DCR DWSP Forest Reserves

DCR Massachusetts

Ken MacKenzie
DCR Division of Water Supply Protection
Director of Natural Resources

FOREST RESERVE'S ROLE

What a Forest Reserve is meant to protect

Forest reserves are formally designated landscapes where natural processes drive long-term forest structure, composition, function, and dynamics.

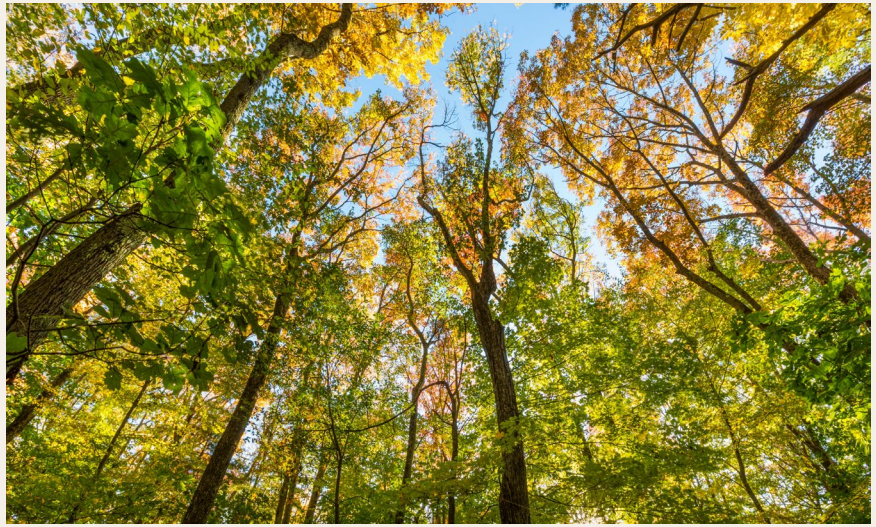
CORE BENEFITS

Allow older forests to mature and develop over time.

Protect biodiversity, habitat, water resources, and ecological integrity.

Contribute to carbon storage and sequestration by keeping forests as forests.

Support low-impact recreation and serve as reference sites for research.



Reserves complement active stewardship elsewhere on the landscape; they do not replace agency missions for water supply, wildlife habitat, forestry, public access, or public safety.

The criteria create a consistent screen

1

Representativeness

Diverse forest types, elevations, soils, landforms, structures, and ecological services.

2

Landscape context

Connection to larger protected and resilient landscapes, with low-conflict public access.

3

Ecological condition

High forest integrity, unique natural features, climate resilience, and manageable risks.

The criteria are designed to be repeatable across DCR State Parks, DCR Water Supply Protection, and MassWildlife lands while still allowing mission-specific objectives.

GIS identifies candidates; Field review confirms them

1 GIS screen

Map candidate areas using reserve criteria, ownership, protected-land context, resilience, ecological features, and known constraints.

2 Agency review

Check mission compatibility, operational needs, public access, water supply, wildlife values, and stewardship responsibilities.

3 Field verification

Visit priority sites to confirm conditions, boundaries, infrastructure, ecological value, and practical designation issues.

Field-based insight ensures decisions are accurate, practical, and ecologically sound.

Confirms that mapped assumptions match on-the-ground conditions.

Identifies public safety, access, boundary, cultural resource, and infrastructure needs.

Distinguishes passive reserve management from necessary stewardship and protection activities.

Reserve siting favors connected, resilient landscapes

Coordination across agencies looks beyond individual parcels to the larger protected-land network.

Prioritizes proximity to other protected lands regardless of designation.

Creates larger interior-forest blocks that buffer core areas from outside impacts.

Strengthens ecological connectivity and wildlife movement.

Improves long-term resilience for biodiversity, aquatic systems, and ecosystem function.

Illustrative focus: Quabbin-region connectivity

A corridor of protected forest from Route 9 toward the New Hampshire border shows how reserves can reinforce broader, diverse conservation management.