

Protecting New Hampshire's Wildlife in a Changing Climate

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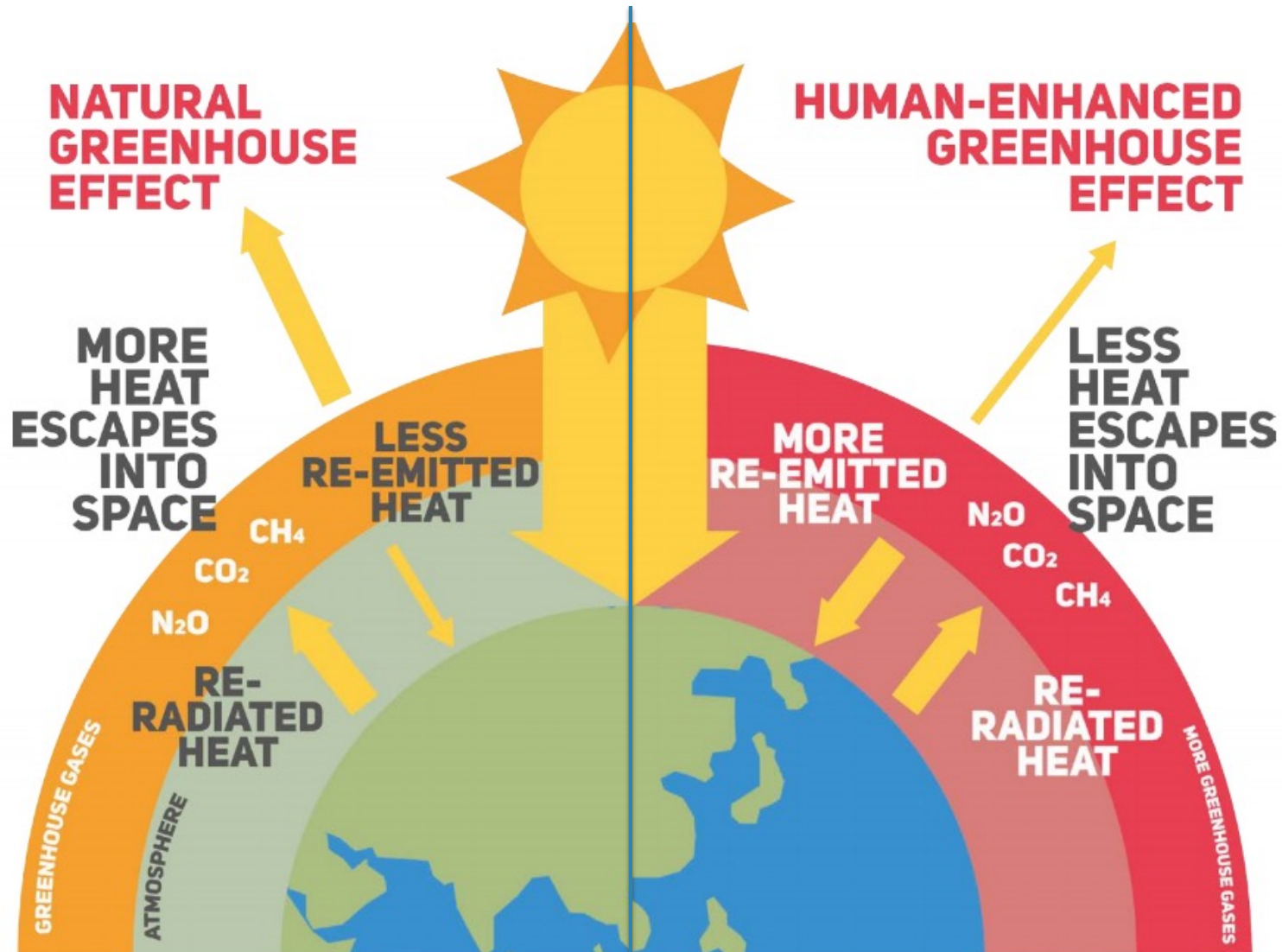
51st New Hampshire Association of Conservation Commissions
Annual Meeting and Conference
November 6, 2021

