Seattle 30% National Forest	No	No	No	No	No	No	No
San Francisco,	Hetch Hetchy	100% National Park Service	No	No	Yes ²	No	No	No	Yes
CA	Peninsula (filtered)	100 % SF Public Utilities	No	No	Yes ³	No	No	No	Yes ²
	Alameda ⁴ (filtered)	32 % SF Public Utilities	No	No	No	No	No	No	No
New York, NY	Delaware/ Catskills ⁵	37.5% City of New York	Yes ⁵	Yes ⁵	No	No	Yes	Yes	Yes ⁷
	Croton Reservoir ⁵	Limited City ownership ⁶ (This watershed is filtered)	Yes ⁵	Yes ⁵	No	No	Yes	Yes	Yes ⁷
Boston, MA	Quabbin Reservoir	60% DCR/DWSP	Yes ⁸	Yes	Yes ¹¹	No	No	Yes	Yes
	Ware River	40% DCR/DWSP	Yes	Yes	Yes ¹¹	No	Yes	Yes	Yes
	Wachusett Reservoir	28% DCR/DWSP	Yes ⁹	No ¹⁰	Yes ¹¹	No	No	Yes	Yes

- ¹ Walking includes cross country skiing, snowshoeing, birdwatching, photography and nature study.
- ² Biking is allowed only along 12 miles of paved roads.
- Public recreation not allowed except for the 10 mile gravel Fifield Cahill Ridge Trail (volunteer docent led walking, biking, and horseback riding only) and the 17.5 mile paved Crystal Springs Regional Trail (walking, skating/rollerblading, bicycling and horseback riding are allowed). Both trails are managed by the San Mateo County Parks Department.
- A portion of lands within the Alameda Watershed are leased by East Bay Regional Park District as part of the Sunol-Ohlone Regional Wilderness. This portion includes pedestrian, equestrian and bicycle trails. Access is allowed to some internal fire roads by permit for research or educational purposes.
- ⁵ In order to responsibly provide recreational access to City property, NYDEP issues a comprehensive permit "The Access Permit" that allows for fishing, hunting and walking on certain designated areas in the watershed. Other areas are referred to as "Public Access Areas" and are open to all without a permit. Boating only in designated areas.
- ⁶ In the densely developed Croton watershed, a minor part of the New York system which contains extensive NYC suburbs, development pressures and the high cost of land have limited the DEP's ability to undertake protection mechanisms such as land acquisition (although land acquisition is used as an secondary layer of protection).
- ⁷ Hiking is not allowed at or immediately around any NYC Reservoirs but other City properties throughout the watershed are open for hiking.
- ⁸ Hunting is allowed only during a controlled/permitted deer hunt within the Quabbin Reservation.
- 9 Allowed in designated areas
- Boating is not allowed on the main reservoir. Non-motorized boats on Quinapoxet and Stillwater Rivers in the Tributary Headwaters Zone, Muddy Pond and on West Waushacum Pond only.
- Bicycling only on designated routes along culverted roads. No off-road/single track mountain biking allowed.



Public Input

DWSP involves stakeholders in its public access policy development, review, and modification.

- 1. Public Survey
- 2. Advisory Committees
- 3. Public Meetings

Local residents, land abutters, visitors, and environmental organizations have been generally supportive of DWSP's policies to protect the public water supply while allowing controlled access.





Public Survey

- DWSP utilized on-line survey tool
- Flier distributed to towns, libraries, advisory committees, and users groups
- Utilized social media, including town and agency websites and facebook pages, as well as DCR twitter account
- 23 question survey available for 41 days: 8/31 10/10
- 692 people took the survey
- Largest response in decades of watershed surveys
 - 3 times response from 2006 survey
- Responses were similar to previous iterations of the survey done for earlier plans:
 - Most people and organizations are appreciative of the resources
 - A subset advocate for activities that are currently prohibited









Quabbin Ownership and Mgt. Areas

1.Quabbin Park

Approximately 3,000 acres at the southern tip of Quabbin Reservoir that is generally open to the public.

2. Quabbin Reservation

Over 45,000 acres of land that was part of the original land taking, including the reservoir islands, bounded by and within state routes 9, 202, 122, and 32A.

3. Off-Reservation

Approximately 10,000 acres of land outside of the bounds of the Quabbin Reservation.

4. Quabbin Reservoir

The 24,000 acre surface of the reservoir itself, excluding the islands.

