

NOTICE OF PUBLIC COMMENT PERIOD AND HEARING

Forward Thinking Regional Master Plan - Climate Addendum

The Strafford Regional Planning Commission (SRPC) is soliciting comments on adoption of the Climate Addendum to the upcoming regional master plan, *Forward Thinking*. The Climate Addendum contains an overview of climate trends and projections in the Strafford Region and identifies a series of goals and objectives for the region to prepare for the impacts of a changing climate. SRPC is soliciting comments for the draft Climate Addendum from **Friday, October 9, 2026, to Tuesday, November 10, 2026**. A public hearing will be held by the Commissioners of the Strafford Regional Planning Commission at **9am on Friday, November 20, 2026**, to consider the adoption of the draft Climate Addendum.

The public hearing can be attended in person or electronically. Attend in person at the address below, or electronically via Microsoft Teams:

Online Access:

<https://teams.microsoft.com/meet/26158346669748?p=4xytesfYGFhcig30qO>

Meeting ID: 261 583 466 697 48

Passcode: fH7Va7Ph

Copies of the proposed Climate Addendum will be available for review at the Dover, Rochester, and Somersworth public libraries and city halls, as well as the Strafford Regional Planning Commission office and website. Copies can be sent to interested parties upon request. Information about joining the meeting is at the Strafford Regional Planning Commission website (www.straffordrpcnh.gov). If you encounter any issues accessing the meeting, please call (603) 994-3500 x115 or email mtaylorfetter@straffordrpcnh.gov.

Comments can be sent via mail or email to:

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- Don Manter, Northwood
- Katrin Kasper, Lee
- Mark Richardson, Somersworth
- Paul Rassmussen, Durham
- Sarah Wrightsman, Newmarket
- Steve Brown, Dover

We appreciate your contributions and expertise.

We would also like to thank the NH Charitable Foundation for their funding support for the development of this Addendum, without which this would not be possible.

Introduction

The Climate Addendum is intended as a complement to the three other components of the *Forward Thinking* Comprehensive Plan – Economic Development, Transportation, and Land Use and Environment. Throughout the development of those components, discussions related to the intersections of extreme weather, climate change, and equity with economic development, transportation, and land use topics emerged. This Addendum provides a focused compilation of those themes and action ideas.

Climate, which is defined as the long-term patterns of temperature, precipitation, and other weather variables at a given location,¹ shapes many aspects of our region's culture, economy, and quality of life. The region's climate provides the backdrop for our vibrant seasonal recreation opportunities and associated tourism, shapes the ecosystems and wildlife that live here, and contributes to making the region an attractive place to live, work, and play. However, many of these characteristics that make the Strafford region a unique and attractive area may be impacted by the changing climate. Weather events including major hurricanes, blizzards and ice storms, and extreme rain events have had significant impacts on the region in the past. Climate change is projected to make those impacts worse.

Globally, temperatures are rising, driven by increasing atmospheric greenhouse gas concentrations. Warmer temperatures create an imbalance in a climate system that has been relatively stable for millennia.² As a result of greenhouse gas-driven global temperature increases, more extreme and unpredictable weather is likely. While these are large-scale challenges, the Strafford region has been and will continue to be impacted. Expected changes include rising sea levels and groundwater levels, warmer temperatures, more intense rain events, and more winter precipitation falling as rain rather than snow. These changes have compounding impacts on ecosystems, infrastructure, the economy, and human health and wellbeing. Climate impacts intersect with underlying social and economic disparities, where those with the fewest resources to prepare and adapt may be more impacted. Despite these impacts, the northeast region is also seen as a potential 'climate haven'³ that may see increases in population as people move from other areas that are more immediately susceptible to wildfire, drought, extreme heat, and flooding.

The impacts of a changing climate make proactive planning even more important. To effectively protect the assets that communities value and reduce vulnerabilities to extreme weather, it is critical that communities and the region incorporate climate into forward-thinking plans, regulations, and other decisions. Communities will face challenging decisions about what to protect and how to develop amidst changing conditions, and how to prepare for more frequent and intense weather events. Climate change impacts will strain already limited resources, including municipal financial resources and capacity. At the same time, we may see new opportunities such as extended growing seasons, the ability to grow new crops, reduced heating costs in the winter, potential population growth that could help offset the state's aging population, and more renewable energy resources. Again, proactive planning at the community and regional scales will be key to both reducing risks and recognizing opportunities. SRPC and the communities that make up the Strafford region have been working on climate-related projects for years, and the importance of this work continues to grow.

Regional Overview

In New Hampshire, temperatures rose an average of 3°F over the last century. Temperatures have been warming more quickly in recent decades and are expected to continue rising.⁴ The amount of water stored in snowpack has decreased substantially, the number of thaw events is increasing, and spring ice-out dates on New Hampshire lakes are shifting earlier in the year. In tandem with these changes, the intensity and volatility of precipitation events will contribute to flooding, erosion, and other impacts.

Extreme Temperatures and the Heat Island Effect

A long-term decrease in the number of freezing days and nights may reduce some of the most acute risks of cold exposure among vulnerable populations, including the hundreds of thousands of people experiencing homelessness in the U.S. On the other side of extreme temperatures, extreme heat days (days with temperatures over 90°F) are expected to increase and change significantly more than freezing days (days less than 32°F). Under a high emissions scenario, the number of days over 90°F per year could reach 600% of the historical rate in Durham by 2100 (64 days per year, compared to the historical average of 11 days per year).⁵

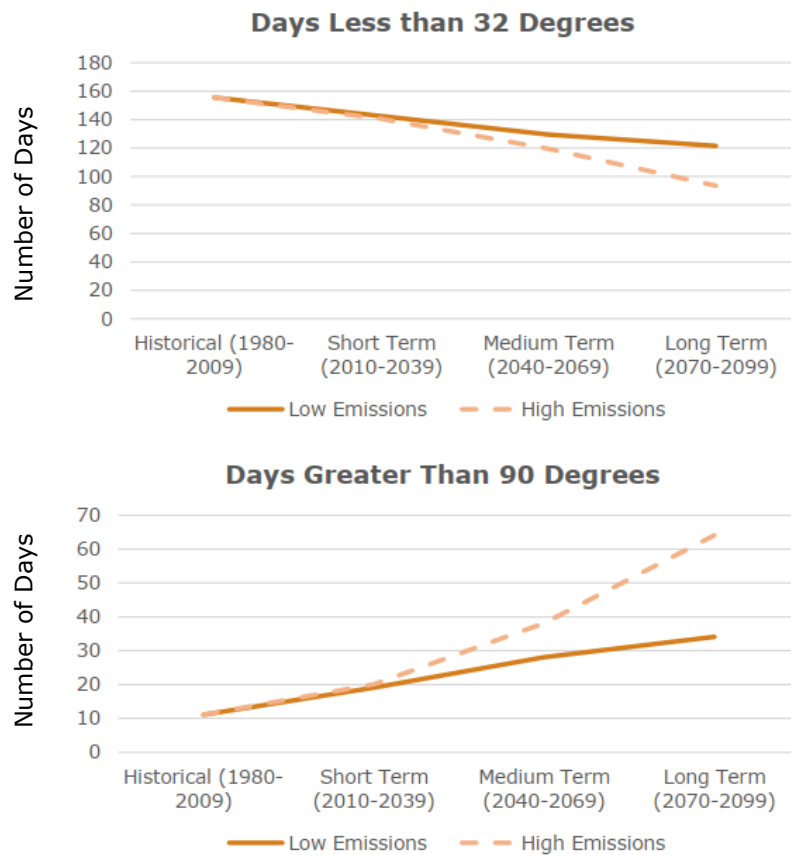


Figure 1. Projected trends in extreme temperatures in Durham, NH, under low and high emissions scenarios⁶

The heat island effect is when developed areas experience higher temperatures than undeveloped areas due to their lack of greenery and concentrations of surfaces and infrastructure that absorb and re-emit the sun's heat much more than natural landscapes do. Urban areas may experience temperatures 1-7°F higher than outlying areas during the day, and 2-5°F higher during the night. Warmer temperatures can increase energy consumption, air quality concerns, and human health and comfort issues. Strategies such as expanding vegetation, green roofs, and 'cool pavements' can reduce the heat island effect.⁷

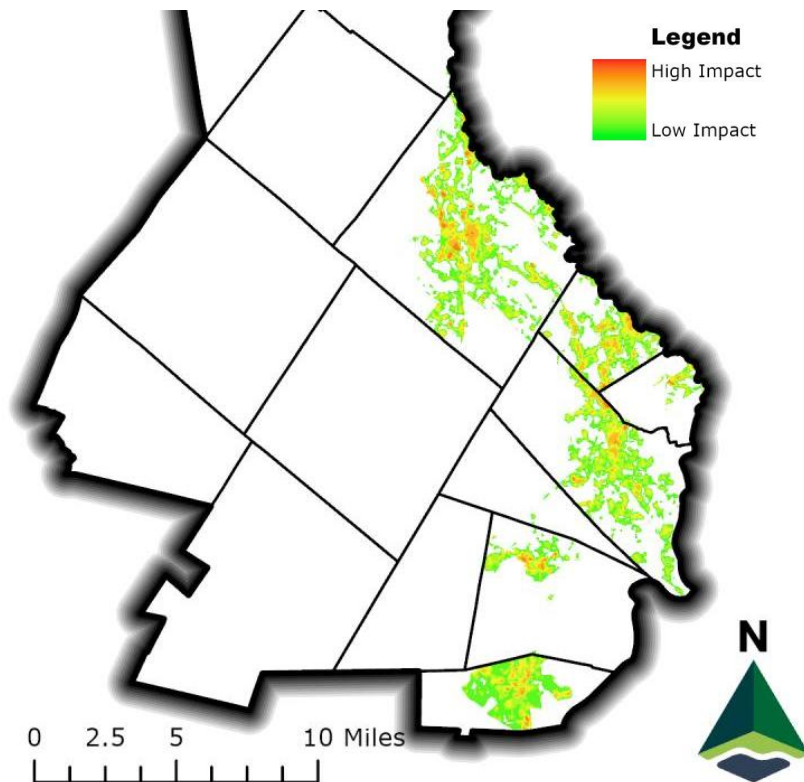


Figure 2. Impact of the Urban Heat Island Effect (SRPC Data Snapshot 2026)

