MERRIMACK RIVER WATERSHED CONSERVATION PLAN: EXECUTIVE SUMMARY

About the Partnership

Established in 2012, the Merrimack Conservation Partnership (the Partnership) is a regional alliance of over thirty conservation and planning organizations formed to protect the southern portion of the greater Merrimack River watershed in New Hampshire and Massachusetts. The Partnership uses its collective resources and expertise to preserve, steward, educate and advocate for a sustainable, ecologically healthy and climate-resilient Merrimack River watershed. To support these shared goals, grant programs—privately funded and administered by the Society for the Protection of New Hampshire Forests—are available to eligible land trusts, municipalities and state agencies.

We envision a Merrimack River watershed where everyone benefits from clean air, clean water and expanded access to green space.

- ***Committed to the Watershed:*** The Partnership is comprised of individuals and organizations who care deeply about protecting the Merrimack River watershed. The work of the Partnership aims to create connections and aligned action between all the partners and stakeholders, who represent different disciplines and perspectives.
- ***Centered in Community and Science:*** We recognize that experience within the community, high-quality data and conservation best practices are all important to lasting progress, and we prioritize and integrate each into this work.
- ***Collaboration and Respect:*** We work collaboratively to protect the watershed by sharing information, leveraging collective resources and working towards common goals. Our work is rooted in respect for the partners, the community, the environment and the watershed.

About the Plan

The Merrimack Watershed Conservation Plan (the plan) helps the Partnership prioritize places where land conservation, restoration and nature-based solutions projects can best meet our vision for a sustainable, ecologically healthy and climate-resilient Merrimack River watershed.

The original 2014 plan focused on land conservation priorities in undeveloped portions of the watershed. The 2025 plan expands the focus to include conservation opportunities in the developed and densely populated areas of the watershed. The plan's community-informed approach identifies specific vulnerabilities and opportunities in the largest cities along the Merrimack River.

Focal Communities

The watershed is home to more than 2.6 million residents in more than 180 communities across two states. Focusing our efforts on deeper engagement within fewer communities allowed us to build relationships with local organizations, learn from residents and address significant gaps within the 2014 conservation plan.

From the outset of the project, the team focused engagement efforts on four major cities along the mainstem of the river which had received nearly no coverage in the 2014 plan: Lowell and Lawrence, Massachusetts and Manchester and Nashua, New Hampshire. These are large cities with limited access to green space, each of which still bears the legacy of the textile mills, which reshaped the river during the Industrial Revolution.

SPATIAL THEMES

Partnership member and community input informed the plan's four themes: community climate resilience, wildlife habitat and connectivity, working lands, and water resources. Alone, each of these themes highlights priority areas for projects which meet a specific need; together, they highlight places where projects can provide multiple benefits for nature and people.

Community Climate Resilience

Identifies priority areas using integrated spatial modeling and community-informed data to address flood risk, heat vulnerability, tree cover and access to green space.

Wildlife Habitat and Connectivity

Identifies priority areas for protecting and restoring habitats, resilient landscapes and wildlife corridors.

Working Lands

Highlights agricultural and forestry landscapes with high conservation value, based on soil quality and land cover.

Water Resources

Targets areas where restoration and renaturing can improve water quality, protect wetlands and safeguard public water supplies.

PROCESS AND METHODS

The project utilized an innovative conservation planning approach, investing heavily in community partner engagement to develop shared priorities that benefit community resilience and habitats through nature-based solutions.

Community Engagement Highlights

The project team worked to understand residents' values and priorities related to the river, and their experiences of environmental issues including climate change. This effort produced a final product that utilized a novel approach to incorporate resident needs and priorities in conservation planning.

The project team collaborated with community-based partners, representing groups and individuals who were not included in the previous planning effort. These organizations brought an awareness of the interconnected challenges of working on climate and water quality alongside the other challenges facing each community. Consistently incorporating these perspectives resulted in a plan that is relevant for more watershed residents and provides more opportunities for collaboration between conservation organizations and others working in the watershed.

