

State Reservations

Will Guinn, Administrator
Forest Management Bureau
Division of Forest and Lands



Department of Natural and Cultural Resources

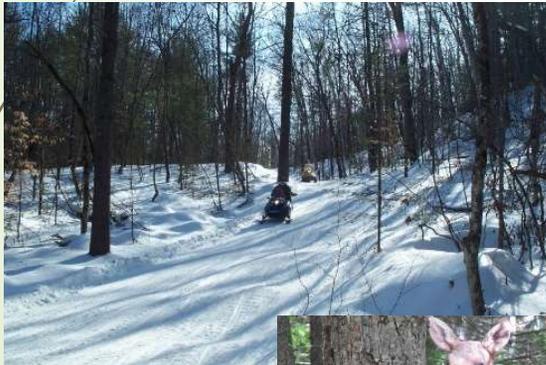
OUR MISSION

To protect, preserve, promote and manage the State's natural and cultural resources, supporting New Hampshire's high quality of life and strengthening the experiences of our residents and guests.

- ▶ Forests and Lands
- ▶ Parks and Recreation
- ▶ State Library
- ▶ Historical Resources
- ▶ State Council on the Arts

What is a State Reservation?

RSA 227-G:2 "Reservation" means public land under the jurisdiction of the department (DNCR) including, but not limited to: **state forest, state park, natural area, historic site, geological site, recreation trail, memorial area, fire tower, wayside area, heritage park, resource center, agricultural area, state forest nursery, fish pier, administrative facility, information center, demonstration forest, certain islands, and lands under lease to the department.**





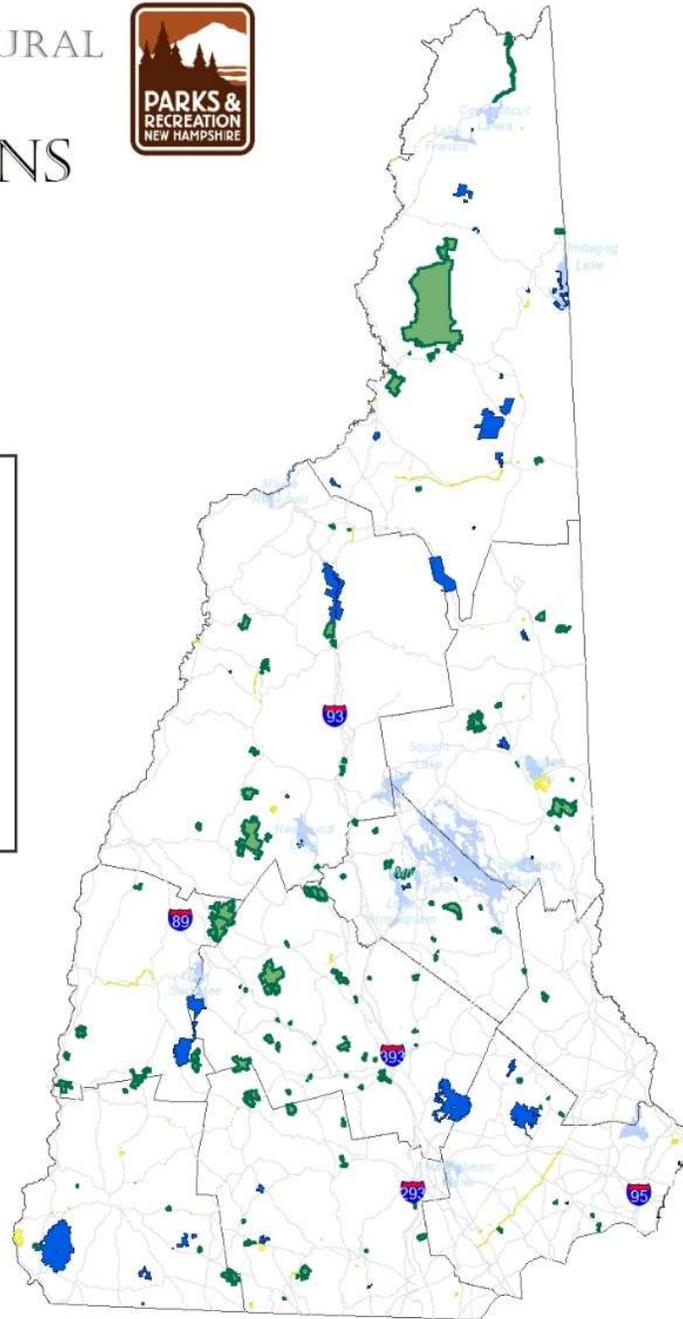
DEPT OF NATURAL AND CULTURAL
RESOURCES
STATE RESERVATIONS



218 State Reservations

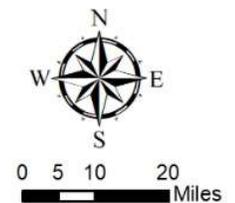
-  120 State Forests (96,006 acres)
-  43 State Parks (67,757 acres)
-  55 Other Properties (5,406 acres)

Total Reservation Acres: 169,169 acres



Map Prepared by: DNCR
Division of Forests and Lands
172 Pembroke Rd
Concord, NH 03301
(603) 271-2214

April, 2019





Purpose of State Reservations

*RSA 227-H:1 Declaration of Purpose. – It is hereby recognized and declared that state-owned reservations contribute to the conservation of natural resources and distinctive quality of life in the state. The public welfare of this state is served by the prudent acquisition and management of reservations to provide **forest benefits** and for the purposes of demonstrating sound forestry principles, protecting habitat for plants, animals, and other organisms, conserving forested watersheds, preserving areas of rare and exemplary natural beauty and ecological value, and providing for perpetual public access and use.*

RSA 227-G:2 "Forest benefits" include, but are not limited to, forest products, a viable forest-based economy, recreation opportunities, scenic values, healthful surroundings, climate mitigation, clean water, and biologically diverse populations of plants and animals.