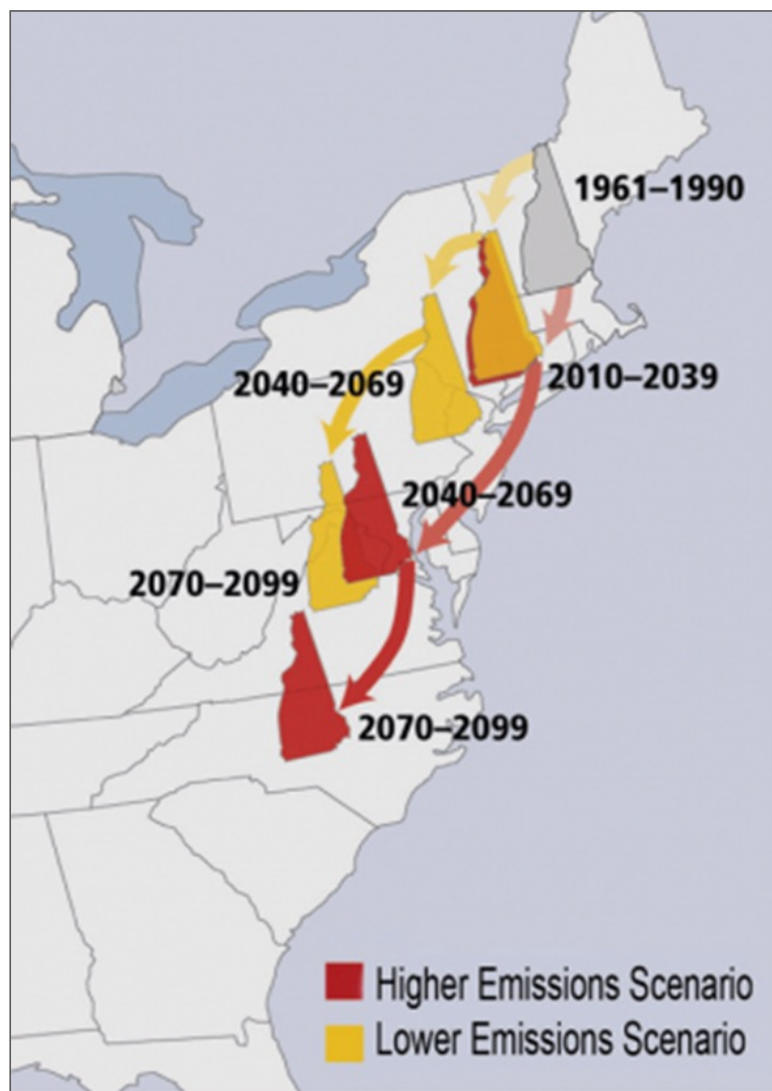
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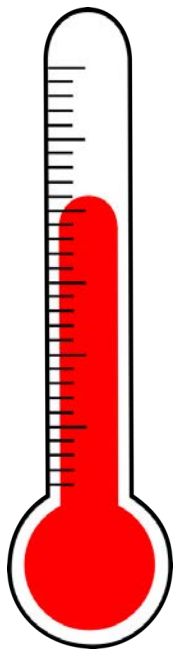


Source: Will Elder, National Park Service (from livescience.com)





What does this mean for New Hampshire?