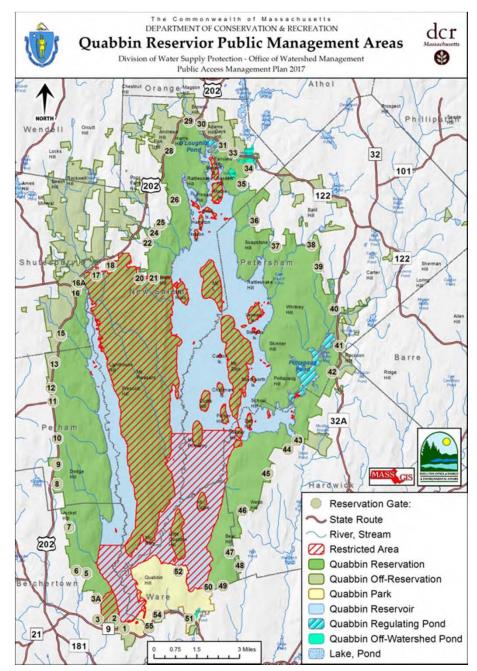
5. Regulating Ponds

Two large ponds of close to 700 acres, Joe O'Loughlin Pond at Gate 31 and Pottapaug Pond at Gate 43.

6. Off-Watershed Ponds

South Spectacle, Bassett Pond, and Peppers Mill Pond are three small ponds that total 130 acres.





Public Access Plan Goals, Evaluation, and Updates

Public Access Plan Goals

- To properly manage a public resource used as a source supply of drinking water.
- To protect drinking water resources from public access impacts.
- To protect historic and prehistoric sites within the watershed.
- To improve and protect long-term ecosystem health and biological diversity within the watershed.
- To assure that public access is safe and appropriate to DCR/MWRA's water quality and regulatory goals.

Plan and Policy Evaluation

- DWSP will conduct periodic reviews to evaluate the plan in general, as well as any policy concerns or conflicts that arise.
- Review will be coordinated through the Quabbin Reservoir Watershed Advisory Committee during their regularly-scheduled meetings, and will include a public input component.

Ten Year Plan Update Process



Americans with Disabilities Act



- Americans with Disabilities Act (ADA) prohibits discrimination on the basis of disability
- Facility alterations include:
 - Signage
 - Curb cuts
 - Ramp and hand-bar construction
 - Automatic door openers
 - Accessible public toilets
 - Accessible fishing pier and trails
- MassWildlife's White-tailed Deer Hunt for Paraplegic Hunters
- Service animals allowed in areas where dogs are prohibited



Quabbin Public Access Policies

Activity	Quabbin Park	Quabbin Reservation	Off- Reservation	Quabbin Reservoir	Regulating Ponds	Off- Watershed Ponds
VEHICLE ACCESS	I ark	Reservation	Reservation	Reservoir	1 onds	Tonds
Driving for Sightseeing	□1	0	0	0	0	0
Snowmobiling	0	0		0	0	0
ATV Riding	0	0	0	0	0	0
Bicycling -Designated roads		□ ⁴	□5	0	0	0
Off-road Bicycling	0	0	0	0	0	0
Sledding	0	0	0	96	Ö	<u> </u>
FOOT ACCESS		<u> </u>				
Walking/Snowshoeing	\Box^6	□6		0	0	
Cross-country Skiing	0	0		0	0	0
Hunting/Trapping	⊘ ⁷	\bigcirc ⁷		0	0	0
Ice Fishing/Ice Skating	0	0		0	0	□8
Shore and Stream Fishing	⊘ 9	□10	□11	□10	□10	□11
WATER ACCESS	T -		-			
Boat Fishing	0	Ø	0	□12	□13	□14
Canoeing/Kayaking/Boating	0	0	<u> </u>	0		
Wading (fishing, launching)	⊘ 15	□16	□16	⊘ ¹⁷	17	15
Swimming		<u> </u>	0	0	0	
OTHER ACCESS Group Activities (weddings,	- 10	1				
organized walks, tour buses, etc.)	□18	□18	□18	0	0	0
Geocaching and related activities	□19	□ ¹⁹	□ ¹⁹	0	0	0
Wildlife/Bird Watching	□20	□20	□ ²⁰	□20	□20	□20
Night Access	⊘ ²¹	□22	□ ²²	0	\otimes	\Box^{22}
Organized Sports	⊘ ²³	⊘ ²³	\bigcirc^{23}	0	0	0
Dogs/Other Animals	0	0	0	0	0	0
Horseback Riding	0	0	0	0	0	0
Collecting/Metal Detecting	0	0	0	0	0	0
Camping	0	0	0	0	0	0
Fishing Derbies	0	0	\bigcirc^{23}	\bigcirc^{23}	\bigcirc^{23}	\bigcirc ²³
Target Shooting	0	0	0	0	0	0
Advertising	0	0	0	0	0	0
Marking or Cutting Trails/Roads	0	0	0	0	0	0
Unmanned Aerial Vehicles	\bigcirc ²³	⊘ ²³	⊘ ²³	⊘ ²³	\bigcirc ²³	⊘ ²³
Alcohol (possession of)	0	0	0	0	0	0
Other	Please cal	ll the Quabbin Visi	tor Center 413-323	-7221 or Waters	hed Ranger Statio	n 413-323-0192



