



State Owned Forest Reserves

Ken MacKenzie

DCR Division of Water Supply Protection
Director of Natural Resources

FOREST RESERVES AND ECOSYSTEM SERVICES

Forests provide a diverse suite of benefits

State-owned Forests in Massachusetts:

- Provide reliable, long-term public water supply
- Create habitat and natural communities
- Promote carbon sequestration and storage
- Support rural communities – wood production
- Facilitate wide ranging recreational opportunities



Balancing Reserve expansion with multi purpose agency goals

FOREST RESERVES AND BIODIVERSITY

- One component of a larger, statewide climate resilience and biodiversity plan
- **Reserves are part of a living landscape:** A mix of forests, rivers, and wetlands all working together to provide clean water, wildlife habitat, and a healthy ecosystem



THE POWER OF NUMBERS.

10%

Massachusetts set a forest conservation goal to manage at least 10% of all forested lands as reserves for their climate, habitat, and other benefits.

FOREST RESERVES IN MASSACHUSETTS

“Forest Reserves are formally designated landscapes where **natural processes**, including small and large-scale natural disturbances, such as wind and ice storms, **determine changes in the long-term structure, composition, function, and dynamics of the forest ecosystem** without deliberate human intervention, unless managers are confronted with a specific, unacceptable risk to human safety or forest health.”

*A Strategy for the Establishment and Protection of the Ecological Integrity
of Forest Reserves in Massachusetts*

Winter 2026

WHAT ARE THE GOALS OF FOREST RESERVES?

- Allow older forests to **mature and develop over time**, creating space for animals and plants that may struggle to survive in more active and developed areas
- Contribute to **carbon sequestration and storage** by keeping forests as forests
- Provide opportunities for **low-impact outdoor recreation** and other public enjoyment
- Serve as **reference sites for ecological research** to better understand how forests change and compare them to the woods we manage

The updated Forest Reserve Science and Technical Committee (FRSTAC) has been an important part of the process