Warmer temperatures, especially in winter

Seasonal shifts in precipitation

Reduced snowpack and ice cover

Longer frost-free season

More extreme precipitation

More intense storms

Rising seas





Extreme storms and flooding



Bri Benvenuti /USFWS

Rising sea levels

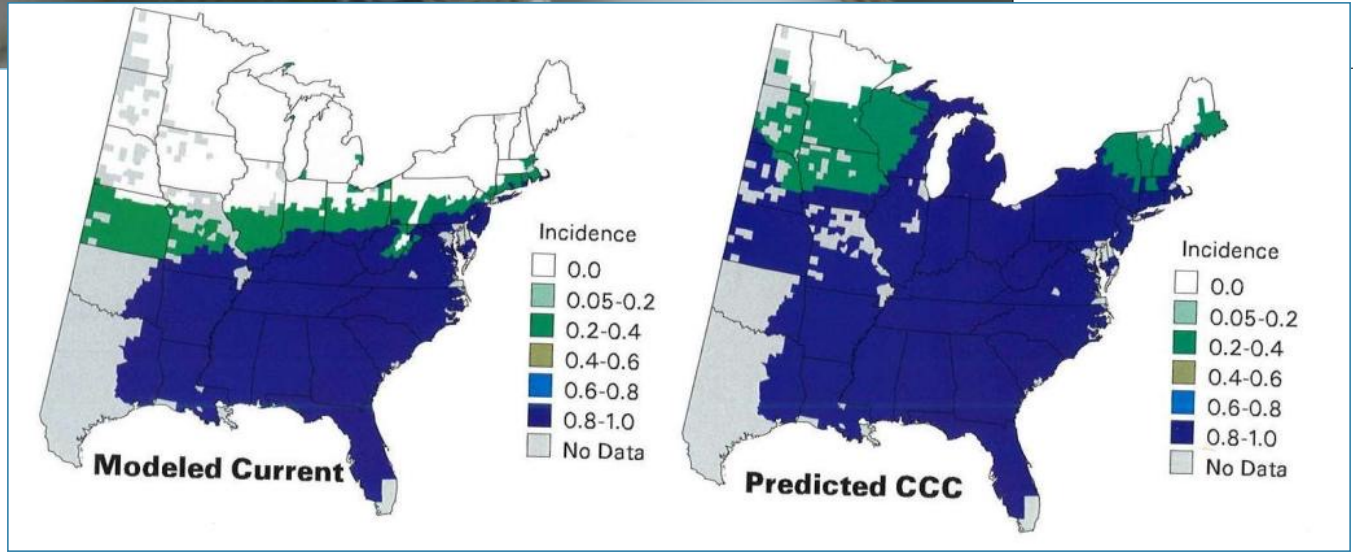
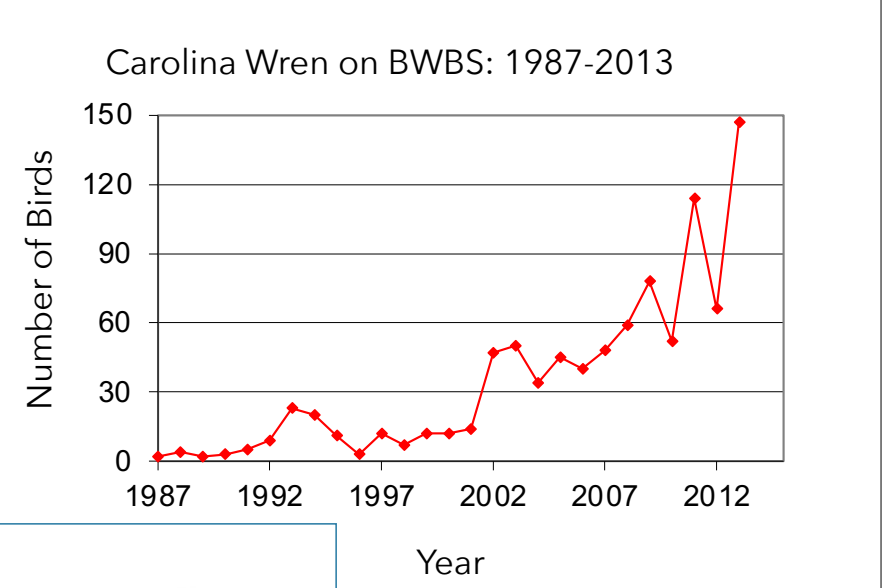




Snow depth and winter ice



Shifts in plant communities and wildlife





Kent McFarland/CC



Phenology



Loss of thermal habitat



Invasive species and pests



L. S. Mills Research Photo

Moose



Dan Bergeron

Moose on the Decline in N.H.