The Trust for Public Land found that areas within a 10-minute walk of a park can be as much as 6°F cooler than neighborhoods outside that range.⁸ Recreation sites are often the most readily accessible shaded areas of the region, in addition to municipal pools, formal and informal beaches, and lake access points. Thirteen percent of the region's recreation sites have manmade shade structures while 64% have shade trees. The remaining 23% have no shade at all.⁹

Heating and Cooling Degree Days

The metric heating degree days (HDD) indicates how cold the temperature was over a given period, defined by the number of degrees a day's average temperature was below 65°F. A higher number of heating degree days often relates to higher energy use for heating. In New Hampshire, annual HDDs have decreased by 10% since 1971. As temperatures continue to warm, New Hampshire could experience a 19-35% decrease in HDD by the end of the century, compared to the 1980-2009 average.

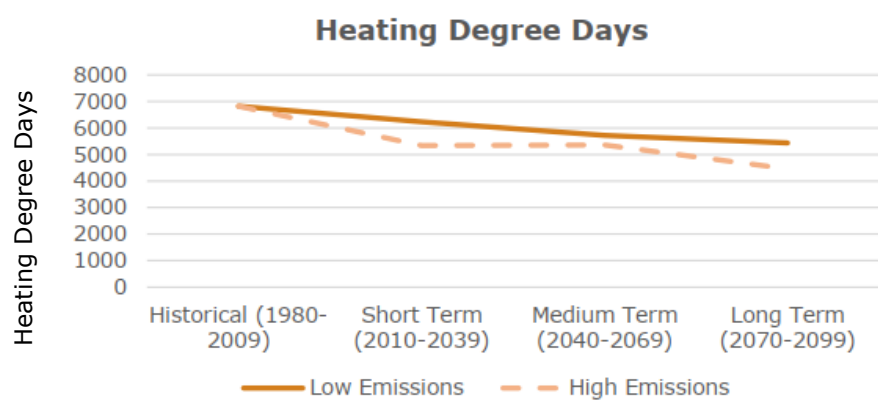


Figure 3. Projected Trends for Heating Degree Days in Durham, NH, under Low and High Emissions Scenarios¹⁰

The metric cooling degree days (CDD) indicates how warm the temperature was over a given period, measured by summing the number of degrees that a day's average temperature was above 65°F. A high number of cooling degree days is often related to higher levels of energy use for cooling. In New Hampshire, annual CDDs have increased by 74% since 1971, and CDDs could double by the end of the century, compared to the 1980-2009 average.

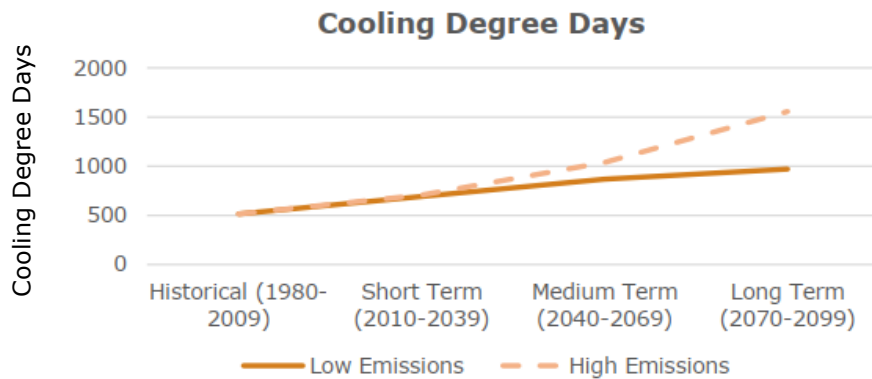
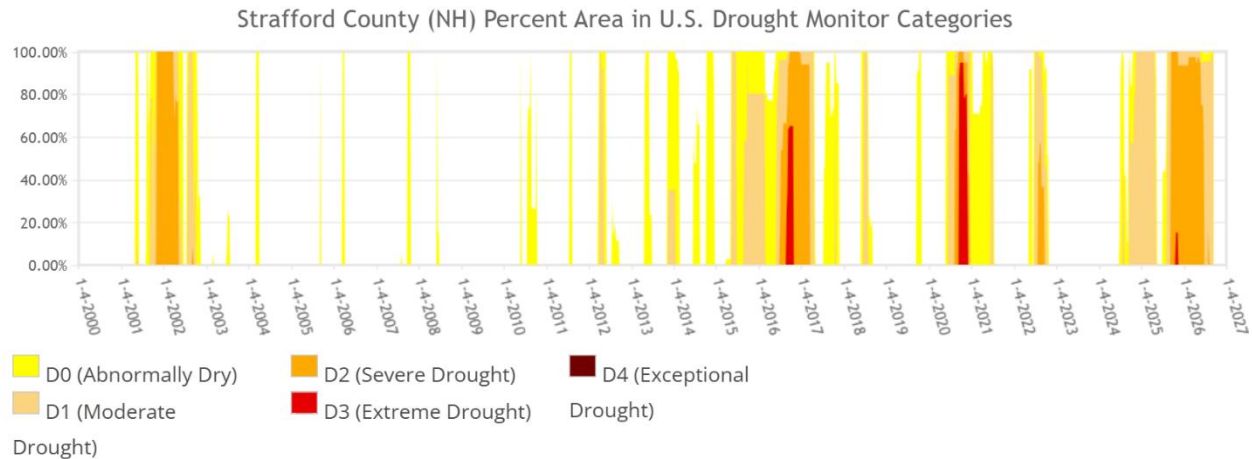


Figure 4. Projected Trends for Cooling Degree Days in Durham, NH, under Low and High Emissions Scenarios¹¹

These changes could have both positive and negative effects. For example, the number of days when heating is needed may decrease (though heating costs may still fluctuate from a variety of external factors). However, the amount of air conditioning needed will likely increase significantly. This will lead to not only greater energy expenses during hot periods, but also more strain on the power grid and increased emissions.

Drought and Wildfires

Strafford County has been in a state of moderate (D1) to severe (D2) drought for over a year. Portions of the county reached the 'extreme drought' category (D3) in October 2025, fall 2020, and September 2016. Under moderate drought conditions, irrigation use increases, crop yields are lower, fish and trees experience stress, wildfires increase, and lake levels are below normal.¹²



From the U.S. Drought Monitor website, <https://droughtmonitor.unl.edu/DmData/TimeSeries.aspx>, 9-23-2026



Figure 5. Percent Area in U.S. Drought Monitor Categories in Strafford County, NH, from 2000 to present (U.S. Drought Monitor)¹³

According to the New Hampshire Dry Well Reports Dashboard, there have been nine reports of a dry well in Strafford County during 2025 and 2026 – five in Farmington, two in Barrington, one in Dover, and one in Lee.¹⁴ NHDES notes that this dashboard only captures voluntarily reported data so the actual number of dry wells is likely much higher.¹⁵ Some municipalities in the region have implemented voluntary or mandatory outdoor water conservation measures.

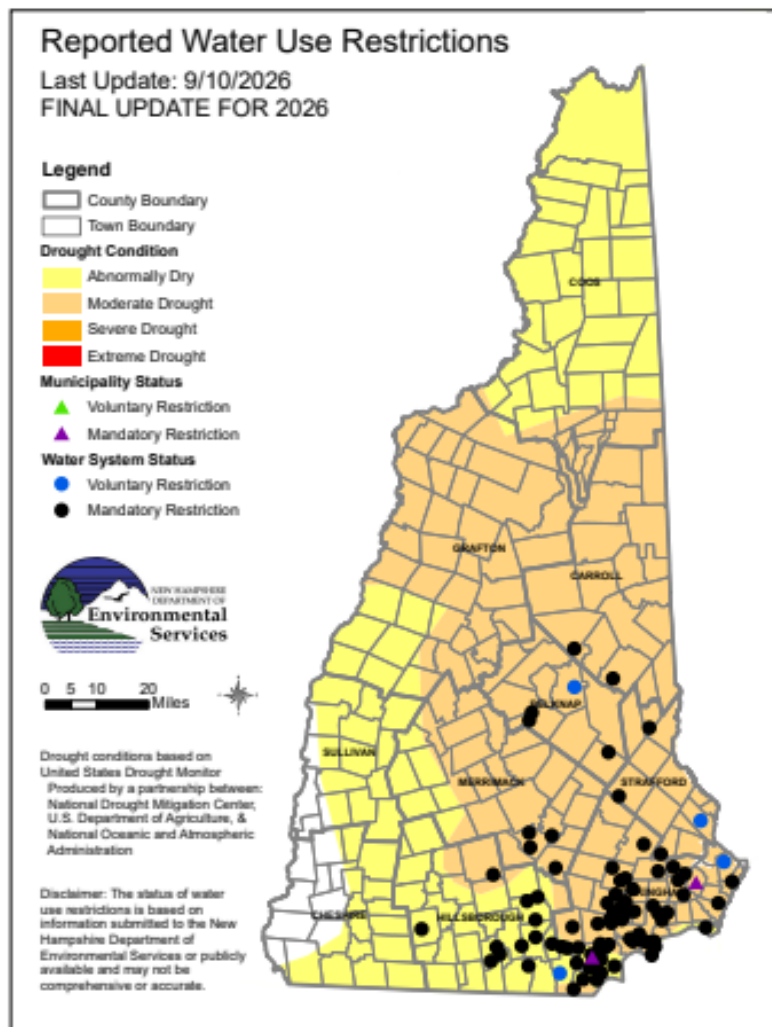


Figure 6. Reported Water Use Restrictions (NHDES)¹⁶

The [NHDES Emergency Drought Assistance Program](#) provides financial assistance to low-income homeowners with drinking water wells impacted by drought. Funding for this program was fully expended in May 2026 and no longer accepted applications.

