

Transferring Conservation Science in New Hampshire's Coastal Watershed

**CONNECT
TO PROTECT**

NEW HAMPSHIRE COASTAL WATERSHED CONSERVATION PLAN

May 24, 2024



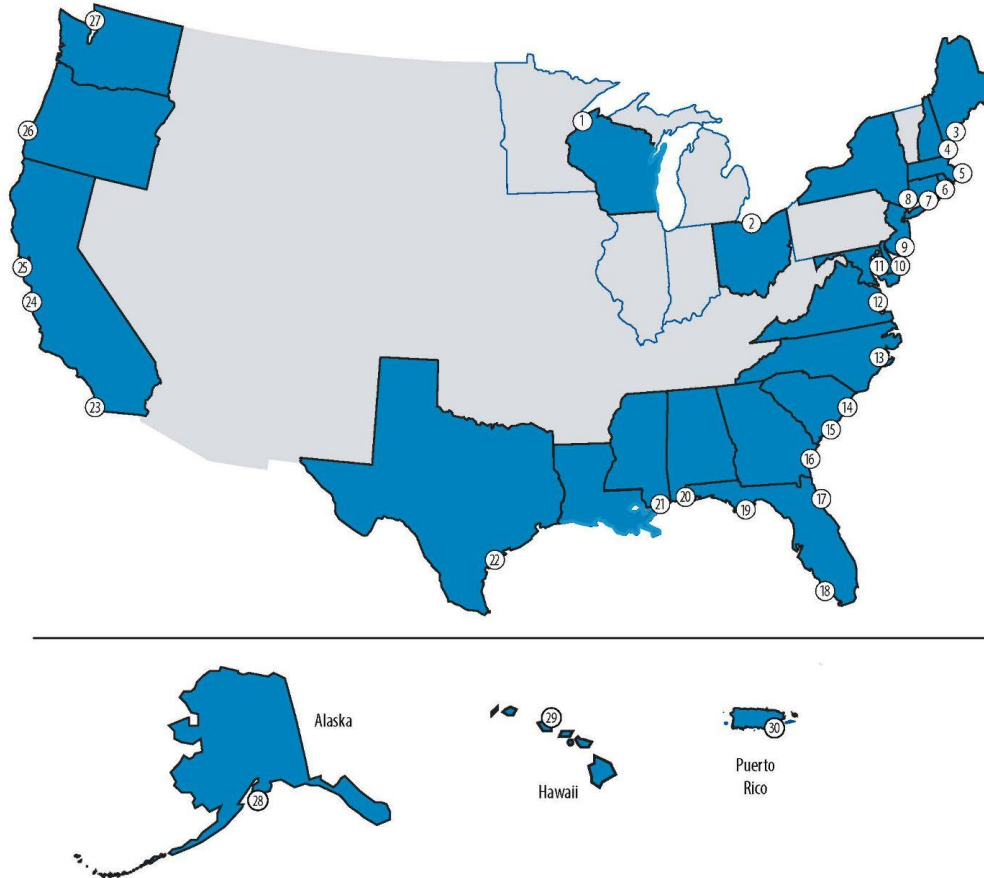
NATIONAL ESTUARINE RESEARCH RESERVES

The National Estuarine Research Reserve System (NERRS)

- NOAA Program
- Place-based collaboration with a local partner, e.g.:
 - State Agency
 - University
 - Nonprofit
- Reserve programs:
 - Stewardship
 - Research and scientific monitoring
 - Training
 - Education

The NERRS Science Collaborative

supports science for estuarine and coastal decision-makers.



Great Lakes

1. Lake Superior, Wisconsin
2. Old Woman Creek, Ohio

Northeast

3. Wells, Maine
4. Great Bay, New Hampshire
5. Waquoit Bay, Massachusetts
6. Narragansett Bay, Rhode Island
7. Connecticut

Mid-Atlantic

8. Hudson River, New York
9. Jacques Cousteau, New Jersey
10. Delaware
11. Chesapeake Bay, Maryland
12. Chesapeake Bay, Virginia

Southeast

13. North Carolina
14. North Inlet-Winyah Bay, South Carolina
15. ACE Basin, South Carolina
16. Sapelo Island, Georgia
17. Guana Tolomato Matanzas, Florida

Gulf of Mexico

18. Rookery Bay, Florida
19. Apalachicola, Florida
20. Weeks Bay, Alabama
21. Grand Bay, Mississippi
22. Mission-Aransas, Texas

West

23. Tijuana River, California
24. Elkhorn Slough, California
25. San Francisco Bay, California
26. South Slough, Oregon
27. Padilla Bay, Washington
28. Kachemak Bay, Alaska

Pacific

29. He'eia, Hawai'i

Caribbean

30. Jobos Bay, Puerto Rico

PROPOSED

Bay of Green Bay, Wisconsin
Louisiana

Session Features

Use the **Q&A** feature to ask questions about the presentation.

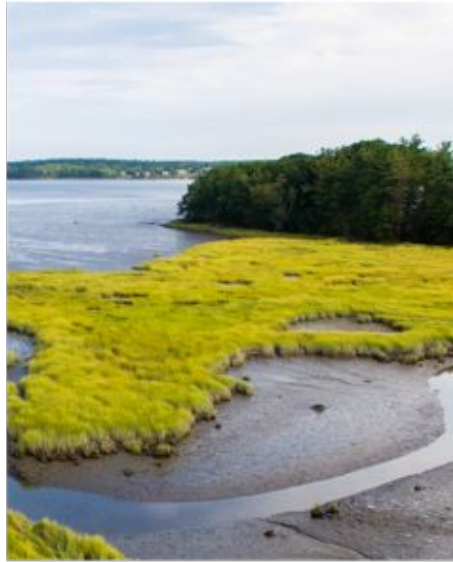
Use the **Chat** function to talk to other attendees.

Need help?

Use the **Chat** feature to contact organizers.



National Estuarine
Research Reserve System
Science Collaborative

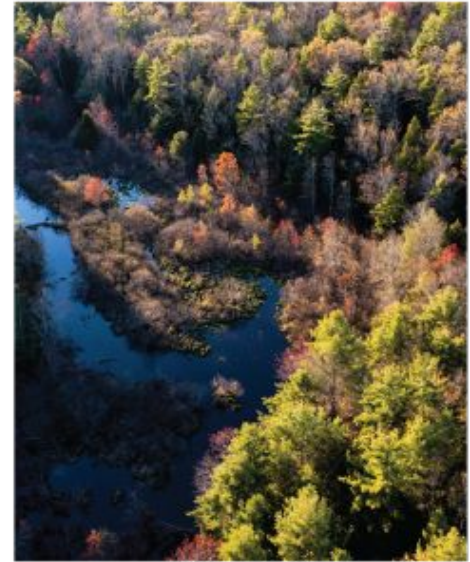
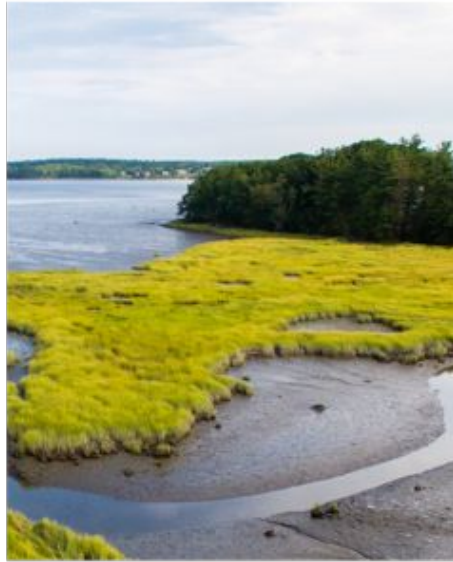