Policy Changes in 2017 Plan



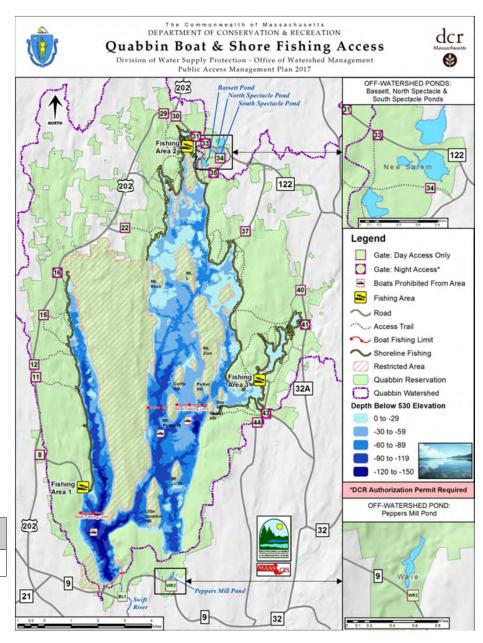
Activity	2006 DWSP Policy	2017 Policy Updates
VEHICLE ACCESS		
Driving for Sightseeing	Allowed with restrictions	Clarified – vehicle access has posted times and wildlife feeding prohibition emphasized
Snowmobiling	Allowed with restrictions	Clarified – designated specific Off-Reservation route, with map
Off-Road Bicycling	Prohibited	Clarified – includes prohibition or trail construction
Sledding	Allowed with restrictions	Clarified – prohibited except for pulling children during other allowed activities.
FOOT ACCESS		
Cross-Country Skiing	Allowed with restrictions	Clarified – allowed on routes within specific section of off-reservation land
Shore and Stream Fishing	Allowed with restrictions	Clarified – includes stream fishing
WATER ACCESS		
Boat Fishing	Allowed with restrictions	Clarified – includes decontamination/boat seal requirements for all private boats
Canoeing/Kayaking/Boating	Allowed with restrictions	Clarified – includes decontamination/boat seal requirements for all private boats; unsealed private canoes and kayaks are prohibited.
Wading (for fishing/launching)	Allowed with restrictions	Clarified – wading only allowed while fishing or boat launching with boots.
OTHER ACCESS	<u>'</u>	
Group Activities	Allowed with restrictions	Clarified – group size thresholds
Geocaching and Related Activities	Placement of cache or related item requires review from Quabbin Visitor Center	Clarified –includes related discovery activities.
Night Access	Allowed with restrictions	Clarified – night access may be terminated for security reasons Adjusted – access to the Swift River, Y-Pool and Rt. 9 parking area is prohibited between 11 p.m and 4 a.m.
Unmanned Aerial Vehicles (UAVs, drones)	Not identified	Prohibited (without written permission)

Shore Fishing

- Shore fishing allowed on existing trails between Gates 8-16 and Gates 22-24.
- Night access allowed with permit at certain gates.