FOREST RESERVES CRITERIA

Criteria used to identify a Forest Reserve

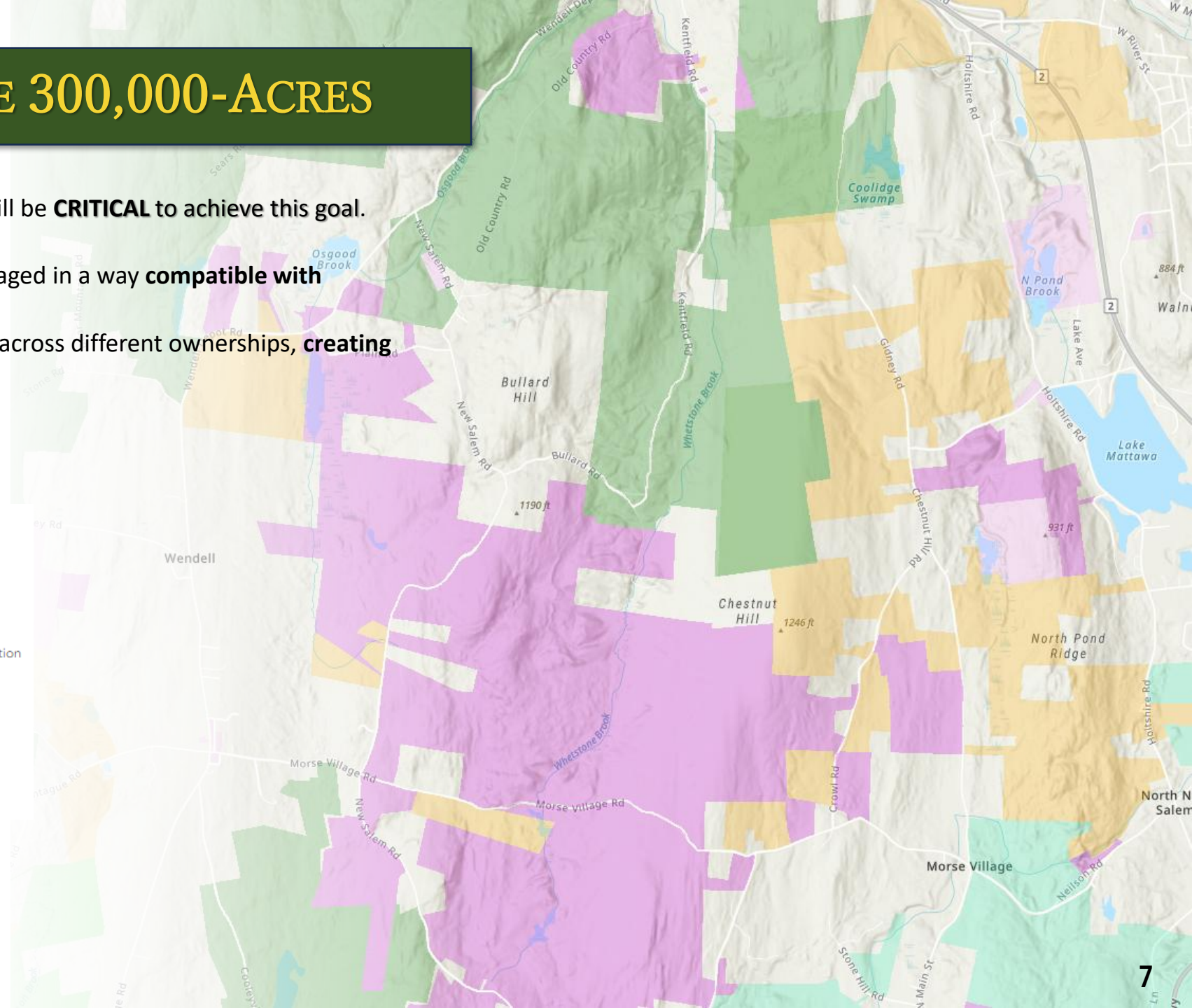
- **Representativeness**
 - Reflects diverse forest types across different elevations, soils, and landforms
 - Capture redundancy in forest traits (composition, structure, ecological services)
- **Landscape Context**
 - Connected to larger, protected, and resilient landscapes
 - Supports processes essential for biodiversity and ecosystem services
 - Located where recreational infrastructure is low-impact
- **Ecological Composition and Condition**
 - High forest integrity and contains unique natural features
 - Climate-resilient with limited potential barriers (invasive species, browse, pests)



PARTNERING TO ACHIEVE 300,000-ACRES

- **Partnerships** with land trusts and municipalities will be **CRITICAL** to achieve this goal.
 - **Identifying Existing Reserves**
 - Existing protected acreage that is managed in a way **compatible with reserve designation criteria**
 - Identify opportunities for reserves that span across different ownerships, **creating larger, more effective reserves.**

Protected and Recreational OpenSpace Polygons



Facilitated Discussion topics:

- Are there organizations for whom this work to designate passively managed forests resonates?
- How do Land Trusts track stewardship intentions over the longer term? How do we identify private (or municipal) forest already designated for passive management?
- Are there land trust representatives who would be interested in collaborating with EEA to better identify Forest Reserves across landholdings?

ACTIVITIES IN RESERVES

Standard Practices, Stewardship & Protections

- Low Impact Recreation
 - Hiking
 - Hunting, fishing, and trapping
 - Wildlife observation
 - Outdoor Education
- Maintenance for public safety and administrative access
- Public safety measures
- Control measures for unauthorized and illegal uses
- Preservation of historic and cultural resources
- Conversion and/or removal of non-native plantations
- Creation of new, low-intensity, non-motorized trails
- Invasive plant control

Activities Requiring Consultation

- Restore, maintain or enhance habitat for rare and endangered species and exemplary natural or rare communities per Natural Heritage and Endangered Species Program (NHESP) recommendations
- Control forest pests or pathogens with regional or statewide risk
- Implement Prescribed fire to sustain natural communities
- Restore water and wetland resources and aquatic connectivity (dam removal)
- Implement long-term monitoring and research
- Address unanticipated declines in biodiversity, forest health or carbon