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Connect to Protect

- **Context:**
 - How we approached the project
 - The management need
 - The science that we transferred
- **Approach:**
 - Setting up our team
 - Project Activities
 - Project Outputs
- **Lessons learned:**
 - For our team
 - For any project like this one



Context: Approach

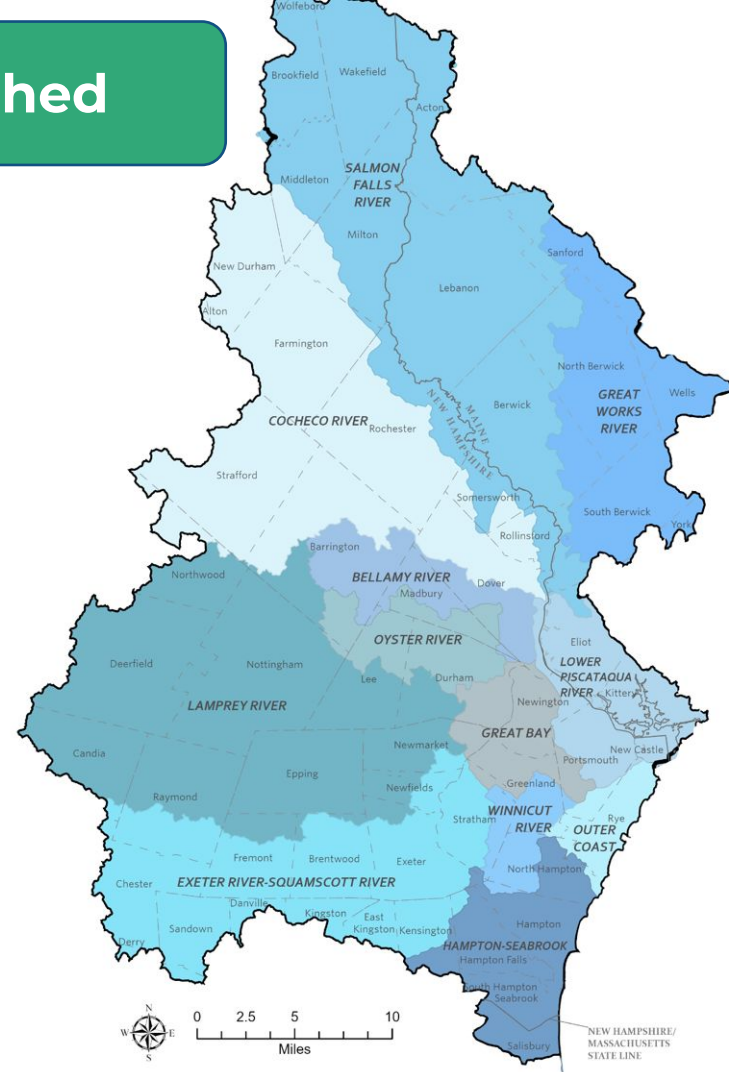
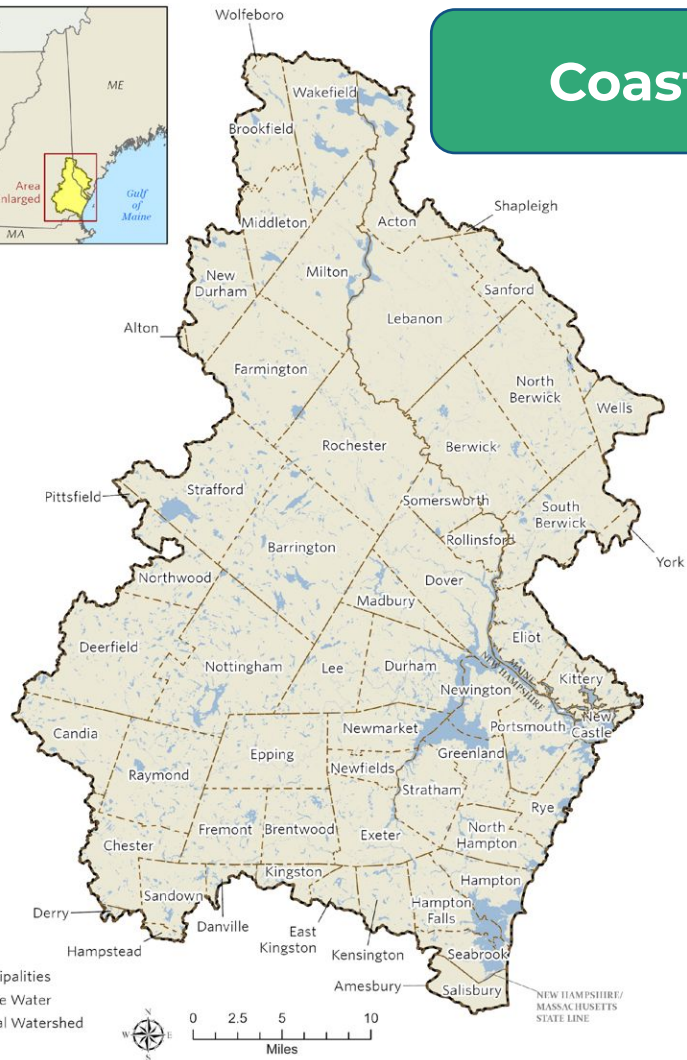
- Identify a need
- Dig in and get specific
- Find the money
- Do the work
- Continue the work