Drought conditions also increase the susceptibility of trees to pests and diseases and increase the risk of wildfire. Additionally, as wildfires become more frequent and intense in other regions, New Hampshire has seen air quality impacts from the smoke.¹⁷

Plant Hardiness Zones

The USDA's Plant Hardiness Zone Map indicates what types of plants can survive and where. In 2012, the region was mostly Zones 5A and 5B, with a bit of Zone 6A in Newmarket. In 2023, the USDA issued an updated version of this map, reflecting warmer temperatures (Figure 7).¹⁸ According to the updated map, there are now mere acres of Zone 5A in Wakefield, and the majority of the region is now Zone 6A with a band of 5B in the more northern communities.

As a result of warmer temperatures, plants that could previously survive in neighboring Massachusetts are starting to survive in New Hampshire, and many crops are growing longer into October before the first frost. This is great for crops like peaches and tomatoes. Conversely, the milder winters with shorter springs and more freeze-thaw events are expected to cause more variable maple tapping seasons and overall decreases in syrup production.¹⁹

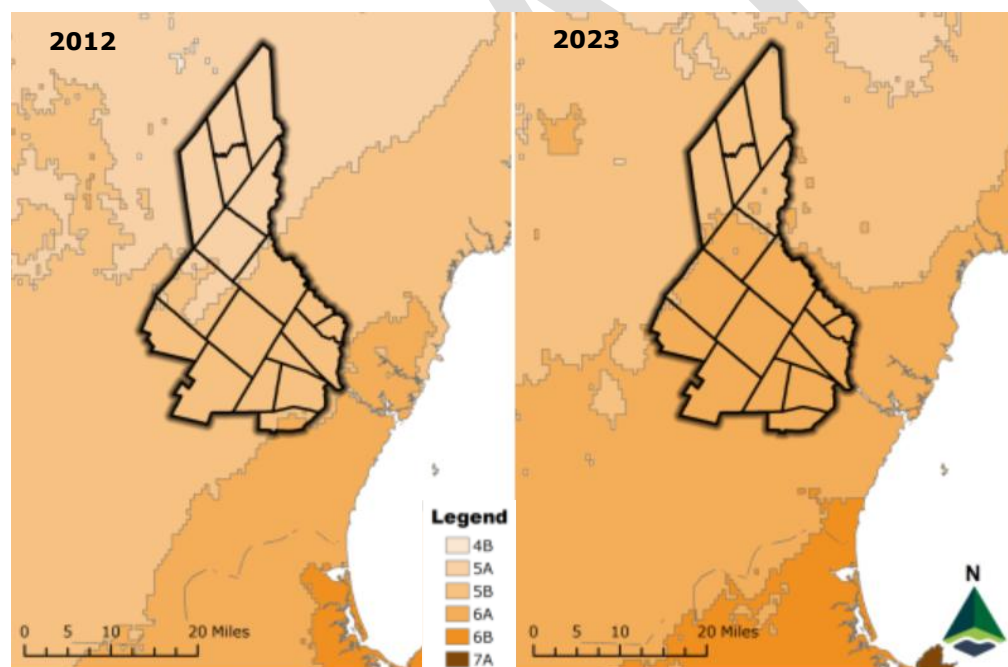


Figure 7. USDA Plant Hardiness Zones for Strafford County, 2012 (left) vs. 2023 (right) (SRPC Data Snapshot 2026)

Coastal Flooding and Groundwater Rise

In coastal New Hampshire, sea levels rose about 8.5 inches from 1926 to 2025 based on local tide gauge data. Sea level is estimated to rise about a foot by 2050, compared to 2000 water levels. By 2100, coastal New Hampshire can expect 3.4 feet of sea level rise compared to 2000 water levels.²⁰

Sea level rise will lead to more frequent flooding from extreme high tide levels and also will increase the extent of flooding as coastal storms occur on top of higher water levels.

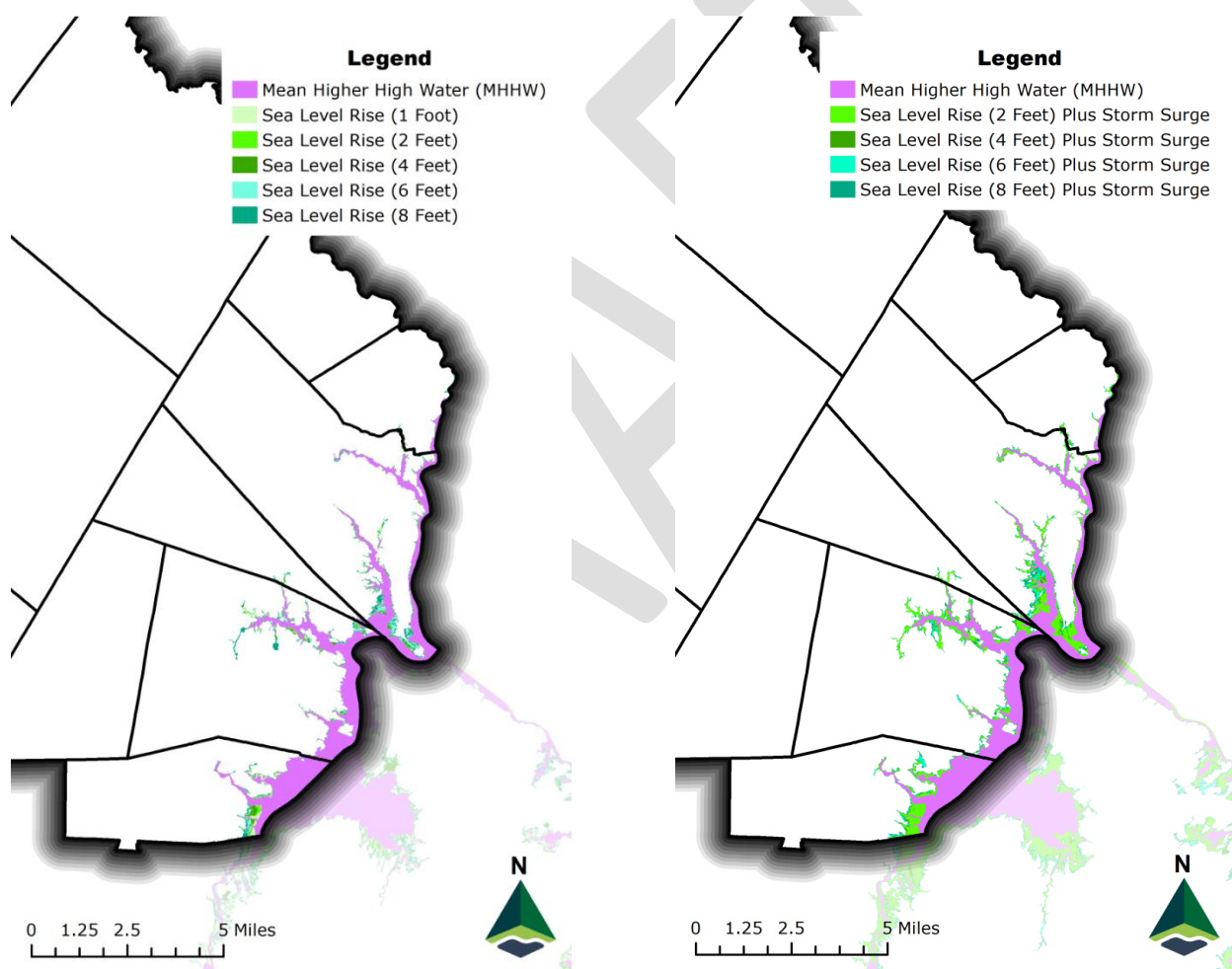


Figure 8. Extent of Area Inundated by Sea Level Rise Scenarios for coastal communities in the SRPC region (SRPC Data Snapshot 2026)

As sea levels rise, groundwater rises too. Groundwater rise can even impact areas not directly affected by aboveground flooding from sea level rise. A groundwater modeling study in Durham found that with 4 feet of sea level

rise, groundwater rise is expected to extend up to 1.5 miles inland. Rising groundwater can threaten infrastructure like roads, septic systems, and underground utilities, and can contribute to saltwater intrusion in drinking water wells.