The intent of the legislature concerning state ownership of reservations is clearly for multiple-use and protection of the natural resources.



State Park or State Forest?

- State Reservations are named and assigned a designation by the Governor and Council at the time of acquisition.
- **State Parks** are reservations that typically have some form of developed recreation that offers amenities and facilities to the public beyond that of simple outdoor space; including campgrounds, picnic areas, beaches, and ski areas. Most of these developed recreation areas charge a fee for admission, which supports the operation of the State Park system which is an operationally self-funded agency.
- **State Forests** are reservations that typically do not have any developed recreation (many do have trails) and are managed to provide *forest benefits* and to *demonstrate sound forestry principles* as mentioned above.



Management of State Reservations

State Reservations are managed by two divisions within DNCR; the Division of Forests and Lands and the Division of Parks and Recreation.

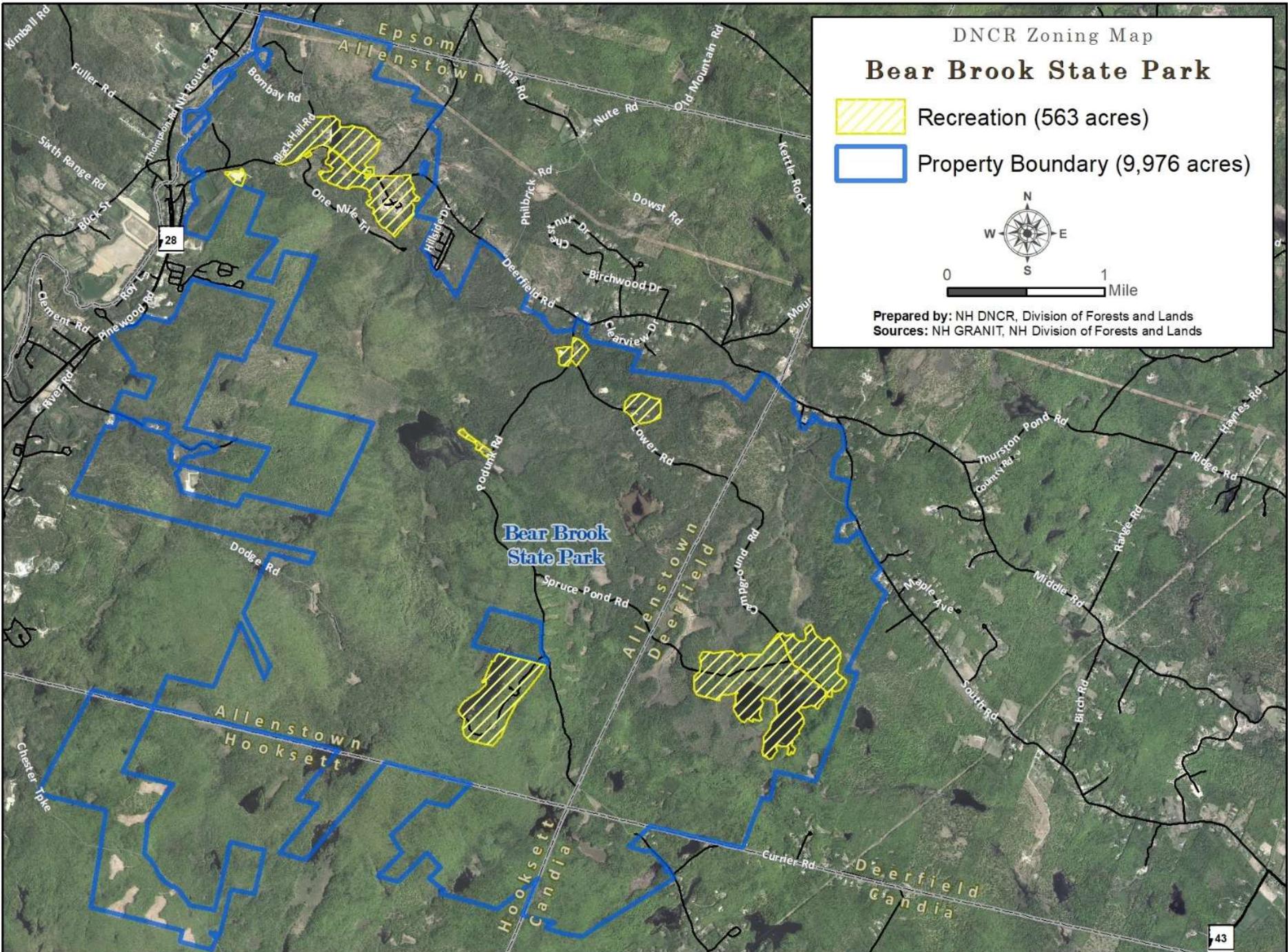
The **Division of Forests and Lands**, through its various bureaus, and in collaboration with other state agencies, is responsible for managing the natural resources on State Reservations; including the sustainable harvest of timber, creation and protection of wildlife habitat, maintenance of boundary lines, and protection of rare and endangered plants and exemplary natural communities.

The **Division of Parks and Recreation** is responsible for the management, operation, and maintenance of developed recreation areas on State Reservations as well as the management of motorized recreational trails for snowmobiles and all-terrain vehicles on both public and private lands.



Zoning (Land Use)

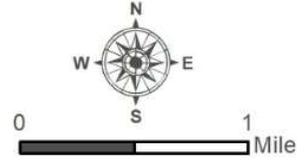
- So the Division of Forests and Lands manages State Forests and the Division of Parks and Recreation manages State Parks, right?
- Not so fast, despite the name or designation of a reservation, Zoning or Land Use is actually what dictates where each Division takes the lead role in the management of a State Reservation.
- The two main categories of Zoning are:
 - **Forestry Land Use** - any undeveloped timber land.
 - **Recreation Land Use** - limited to developed areas containing infrastructure, facilities, or amenities where the public is invited to recreate.
- State Forests are almost exclusively zoned Forestry Land.
- Recreation Land is actually only a small portion of most State Parks.
- In fact only 12,865 acres of all State Reservations are actually zoned as Recreation Land.