Activity	Quabbin Park	Quabbin Reservation	Off- Reservation	Quabbin Reservoir	Regulating Ponds	Off- Watershed Ponds
Shore Fishing	⊘ ¹	\Box^2	\square^3	\Box^2	\Box^2	\Box^3





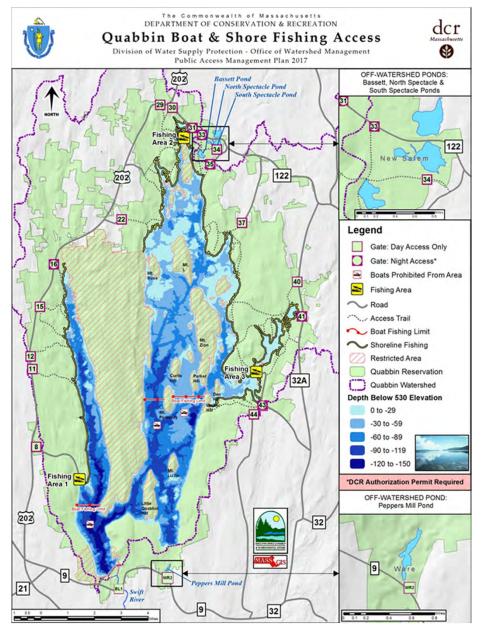
Boat Fishing

- Boating for fishing purposes is allowed on Quabbin Reservoir during the designated fishing season from three Boat Launch Areas.
- Private boats must meet size and boat seal requirements.
- Rental boats are available.
- Program a legacy of 1950s.
- Closely controlled by DWSP.
- · Does not threaten public health.

Activity	Quabbin Park	Quabbin Reservation	Off- Reservation	Quabbin Reservoir	Regulating Ponds	Off- Watershed Ponds
Boat Fishing	0	0	0	\Box^1	\Box^2	\Box^3







Quabbin Boat Seal

- Quabbin Boat Seal (QBS) program initiated to ensure that boats launched at Quabbin have been properly decontaminated to minimizes the threat of Aquatic Invasive Species (AIS) getting into the reservoir.
- AIS are plants and animals that are not native to New England and can potentially spread rapidly if accidentally introduced. If they get into Quabbin Reservoir or other lakes and ponds, they could take over and disrupt the natural balance, degrade water quality, and interfere with recreation such as fishing.
- All private boats must have an intact QBS to be eligible for launching on the reservoir.
- Seals can be obtained through either a Cold Weather Quarantine or a full Boat Decontamination.
- Since initiated in 2009, xxx boats have obtained a QBS.











Biking

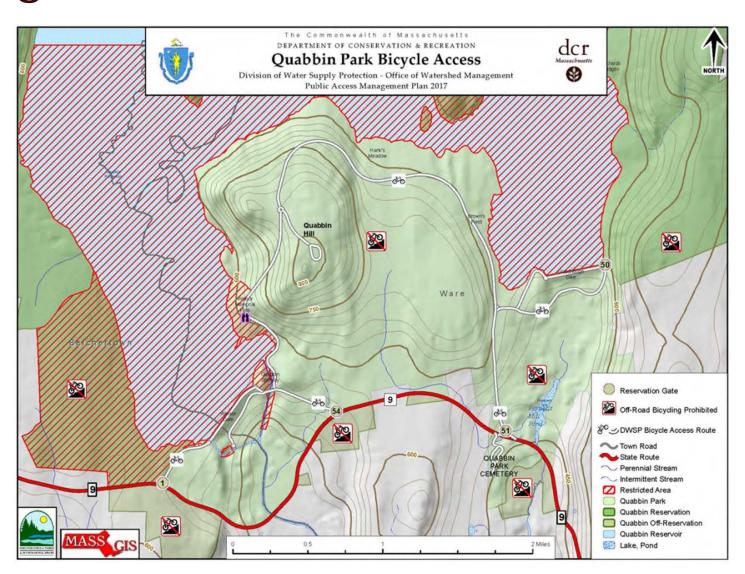
- There are 47.6 miles of designated bicycle routes on DWSP lands in the Quabbin Reservoir watershed.
- Biking allowed only on existing paved and wood roads.
- Off-road/single track bicycling is not allowed.

Activity	Quabbin Park	Quabbin Reservation	Off- Reservation	Quabbin Reservoir	Regulating Ponds	Off- Watershed Ponds
Bicycling – Designated Roads		\Box^2	□3	0	0	0



