



Science Summary: Researchers at NE CASC are collaborating with state natural resource managers to incorporate climate change information into their strategic conservation plans for Regional Species of Greatest Conservation Need and their habitats across the Northeast and Midwestern US.

2015

Generated a regional climate synthesis

Established relationships with states, co-produced a workplan, and delivered a synthesis

Goal: Assist states to integrate climate change information into the 2015 plan revisions

- Summarized trends and projections for 60+ climate variables
- Literature review of 358 RSGCN
- Synthesized Climate Change Vulnerability Assessments covering 1000+ species and 80+ habitats
- Synthesized 960+ adaptation strategies by scale, resource, climate stressor, and national goals
- Highlighted regional case studies and tools of resilience initiatives

Evaluated synthesis impact

Stayed abreast of shifting state initiatives and climate adaptation needs and emerging threats

Goal: Assess the effectiveness of the synthesis report in helping states incorporate climate change into the SWAPs. NE CASC evaluated the use of the report to better understand:

- What aspects of the synthesis were used and how
- How the states treated climate change overall within their respective SWAP
- What were the emerging and high priority threats the states are tackling

Looking forward to the 2025 revisions

Building and expanding on past successes

Goals: Coordinate a network to solicit specific, emerging state needs and deliver current information on a regular basis to key state agency programs; Convene the Northeast Climate Change Working Group to focus on sharing key climate research needs and develop priority actions that can be delivered most effectively across the region.

- In 2020, the NE CASC began meeting with NE SWAP Coordinators to develop a plan for an updated climate synthesis for the 2025 SWAP revisions.
- Funded a new project to develop a cohesive set of downscaled climate model projections for the Northeast
- Formed a steering committee to guide the model development process and ensure the results will be appropriate and actionable for state-level decision making
- Organized a workshop to scope the scale of spatial and temporal data products and solicit additional partner climate data needs.

Key terms:

SWAP - State Wildlife Action Plans are state-level assessments of the health and challenges facing species and ecosystems that include detailed plans for addressing risk.

RSGCN - Regional Species of Greatest Conservation Need

NEAFWA - Northeast Association of Fish and Wildlife Agencies

2020

2025

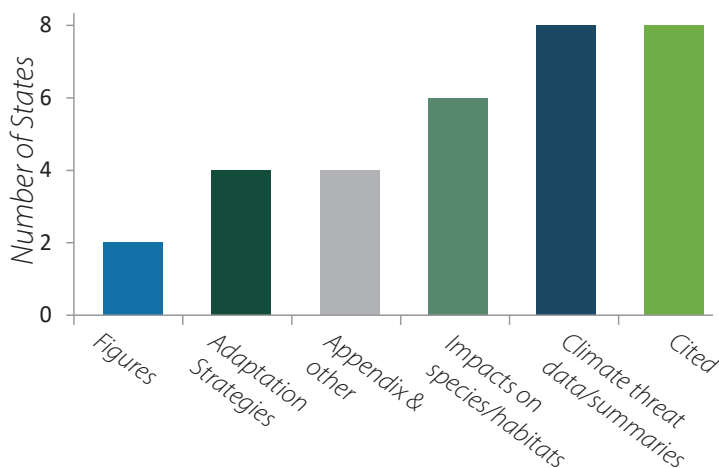
Next regional SWAP plans are released

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Assessment of 2015 synthesis results

States acknowledged climate change as a significant threat in the 2015 SWAPs and noted that it will further complicate future management actions and ecosystem health. The bar graph below shows how NEAFWA States cited or incorporated data, text, and figures from the NE CASC synthesis report into their 2015 plans.



Key takeaways

The SWAPs report was highly valued by NEAFWA states, as both a resource tailored to the needs of fish, wildlife, and cultural resource managers and as a model of a regional guide tailored to the scales and timelines of decision making.

Next steps and additional management applications

- 3 New NE CASC-supported projects to inform the 2025 SWAPs.
- Supporting the ongoing work of state natural resource managers to synthesize climate change and other threats across 14 Northeastern states (Virginia to Maine, including the District of Columbia) to support coordinated regional conservation and climate adaptation.
- Highlight how climate change interacts with persistent, pervasive threats to wildlife, such as disease, invasive species, pollution, and barriers to flow in rivers and streams.
- The 2015 report has informed additional adaptation and communication products such as the **Massachusetts Climate Action Tool** (climateactiontool.org) and the **Climate Registry for the Assessment of Vulnerability** (<http://crave.cakex.org/>).

Learn more at: necasc.umass.edu

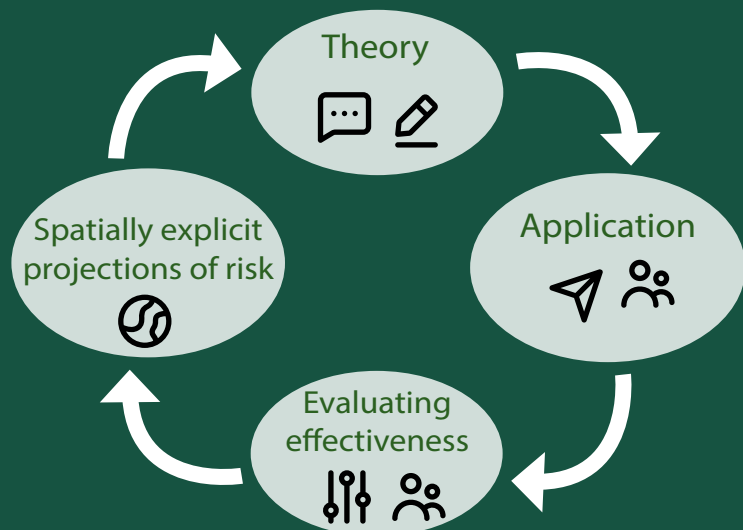
Layout and design by Elsa Cousins

Northeast Climate Adaptation Science Center, 136 Morrill Science Center, 611 N. Pleasant Street, UMass Amherst, Amherst, MA 01003

Climate change is moving up on the list of top 5 threats to RSGCN

The 2015 report was the first step to linking threats to actions. Now the project team is thinking about climate adaptation at a finer scale.

Working group process:



Recipe for Success

1. States self organized at the regional level
2. Researchers provided a menu of potential options and received feedback on direction
3. Report focused on and provided what was desired by NEAFWA and SWAP coordinators

Personel Affiliated with the projects:



Michelle Staudinger,
UMass Amherst,
USGS NE CASC



Karen Terwilliger and
Tracy Monegan Rice,
Terwilliger Consulting,
Inc.



Ambarish Karmalkar,
UMass Amherst