Rainfall and Flooding

Total annual precipitation has increased in coastal New Hampshire since 1900, primarily due to more intense rain events. Seasonal differences in precipitation are expected to increase in the coming decades – for example, precipitation is projected to increase 13-32% during the winter and spring, while little change is expected during summer and fall. As temperatures rise, snowfall is expected to decline, with more winter precipitation falling as rain rather than snow. Additionally, the frequency of the heaviest precipitation events could double by the end of the century.²¹ More intense rain events can contribute to flooding, erosion, and water quality issues due to runoff.

Impacts of these Changes

Collectively, these trends in warmer temperatures, drought, wildfires, coastal flooding, groundwater rise, and more intense precipitation will affect all aspects of life in the Strafford Region, including physical infrastructure, businesses and the economy, human health and wellbeing, public safety, natural resources and ecosystem health, wildlife, agriculture and aquaculture, and water quality and quantity. Many of these impacts are discussed in the themes below.

Climate Vision, Themes, and Lenses

Vision Statement:

The Strafford Region will be a place where all can thrive in the face of a changing climate. By developing proactive plans, advancing resilient and efficient infrastructure projects, encouraging climate-smart development and land use planning, protecting natural resources, and fostering inclusive and connected communities, the Strafford Region will be prepared for extreme weather and long-term climate change and equipped to make smart and equitable investments in the future.

The Regional Plan Subcommittee and SRPC staff identified four themes and accompanying goals for the *Forward Thinking Climate Addendum* that collectively support the vision for the region.

Theme 1: Engaged and Informed Communities

Goal Statement: Community members in the Strafford Region have access to the information they need and are actively engaged in planning and decisions related to climate resilience.

Theme 2: Resilient and Efficient Infrastructure

Goal Statement: Infrastructure in the Strafford region will be resilient to the impacts of a changing climate and advancing energy efficiency and greenhouse gas reduction.

Theme 3: Climate-Smart Development and Land Use

Goal Statement: Land use planning in the Strafford Region will integrate climate, supporting subsequent adaptation and mitigation action.

Theme 4: Resilient, Healthy, and Connected Communities

Goal Statement: Communities in the Strafford region are prepared for extreme weather events and able to thrive amidst the impacts of climate change.

Additionally, **four lenses** were identified as overarching principles that interact with the themes above. These four lenses are consistent across the Comprehensive Economic Development Strategy (CEDS), the Metropolitan

Transportation Plan (MTP), and the Land Use and Environment (LUE) Chapter. The lenses include:

Regional Partnerships and Collaboration

Growing regional and intercommunity collaborations to address shared vulnerabilities and build resilience at multiple scales. Fostering connections and partnerships to leverage resources.

Resiliency and Future Readiness

Supporting a region that is prepared for extreme weather, building self-sufficiency through alternative energy and local food production, and reducing physical vulnerabilities through climate-smart land use planning and infrastructure projects. Increasing social capital by supporting community connections and civic engagement.

Quality of Life and Community Identity

Protecting and enhancing the assets and quality of life factors that contribute to the region's identity in the face of a changing climate.

Age Friendliness

Supporting all community members to be prepared for extreme weather and impacts of a changing climate. Encouraging connections across demographics to build resilience.

Engaged and Informed Communities

Climate Education

Understanding the causes and impacts of climate change is an important factor in supporting action to address the impacts. Climate change is also contributing to mental health impacts, particularly for youth.²² According to national surveys and public opinion modeling, a majority of people in the U.S. acknowledge that global warming will harm future generations and agree that schools should teach about global warming.²³ At the same time, surveys of teachers identify a lack of confidence, resources, and support to teach about climate change.²⁴ Solutions-oriented climate education can serve as an antidote to help mitigate climate anxiety.²⁵ Some local resources include the NH Environmental Educators network, which provides grants to support hands-on outdoor learning experiences, and the NH Energy Education Project, which provides climate and energy-focused curricula, teacher workshops, and small grants for action projects.

Case Study: Climate in the Classroom Program in Durham

Starting in 2015, SRPC spearheaded a creative project with the primary goal of reaching and engaging with a broader group of individuals around the topic of climate change. SRPC and partners identified a need to engage with parents and children, who are often absent from planning discussions due to full-time jobs, school, and otherwise busy schedules. Along with staff from UNH Extension and NH Sea Grant, the project came to life for the first time at Oyster River Middle School. Former 5th grade teacher, Chris Hall, credited the planning work the team took together as critical to



Figure 9. Kyle Pimental discusses Sea Level Rise with students at Oyster River Middle School in Durham

the project's success, and noted the power behind making the science "both understandable and palatable for this age group."

The program, supported by funding from the NH Department of Environmental Services Coastal Program, involved a kickoff presentation and classroom activity, followed by a group project culminating in a community workshop. Groups of students worked together to create a poster addressing a key question related to climate change. After several weeks researching their question, crafting their posters, and practicing their presentations, the students presented their research to family members, town officials, and other community members at a culminating event at the Durham Public Library. "The whole project was based around the kids' teaching the adults in our community," Hall said. "For many adults, they learned things they did not know, like the science behind climate change." Over 90 people attended the event and asked the students important questions about their posters.

The program grew at Oyster River Middle School, with more teachers participating in subsequent years. SRPC again collaborated with UNH Extension and NH Sea Grant, supported by a NHDES Coastal Resilience Grant, to support a teacher workshop and transfer the program to other schools in coastal New Hampshire. Since the inception of Climate in the Classroom, the program has reached hundreds of students and family members. The success of this project came from the hands-on local educational engagement with climate ideas that opened the door to further awareness in the community. Hall described how the program "gave [students] a sense of hope" and reflected that climate education is "as important as anything we teach."

The multipronged benefits of this effort are part of what makes it unique. Ultimately, the goal is to plant a seed for action from adults and for future leadership from students. One factor in the success of this program was working directly with teachers to develop and tailor the curriculum. Recognizing that each teacher, class, and school system is different, the team also endeavored to provide a variety of activities and options that could be selected, based on what best meets the teachers' needs. In recent years, the Climate in the Classroom program has evolved into a professional development opportunity for educators, hosted by NH Sea Grant and UNH Extension.

Community Engagement

Engaged community members are key to climate resilience, both in terms of informing and building support for municipal action, as well as fostering preparedness at the individual, neighborhood, and community scales. Residents can play a key role in informing master plan chapters and priorities, for example, as well as considering zoning updates related to resilience. Community support is

Case Study: Seacoast Remembrance Project in Durham

One of the barriers to acting proactively to address climate change is that scientific projections can feel overwhelming and abstract. To help make future climate projections feel more tangible in the present, SRPC worked with the Town of Durham, UNH Extension, and NH Sea Grant on a creative art project. Led by artist Tom Starr from Northeastern University, the [Seacoast Remembrance Project](#) resulted in the installation of a series of site-specific markers at locations throughout the community. Each marker presented a simple, future-oriented statement, written in the style of a historic plaque.

SRPC engaged the Durham Leadership Team, a group of municipal staff from the various departments, in a series of conversations to brainstorm about climate impacts and identify visible locations and statements for the markers. These discussions leveraged available climate science and vulnerability assessment information, such as the C-RiSe Vulnerability Assessment SRPC completed in 2017. In addition to statements about climate impacts, like flooding and extreme heat, the Leadership Team also included statements highlighting adaptation actions the Town may take in the future – for example, “All downtown buildings powered by 100% renewable energy – July 20, 2040.” Sites include several downtown locations, the UNH pool, Mill Pond Park, Durham Town Landing,



Figure 10. Seacoast Remembrance Project sign at the Durham Town Hall

Jackson's Landing, and Wagon Hill Farm. Each marker has a QR code that pointed to a webpage with more information about the underlying climate science and what the Town is doing to address climate impacts. In this way, the markers can serve as an on ramp for members of the public who notice a sign to learn more.

In addition to the physical installations themselves, the project served as an engaging way for SRPC to discuss climate information with a variety of municipal staff members and explore the types of impacts Durham can expect in different parts of the community. While Durham was the first New Hampshire community to take on this project, Starr has worked with numerous communities in Massachusetts on a similar project, with over 100 installations in total. This outside-the-box project highlighted the benefits of engaging with the art community as a creative engagement and communication approach, to help people connect with climate impacts in a way that can be challenging with data and graphs alone.

Goal Statement

Community members in the Strafford Region have access to the information they need and are actively engaged in planning and decisions related to climate resilience.

Objectives and Strategic Direction

- Support education and learning opportunities related to climate impacts and resilience.
- Encourage more municipalities to participate in the NH Coastal Adaptation Workgroup (CAW). Continue to recognize the climate efforts of Strafford region community leaders through CAW's Community Champions award.
- Promote climate-related awareness building opportunities such as CAW's Picturing Rising Tides campaign and participatory science programs.
- Connect teachers in the region to resources and professional development opportunities related to climate.
- Make sure engagement opportunities are accessible and welcoming for all.

Resilient and Efficient Infrastructure

Infrastructure Vulnerabilities and Adaptation

Coastal Hazards

In 2017, SRPC completed the [Climate Risk in the Seacoast \(C-RiSe\) Vulnerability Assessment](#), looking at the infrastructure and assets exposed to sea level rise (SLR) and storm surge in the region's five coastal communities: Dover, Durham, Madbury, Newmarket, and Rollinsford. Table 1 provides a summary of some of the key vulnerabilities identified in this assessment for the region.