DNCR Zoning Map

Bear Brook State Park

-  Recreation (563 acres)
-  Property Boundary (9,976 acres)



Prepared by: NH DNCR, Division of Forests and Lands
 Sources: NH GRANIT, NH Division of Forests and Lands



Natural Resource Management



Scott Rolfe, Regional Forester
Forest Management Bureau
Division of Forests and Lands

Brief History of Bear Brook State Park





Overview

- ▶ Third largest State Reservation, 9,976 acres.
- ▶ Located in Allentown, Candia, Deerfield, and Hooksett.
- ▶ 1916: First piece of property acquired, Bear Brook SF, 413 acres.
- ▶ 1935-1942: CCC developed the park.
- ▶ 1942: 6,463 acres transferred to State from National Park Service.
- ▶ 1943: Game Refuge established, 3,175 acres.
- ▶ 1952: First campground opened.
- ▶ Two dams have been installed by Fish and Game; Hayes and Hall Mountain marshes
- ▶ 1981 was the last land addition to Bear Brook
- ▶ 1990's: Present Bear Brook management plan was developed and implemented.

Civilian Conservation Corps

- Civilian Conservation Corps (CCC) was established to provide employment and training to unemployed youth and WWI veterans during the Great Depression.
- Bear Brook State Park was developed by the CCC from 1935 to 1942.
- Established plantations on marginal farmlands purchased by the Federal Government.
- Completed miles of trails and built a fire tower that went into service in 1940 and was decommissioned in 1974

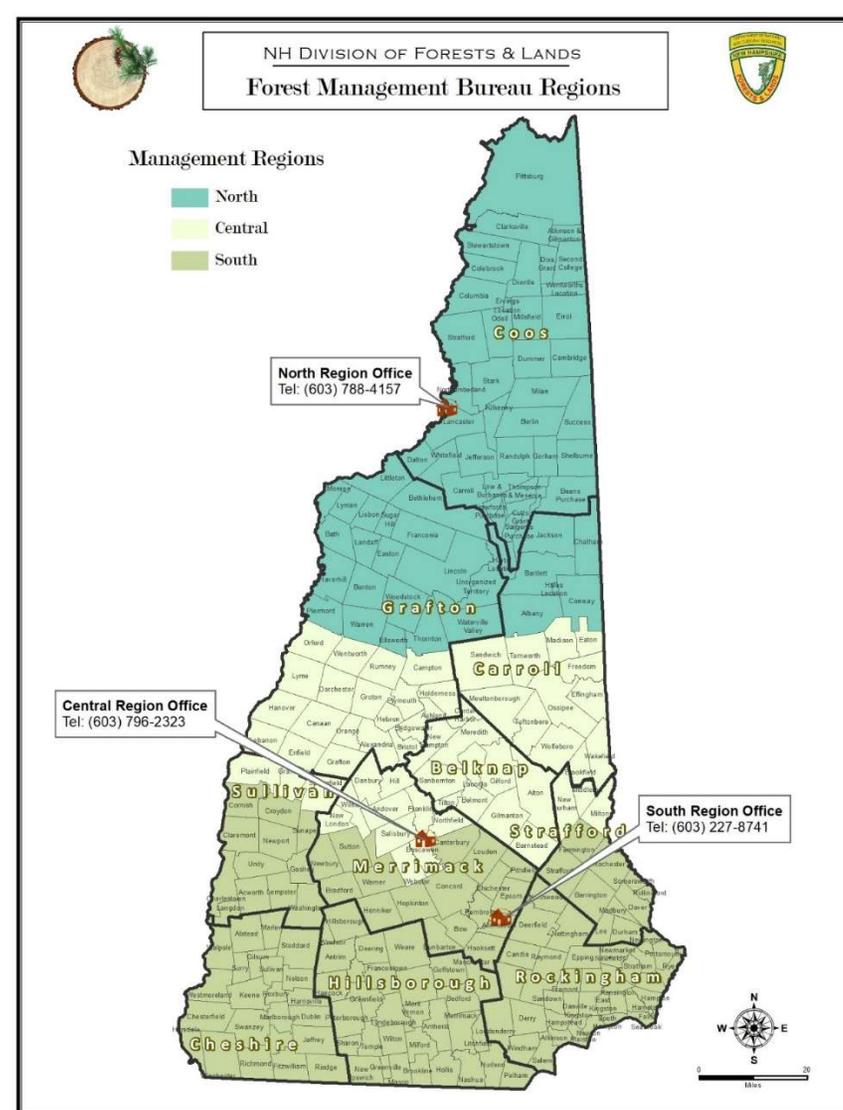


Division of Forests and Lands Structure

- Forest Management Bureau
- Land Management Bureau
- Natural Heritage Bureau
- Planning and Community Forestry Bureau
- Forest Protection Bureau
- Forest Health Program



Forest Management Bureau Regions



Forest management on all State Reservations is carried out under authority of RSA 227-G and RSA 227-H to achieve four main objectives:



Demonstrate Sound Forest Management Practices



Provide a Sustainable Yield of Forest Products



Help Maintain a Viable Forest-Based Industry



Preserve Other Forest Resources such as:

Wildlife Habitat



Water Quality and Forest Soils



Public Recreation



Rare Plants and Cultural Artifacts

Forest Management Approach for Bear Brook State Park





Forest and Wildlife Habitat Management on State Lands:

- Goes through an intensive 40 step process.
- Is reviewed by Fish and Game, Natural Heritage, Historic Resources, Parks and Recreation and Department of Environmental Services.
- Meets or exceeds the recommendations set forth in “Good Forestry in the Granite State” and the “BMPS for Erosion Control on Timber Harvesting Operations 2016 edition”.
- Follows all DES permitting procedures.
- Provides an opportunity for public comment.

