



Science Summary: A decade-long partnership between NE CASC, NEAFWA, and twenty SWAP Coordinators has yielded two landmark syntheses--released in 2015 and 2024, respectively--designed to help states incorporate climate change information into their strategic conservation plans for Regional Species of Greatest Conservation Need and their habitats across the Northeast.

## 2020 Evaluated Impact of Initial Synthesis

*Gathered information regarding shifting state initiatives, climate adaptation needs and emerging threats*

**Overview:** Assessed the effectiveness of the initial 2015 synthesis in helping states incorporate climate change into their SWAPs.

**Key questions included:**

- How was the synthesis used?
- How did the states treat climate change overall within their respective SWAPs?
- What were the emerging and high priority threats the states were tackling?

### Key terms:

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

**RSGCN** - Regional Species of Greatest Conservation Need

**NEAFWA** - Northeast Association of Fish and Wildlife Agencies

## 2021 Initiated Planning for 2025 SWAP Revisions

*Built and expanded on past successes*

**Overview:** Coordinated a regional network and working group to identify emerging state climate needs, deliver information on a regular basis to key state agencies and develop priority actions.

- Funded a new project to develop a cohesive set of downscaled climate model projections for the Northeast.
- Working with state agencies, project leaders coordinated a steering committee to guide development of climate projections & ensure their relevance for state-level planning.
- Organized a workshop to scope the scale of spatial and temporal data products and solicit additional partner climate data needs.

## 2024 Generated a New Regional Climate Synthesis

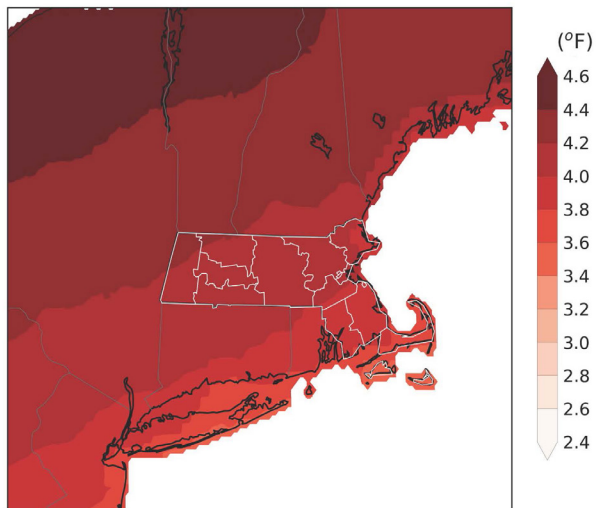
*Maintained relationships with states to co-produce a workplan and deliver a new synthesis*

**Overview:** The 400-page co-produced document is assisting states in explicitly addressing climate risks and adaptation options in their 2025 SWAPs, which are currently in development.

- Generated state-specific climate summaries for 13 NEAFWA states.
- Synthesized 450+ new articles on current and proposed RSGCN.
- Provided 24 new Climate Change Vulnerability Assessments with 392 new records for RSGCN, including 92 new species.
- Provided a wealth of new climate adaptation decision-support information, including 16 adaptation action menus, 7 summaries of emerging climate topics, & 81 additional resources.

## 2025 New Regional SWAPs Released

## Key Findings



*In a medium emissions scenario, Massachusetts is expected to experience up to 4.5°F warming by mid-century and about 7-8°F warming by 2100.*

- The Northeast has warmed by 2.5°F and has experienced a steady increase in total annual precipitation since 1895.
- Over the past century, coastal areas show greater increases in temperature and extreme precipitation than the interior.
- Average and extreme temperatures will increase, but the precise magnitude of these increases depends on future greenhouse gas emissions.
- Average and extreme precipitation will increase over the long term, but yearly variation will occur.

## Key Takeaways

Because state managers lack the time to keep abreast of climate adaptation science, they widely rely on the NE CASC syntheses for their conservation decision-making.

- The 2014 synthesis was widely cited in 2015 SWAP reports, and states anticipate relying on the 2024 synthesis more heavily for their 2025 revisions.
- NE CASC is developing an interactive website to make the synthesis data more accessible.

## Scan for More Information

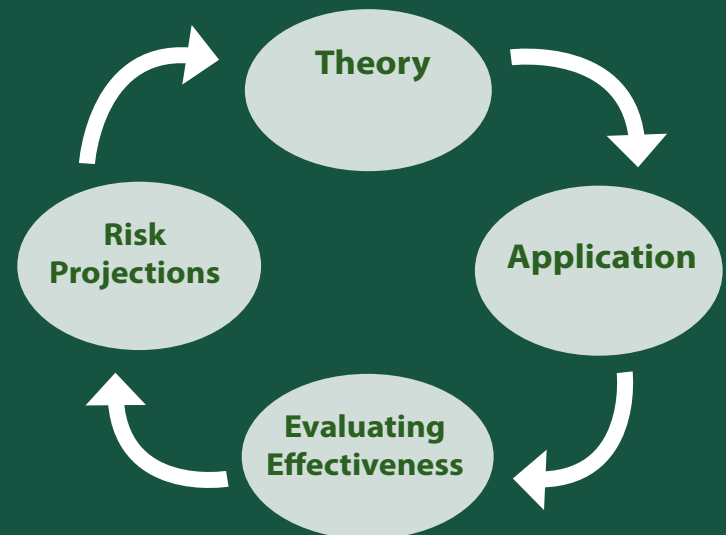
- [Full Synthesis Text](#)
- [Webinar Recording](#)
- [Climate Projection Slideshow](#)
- [Additional Resources](#)



## How can we better link threats to actions?

*Building on the success of the initial SWAP synthesis, the NECASC project team thought about climate change at a finer scale for the 2024 report.*

*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.

## NE CASC Synthesis Project Leaders



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