Table 1. Infrastructure in the Strafford Region projected to be exposed to flooding under multiple sea level rise and storm scenarios (SRPC Data Snapshot 2026, based on data from the C-RiSe vulnerability assessment (2017))

Type of infrastructure	1.7' of SLR	4.0' of SLR	6.3' of SLR	1.7' of SLR + storm surge	4.0' of SLR + storm surge	6.3' of SLR + storm surge
Homes	3	25	92	192	212	212
Bridges	17	18	18	18	18	20
Miles of roads	0.32	1.29	3.3	7.96	8.05	8.05
Critical facilities	0	2	3	3	3	3

At the time the assessment was done, the 6.3 feet of sea level rise plus storm surge scenario impacted 970 parcels valued at \$441 million (\$602 million in today's dollars), and 206 homes valued at over \$78 million (\$106 million in today's dollars).²⁶ Since 2017, the quantity of exposed assets has likely grown due to increased development.

In addition to the C-RiSe assessment, SRPC worked with Dr. Jayne Knott and other partners to assess groundwater rise vulnerability in the Towns of Newmarket and Durham. The Newmarket study found that groundwater rise is predicted to occur within 0.8 miles from the coast of Newmarket with 6.6 feet of sea level rise. Vulnerable infrastructure includes a contamination hazard site, a local potential contamination site, and a sewer pump station. Thirty private drinking water supplies and septic systems may also be impacted. The report flagged the drinking water well at the Moody Point neighborhood as vulnerable to groundwater rise and saltwater intrusion,

contributing to the decision to extend municipal water supply to the neighborhood.²⁷ The Durham study found that groundwater rise is predicted to occur up to 1.5 miles inland from the Durham coastline with 8 feet of sea level rise. Rising groundwater could weaken coastal roads, damage underground infrastructure, and impact septic systems, wells, and underground contaminated sites. The study identified assets vulnerable to 6 feet of sea level rise, in areas where groundwater depth is 5 feet or less. These vulnerable assets included 71 stormwater catchbasins, 92 culverts, over 100 private wells and septic systems, four public drinking water wells, four contaminated sites, almost 10 miles of roadways, over 1,000 feet of stormwater pipes, 2.2 miles of sewer pipes, and 3.3 miles of water pipes. Impacts could include increased maintenance and repair costs as well as water quality issues.²⁸

While these coastal hazards only directly impact a subset of the communities in the region, indirect effects can extend to those in others as well – for example, those who live further inland but commute to the coast for work. The economic impacts of coastal storms and rising sea levels on coastal New Hampshire also have state-wide ramifications, as the coastal region represents a major economic engine for the state through tourism, recreation, and significant employers.

Inland hazards

Beyond the immediate coastal hazards, all of the communities in the region face impacts from extreme precipitation, riverine flooding, heat, and wildfire. The SRPC Data Snapshot 2026 includes maps of FEMA's Risk Index, which indicate risk for different hazards at the census tract scale (see, for example, Figure 11). Risk is calculated as the expected annual loss multiplied by a community risk factor, based on social vulnerability and community resilience. Some of the higher risk ratings in the region include riverine flooding, ice storms, winter weather, and drought. Municipalities' hazard mitigation plans provide a local ranking of hazards and documentation of past impacts and potential risks.

Riverine Flooding

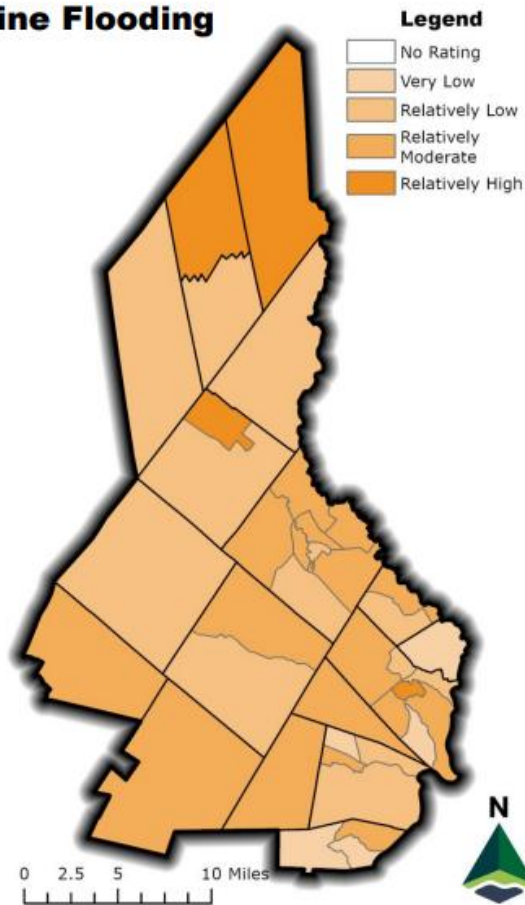


Figure 11. FEMA Hazard Risk Map for Riverine Flooding for the Strafford Region²⁹

Economic impacts

As climate impacts increase, economic costs rise as well. For example, more intense storms cause business interruptions and greater costs to repair damage; extreme heat causes energy costs to increase as well as health impacts particularly for older populations and outdoor workers. Long-term, sectors such as the ski industry face growing challenges and costs to remain viable, and municipalities face increasing costs for infrastructure maintenance and upgrades. A 2022 study found that a 1°F increase in average temperature resulted in a 3.2% increase in per capita municipal general-fund expenditures in Massachusetts.³⁰

Across the US, billion-dollar disaster events are becoming more common. As of 2022, the United States experienced an average of one billion-dollar “natural” disaster every three weeks. In the 1980s, the frequency of one billion-dollar disasters (adjusted for inflation) was every four months. Over

the course of four years, from 2018 to 2022, the US experienced 89 one billion-dollar disasters.³¹ In New Hampshire, single weather events have not yet reached the billion-dollar level. However, multiple events in 1998 had a combined disaster cost of over a billion dollars for the first time in the 40 years of data. As extreme weather events become more impactful, it is important for New Hampshire communities to prepare now through mitigation to reduce the cost of damages to infrastructure. According to a 2024 report released by the U.S. Chamber of Commerce, \$1 of investment in resilience and preparedness results in \$6 avoided costs of cleanup after disasters and an additional \$7 of savings for the local economy.³²

Case Study: Lubberland Creek Culvert Replacement in Newmarket



Figure 12. Culvert at Bay Road and Lubberland Creek in 2014 (left) and 2019 (right) (credit: TNC)

Culvert replacement projects present exciting opportunities for multiple benefits – reduce flooding, improve wildlife passage, enable salt marsh migration as sea levels rise, and reduce maintenance costs. This makes these projects prime candidates for collaboration among different partners and for leveraging multiple funding sources.

The culvert where Bay Road crosses Lubberland Creek in Newmarket was an early example of this kind of project in coastal New Hampshire, representing a successful partnership between SRPC, the Town, The Nature Conservancy (TNC). SRPC has worked to support the Town of Newmarket to advance its resilience goals for many years. Flood resilience has been part of the Town's master plan since 2015, and SRPC has helped update plans, draft regulations, and advance studies and design for resilience-related projects. Bay Road serves as an evacuation route for the town. The frequent flooding

at this crossing presented safety concerns and infrastructure maintenance costs.

For TNC, the site is very close to their Newmarket office, raising awareness of and interest in the site. In addition to the flooding concerns, the site was identified as a barrier for fish passage and a tidal restriction impacting habitat health. While on a walk from the office one day, Joanne Glode from TNC stopped at the culvert and noticed an abundance of eels (a species of special concern in New Hampshire) at the base of the perched culvert. She also knew from working there how often it floods. TNC connected with public works staff at the Town of Newmarket, and the combination of interests (reducing flooding, mitigating a public safety issue, improving habitat for fish, and enabling salt marsh migration) made a strong case for funding and getting partners on board.

Joanne described how this work evolved from a convergence of new information, observations, and resources. Sea level rise projections had recently been published for coastal New Hampshire, and LiDAR for the Great Bay area was newly available. Another TNC colleague combined the sea level rise projections with the new LiDAR to help visualize which areas were most vulnerable to flooding in the future. TNC was interested in the potential loss and migration of salt marsh habitat. The NH Department of Environmental Services was also working on a tidal crossing assessment at the time, developing a protocol for assessing culverts for flood resilience, geomorphology, and aquatic organism passage.

The initial culvert was a 36-inch corrugated metal pipe and was perched at all tidal stages, creating a complete barrier to aquatic organism passage.³³ This location was highlighted in the [C-RiSe Vulnerability Assessment](#) completed for the Town by SRPC in 2017. Undersized culverts are often replaced in-kind and not sized adequately to deal with flood risk and aquatic organism passage, due in part to the higher upfront financial costs. Through this partnership, TNC was able to leverage federal and state grant funding while the Town staff contributed labor, reducing the overall cost. This undersized culvert was replaced with a 16-foot span, designed based on a 3.74-foot sea level rise scenario and 1% annual chance rain event. The road no longer floods, and aquatic connectivity is improved for fish and other organisms. Additionally, the improved tidal connection will better allow the salt marsh habitat to migrate inland as sea levels rise.

With the culvert replacement completed in 2019, TNC now has multiple years of monitoring data for the impacts on the fish community, as well as plans to track the vegetation and salinity measurements, which will take longer to show changes. The Town staff and community members benefit from reduced safety concerns and maintenance costs at that location. Joanne reflected on the importance of organizations like TNC connecting with municipalities to find these kinds of projects that have multiple benefits and align with community needs.