Collaboratively

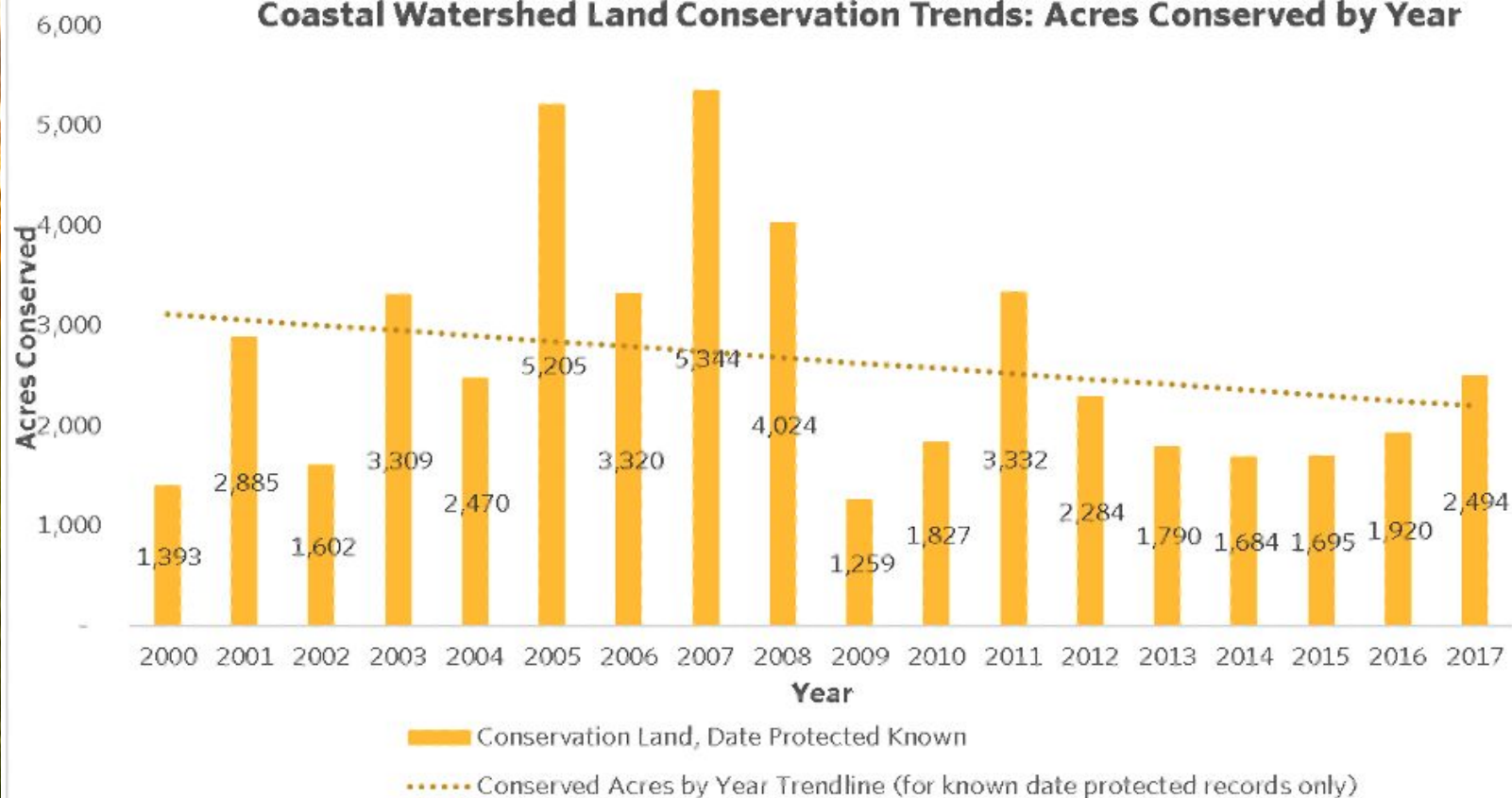


NEW HAMPSHIRE COASTAL WATERSHED CONSERVATION PLAN

Coastal NH Watershed



Coastal Watershed Land Conservation Trends: Acres Conserved by Year



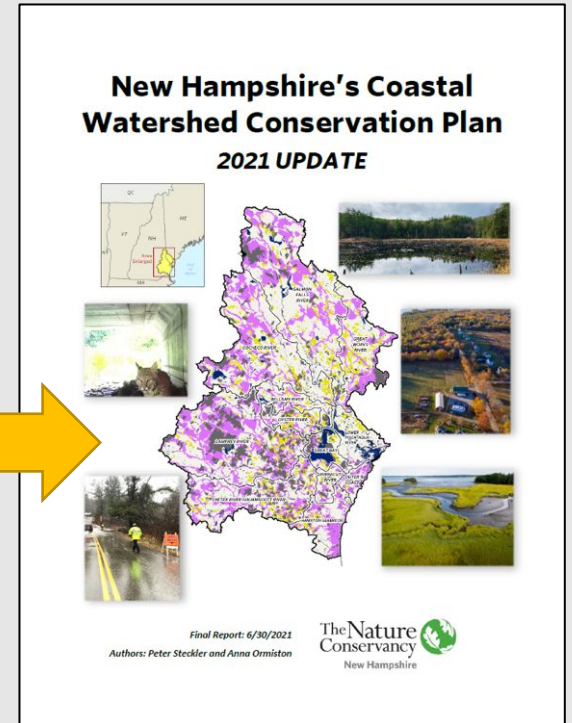
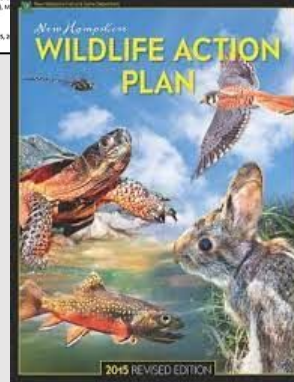
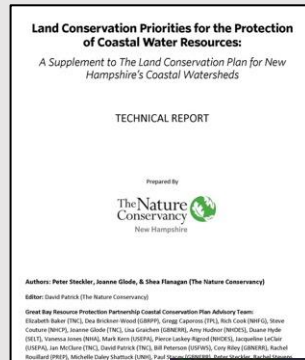
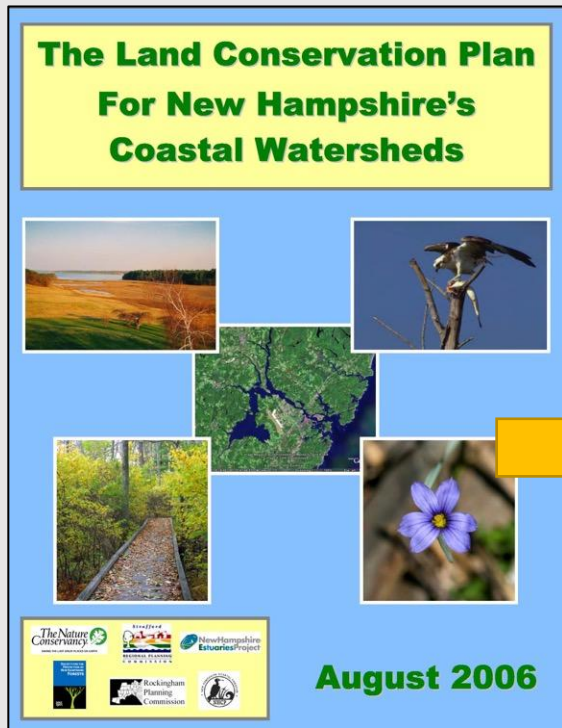
The Land Conservation Plan For New Hampshire's Coastal Watersheds



August 2006

PROGRESS

70% of lands protected
across NH's portion of the
coastal watershed since
2006 are associated with
priorities from the 2006 plan



Development of the Coastal Watershed Conservation Plan

Data Used to Identify the Conservation Focus Areas

Wildlife and Habitat

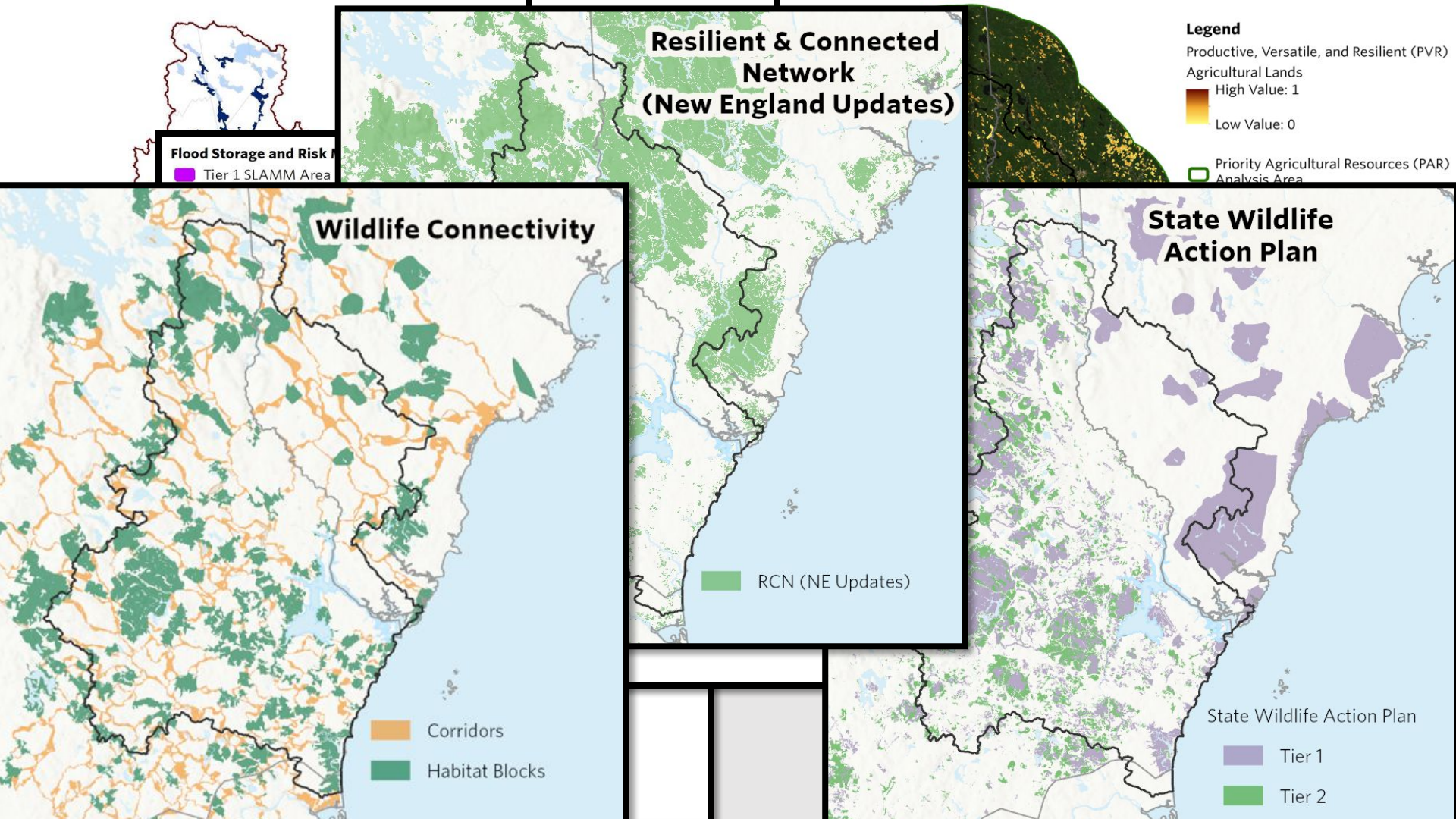
- Critical habitats
- Species of greatest conservation need
- Wildlife corridors and habitat blocks
- Resilient and Connected Network