Initial community outreach included a series of informational interviews and conversations with over 50 community advocates to understand ongoing projects, concerns and opportunities. A poll of 400 watershed residents provided further information about community perceptions of, and values related to, the river. This initial work informed how

the team selected and refined themes for spatial analysis and directly shaped the second phase of community engagement. The project team collaborated with community advisors to connect with nearly 800 residents in the focal communities. Engagement included tabling at local fairs and festivals and culminated with a series of collaborative community mapping workshops. This revealed information about residents' experiences of flooding and extreme heat, and their access to, and quality of, green spaces in their community. Additionally, the project team conducted a novel approach to youth engagement executed in partnership with local schools and programs which brought perspectives from some of the youngest watershed residents.

Project Advisors

An Advisory Committee of Partnership members assisted with spatial analysis and provided key technical insights into data sources, model parameters and weightings. Advisory committee members also provided key connections to other community partners and existing work on the ground.

Community advisors, selected by local organizations with deep ties to their respective neighborhoods, played a critical role in ensuring the updated plan reflects resident priorities and ongoing projects related to the Merrimack. As trusted entities, community advisors helped reach a broader subset of residents through co-hosted events.

A Shared Vision for Conservation in the Merrimack River Watershed

The 2025 Merrimack Watershed Conservation Plan offers a science-based framework for guiding conservation across one of New England's most ecologically and socially significant watersheds. By integrating robust spatial analysis with meaningful community engagement, the plan identifies high-impact opportunities for land protection, restoration, and nature-based solutions. It equips conservation practitioners with the tools and data needed to align efforts across disciplines, address climate resilience and deliver lasting benefits for both people and nature throughout the Merrimack River watershed.

To learn more...

To see the full plan and learn more about the process and methods used to create it, please visit **nature.org/Merrimack.**

Acknowledgements

This project was led by The Nature Conservancy in New Hampshire and Massachusetts in collaboration with the Merrimack Conservation Partnership. This project was supported in part by the National Fish and Wildlife Foundation through a grant from the National Coastal Resilience Fund, by the generosity of multiple private foundations and by the Society for the Protection of New Hampshire Forests.