Energy Efficiency and Emissions Reduction

NHDES is working on a [Comprehensive Climate Action Plan](#) for the state, anticipated to be completed by the end of 2026. This will include a greenhouse gas inventory and emissions projections, emissions reduction targets and benefits analysis, and a workforce planning analysis. This comprehensive action plan builds on the [State of New Hampshire Priority Climate Action Plan](#) (March 2024), which includes regional planning commissions in the list of 'key implementing agencies.' Several of the recommendations mention supporting technical assistance by the regional planning commissions, including recommendations to develop and expand transit programs and deploy electric charging infrastructure.

Renewable Energy

A majority of electricity for the region is sourced from non-renewable sources outside of Strafford County. The energy resource mix for the New England Region includes 51% natural gas, 23% nuclear, 13% renewables, 7% net imports, 6% hydro, <1% coal, and <1% oil.³⁴ Renewable energy generation within the SRPC region is limited but growing. Seventeen percent of New Hampshire's electricity generation came from renewable resources in 2024, according to the U.S. Energy Information Administration.³⁵ Most of the state's renewable generation comes from hydroelectric power, biomass, and wind. The Seabrook Station, one of only two nuclear power plants in New England and the largest power plant in New Hampshire, provided 56% of New Hampshire's 2023 total in-state electricity net generation.³⁶

Renewable power sources in the SRPC region include:

- **Hydroelectric Dams:** There are multiple, privately owned hydroelectric dams on the on the Salmon Falls River: Milton Hydro,

Somersworth Lower Great Dam, and the Rollinsford plant operated by Green Mountain Power Corp.

- **Large Scale Solar:** Recent years have seen a growing number of large solar generation arrays built in the region: Milton Solar Farm, Dover High School, Blackwater Road Solar in Somersworth, and others in development (e.g., Lilac State Solar Project in Farmington)
- **Biomass:** Biomass is rarer in NH, but the region has a significant source from the Turnkey Landfill Gas Recovery facility in Rochester operated by Waste Management. In 2010, the University of New Hampshire began using natural gas from Turnkey to generate its electricity and heat, reducing UNH total emissions by about 25%.

Local resources related to renewable energy include [Clean Energy NH](#), whose Energy Circuit Riders support municipalities and small businesses to expand renewable energy generation, fleet electrification, and energy-saving upgrades. The [NH Community Development Finance Authority's Clean Energy Fund](#) provides low-interest financing to businesses, nonprofits, and municipalities to support renewable energy projects.

Alternative Transportation

Public Transit service plays an important role in sustainability of the transportation system. In FY2025 COAST passengers traveled an estimated 2,708,901 miles and riders avoided an estimated 1,194 tons (2,388,000 lbs.) of greenhouse gases being emitted into the atmosphere.³⁷ At the same time, every \$1 dollar invested in COAST operations yields \$4 for the regional economy. UNH Wildcat Transit is a public transportation service focused on providing transportation for UNH students, faculty, and staff. In FY2025, UNH Wildcat provided 675,734 trips across its regional and on-campus routes.³⁸ The majority of the UNH Wildcat fleet is fueled with cleaner compressed natural gas and campus planning is working toward electrification of the bus fleet. The [SRPC Active Transportation Plan](#) (2024) provides a framework with goals and strategies related to improving non-motorized transportation in the Strafford region.

Alternative Transportation Fuels

Adoption of alternative transportation fuels is growing nationwide and in the SRPC region. Electric and propane are the most common types, with electric for personal vehicles and propane generally for larger vehicles like solid waste pickup. New Hampshire lags well behind neighboring New England

states. The Strafford region particularly lacks public vehicle charging infrastructure and represent a noticeable gap in the state. However, more charging stations are coming online at specific destinations such as entertainment and commercial centers, hotels, and multi-family residential buildings. Expansion of public vehicle charging will require continued public and private investment and upgrades of electric infrastructure. Charging rates vary by station “level” and planning is required to install stations at appropriate locations. Most electric stations in the SRPC region are “Level 2,” except for eight DC Fast Charging (Level 3) stations at Hannaford's in Rochester reserved for Tesla vehicles. See the table below for the differences between each level. Liquid Petroleum Gas (LPG) is also known as propane Autogas where it is used primarily for fleet applications such as buses and heavy-duty machinery. Propane vehicles are typically as efficient as gasoline and offer lower carbon and oil contaminants for a longer lasting engine.

Electric vehicle charging stations are projected to become more common throughout the United States in the coming 10 years as demand rises and new models become available. However, it will require additional infrastructure to support the stations, especially in rural areas. Expanding charging has economic implications in addition to the climate mitigation benefits. For example, in a survey of New Hampshire EV drivers, over 70% reported patronizing local businesses while using public EV charging stations, typically spending between \$20 and \$40.³⁹

Table 2. Charging Stations in the SRPC Region (DOE, 2026)

Municipality	Electric Station
Dover	7
Durham	5
Farmington	0 (1 LPG)
Newmarket	2
Rochester	4
Somersworth	3

SRPC launched a [Municipal Guide to EV Charging Stations](#) in 2023. This resource compiles information related to charging levels, funding sources, signage, policy, and more. The Guide is intended to support municipalities to navigate the process of increasing deployment of EV charging stations, as demand for charging stations rises. NHDES recently announced the [Recharge the Adventure New Hampshire Grant Program](#), a competitive reimbursement

program funded by the New Hampshire Volkswagen Environmental Mitigation Trust (VW Trust) to install Level 2 electric vehicle charging infrastructure at travel- and tourism-oriented locations across New Hampshire. [Clean Energy NH](#) also provides resources related to electric vehicles and charging.

Energy Efficiency

As warmer temperatures cause energy usage to rise in the summer and electricity costs increase, advancing energy efficiency becomes increasingly important and impactful. New Hampshire ranked seventh in terms of average retail price of electricity to residential sector (27.27 cents/kilowatt-hour), as of October 2025.⁴⁰ The abundance of older construction in New Hampshire often leads to relatively poor energy efficiency, resulting in higher heating and cooling costs. This disproportionately burdens lower income populations and renters, as they face rising utility bills on top of other expenses. Improving energy efficiency can support cost reduction as well as health benefits.

Fortunately, there are a variety of resources to support energy efficiency improvements in New Hampshire. For example, the [NH Community Development Finance Authority's Clean Energy Fund](#) provides low-interest financing to businesses, nonprofits, and municipalities to support energy efficiency projects, as well as energy audit grants to rural small businesses and agricultural producers. [NHSaves](#) offers residents energy audits, workshops, and rebates and low- to no-interest loans to support energy efficiency improvements. NHSaves also provides support for businesses and municipalities. NHSaves programs are funded by electric and natural gas ratepayers and administered by Eversource, Liberty Utilities, New Hampshire Electric Cooperative and Unitil. Additionally, New Hampshire is part of the [New England Heat Pump Accelerator program](#), funded by the EPA's Climate Pollution Reduction Grants and administered locally by NHDES and NHSaves.

Goal Statement

Infrastructure in the Strafford region will be resilient to the impacts of a changing climate and advancing energy efficiency and greenhouse gas reduction.

Objectives and Strategic Direction

- Support municipalities in the region to incorporate climate projections into infrastructure projects, including retrofits and new infrastructure. Utilize available information from vulnerability assessments and the updated NH Coastal Flood Risk Summary to inform projects.
- Support municipalities to prepare proactively to fund climate resilience projects. For example, facilitate inclusion of climate resilience into capital improvements planning, advance a pipeline of shovel-ready resilience-related projects, and explore development of climate resilience cooperative agreements and coastal resilience funds among municipalities (NH RSA 36:53-a).
- Where possible, encourage use of natural and nature-based strategies to maximize resilience co-benefits for people and the environment.
- Advance awareness about available resources for renewable energy and energy efficiency (e.g., grants, tax incentives, etc.) and about the overall cost savings benefits for resilient and efficient infrastructure.
- Work with municipalities to inventory greenhouse gas emissions and energy usage and identify opportunities for reduction.
- Advance the recommendations from the [SRPC Active Transportation Plan](#) (2024) and Metropolitan Transportation Plan (2026), such as decreasing commute times and congestion, participating in CommuteSmart Seacoast, and improving and promoting bike paths.
- Identify opportunities to build energy resilience in the region.⁴¹

Climate-Smart Development and Land Use

Land use planning plays a critical role in both climate adaptation and mitigation. Multiple communities in the Strafford region have incorporated climate change into their master plans, a key foundation for subsequent actions. SRPC supported the City of Dover to develop a Climate Adaptation Chapter, which won the Plan of the Year award from the New Hampshire Planning Association in 2018. Within municipal zoning ordinances and regulations, there are a variety of opportunities to incorporate climate impacts to ensure future development is located away from areas vulnerable to flooding, for example. The [Resilient Land Use Guide](#), published in 2022 by SRPC and Rockingham Planning Commission, provides model regulations that incorporate the best practices and updated information to help municipalities in New Hampshire adapt to climate change and coastal hazards. In addition, the [NH Menu of Higher Floodplain Regulation Standards](#), from the NH Office of Planning and Development, provides recommended higher standards that go beyond the minimum National Flood Insurance Program requirements. Several of the communities in the Strafford region have adopted higher standards. For example, see the case study below on improving floodplain management regulations, highlighting efforts in Durham, Dover, Rollinsford, and Madbury.