Water Resources

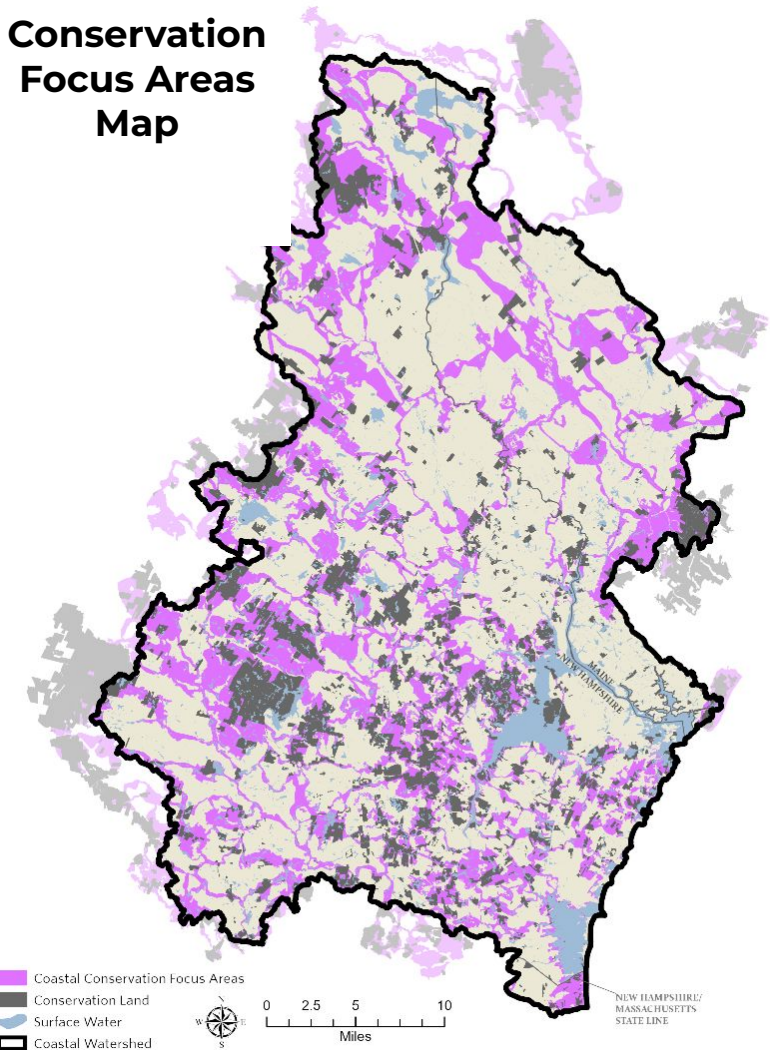
- Source water protection (public water supply)
- Pollutant attenuation

Climate Adaptation

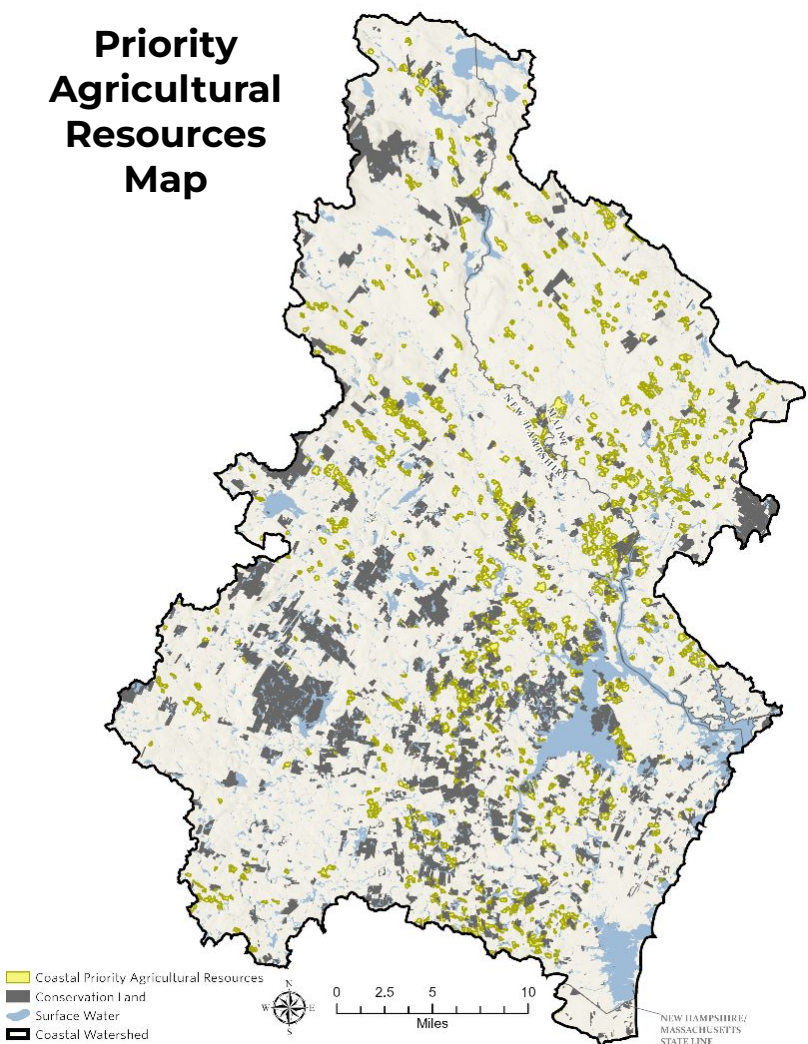
- Resilient tidal marshes
- Flood storage and risk mitigation



Conservation Focus Areas Map



Priority Agricultural Resources Map



Connect to Protect Transfer Project

The What: What do we want to happen because of this project?

The Who: Who do we involve and what is their role?

The How: What activities and outputs will advance the goals?



The What....