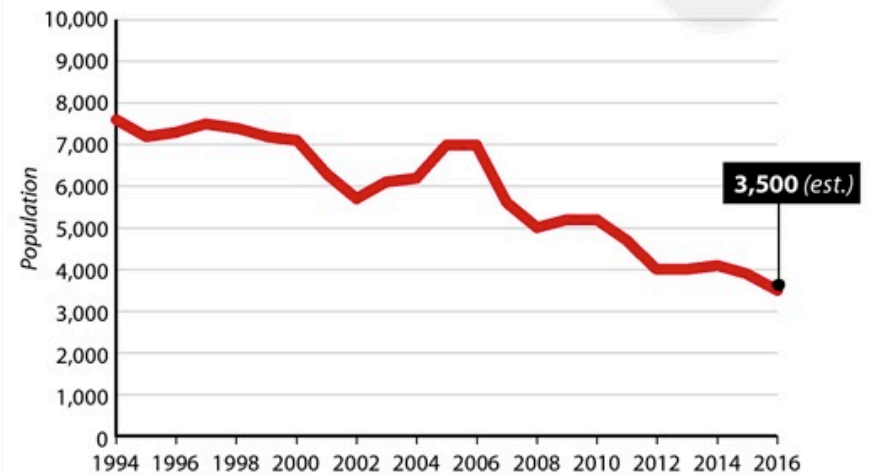
The estimated moose population in New Hampshire has decreased by more than 50 percent since the mid-1990s. State biologists believe a spreading tick population, bolstered by shorter winters, is the main culprit.



Moose
Alces alces

NEW HAMPSHIRE MOOSE POPULATION

Estimated, 1994-2016



SOURCE: New Hampshire Fish & Game Dept.

PAUL HORN / InsideClimate News

Brook trout



Pollinators



An aerial photograph showing a meandering river with muddy, brownish water flowing through a dense, vibrant green landscape. The river winds from the top left towards the bottom left, with several smaller tributaries branching off. The surrounding land is covered in thick vegetation, appearing as various shades of green. The overall scene suggests a natural, possibly wetland or marshy, environment.