Additionally, ordinances can be updated to support emissions reductions. For example, ordinances can be updated or adopted to inform the location and development of renewable energy, facilitate alternative transportation, and reduce sprawl. One relevant resource is the [NH Model Solar Ordinance](#), developed by Clean Energy NH to facilitate clear regulations related to solar energy.

Land conservation and natural resource protection also plays an important role in both climate adaptation and mitigation. Protecting riparian buffers and areas that provide flood storage helps keep infrastructure out of harm's way. Maintaining forested landscapes and healthy ecosystems also contributes to carbon sequestration and storage. Municipalities can incorporate these benefits in their natural resource inventories and conservation priorities. See for example the [City of Somersworth's Natural Resource Assessment](#), which identifies flood storage areas.

Case Study: Groundwater Rise Mapping in Newmarket and Durham

With rising sea levels, people often think about aboveground flooding. But as sea levels rise, groundwater rises, too. In places where groundwater is already relatively shallow, groundwater rise can pose risks to underground infrastructure such as water and sewer pipes, septic systems, and drinking water wells. It can also compromise the integrity of roads, impacting the lifespan and maintenance needs of the pavement. Researcher and modeler Dr. Jayne Knott has been at the leading edge of advancing knowledge of groundwater rise in coastal New Hampshire since she was a graduate student at UNH.

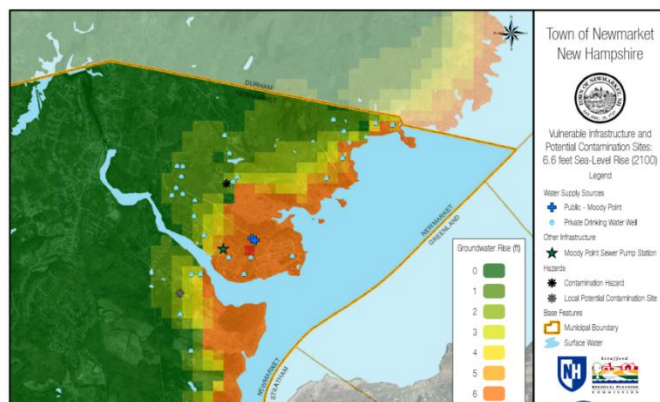


Figure 13. Example map from the Newmarket Groundwater Rise Study

SRPC led an effort to work with Dr. Knott and the Town of Newmarket to explore the potential impacts of groundwater rise, beginning in 2016. Drinking water wells in a densely developed neighborhood were beginning to show evidence of saltwater intrusion. This can arise from over-pumping, exacerbated by the droughts the area has faced in recent years. The groundwater rise projections from Dr. Knott's modeling indicated that saltwater intrusion in these drinking water wells was likely to continue to be an issue in the future. Equipped with the results of the study, the Town was able to extend municipal drinking water infrastructure out to this neighborhood of around 100 residences, securing fresh drinking water for those community members.

Newmarket resident Dale Pike was on the Town Council at the time and active in the groundwater rise study. Dale reflected that the modeling results from Dr. Knott were helpful for communications with municipal staff and boards about this issue – particularly where groundwater rise is less visible than flooding. He also stressed the importance of connecting to the vast network of partners and resources in coastal New Hampshire. Dale recommended that towns identify representatives to build connections and seek collaboration opportunities. In larger municipalities, this function is

often filled by municipal staff, but in smaller communities, it may be a volunteer, like Dale.

The Town of Durham leveraged the lessons learned from the Newmarket to conduct a similar study, beginning in 2020. Dr. Knott emphasized the importance of clarifying the questions the community wants to investigate through the process. Additionally, hydrologic modeling is particularly well suited to a watershed scale, rather than by smaller geographies. A more accessible [non-technical report](#) summarizing model results and recommendations was developed to complement the technical report. Dr. Knott reflected that the partnership between her technical modeling company and SRPC made for a better project and result.

Case Study: Improving Floodplain Management Regulations

One of the primary tools municipalities can use to inform climate-resilient development is through floodplain management regulations. Municipalities that participate in the National Flood Insurance Program (NFIP) have to adopt minimum standards to remain in compliance. In recent years, SRPC has supported multiple municipalities in the region to adopt higher standards and clarify processes to improve regulation of development in the floodplain. The State of New Hampshire offers a *Menu of Higher Floodplain Management Standards* to support municipalities to go above and beyond the minimum standards and provide additional protections for property and public safety.⁴²

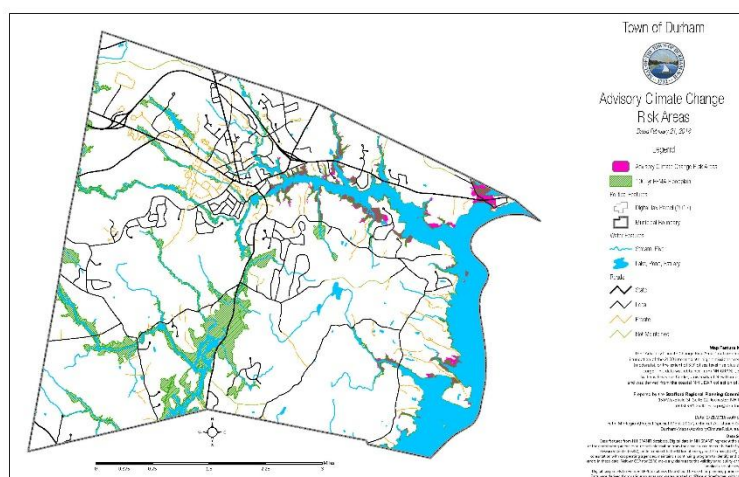


Figure 14. Map of Durham's Advisory Climate Change Risk Area

The Town of Durham worked with SRPC to conduct an audit of their existing floodplain management regulations in 2018. As a result, Durham increased the required structure elevation to include two feet of freeboard,⁴³ providing additional protection for structures. Additionally, the town incorporated a new section of the ordinance, creating Advisory Climate Change Risk Areas based on sea level rise projections. Landowners and developers in these areas are encouraged but not required to build to higher standards.

According to Town Planner Michael Behrendt, "Both changes bring benefits to property owners in the community by providing an additional measure of protection against future flooding."⁴⁴ SRPC also worked with the City of Dover in 2021 to conduct a regulatory audit to ensure compliance with the NFIP and identify higher standards to improve resilience. Resulting updates the City adopted included: prohibiting construction of critical facilities and storage of hazardous materials in floodplain areas; elevating structural components (e.g., electric, heating, and plumbing) to two feet above base flood elevation; and adding flexible language for accessory structures.

SRPC worked with the Towns of Madbury and Rollinsford to improve floodplain management regulations in 2022 and 2023. These efforts were informed by a review of the NH Coastal Flood Risk Summary, the NH Model Floodplain Ordinance, and updates to flood resistant design and construction standards referenced in the state building code and residential code. One of the most significant revisions was to require new construction located in the special flood hazard area to elevate the lowest floor at least two feet above the base flood elevation. This update facilitates compliance with building codes. The updated language for both towns also included:

- Clearer identification of administrative provisions, the permitting process, responsibilities of the floodplain administrator, and the process for applicants to appeal administrative decisions.
- Structural standards for developments in special flood hazard areas.
- Flexibility for detached accessory structures.
- Consistency with best practices for floodplain management.

SRPC partnered with UNH Extension and NH Sea Grant on outreach and engagement activities as part of this project. Casey Jordan, a Madbury Planning Board member, shared the following reflection:

A good floodplain ordinance is vital in many ways, as we were able to ensure our building standards were ready for updated climate change predictions so homeowners did not build to see their hard work washed away.⁴⁵

Tom Clark, the Code Enforcement Officer for the Town of Rollinsford, shared, "We are aware of the importance of having strong floodplain regulations to reduce future risks to property owners. In addition, as the floodplain administrator, I appreciate the improved guidance which will assist me to ensure the regulations are being applied correctly."⁴⁶

Goal Statement

Land use planning in the Strafford Region will integrate climate, supporting subsequent adaptation and mitigation action.

Objectives and Strategic Direction

- Incorporate resilience into land use planning. For example, steer new development away from vulnerable areas and integrate higher standards for floodplain management.
- Identify opportunities to encourage local food production through farm-friendly regulation updates or other mechanisms where appropriate.
- Support inclusion of climate considerations into natural resource inventories and conservation planning. For example, identify wildlife corridors to support migration, areas that provide flood storage or enable salt marsh migration, intact riparian buffers, and habitats that provide carbon storage.
- Support municipalities to identify suitable areas for renewable energy (e.g., solar farms) and adopt model ordinance language to facilitate local renewable energy production.⁴⁷
- When updating master plans and zoning ordinances, consider opportunities to decrease sprawl (and associated emissions), foster social cohesion to support connectivity and community resilience, and incorporate climate migration considerations.
- Support municipal staff and boards to consider climate hazards when reviewing development applications.
- Support municipalities to prepare for the potential impacts of data center development, including energy usage, water quality, and others.
- Explore municipal interest in joining the [Community Rating System](#), a voluntary incentive program administered by FEMA that allows discounts on flood insurance premiums for communities that exceed the minimum National Flood Insurance Program (NFIP) requirements.