Prioritizing conservation projects



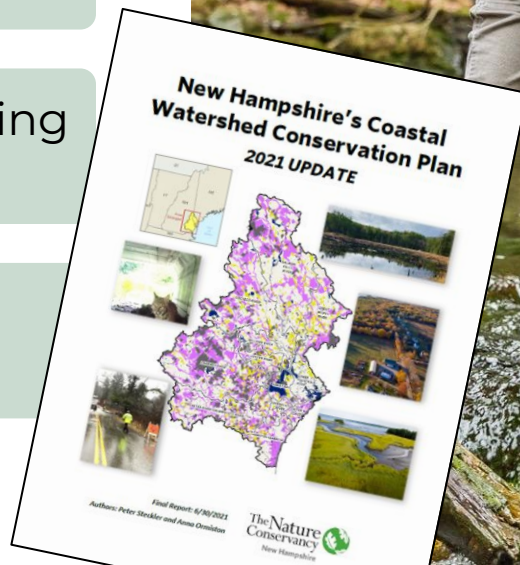
Aligning efforts to protect priority lands



Municipal land use planning and regulations



Reviewing development proposals



Who: Executive Team



Pete Steckler
Northeast Conservation
Services



Cory Riley
Great Bay NERR



Lisa Wise
UNH Extension &
NH Sea Grant

Who: Outreach Team



Abigail Lyon

Piscataqua Region Estuaries
Partnership



Cory Riley

Great Bay NERR



Pete Steckler

Northeast Conservation
Services



Emma Tutein

UNH Extension



Lynn Vaccaro

Great Bay
NERR



Lisa Wise

UNH Extension &
NH Sea Grant

**CONNECT
TO PROTECT**

NEW HAMPSHIRE COASTAL WATERSHED CONSERVATION PLAN

Who: Great Bay Resource Protection Partnership

The Partnership's *Principal Partners*

- Great Bay National Estuarine Research Reserve
- New Hampshire Audubon
- New Hampshire Fish and Game Department
- Society for the Protection of New Hampshire Forests
- Southeast Land Trust of New Hampshire
- The Nature Conservancy, New Hampshire Chapter
- U.S. Environmental Protection Agency
- U.S. Fish and Wildlife Service, Great Bay National Wildlife Refuge
- U.S.D.A. Natural Resources Conservation Services



Who: Advisory Committee

NH Department of Environmental
Services

The NH Chapter of the Nature
Conservancy

Southeast Land Trust

Bear Paw Regional Land Trust

Regional Planning Commission

NH Association of Conservation
Commissions

NH Charitable Foundation

Towns of Rye and Exeter



Needs Assessment
questions and
distribution

Outreach Plan

Sustainability Plan

Project Activities and Products

- Needs assessment
- Outreach products
- Technical assistance
- Integration into *State of Our Estuaries* Report
- Funder outreach
- Sustainability plan
- Culminating webinar

Needs Assessment

2021 COASTAL WATERSHED CONSERVATION PLAN NEEDS ASSESSMENT REPORT

February 2022

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Conservation Commission	39
Land Trust Committee/Volunteer	10
Other	10
Land Trust Board Member	8
Town/City Staff	5
Natural Resources Professional	5
Regional Planning Commission Staff	5
Planning Board	4
Zoning Board	3
Land Trust Staff	3
Select Board or Council Member	1

PRODUCTS

Report

Needs Assessment

Input on products:

- A user-friendly website
- GIS data layers
- Access to the large-format maps
- Two-page factsheets

Input on format/timing of trainings:

- One-hour virtual introductory workshop

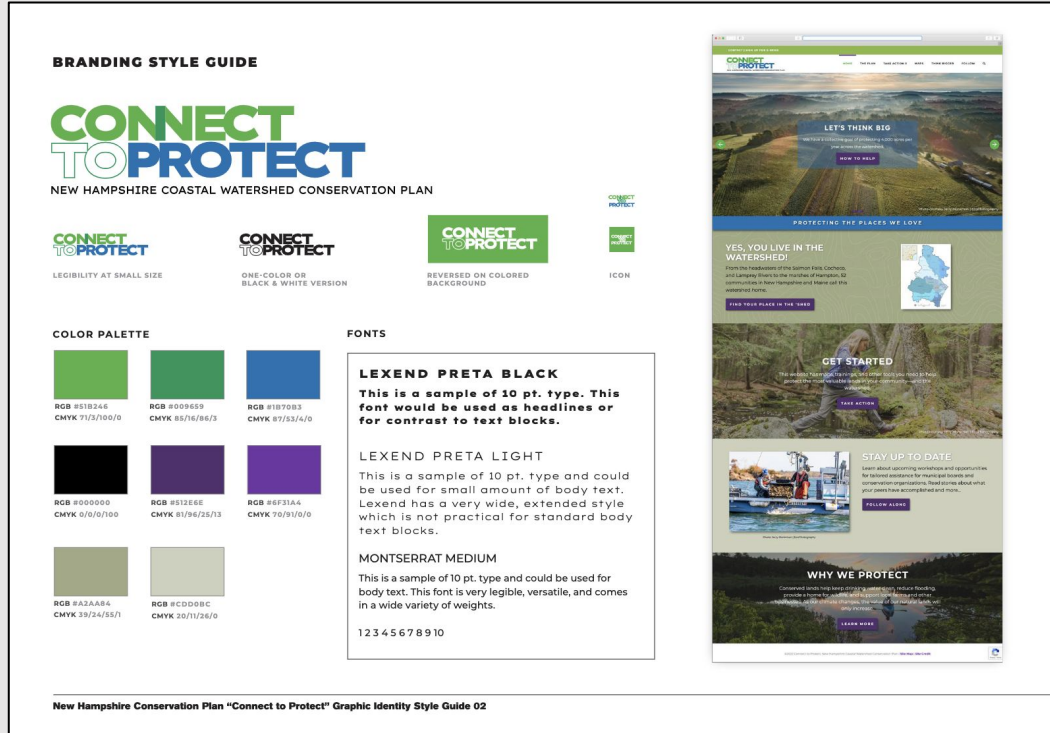
Input on the direct assistance:

- Content, format, and additional considerations

PRODUCTS

Report

Outreach Products



PRODUCTS

Style Guide

Website

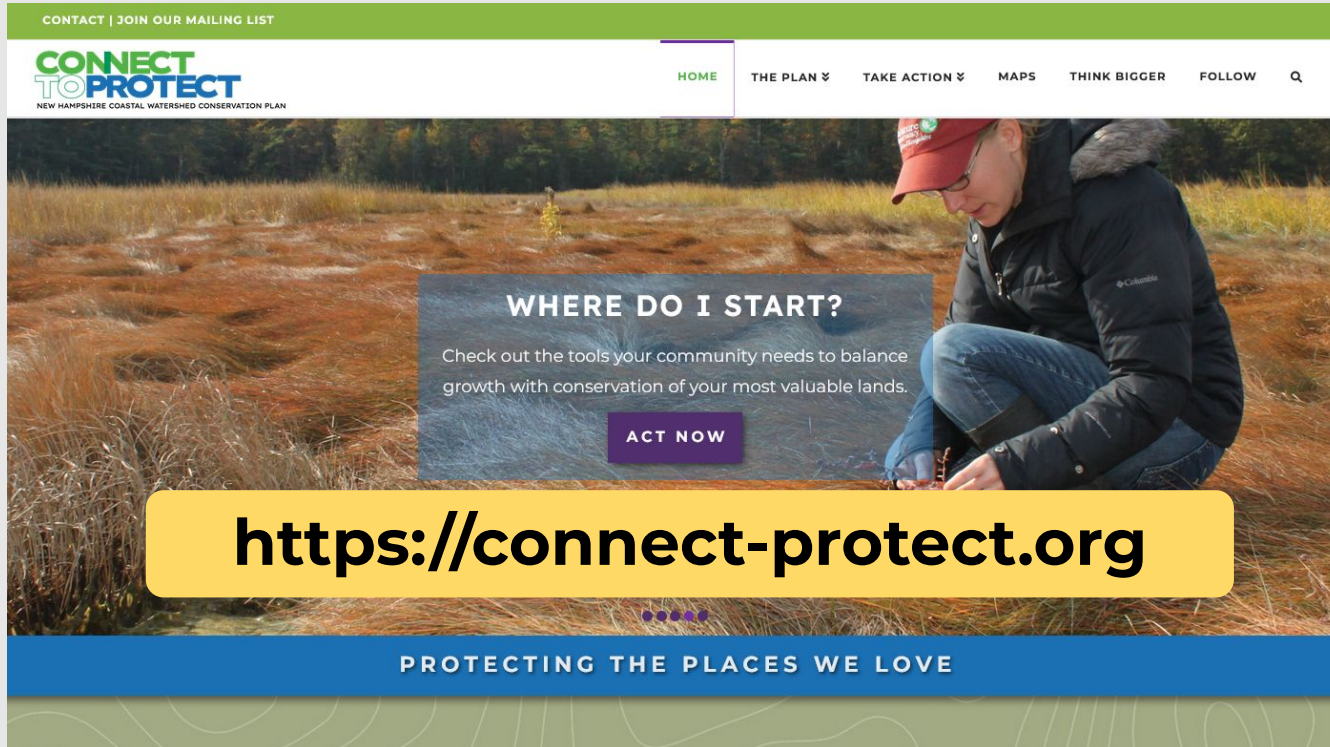
2-pager

Video: How to Read the Maps

Instructions for NH Coastal Viewer

Overview Webinar

Outreach Products



PRODUCTS

Style Guide

Website


2-pager

Video: How to
Read the Maps

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NH Coastal Viewer

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NEW HAMPSHIRE COASTAL WATERSHED CONSERVATION PLAN

PROTECTING OUR WATERSHED FOR THE FUTURE



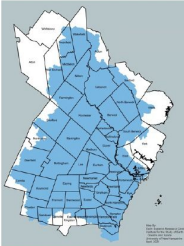
ONE ACRE A DAY

That's how quickly we are losing natural lands in New Hampshire's coastal watershed to development. Natural lands protect drinking water, sustain wildlife habitats, protect productive farmlands, and make our region an attractive place to live, work and play. As our climate becomes hotter, drier, and stormier, the value and cost of protected land will only increase. We must act now to protect the lands that sustain natural systems and human communities before they are lost.

ALIGNING EFFORTS TO MAXIMIZE BENEFITS

The [2021 New Hampshire Coastal Watershed Conservation Plan](#) was developed by The Nature Conservancy and its partners to provide clear guidance for where future conservation efforts are most needed. An update to an earlier (2006) version, the Plan aligns efforts to protect high priority lands in the coastal watershed. The Plan identifies high priority natural areas and agricultural resources based on their ability to provide specific benefits, including:

- Drinking water source protection and groundwater recharge
- Wildlife habitat and corridor protection
- Flood reduction and salt marsh habitat protection
- Local farm productivity



The Plan focuses on the **New Hampshire Coastal Watershed**, which is the geographic area that drains into the Atlantic Ocean from the Piscataqua River, the Hampton Seabrook Estuary, and the coastline in between. The 990 square mile watershed includes 42 communities in NH and 9 communities in Maine that are fully or mostly in the coastal watershed. These communities are home to over 400,000 people.


CONNECT TO PROTECT

Conservation partners have set an ambitious goal of protecting **4,000 acres a year** and are working hard to attract and direct funding to meet this goal. Communities, land trusts and conservation groups across the watershed are invited to join these efforts and use the Plan.

FIND SUPPORT

Visit www.connect-protect.org for resources to support your conservation work:

- Locate [local conservation organizations](#) that can help
- Sign up for [upcoming workshops](#)
- Learn how to [communicate the value](#) of land protection
- Find [funding sources](#) for conservation projects
- Request [assistance](#)



Photos: Jerry Montemayor, EcoPhotography
Courtesy of Southwest Land Trust

WWW.CONNECT-PROTECT.ORG

PRODUCTS

Style Guide

Website

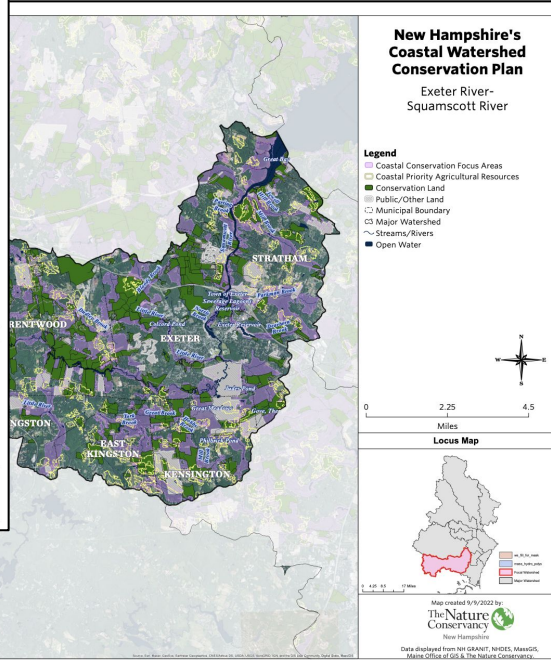
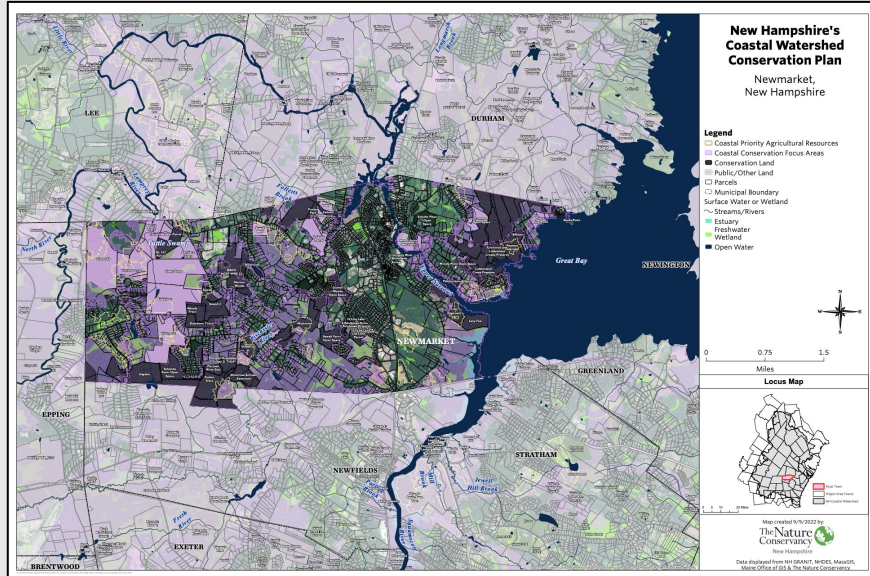
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Video: How to Read the Maps

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Overview Webinar

Outreach Products



PRODUCTS

Style Guide

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INSTRUCTIONS FOR ACCESSING THE NH COASTAL WATERSHED CONSERVATION PLAN LAYERS ON THE NH COASTAL VIEWER

Want an overview of the NH Coastal Viewer before diving into these instructions? A Guide to Get Started, a variety of training exercises, and several instructional videos are available here: www.nhcoastalviewer.org/training-resources/

FINDING THE DATA LAYERS

1. Go to the NH Coastal Viewer: <http://nhcoastalviewer.unh.edu/>
2. A disclaimer will pop up that you will need to acknowledge.
3. In the bottom left corner of the screen there is an "About the Viewer" tab. Just to the right of that tab is the "Layers" tab – click on this tab to display the list of available layers.

4. At the top of the table of contents, there is a dropdown menu that offers several options for filtering the list of layers. Select the dropdown option that says "Coastal Watershed Conservation Plan (2023)" to narrow the layers displayed to those most relevant to the Plan (see list of available layers in the box to the right).