**Plants and animals
must adapt or relocate**



Take Action



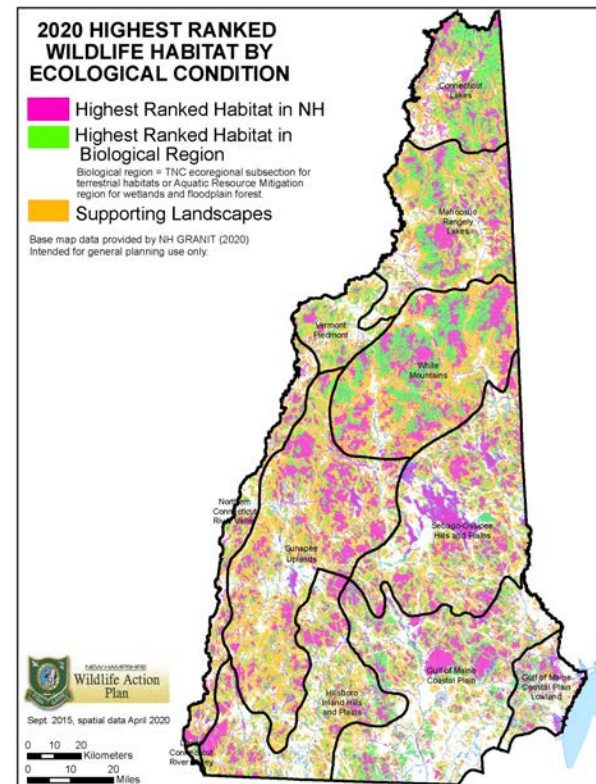
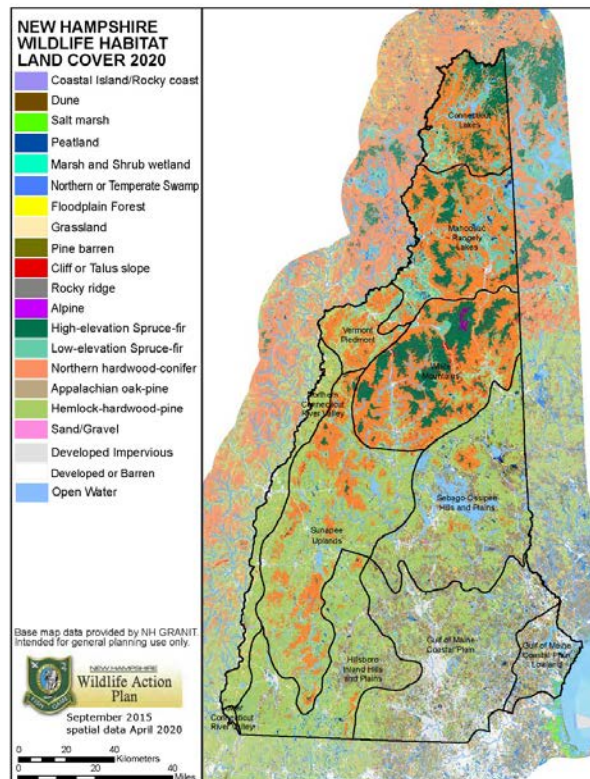
Climate Resilience

The ability of a species, habitat, or ecosystem to adjust to environmental disturbance caused by climate change by evolving, taking advantage of local opportunities, or relocating to more suitable habitat