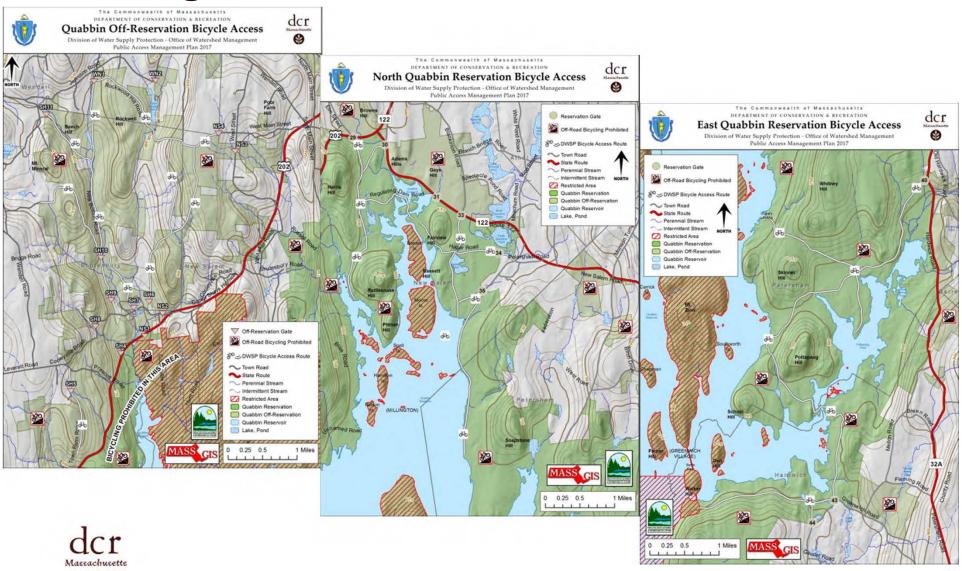


Biking





Biking

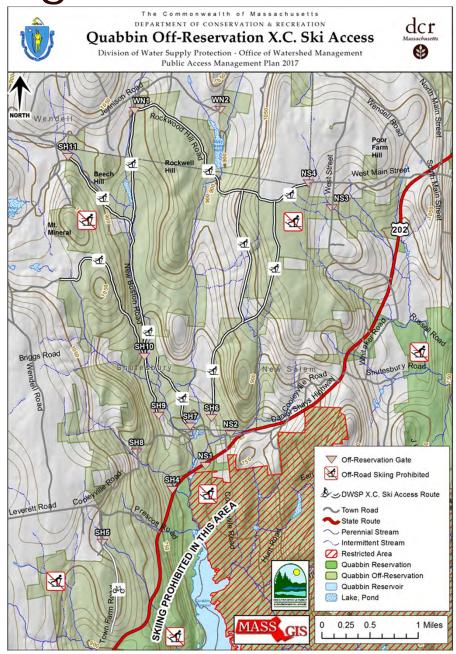


Cross-country Skiing

- Cross-country skiing typically has a greater range (distance travelled in a given time) than other nonmotorized winter activities such as hiking and snowshoeing.
- It is critical that DWSP limits any potential access to the reservoir shoreline and the possibility of people skiing on the frozen reservoir surface.
- DWSP has limited resources to patrol cross-country skiing activities, and in a worst-case scenario manage accidents, in remote locations throughout the watershed.
- Cross-country skiing is allowed only along 13 miles of cross-country ski routes in the Off-Reservation management area.

Activity	Quabbin Park	Quabbin Reservation	Off- Reservation	Quabbin Reservoir	Regulating Ponds	Off- Watershed Ponds
Cross-country Skiing	0	0		0	0	0



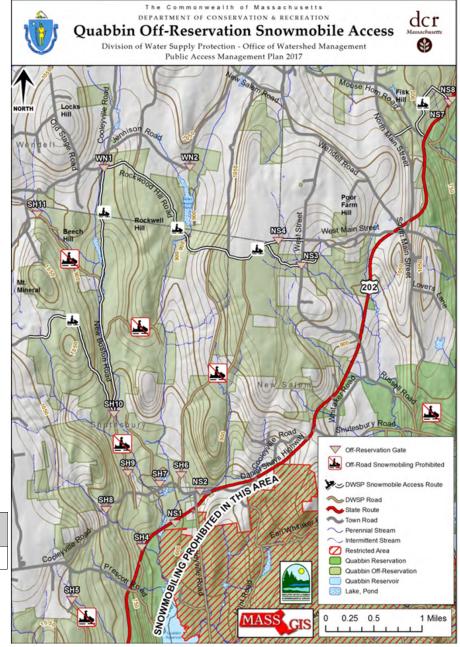


Snowmobiling

- Snowmobile use is prohibited throughout most of the DWSP Watershed System.
- Limited snowmobiling access is allowed on designated, marked routes only within Off-Reservation lands.
- Policy has been clarified to designate specific Off-Reservation routes, with updated map.
- These specific routes were developed in collaboration with local snowmobile club input.