5. If you'd like the flexibility to enable other data layers not included on this filtered list, skip the previous dropdown menu step and remain on the "All Layers" option. For example, you may want to add city/town boundaries and Wildlife Action Plan habitat land cover, or conservation and public lands.

- a. To find the Coastal Watershed Conservation Plan (2023) layers from the full list of layers, make sure that the check box next to the "Environment and Conservation" category is checked. Select the "+" mark to the left of the "Environment and Conservation" heading to expand the dropdown list of layers under that category.

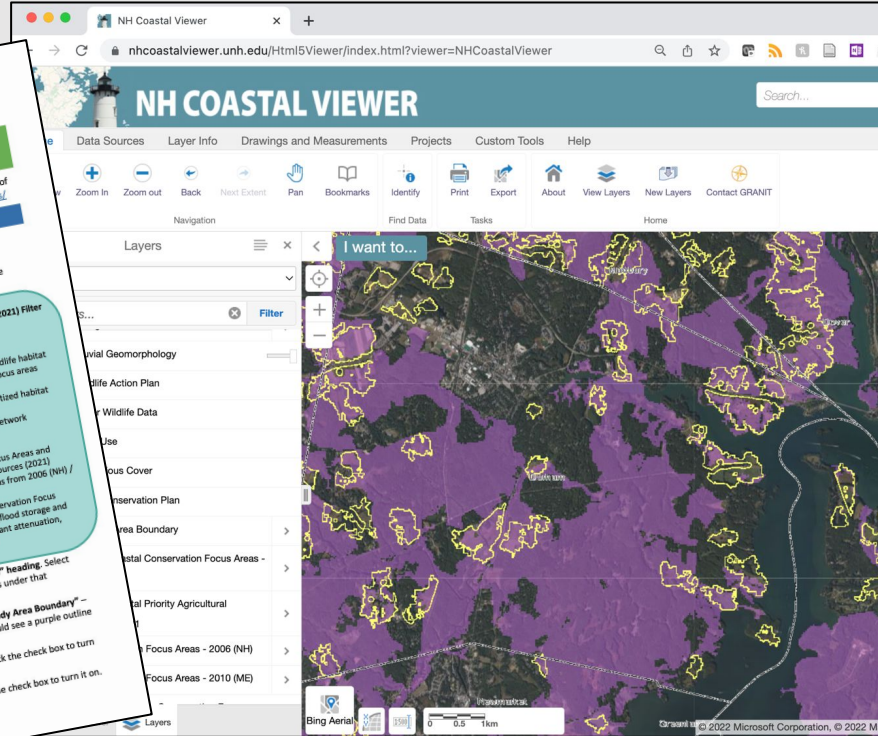
- b. Under the "Environment and Conservation" category, scroll down and click on the check box next to the "Land Conservation Plan" heading. Select the layers under that category.

- c. The first data layer listed under the "Land Conservation Plan" category is titled "Study Area Boundary" – click on this. This adds purple shaded areas to the map.

- d. The next layer on the list is titled "Coastal Conservation Focus Areas – 2021". Click the check box to turn it on. This adds purple shaded areas to the map.

- e. The third layer is titled "Coastal Priority Agricultural Resources – 2021". Click the check box to turn it on. These areas are outlined with yellow lines.

- Coastal Watershed Conservation Plan (2023) Filter**
- ✓ **Layers Available:**
 - ✓ **Wetlands (where available)**
 - ✓ **Wildlife Action Plan**
 - NH WAP – highest ranked wildlife habitat
 - ME Beginning with Habitat focus areas
 - ✓ **Other Wildlife Data**
 - Wildlife corridors and prioritized habitat blocks
 - Resilient and Connected Network
 - ✓ **Land Conservation Plan**
 - Study area boundary
 - Coastal Conservation Focus Areas and
 - Priority Agricultural Resources (2023)
 - Conservation focus areas from 2006 (NH) / 2010 (ME)
 - Areas – 2016 update (flood storage and risk mitigation, pollutant attenuation, public water supply)



PRODUCTS

Style Guide

Website

2-pager

Video: How to Read the Maps

Instructions for NH Coastal Viewer

Overview Webinar

Outreach Products



PRODUCTS

[Style Guide](#)

[Website](#)

[2-pager](#)

[Video: How to Read the Maps](#)

[Instructions for NH Coastal Viewer](#)

[Overview Webinar](#)

Technical Assistance

Round 1 (2023): 6 municipalities and 2 land trusts

Round 2 (2024): 7 additional municipalities

Process:

- Held initial scoping meeting to discuss goals, context, and next steps
- Walked through the maps in an in-person meeting
- Shared 2-page factsheet, recording of overview webinar, and Connect-Protect.org website
- Shared relevant examples and additional resources and had follow-up meetings/communications as needed

PRODUCTS

**Assistance
request survey**

**Summary of
projects**

Technical Assistance Examples

- Updating existing / developing new conservation priority checklists
- Generating a list of priority parcels
- Developing customized maps
- Convening a workshop for municipal boards and staff
- Supporting municipal staff to update conservation lands data on NH GRANIT

PRODUCTS

Assistance
request survey

Summary of
projects



Photo by Jerry Monkman

How much of the Conservation Focus Areas in the Piscataqua Region Watershed are permanently conserved or considered conserved public lands?

As of 2022, 32.6% of Conservation Focus Areas (CFAs) in New Hampshire and 14.1% of CFAs in Maine were conserved. This represents a total of 29.3% of conserved CFA acreage in the watershed. Given the challenges associated with conserving these important lands, the PREP goal of conserving 75% of total acres in the CFAs will take additional effort to achieve.

Goal

Conserve 75% (199,026 acres) of lands identified as Conservation Focus Areas.



Photo by Jerry Monkman

Why We Track This Indicator

The Piscataqua Region Watershed is home to exceptional unfragmented natural areas and corridors supporting important wildlife populations, water filtration capacity, and protection against flooding and storms. CFAs represent highly prioritized areas for conservation that maximize these benefits. Due to development and growth pressures in our region, it is increasingly important to protect these areas to ensure they will continue to provide benefits for future generations.

Explanation

The 2021 New Hampshire's Coastal Watershed Conservation Plan (Plan) is a science-based, regional conservation master plan that identifies 265,368 acres of CFAs in the Piscataqua Region Watershed across New Hampshire, Maine, and Massachusetts.¹⁷ These CFAs encompass conservation priorities for maintaining ecological function and integrity for wildlife and habitat, coastal water resource protection, coastal resilience, and climate adaptation. The Plan identified CFAs by synthesizing and weighting previous conservation datasets used to prioritize land conservation and protect the specific benefits and values mentioned.^{18–23} The CFAs in the new Plan integrate, update, and replace the 166,212 acres of CFAs identified in The Land Conservation Plan for New Hampshire's Coastal Watersheds (2006)²⁴ and The Land Conservation Plan for Maine's Piscataqua Region Watersheds (2010)²⁵ and used for the 2018 State of Our Estuaries report.

Of the 265,368 acres that fall within designated CFAs, 29.3% (77,629 acres) has been permanently protected (Figure 6.1), representing progress toward the PREP goal of conserving 75% of total CFA acres in the region (199,026 acres) but still falling far short. As there have been incremental updates but no substantial, comprehensive updates to the conservation lands datasets since 2017, conserved acres may be underrepresented in the data after this point. Nonetheless, the data we have suggests the need for continued, focused efforts in protecting valuable lands in our region to meet our goal.

Acknowledgments and Credit

Trevor Mattera (PREP), with contributions from Anna Ormiston and Peter Steckler (TNQ) and David Justice and Chris Phaneuf (NH GRANIT, Earth Systems Research Center). Graphics from Anna Ormiston and Peter Steckler.

