# What is conservation planning?

- The identification of lands with important natural resource values
- Development of protection and management strategies for priority lands
  - Conservation acquisition and natural resource management
  - Private ownership with regulatory protections
  - Private ownership with management agreements

# What are important natural resource values?

- Water supply lands
  - Watersheds of surface supplies
  - Lands overlying stratified drift aquifers
- Flood storage areas
  - Wetlands
  - Floodplains
- Shorelands and riparian areas
- Highly productive agricultural soils
- Productive forest lands
- Important wildlife habitat
- Mineral deposits
- Scenic viewsheds

# Who does conservation planning?

- **Federal agencies**
  - **US Forest Service**
  - **US Fish & Wildlife Service**
  - **Natural Resource Conservation Service**
  - **Army Corps of Engineers**

# Who does conservation planning?

- Federal natural resource agencies
- **State natural resource agencies**

## Maine

- **Maine Bureau of Parks and Lands**
- **Maine Forest Service**
- **Maine Department of Inland Fisheries and Wildlife**

## New Hampshire

- **NH Division of Forests and Lands**
- **NH Division of Parks**
- **NH Fish and Game Department**
- **NH Water Resources Board**

## Vermont

- **Vermont Department of Fish and Wildlife**
- **Vermont Department of Forests, Parks, and Recreation**
- **Vermont Department of Environmental Conservation**

# Who does conservation planning?

- Federal agencies
- State agencies
- **Municipal government**
  - **Conservation Commissions**
  - **Town Forest Committees**
  - **Open Space Committees**

# Who does conservation planning?

- Federal agencies
- State agencies
- Municipal government
- National and Statewide non-profit organizations
  - Trust for Public Lands
  - The Nature Conservancy
  - The Conservation Fund
  - Forest Society of Maine
  - Maine Audubon Society
  - Maine Farmland Trust
  - Society for the Protection of New Hampshire Forests
  - Audubon Society of New Hampshire
  - Audubon Vermont
  - Vermont Land Trust

# Who does conservation planning?

- Federal agencies
- State agencies
- Municipal government
- Non-profit organizations
- Local land trusts
  - Lower Kennebec Regional Land Trust
  - Mahoosuc Land Trust
  - Maine Wilderness Watershed Trust
  - Sebasticook River Watershed Association
  - Five Rivers Land Trust
  - Lakes Region Conservation Trust
  - Mondadnock Conservancy
  - Piscataquog River Watershed Association
  - Jericho Underhill Land Trust
  - Lake Champlain Land Trust
  - Middlebury Area Land Trust
  - Passumpsic Valley Land Trust

# Who does conservation planning?

- Federal agencies
- State agencies
- Municipal government
- Non-profit organizations
- Local land trusts
- **Coalitions and partnerships**
  - **Mount Agamenticus to the Sea Conservation Initiative**
  - **Quabbin to Cardigan Conservation Collaborative**
  - **Great Bay Partnership**
  - **Vermont Housing and Conservation Board**

# How does one plan for wildlife habitat and mobility?

- **Identify core habitat areas**
- **Identify linkages between core habitat areas**

# Core habitat areas

- Provide daily needs for food, water, shelter
  - Consistent throughout the year for some species (e.g., hairy woodpecker, red squirrel)
  - Differ by season for some species (e.g., black bear, moose, wood frog, migratory birds)

# Landscape linkages

- Difficult to document
- Exist at many different scales
  - Amphibians moving between upland habitat and breeding pools (<2000 ft)
  - Turtles moving from wetlands to upland egg-laying sites (<10 mi)
  - Otters moving between watersheds (20-30 mi)
  - Bears moving from spring seeps to summer berry patches to fall mast stands to winter den sites (15 mi radius)
  - Birds migrating between North American breeding areas and tropical wintering areas (thousands of miles

# Tools for locating landscape linkages

- Direct observation
- Tracking
- Radio-telemetry
- Computer modeling
  - Map land cover
  - Assign resistance values
  - Conduct least cost path analysis

# Opportunities for Collaborative Planning

- Identify and prioritize intersections between wildlife travel linkages and transportation network
- Use straight line diagrams to document sensitive areas
- Develop strategies for minimizing conflict between moving animals and moving vehicles
- Improve dangerous situations during scheduled repairs and reconstructions