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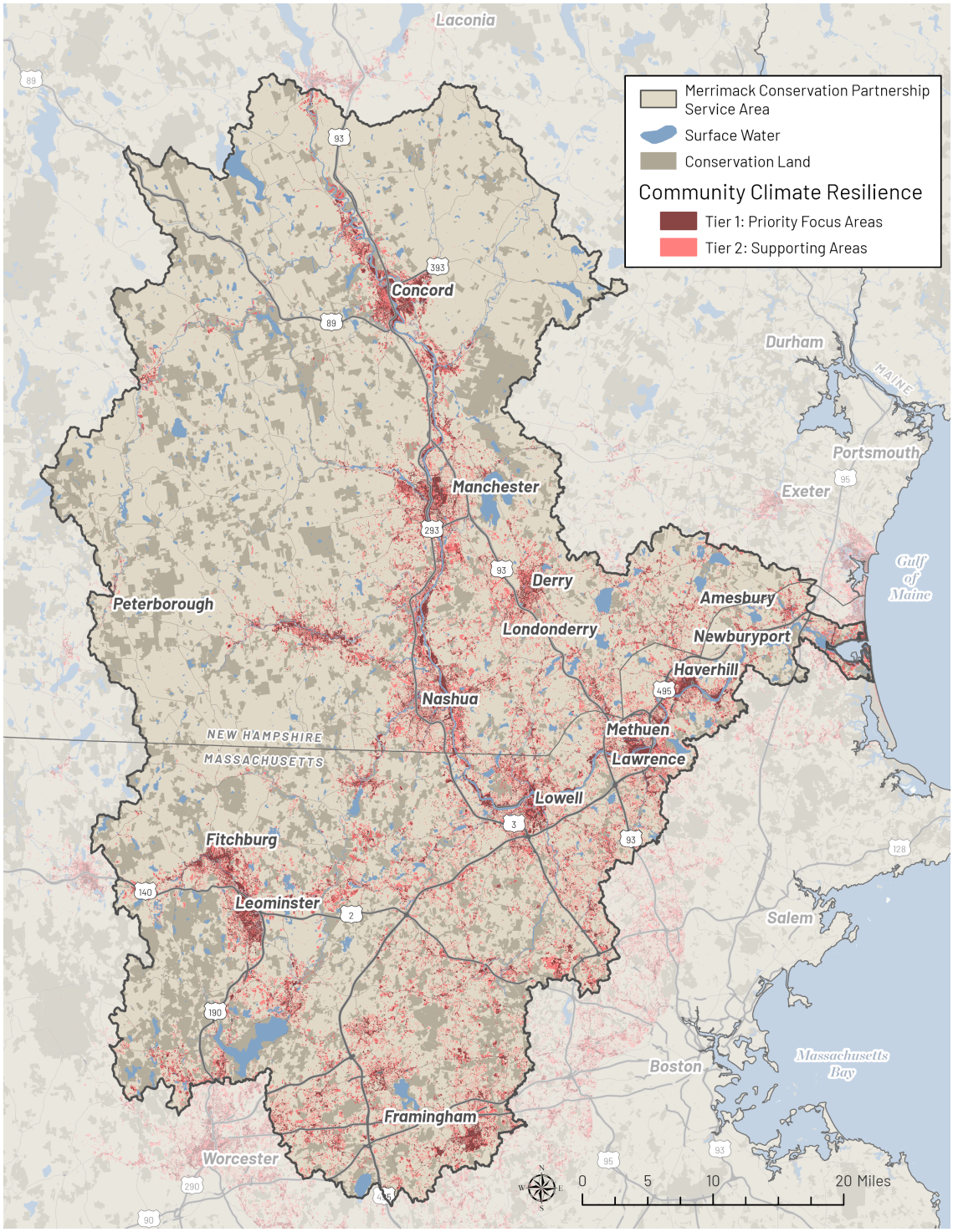
COMMUNITY CLIMATE RESILIENCE