Resilient, Healthy, and Connected Communities

Human Health, Safety, and Wellbeing

Climate change impacts human health and safety in numerous ways. As average temperatures climb and heat waves become more frequent and intense, we could see significant increases in health risks and hospital visits in summer months, which may strain hospital capacity. A recent study from NPR and Boston University found heat-related deaths may be vastly undercounted.⁴⁸ In addition to the health impacts, extreme heat can cause other disruptions – for example, several school districts in the area have had to implement closures, early dismissals, or adjustments to athletic practices as a result of sustained high temperatures.⁴⁹ Cooling centers, frequently operated by municipalities or social service providers, are operated during extreme heat events for all groups in need of relief.

Additionally, climate change worsens air quality by increasing ground-level ozone, increase pollen concentrations and extend pollen seasons,⁵⁰ and intensify wildfires leading to issues with smoke. In September 2026, NHDES published an article highlighting the increasing air quality impacts from wildfires in recent years. Particulate matter levels exceeded the national standard across the entire state of New Hampshire for the first time in summer 2021. Prior exceedances in New Hampshire have been more isolated events. Now, NHDES and partners track wildfires and potential smoke impacts more routinely and issue Air Quality Alert Days as needed.⁵¹ This additional air pollution can especially affect people in sensitive groups, including children, older adults, and people with asthma

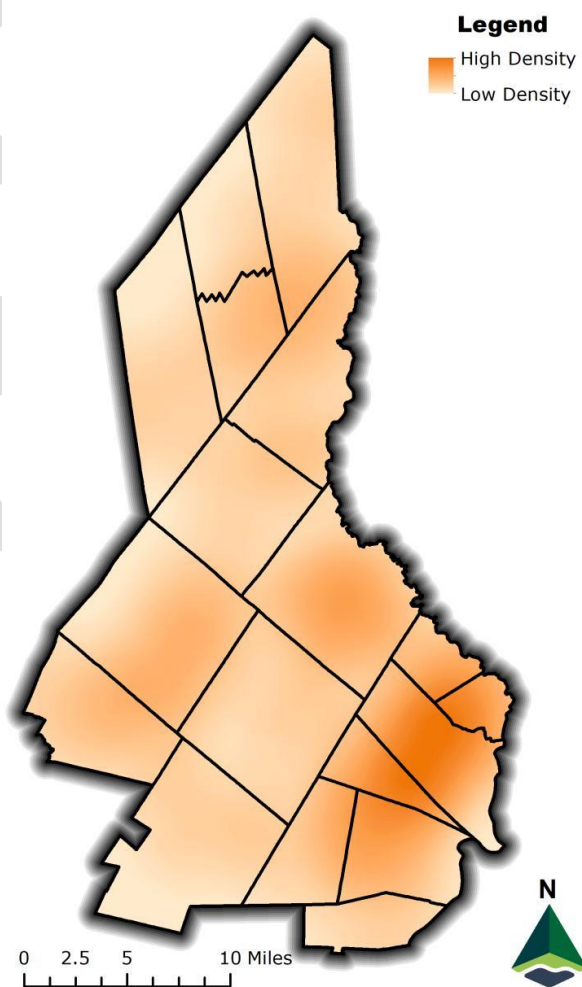


Figure 15. Availability of hospital and emergency medical service locations throughout the SRPC region (SRPC Data Snapshot 2026)

and other lung conditions. Flooding and storms also present risks to public health and safety. Just 6 inches of fast-moving flood water can knock over an adult, and 12 inches can carry away most cars.⁵² Flood waters can also carry debris and contaminants like harmful bacteria or chemicals, which can present risks of injury, infection, and illness.⁵³

Hazard Mitigation Planning

Municipalities must update Hazard Mitigation Plans every five years, which will enable them to access mitigation funding for projects that will help reduce the loss of life and property. SRPC's 2026 Data Snapshot identifies the status of the Hazard Mitigation Plans in the region:

Table 3. Hazard Mitigation Plan Status for Municipalities in the Strafford Region

Town	Expiration Date	Status
Barrington	2/20/2029	Active
Brookfield	7/17/2029	Active
Dover	3/29/2023	In Progress
Durham	4/18/2029	Active
Farmington	8/28/2023	In Progress
Lee	6/12/2029	Active
Madbury	6/10/2030	Active
Middleton	1/21/2030	Active
Milton	1/21/2030	Active
New Durham	7/19/2027	Active
Newmarket	5/4/2023	In Progress
Northwood	6/26/2030	Active
Nottingham	12/5/2029	Active
Rochester	8/20/2030	Active
Rollinsford	1/19/2027	Active
Somersworth	2/16/2027	Active
Strafford	4/14/2030	Active
Wakefield	7/17/2029	Active

Social Cohesion and Civic Health

Impacts and adaptation actions related to physical infrastructure are often top of mind when it comes to extreme weather and long-term climate change. However, social infrastructure and social cohesion are incredibly important factors in climate resilience that may be overlooked. Social cohesion refers to the amount of trust and connectedness within a community.⁵⁴ Recognizing social cohesion as an integral component of climate resilience opens up a broader suite of adaptation actions.

Relatedly, the UNH Carsey Institute reports on the Civic Health Index, which includes connecting in community, trust (in government, news, and neighbors), civic awareness and engagement, belonging and mattering, voting, and volunteering and giving. The *2024 New Hampshire Civic Health Report*⁵⁵ found that New Hampshire residents feel they matter less to their communities and are engaging less with others compared to the 2019 report; trust in national and local government remains low; and residents have mixed feelings about whether they belong in their community.

[placeholder for social vulnerability index map]

Goal Statement

Communities in the Strafford region are prepared for extreme weather events and able to thrive amidst the impacts of climate change.

Objectives and Strategic Direction

- Support community preparedness through hazard mitigation planning, sharing resources and information, and promoting opportunities for connection among neighbors.
- Support businesses to prepare for and adapt to climate impacts.
- Connect communities with University of New Hampshire resources, such as UNH Sustainability Fellowships and the B Impact Clinic.
- Facilitate connections across municipal boundaries, including Climate Resilience Cooperative Agreements (NH RSA 36:53-a).
- Support municipalities and community members to access resources related to climate adaptation and mitigation, including grants, tax credits, incentives, and technical assistance.
- Promote participation in volunteer programs related to preparedness, such as Medical Reserve Corps, NH Disaster Animal Response Team, Community Emergency Response Teams, etc.
- Identify opportunities to address social vulnerability so all can thrive, such as advancing affordable housing, improving transit, expanding access to recreation and green space, and supporting local food production.
- Explore ways to advance social cohesion, such as encouraging civic engagement, volunteerism, third spaces, and resilience hubs.⁵⁶
- Support workforce development in fields related to climate change.
- Consider potential impacts of climate migration on the region.

Preliminary Action Plan

Through literature review of plans, documents, and studies by partner agencies, combined with relevant past work completed by SRPC, the following are preliminary actions for SRPC to advance equitable climate adaptation and mitigation in the Strafford region.

- Advance climate vulnerability assessments using the latest scientific information.
- Support municipalities to incorporate climate-related best practices into plans (e.g., master plans, hazard mitigation plans, capital improvement plans), regulations (e.g., floodplain management ordinances), and other planning documents (e.g., natural resource inventories).
- Support municipalities to advance priority projects through connecting to partners and grant opportunities and providing technical assistance.
- Contribute to outreach, education, and engagement efforts related to climate change, including efforts such as the NH Coastal Adaptation Workgroup's biennial Climate Summit and Picturing Rising Tides campaign, as well as UNH Extension's Business Resiliency Academy.
- Continue to participate in the NH Coastal Flood Risk Summary update and support outreach and training related to the updated Guidance for Using Best Available Science.
- Work with municipalities to explore development of climate resilience cooperative agreements and coastal resilience funds among municipalities (NH RSA 36:53-a).
- Promote available resources for renewable energy and energy efficiency.
- Support workforce development in fields related to climate change.

Appendix A. Acronyms List

CDD	Cooling Degree Days
DOE	Department of Energy
EIA	Energy Information Administration
EPA	Environmental Protection Agency
FEMA	Federal Emergency Management Agency
HDD	Heating Degree Days
MHHW	Mean Higher High Water
NFIP	National Flood Insurance Program
NH CAW	New Hampshire Coastal Adaptation Workgroup
NHDES	New Hampshire Department of Environmental Services
SRPC	Strafford Regional Planning Commission
UNH	University of New Hampshire
USDA	United States Department of Agriculture

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⁴⁹ WMUR. “[High heat prompts some New Hampshire schools to change plans for Friday.](#)” September 8, 2023.

⁵⁰ UCAR Center for Science Education. “[Air Quality and Climate Change.](#)”

⁵¹ NHDES. “[Wildfire Smoke and Air Quality Impacts.](#)” September 10, 2026.

⁵² National Weather Service. “[Turn Around Don’t Drown.](#)”

⁵³ U.S. Centers for Disease Control and Prevention. “[Safety Guidelines: Floodwater.](#)” August 24, 2026.

⁵⁴ El-Dardiry, R., ‘t Hart, P., Toom, V., de Vries, A., and Hulscher, S. (2026). [Social Cohesion and Climate Events. In: People and Climate. Research for Policy.](#) Springer, Cham.

⁵⁵ Moore-Vissing, Q., Portrie, C., Sarup, H., and Holt-Shannon, M. (2024). [New Hampshire Civic Health Report.](#) UNH Carsey School of Public Policy.

⁵⁶ Urban Sustainability Directors Network. “[Resilience Hubs.](#)”