Cooperative Research





Cooperative Wildlife Management



Cooperative Recreation Management



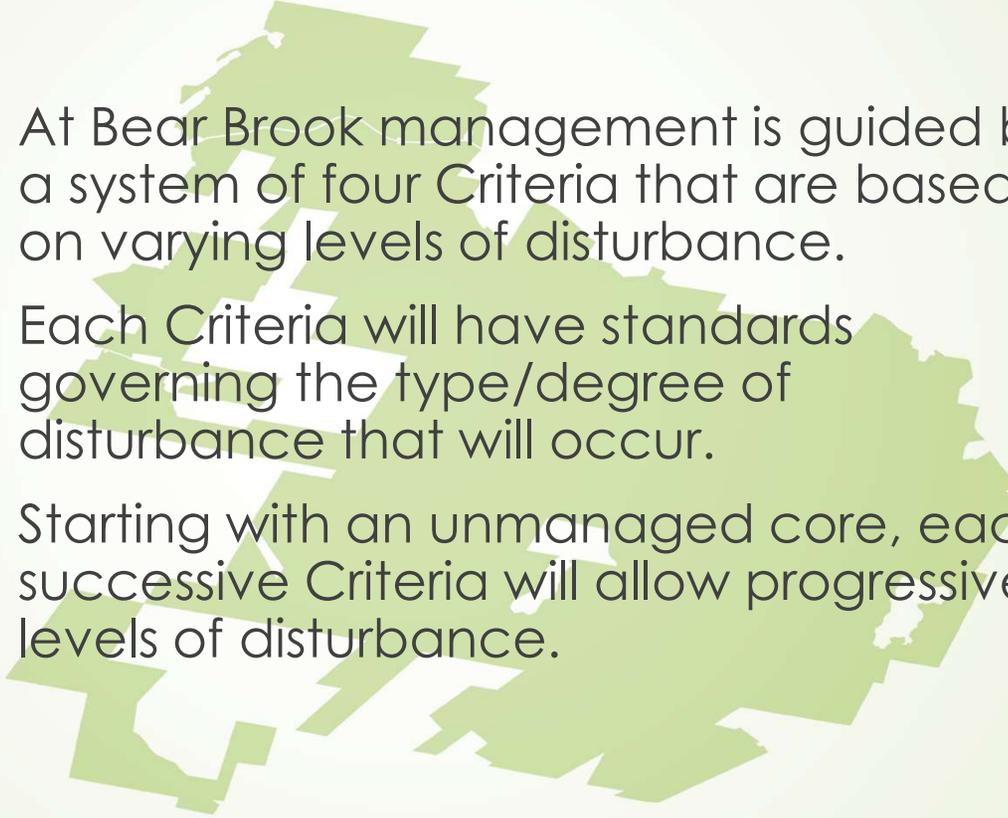
Bear Brook Management Plan - 1994

- Was created by the collaboration of partners for the management of all the resources in the park in order to protect, manage, or enhance specific attributes.
- Forest and wildlife management projects have been occurring on an annual basis over the past 70 years





Bear Brook State Park Management Criteria System

- 
- ▶ At Bear Brook management is guided by a system of four Criteria that are based on varying levels of disturbance.
 - ▶ Each Criteria will have standards governing the type/degree of disturbance that will occur.
 - ▶ Starting with an unmanaged core, each successive Criteria will allow progressive levels of disturbance.