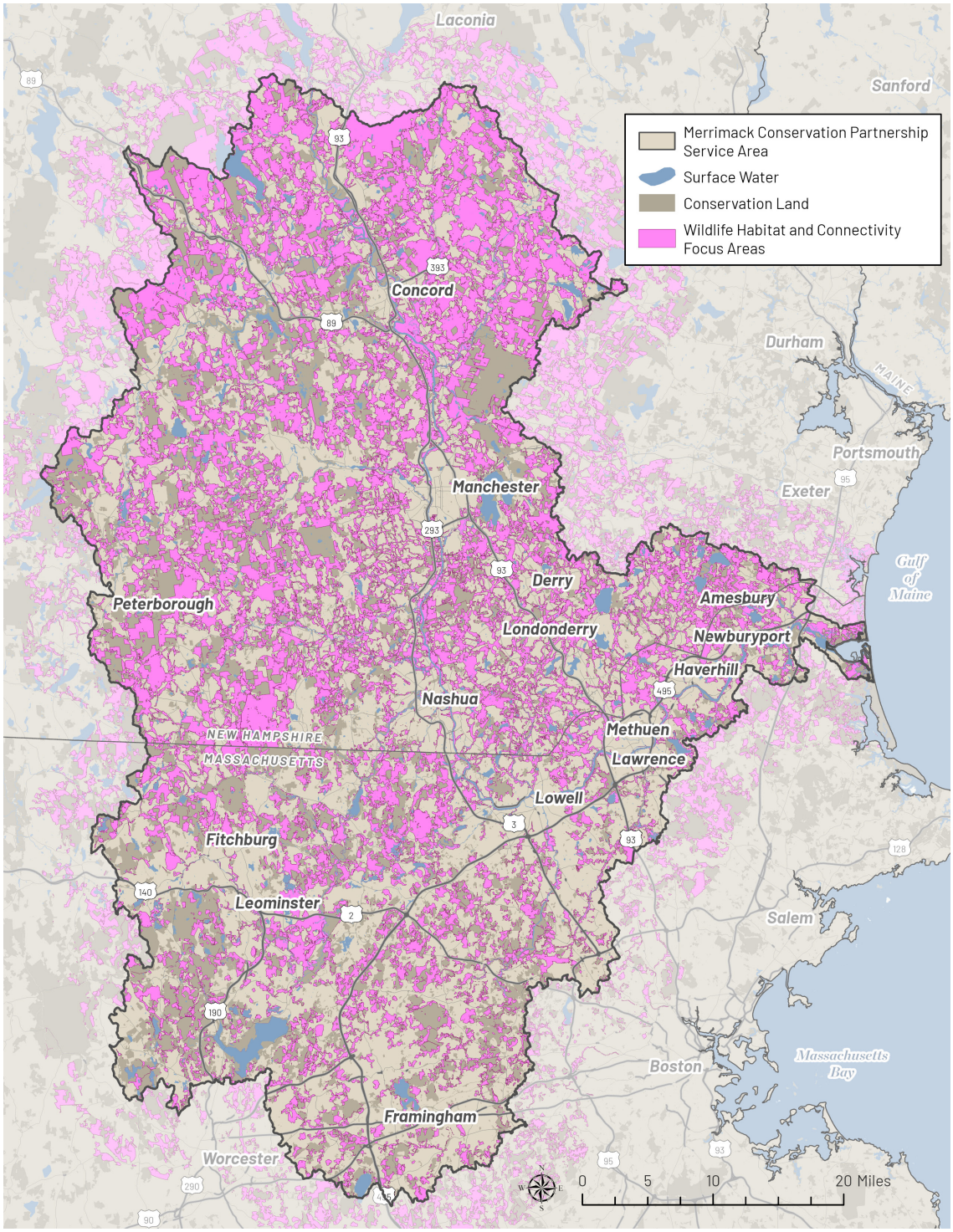
The community climate resilience theme identifies focus areas and supporting lands within the Merrimack watershed that ranks community perspectives and priorities for flood risk reduction, need for trees and heat island relief, and increased access to new and existing green space. The spatial data that shaped this theme included heat severity, flood storage and risk mitigation, access to recreational opportunities and green space, census blocks identified to be at higher risk for flooding, heat severity and need for improved or additional green space, and local assets and experiences identified through community engagement.