Extended Report

See the [Extended Report](#) for a breakdown of total and protected CFA acreage across towns in the Piscataqua Region Watershed. Looking to take the next step protecting lands in your community? Check out www.Connect-Protect.org for more information.

Integration into State of Our Estuaries Report

PRODUCTS

Incorporated into tracking metrics

Invest Now: Protect Coastal New Hampshire for the Future

One acre a day

That's the rate at which we are losing the natural lands that defines life in coastal New Hampshire to development. From the headwaters of the Salmon Falls to the salt marshes of Hampton, 42 communities depend on this natural infrastructure to keep drinking water clean, reduce flooding, provide a home for wildlife, and support local farms and other businesses.



Photo courtesy Jerry Monkman /
Southeast Land Trust of New Hampshire

Unique Opportunity

Protecting our most valuable natural areas is an opportunity that will never come again—and we are ready for it. We are a network of public agencies and nonprofits with boots on the ground in every coastal watershed community and a proven track record of delivering the conservation science, tools, and technical assistance they need to balance growth with conservation. Through the New Hampshire Coastal Watershed Conservation Plan, we have identified the lands that must be protected to support the New Hampshire way of life for future generations.

New Hampshire's Coastal Conservation Team

- Great Bay Resource Protection Partnership
- Great Bay National Estuarine Research Reserve
- National Resource Conservation Service
- New Hampshire Coastal Program
- Society for the Protection of New Hampshire Forests
- South East Land Trust
- The Nature Conservancy — New Hampshire
- United States Fish & Wildlife
- University of

A Role for Federal Investment

Federal funding is required to protect our natural infrastructure. This community-informed Conservation Plan balances conservation priorities with opportunities for economic growth and development to set a collective goal of protecting 4,000 acres per year across the watershed. This will require an estimated \$15,000,000 annually, not only to purchase the lands but to ensure that they are managed in a way that maximizes their benefits over time.

Now is the Time

As our climate becomes hotter, drier, and stormier, the value of conservation land will only increase over time. Conservation lands protect precious water resources, sequester carbon, mitigate erosion, and reduce flooding. They are essential to the state's agricultural and tourist economies, providing open space and opportunities for hunting and fishing. By connecting newly available federal funding for conservation with a mission-ready team on the ground, we can protect these lands for the future.



Funder Outreach

PRODUCTS

2-pager for
funders

Funder webinars

Next Steps

The project team, Advisory Committee and funders were asked which ideas in this document should be considered the highest priority for immediate next steps.

Next Steps
Website
Develop plan for basic website maintenance: includes annual updates/refreshing content/analytics.
Review website sign in form and clarify how follow up will happen.
Make sure partner website are using the updated plan and pointing to Connect to Protect on their websites.
Webinars and Technical Assistance
Develop a way to share and capture informal needs as outreach professionals continue to work with towns.
Offer the introductory webinar on a regular basis.
Coordinate with the NH Association of Conservation Commissions to provide materials and recorded webinars to help "onboard" new coastal conservation commission members.
Share best practices, resources and lessons learned between communities (via workshop, webinar, website, etc.).
Create "pathways" for technical assistance to help focus projects and prepare outreach.
Explore if and how the Great Bay Resource Protection Partnership can partner with outreach professionals consistently.
Maps
Help communities update GRANIT public lands data for their town.
Customize maps for high priority technical assistance needs.
Outreach Committee
Facilitate committed and organized team of partners to lead outreach efforts on a regular basis and reply to website inquiries.
Create stronger ties between outreach group and organizations that implement land protection projects.
Integrate conservation plan into decisions related to housing, land use planning and food security.

Sustainability Planning

PRODUCTS

Sustainability Plan

Culminating Webinar

Connect to Protect webinar: How coastal NH/ME communities are advancing land cons...



How coastal NH/ME communities are advancing land conservation priorities

CONNECT TO PROTECT
NEW HAMPSHIRE COASTAL WATERSHED CONSERVATION PLAN

December 8, 2023

1:17 / 1:15:42

CC 1x



PRODUCTS

Webinar
recording

Reflections: For New Hampshire

- Our communities will need ongoing technical assistance to incorporate the plan into their work.
- The maps will need constant updating and many towns will want customized maps.
- Repeating our introductory webinar at regular intervals will help keep volunteer boards engaged.
- Connecting technical assistance providers to the land trusts and agencies that do land deals is critical.
- Land protection partners need to work closely with other sectors to build support for conservation (housing, land use planning, food sustainability).

Reflections: Big Picture for all of us

Technical assistance and outreach are key to putting conservation planning into practice.

Sustained partners dedicated to advancing conservation developed, implemented, and are sticking with this project.

Project success was due to:

- dedicating time and resources to collecting *and using* feedback
- project management
- dedication to the topic beyond the grant timeframe



Questions & Discussion

- What are some creative ways you've maintained products from a project?
- Have you used a sustainability plan for projects?



NEW HAMPSHIRE COASTAL WATERSHED CONSERVATION PLAN

Email: info@connect-protect.org

Website: <https://connect-protect.org>

Q&A

Q: What helps support long collaboration between all partners? What helped foster dedication to the topic beyond the grant timeline?

A: There was a strong backbone of personnel across organizations already present. Experience collaborating with each others aided their co-planning and applying for resources. In New Hampshire, it's rare for an organization to only apply grants for themselves. It's almost always a joint project that pulls in experts from other organizations. There's already a lot of organizations in New Hampshire focusing on natural resources and conservation with a lot of different ways of incorporating this information. Through these connections, we were able to find ways to leverage existing staff capacity and work plans. The team really liked working together and wanted to continue to collaborate.

Q: How do you work through dependence on grant funds?

A: There's a couple partners who are part of the project and part of the sustainability plan that have sustained 'hard' funding. So, it's really a matter of building that into what they already do. The outreach team had no funding associated with this project. We just know this is important, and so we're gonna do it. The grant gave us a little boost and energy to get the products done and engage some important partners. We're kind of used to scraping things together and seeing if we can make it work. And you have to really get used to scaling ("We can't do everything, so what's the most important thing we can do? Okay, let's do it.")

Q: How do you work through turnover of partners, especially given the volunteer nature?

A: Land use planning is very tied to local government in New Hampshire. A key is building relationships with both city staff and the volunteer boards, so that when there are new board members, the people in the city can connect them with existing resources or people who do technical assistance. We know we want to offer this webinar once a year to capture those new volunteer boards that come on throughout time. Another key thing in the sustainability plan was making sure that reference to this plan is the right link on all of our partners' websites.



**National Estuarine
Research Reserve System
Science Collaborative**

Q&A

Q: How are the communities responding in regards to the conservation effort promoting their health and wellbeing? How can we make sure there is an equitable distribution of ecosystems services that promotes community happiness?

A: The coastal plan and maps have been tools to continue and deepen conversations across municipal boards and staff. In one community, we met with the conservation commission and talked through the maps, and they said, “Our planning board really needs to see this. Our zoning board really needs to see this.” More and more towns are doing built out analysis and always updating master plans. I think having this updated resource can pair well with those other municipal planning efforts. We can be thinking about prioritizing land for different purposes and reasons. The plan and the maps are a conservation tool to convey the importance of priority areas for people, such as flood storage and risk mitigation, when development proposals are in front of boards. The communities would look at the priorities from this regional plan then add their own criteria and priorities at the municipal level. We acknowledge that local communities may value some places that don’t pop into this plan for reasons not included in regional prioritization. Our technical assistance can help combine regional priorities with whatever is locally important. There have been a lot of interesting conversations about how to integrate conservation, food sustainability, and housing in New Hampshire. I don’t think the goal is to stop development all together, so it’s really about how do you direct uses in places where things are most important. So the key to this plan is really trying to find those places that are just so valuable ecologically, that it would be wise to protect them.



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