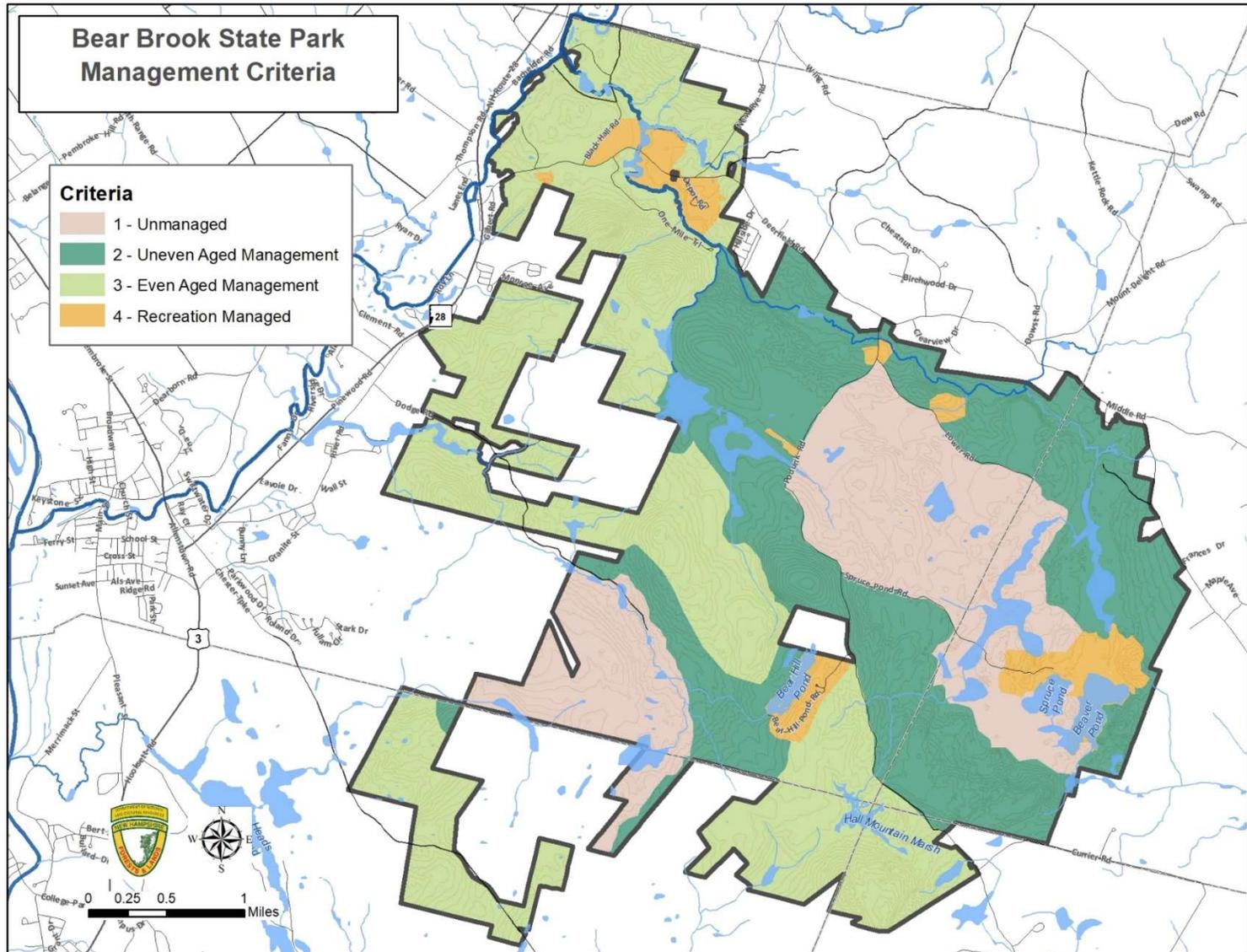
Management Criteria

- ▶ Criteria 1: 21% *“Undisturbed”* - 2,167 acres, this area will be left to progress through natural disturbances and forest succession.
- ▶ Criteria 2: 37% *Transition Zone* – 3,342.5 acres, uneven-aged management will be used to promote long rotations of mid to late successional species across a balance of age classes.
- ▶ Criteria 3: 37% *Highest levels of disturbance* – 3,903.5 acres, even-aged management will be used to create large scale openings to provide early successional and young forest habitat.
- ▶ Criteria 4: 5% *Developed Recreation* - 563 acres, facilities, campsites, beach, day use areas, etc.

Bear Brook State Park Management Criteria

Criteria

- 1 - Unmanaged
- 2 - Uneven Aged Management
- 3 - Even Aged Management
- 4 - Recreation Managed



White Pine Regenerating in a Shelterwood Cut



A feller-buncher harvests red pine to release advanced white pine regeneration



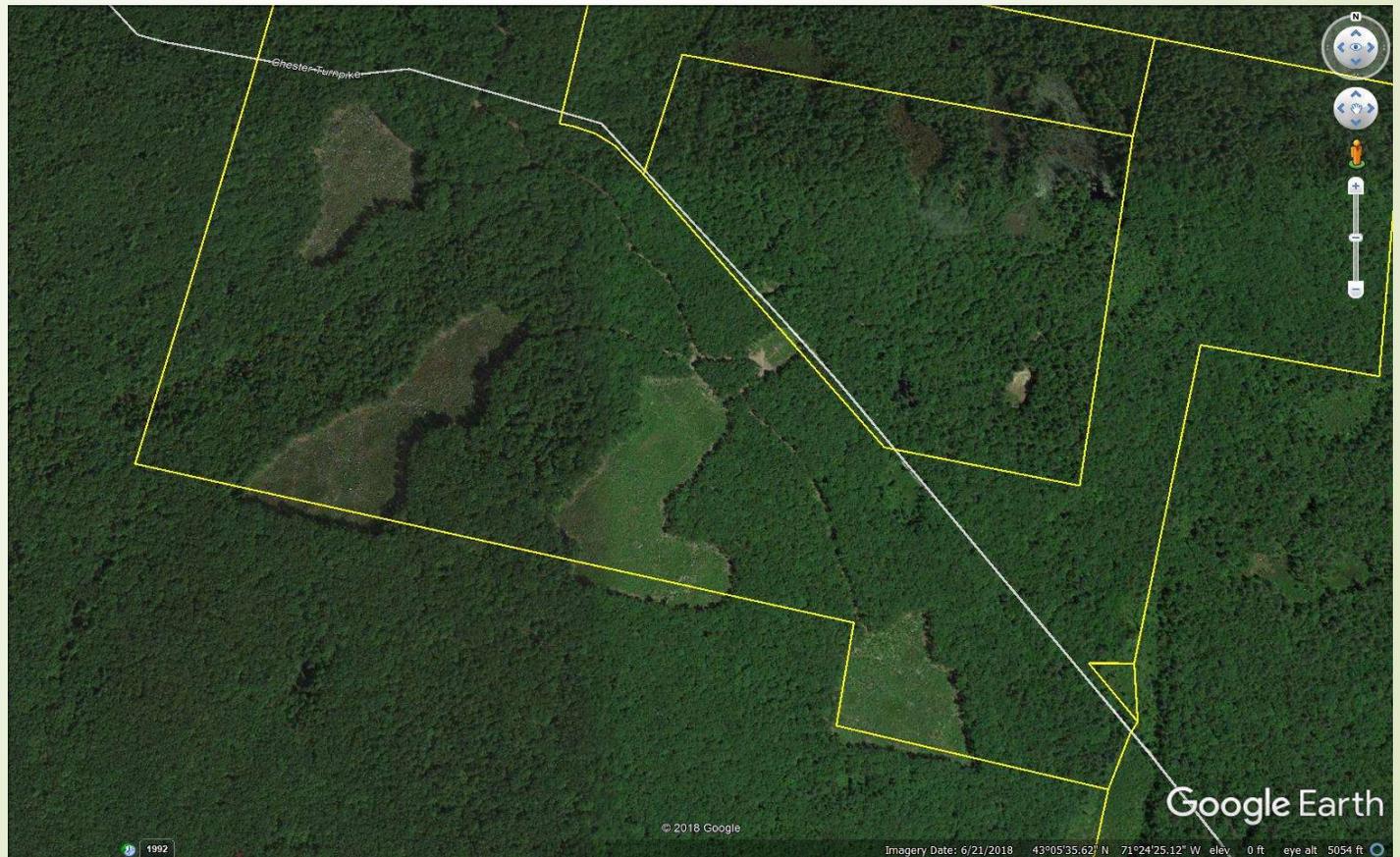
Overstory Removal to Release Advanced White Pine Regeneration