Map by: Anna Ormiston/TNC

WILDLIFE HABITAT AND CONNECTIVITY

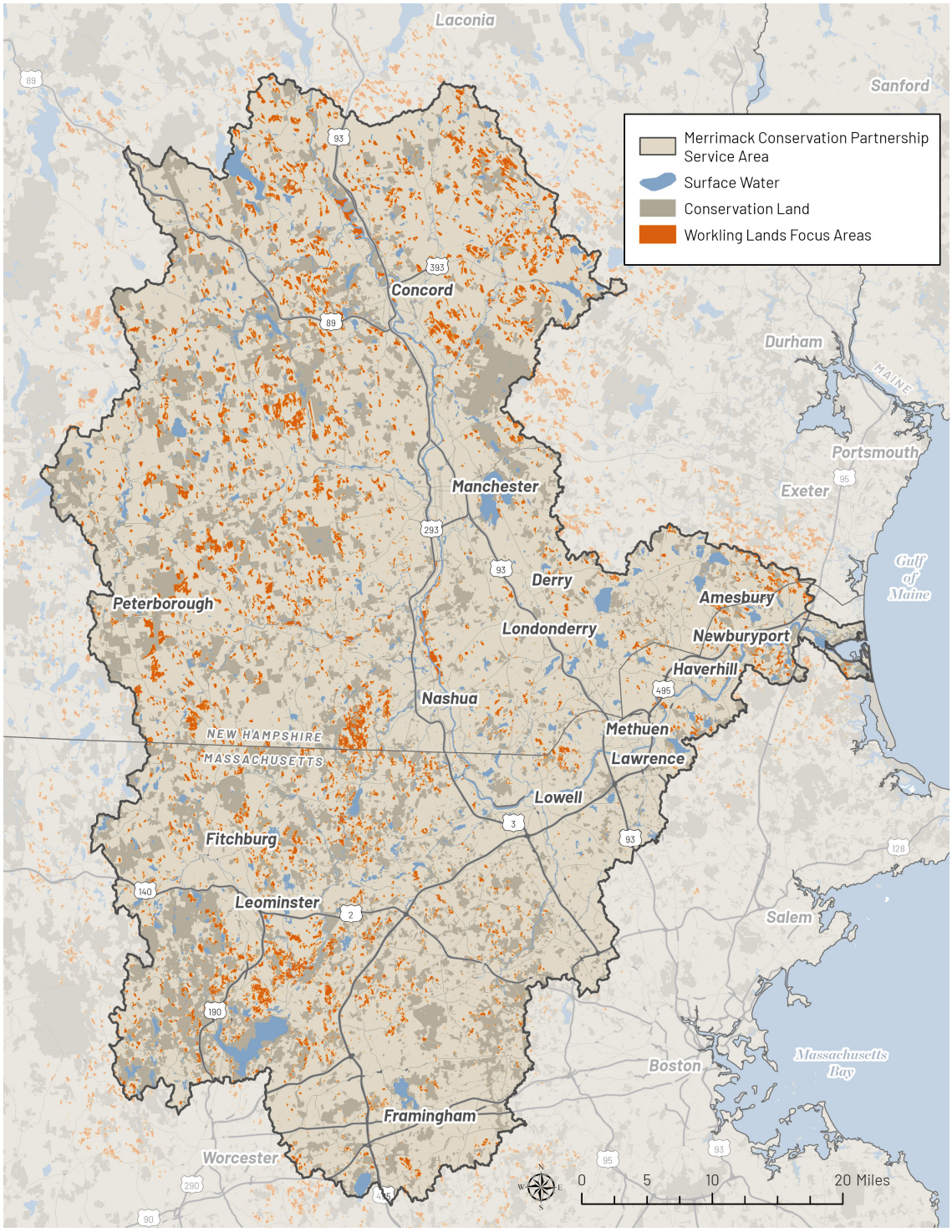
The wildlife habitat and connectivity theme identifies priority focus areas for protecting and restoring habitats, resilient and connected lands and wildlife corridors within the Merrimack watershed.