Activity	Quabbin Park	Quabbin Reservation	Off- Reservation	Quabbin Reservoir	Regulating Ponds	Off- Watershed Ponds
Snowmobiling	0	0	\Box^1	0	0	0



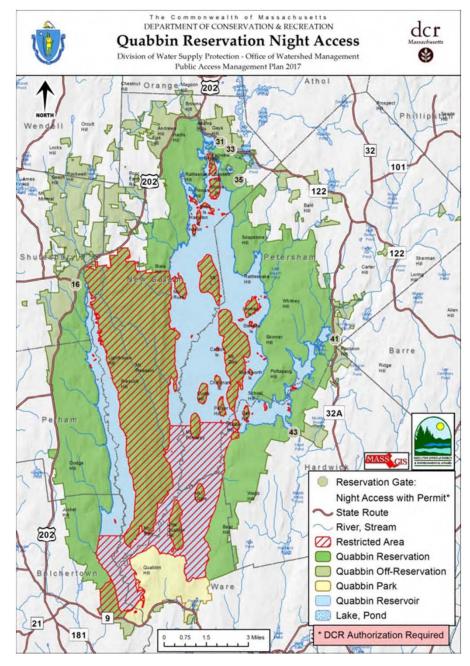


Night Access

- Night access for pedestrians allowed through certain gates with DWSP permit during fishing season.
- Allowed without a permit on the Swift River below the Y Pool, if access is from Route 9, and on Peppers Mill Pond, provided that access is limited to the immediate banks of the Swift River, Y Pool, or Peppers Mill Pond only.
- Due to security reasons, access to the Swift River, Y-Pool and Rt 9 parking area is prohibited between 11 p.m. and 4 a.m.
- Night access may be denied during times of heightened security or alerts.

Activity	Quabbin Park	Quabbin Reservation	Off- Reservation	Quabbin Reservoir	Regulating Ponds	Off- Watershed Ponds
Night Access	⊘ ¹	\Box^2	\Box^2	0	0	$\square^{1,2}$





Group Activities

- Quabbin Reservoir lands, especially within Quabbin Park, are a desirable scenic backdrop for many group activities, such as weddings, memorial services, organized hikes, and tour buses.
- DWSP policy has been clarified to address the increasing frequency of group access activity requests by stating numbers of people or vehicles requiring a permit.
 - Group activities are allowed without a DWSP-issued permit for groups of up to 25 individuals and 10 cars or motorcycles. DWSP requests a courtesy call to the Visitor Center at (413) 323-7221 to avoid group conflicts.
 - A DWSP-issued permit is required for any group of more than 25 individuals or 10 cars or motorcycles. Quabbin Reservoir permit applications are available at www.mass.gov/eea/ agencies/dcr/water-res-protection/watershed-mgmt/watershed-and-reservoir-permits.html or by contacting the Quabbin Visitor Center at (413)-323-7221.
 - Group activities of greater than 100 individuals or 40 cars or motorcycles shall be subject to additional review, including possible requirements for an accompanying Watershed Ranger detail.
 - Any access by bus requires a DWSP-issued permit.
 - Ceremonies, such as weddings and memorials, are limited to 75 people or less.



Unmanned Aerial Vehicles (UAVs, "Drones")



- Recent technological advances have made civilian use of UAVs an increasingly popular activity.
- The unregulated use of UAVs can cause security concerns, public safety and public enjoyment problems, and interfere with wildlife.
- The use of UAVs is prohibited on the Quabbin Reservoir Watershed System without a DWSP-issued permit specific to a designated location/time, for designated purposes, with an Federal Aviation Administration (FAA) registered UAV, and operated under FAA rules.
- DWSP will review permit applications for affiliated research projects on a case-by-case basis, provided such proposals do not interfere with security, wildlife functions, or public safety, privacy, or enjoyment.
- This is a new policy developed due to rapidly expanding technologies that enable widespread participation in this activity.





Summary

- The primary purpose of Quabbin Reservoir and surrounding DWSP lands is drinking water supply for 2.5 million people.
- DWSP recognizes that these resources are attractive to watershed residents and the general public for a wide range of recreational activities.
- DWSP factors into its management that the source water protection program provided for MWRA's water supply must meet strict state and federal oversight guidelines as it services one of the few unfiltered drinking water supplies in the nation.
- DWSP does allow different forms of public access on much of the Quabbin Reservoir watershed.