Universal Access Vista and Regeneration

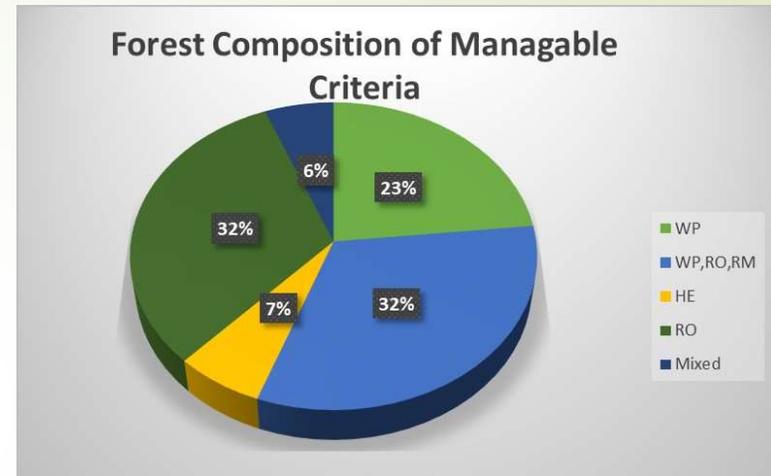


Young Forest Habitat Development in Even Aged Management Criteria



Timber Resource

- Approximately 1,000 acres of wetlands
- The timber resource is distributed fairly evenly between hardwood, softwood and mixed wood types with roughly one third of the acreage in each.

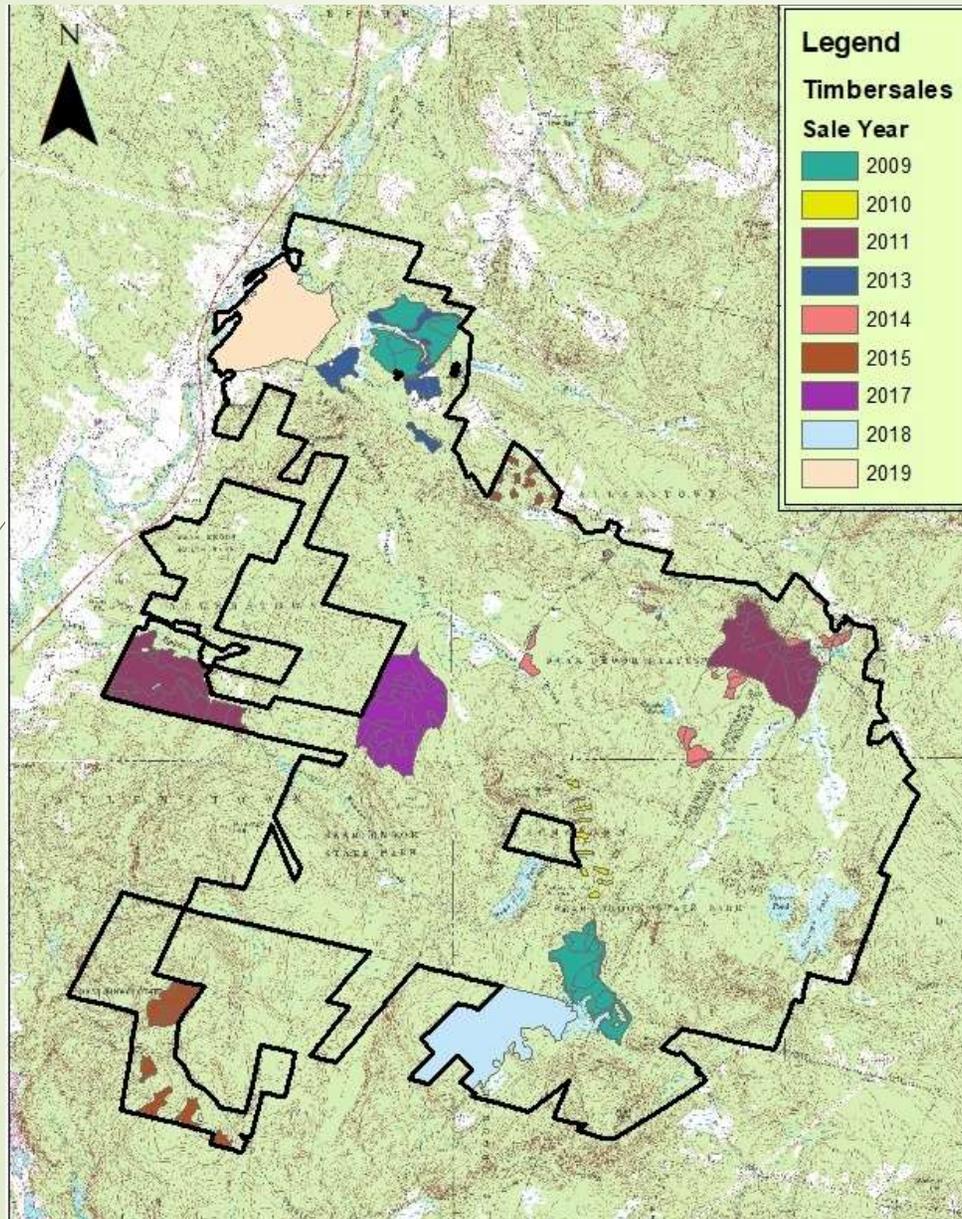


Acres Treated and Volumes Harvested over the last 10 Years

Project #	Year	Purchaser	Towns	Acres		Board Feet	Tons	Value
				Acres treated	Regenerated			
1.545	2010	HHP	Allenstown	72	20	158,160	1,753	\$70,171
1.549	2011	R.C. McLucas Trucking	Allenstown/Deerfield	155	2	638,158	6,028	\$116,413
1.553	2011	Timberwolf Logging	Allenstown	115	0	217,395	4,235	\$51,551
1.580	2013	Garland Lumber	Allenstown	118	118	1,663,147	2,757	\$279,724
1.587	2014	HFLC	Allenstown/Deerfield	95	11	596,655	3,616	\$86,240
1.592	2015	HFLC	Hooksett	221	45	270,280	5,113	\$115,567
1.605	2016	CCM	Allenstown	80	17	229,245	2,720	\$44,584
1.613	2017	Timberwolf Logging	Allenstown	150	28	340,900	6,780	\$65,424
1.624	2018	Garland Lumber	Hooksett	51	51	212,073	4,382	\$88,755
1.631	2019	Timberwolf Logging	Allenstown	160	0	635,745	6,202	\$121,726
10 Year Totals				1,217	292	4,961,758	43,585	\$1,040,155
10 Year Average				122	29	496,176	4,359	\$104,015