Map by: Anna Ormiston/TNC

WORKING LANDS

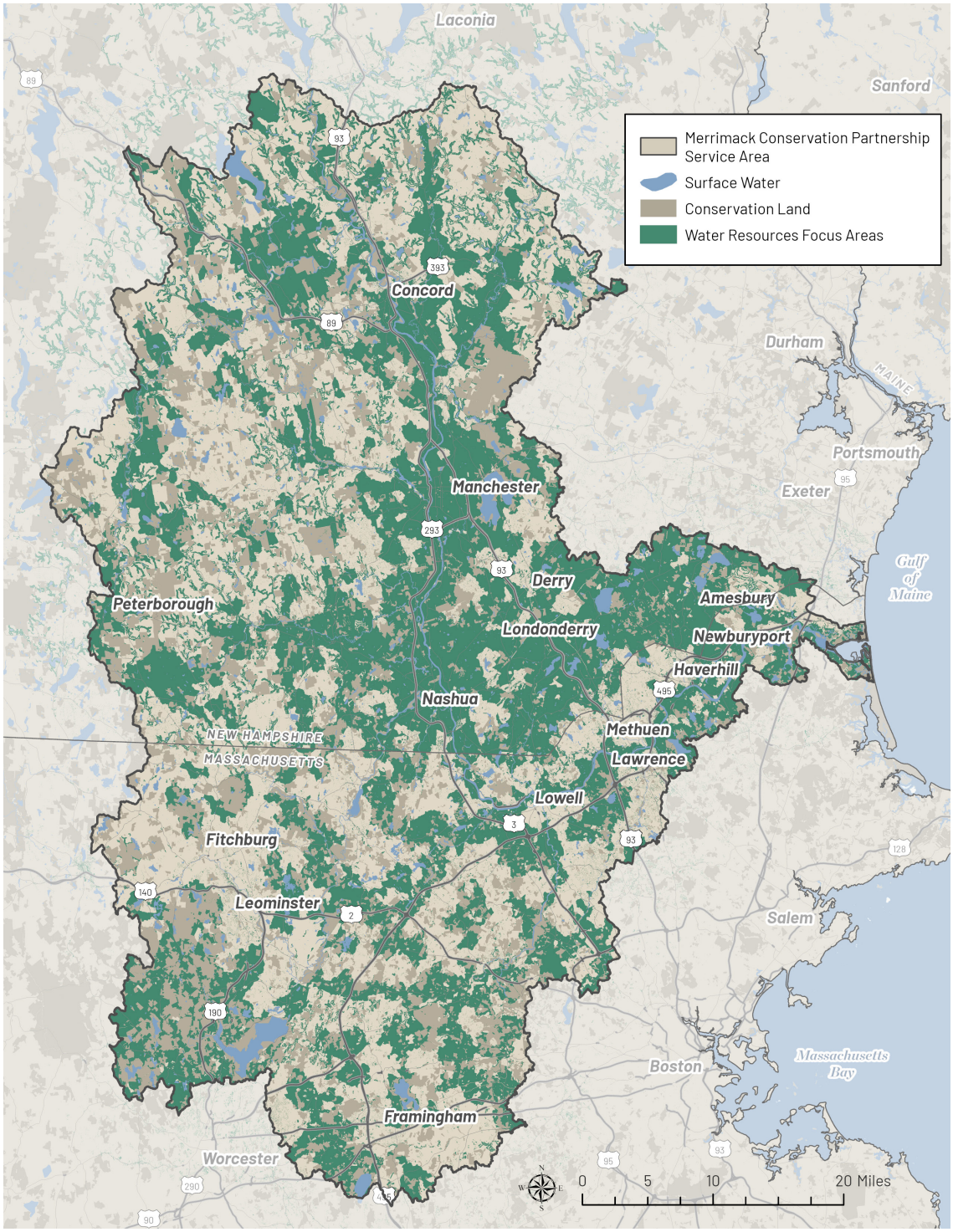
The working lands theme identifies priority agricultural and forestry landscapes for protection. The priority agricultural resources data were generated based on an analysis using data from the 2020 Farms Under Threat study, which identified productive, versatile and resilient agricultural soils. Priority forestry lands data identify high priority areas for protecting and managing timber forests using prime forest land soils, land cover and large, intact forest blocks.



Map by: Anna Ormiston/TNC

WATER RESOURCES

The water resources theme identifies priority areas where protection, restoration and renaturing can improve water quality and quantity. This includes places where renaturing strategies like green infrastructure and pavement removal can help filter and remove pollutants, where locally important wetlands and buffer areas should be prioritized for protection and restoration, and areas where actions can safeguard public water supplies. This was determined by analyzing riparian and wetland buffers, hydrologic soil types, land cover data, public water supply areas, surface water and ground water resources.



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