**Conserve large
habitat blocks**



NH Wildlife Action Plan Maps



Protect wildlife corridors



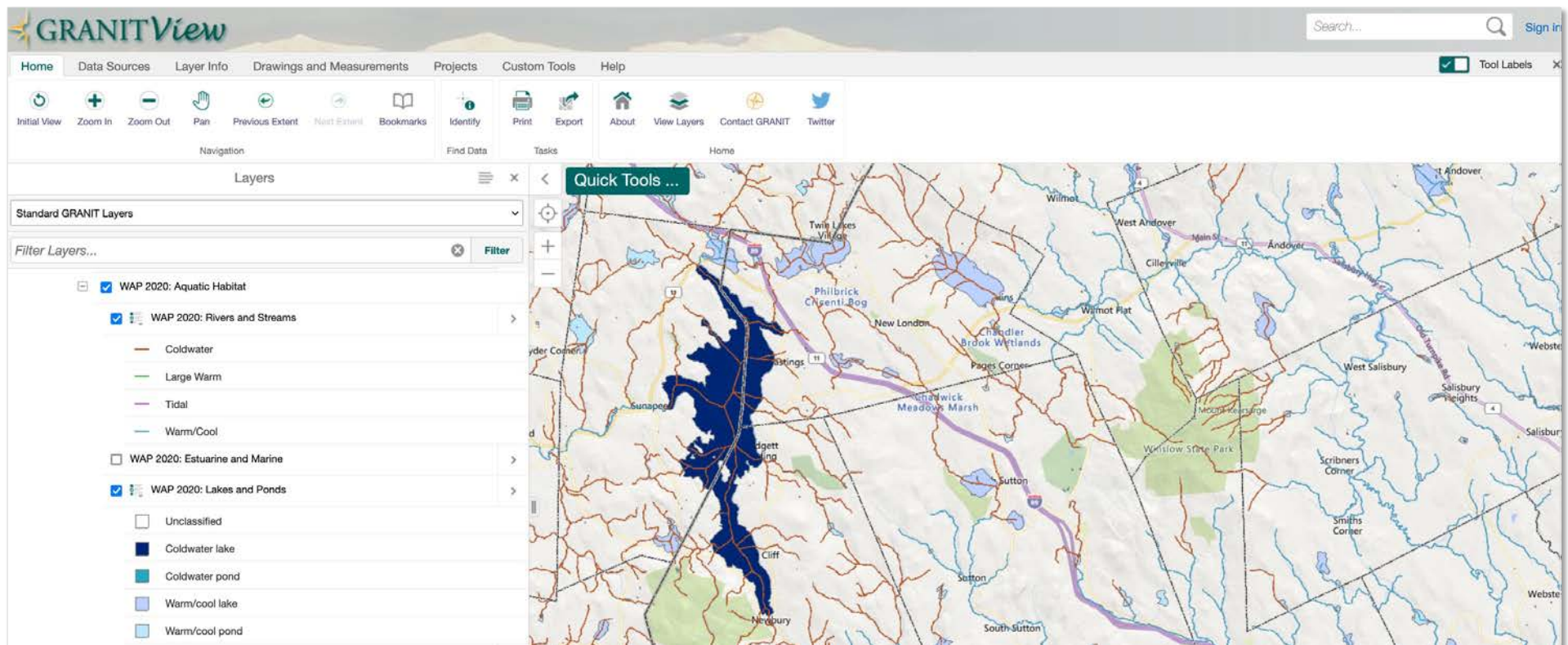
NH Wildlife Corridors Map





Protect and restore riparian buffers

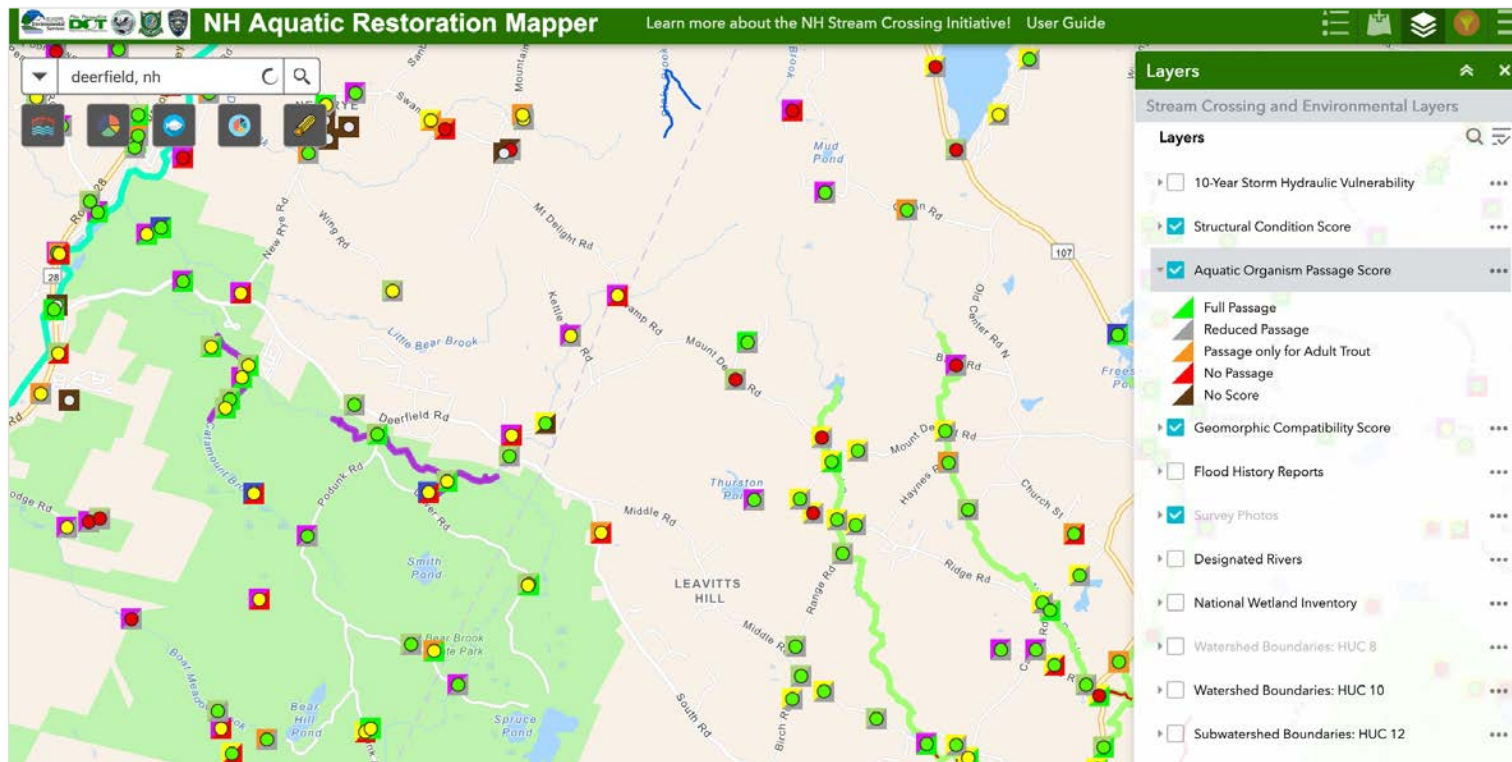
Aquatic habitat & protections





Restore aquatic connectivity

Aquatic Restoration Mapper



Include climate in municipal planning



**Conservation
criteria/planning**



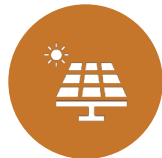
Master plan updates



**Development
review & zoning
ordinances**



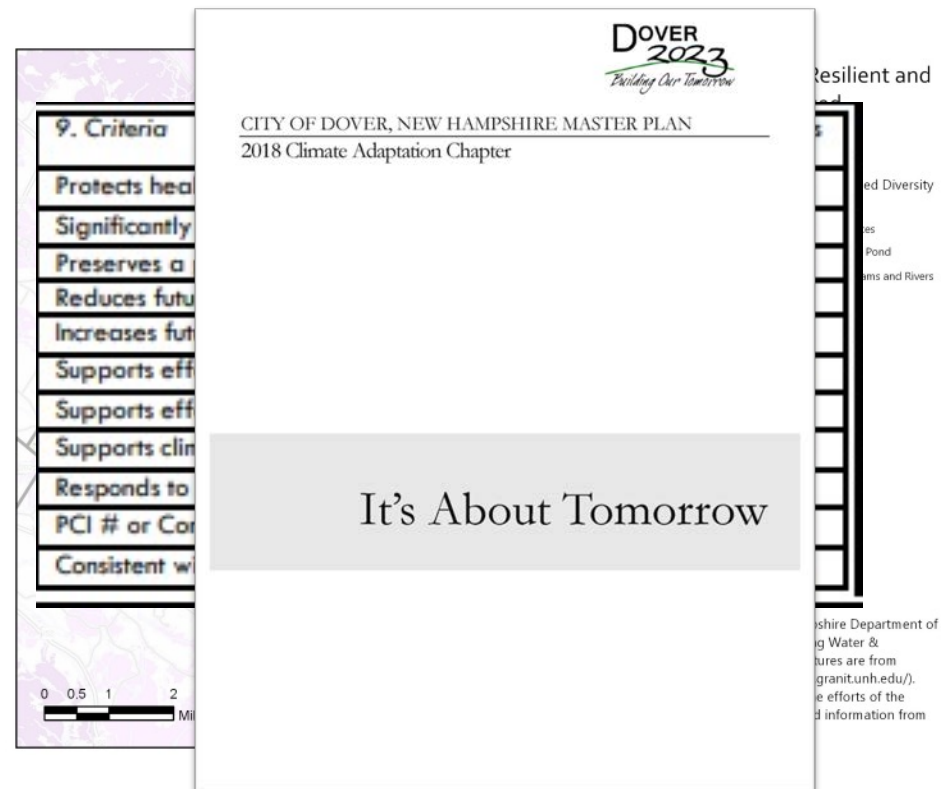
**Infrastructure
decisions**



**Siting renewable
energy projects**

Municipal planning examples

- **Barrington** added climate-related data to their natural resources inventory