Forest Management Projects





Cross discipline considerations that are considered on every project :

- 
- ▶ Use of appropriate buffers for all wetlands and water bodies that meet or exceed those in “Good Forestry in the Granite State”.
 - ▶ Use of appropriate crossing devices as recommended in the BMPS for erosion control.
 - ▶ Use of appropriate buffers for historic resources such as cellar holes and cemeteries as recommended by DHR.
 - ▶ Manage for critical wildlife habitats in conjunction with Fish and Game.
 - ▶ Manage exemplary natural communities in conjunction with NHB.
 - ▶ Work with Parks and Recreation to share roads/trails and use aesthetic buffers.

Interpreting Forest Management Activities and Addressing Public Interest





Recreation Management



Johanna Lyons, State Park Planning & Development Specialist
Bureau of Park Operations
Division of Parks and Recreation

Division of Parks and Recreation

RSA 216-A:1

- To protect and preserve scenic, recreational and other areas
- To continually provide additional park areas and facilities
- To make these areas accessible to the public
- To encourage and support tourism and related economic activity within the state





Division of Parks and Recreation - Structure

- Park Administration
- Bureau of Park Operations
 - 3 regions; South, Central, Great North Woods
 - 2 management areas; Franconia Notch State Park & Mount Washington State Park
 - Planning & Development Office
 - Construction and Maintenance Office
- Trails Bureau
 - 3 regions; North, Central, South
- Historic Sites Bureau

Division of Parks and Recreation - Funding

- RSA 216-A:3 (self-funding)
 - Fees to recover portion of budget expenses consistent with Parks Intent
 - Fees according to market conditions and private industry trends
- \$30 million operating budget
 - Forty-one (41) of 93 parks generate revenue
 - Twenty-six (26) generate positive revenue
 - More than one million visitors at fee sites





Division of Parks and Recreation - Statewide

- State Parks, Historic Sites, Waysides, and Rail Trails
- Cannon Mountain Ski Area, Franconia Notch State Park
- 93 properties, 21 camping areas
- Motorized Trails
 - 7,300 miles of snowmobile trails
 - 1,200 miles of ATV trails
- Non-motorized Trails
 - Hundreds of miles connected to federal and community trails

Recreation Demonstration Area

- ▶ Bear Brook State Park is unique among New Hampshire's Depression-era parks in its origins as a federally-owned Recreational Demonstration Area.
- ▶ The progressive New-Deal RDA program was aimed at converting poor "sub-marginal" land to a better use, specifically outdoor recreation accessible from urban areas.
- ▶ Bear Brook was the only RDA in New Hampshire and one of a handful in New England.





Bear Brook State Park Recreational Use

- Swimming
- Picnicking
- Camping
- Trails
- Hunting/Fishing
- Nature observation
- Archery course
- Boating

Category	Income	Expense
Camping	\$169,202	
Admission	\$70,082	
Pavilion	\$15,594	
Other	\$7,256	
Retail	\$40,750	
Compensation		\$164,370
Other		\$70,759
Total \$67,756	\$302,885	\$235,129



Bear Brook State Park Day-Use Visitorship

Year	Paid	Prepaid	Comp	Total
2014	12,763	3,177	1,397	17,337
2015	14,284	2,336	2,098	18,718
2016	16,829	4,382	2,659	23,870
2017	13,078	2,478	2,699	18,255
2018	14,643	3,857	2,420	20,920



Bear Brook State Park Trail Use

- Mature network of single and multiple use trails
- Approximately 40 miles of non-motorized trails
- Permitted Trail Use
 - Hiking
 - Mountain biking
 - Horseback riding
 - Snow shoeing
 - Nordic skiing
 - Mushing
 - Winter OHRV (snowmobile/ATV)

Bear Brook State Park Camping

- ▶ Beaver Pond Campground
 - ▶ 112 campsites
 - ▶ Campers beach
 - ▶ Easy access to trail system
- ▶ Bear Hill Pond Camp
 - ▶ Former 4H Camp
 - ▶ Redeveloping the cabins in Oaks Unit
- ▶ Smith Pond Shelter
 - ▶ Walk-to primitive shelter
- ▶ Catamount Campground
 - ▶ NEW! Redeveloping the family picnic area





Bear Brook State Park Camping Occupancy

Year	% Occupied
2014	41.28
2015	43.05
2016	47.37
2017	46.99
2018	51.39

Bear Brook State Park Infrastructure

- Highly designed and built, infrastructure supports recreation and property management.
- Approximately 134 buildings in 6 administrative units
 - Catamount Pond
 - Depot Area
 - Podunk Road
 - Bear Hill Pond Camp
 - Spruce Pond Camp
 - Beaver Pond Camp



Bear Brook State Park Infrastructure

- Pavilions (3)
- Playgrounds (2)
- Beaches (4)
- Camps (2)
- Dams (5)
- Septic Systems (35)
- Water Systems (6)
- Picnic Area – 15 picnic tables and 10 grills





The Planning Process

- Tech Team
- Steering Committee
- Public Listening Session
- Draft Chapter Reviews
- Draft Plan
- Public Comment Period
- Draft Plan Revision
- Final Plan Adoption



Technical Team

- Responsible for drafting the updated chapters in the plan.
- Comprised of Natural Resource, Cultural Resource, and Recreation professionals and specialists from various state agencies.
- Many of these individuals are responsible for the management that occurs on the property.
- Others are routinely consulted by the managers or work in collaboration with the managers to protect or enhance various resources.