- Several communities have added climate considerations to their criteria for land conservation
- **Dover** added climate to criteria for capital improvement planning decisions
- More and more communities are adding climate to their master plans

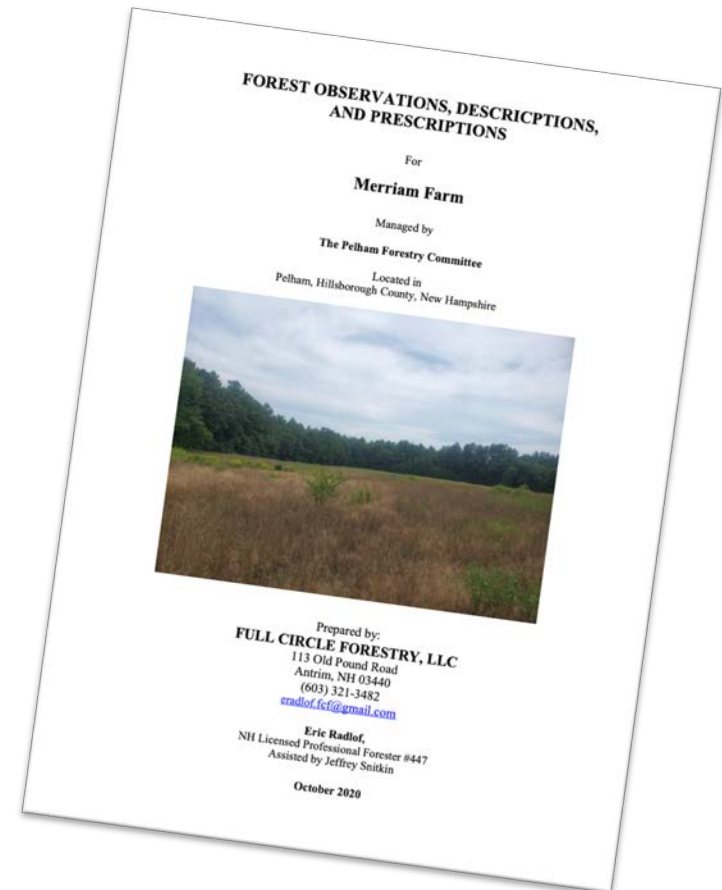


Consider climate in habitat management



Habitat management example

"Tending young, developing stands, or stand components, along with periodic harvests of commercial size trees will produce multi-aged stands over time that... provide increased diversity and complexity while **improving resiliency to natural disturbances and climate change.**"



**Share
with your
community**



Outreach example

Claremont conservation commission climate outreach series:

- Climate change 101
- Vernal pools citizen science project
- Climate change and birds
- E-bird and Merlin apps
- Pollinators and climate change
- Pollinator garden planting work day (Monarch Waystation)
- River restoration and resilience
- Stormwater management solutions



Photos: Eric Zengota

Resources



www.TakingActionForWildlife.org/resources/climate-change-resources



Questions?

Discussion

- What do you see as your community's biggest challenge related to climate change?
- Has your town taken any of these actions to incorporate climate in wildlife/habitat protection?
- If not, do any of these actions feel like something you may want to take on?
- What additional resources or assistance would be useful in working on climate change in your community?