Bear Brook Management Plan Technical Team 2019

Agency	Name/Title
DNCR - Division of Parks & Recreation	Johana Lyons, Parks Planner
DNCR - Division of Parks & Recreation	Tara Blaney, Regional Park Manager
DNCR - Division of Parks & Recreation	Christina Barton, Park Manager
DNCR - Division of Parks & Recreation	Chris Gamache, Chief, Bureau of Trails
DNCR - Division of Parks & Recreation	Mike Weeks, Regional Trails Supervisor
DNCR - Division of Parks & Recreation	Seth Prescott, Design Development and Maintenance
DNCR - Division of Forests & Lands	Will Guinn, Administrator, Forest Management Bureau
DNCR - Division of Forests & Lands	Scott Rolfe, Regional Forester
DNCR - Division of Forests & Lands	Billy Kunelius, Forester
DNCR - Division of Forests & Lands	Lisa Scott, GIS Specialist
DNCR - Division of Forests & Lands	Kyle Lombard, Forest Health Program Coordinator
DNCR - Division of Forests & Lands	Pete Bowman, Ecologist, Natural Heritage Bureau
DNCR - Division of Forests & Lands	Tracy Boisvert, Administrator, Land Management Bureau
DNCR-Division of Historical Resources	Mark Doperalski, State Archaeologist
NH Fish & Game Department	Jim Oehler, State Lands Habitat Biologist
NH Fish & Game Department	Melissa Doperalski, Wildlife Diversity Biologist
NH Fish & Game Department	John Magee, Fish Habitat Biologist



Steering Committee

The Steering Committee shall serve in an advisory capacity, providing advice to the Technical Team during the process of updating the Bear Brook State Park Management plan to ensure the representation of the multiple interests that utilize the park, as well as the protection of the natural and cultural resources contained within the park.

Steering Committee Members are appointed by the Commissioner of the Department of Natural and Cultural Resources and shall serve a term of one year during which time they shall participate in four to six public meetings, review draft plan revisions, listen to and consider public comment, and make recommendations to the Technical Team to assist in the production of an updated management plan that meets the spirit of the vision and best serves the public for the next 15 years.

At the completion of the planning process the Steering Committee, through its chairperson, shall recommend the updated management plan to the Commissioner of the Department of Natural and Cultural Resources. Upon review and approval, the Commissioner will sign and formally adopt the new plan.

Bear Brook Management Plan Steering Committee 2019

Representative	Name/Title
Town of Allenstown	Sandra McKenney, Selectman
Town of Candia	Tom St. Martin
Town of Deerfield	TBD
Town of Hooksett	Mathew Lavoie, Code Enforcement
State Park System Advisory Council	Suzanne Smith, State Representative
Statewide Trail Advisory Council (Recreation At-large)	Tom DiMaggio, Chair
New England Mountain Bike Association (Non-motorized Recreation)	Dan Dwyer, Vice President
Derry Trail Riders (Non-motorized Recreation)	Avis Rosenfield
Southern New Hampshire Snow Slickers (Motorized Recreation)	Steve Hampl
New Hampshire Wildlife Federation (Big-game and Sportsmen)	Eric Orff
New Hampshire Audubon (Non-game Wildlife)	Carol Foss, Senior Advisor for Science and Policy
The Nature Conservancy, New Hampshire Chapter (Forest Ecology)	Jeff Lougee, Director of Stewardship and Ecology
Society for the Protection of New Hampshire Forests (Forest Management)	Wendy Weisiger, Managing Forester
Fort Mountain Trucking (Forest Products Industry)	Jeff Eames, President
Cultural and Historic Resources	Armand Verville



Public Listening Session

- The purpose of the listening session is to hear opinions from state-wide associations, recreational clubs, forestry and wildlife professionals and citizens on the current management of the property.
- Participants are asked to comment on current management, existing uses and demand and suitability of the property.
- The following are topics the department has identified that will assist in the update of the management plan
 - Opportunities and Conflicts
 - Support facilities
 - New activities
 - Facility improvements need/desired
- Speakers will be asked to sign up in advance of the meeting with the Park Planner for scheduling purposes
- Public comment will be held after the last registered speaker has presented.



Chapter Review

- Chapters will be presented by members of the Tech Team to the Steering Committee at future meetings.
- Drafts provided to committee and placed on website in advance.
- Steering Committee to ask questions and provide input after the presentation.
- Time for public comment on the presented chapters at the end of each Steering Committee meeting.
- Tech Team will take comments under advisement for the draft plan.



Draft Plan

- After all chapters have been presented and revised a draft plan will be prepared by the Tech Team.
- The draft plan will be presented to the Steering Committee and any changes to the chapters will be highlighted.
- The Draft plan will be posted on the website and a 30 day public comment period will begin.
- Addresses (written and email) will be provided for comments.
- During this period a second publiclistening session will be held.



Final Plan Adoption

- After the 30 day public comment period has ended, comments will be reviewed, categorized and provided to the Steering Committee.
- The draft plan will be revised and presented to the Committee for final review.
- The Steering Committee will make a recommendation to the Commissioner.
- Ultimately the Commissioner will make the final decision to adopt the plan based on the determination that it provides for multiple use and protection of the resources.

Questions?

- Bear Brook State Park Steering Committee
<https://www.nhstateparks.org/about-us/commissions-committees>
- Division of Forests and Lands, <https://www.nhdfi.org>
- Division of Parks and Recreation,
www.nhstateparks.org
- Department of Natural and Cultural Resources,
<https://www.dncr.nh.gov/>

