# Rhode Island's Climate Imperative:

## Our State's Forests as a Natural Climate Solution

## **Overview**

Rhode Island's Forests: Where we are today:

Forest Size: 360,000 acres (46% of land base)

**Current Forest Carbon Storage:** 42 million tons,

17 million tons aboveground

**Co-Benefits:** In addition to natural climate benefits, Rhode Island's forests provide clean water, clean air, shading and cooling, recreation, healthier people, equitable access to the benefits of forests, and jobs and economic opportunity.

### **Five Pathways for Maximizing Forests' Potential**

The 2022 paper, New England's Climate Imperative: Our Forests as a Natural Climate Solution, lays out a way forward for Rhode Island and all New England states to reduce forest loss, increase the forests' contribution to mitigating climate change, and help achieve state climate goals through five complementary pathways. These pathways have been developed to be supportive of existing state climate-related focal areas and actions by providing information on the potential climate mitigation and co-benefits of different forest-related strategies.

#### The five pathways are:

- Avoided Deforestation Minimize the loss of forest to development
- Wildland Reserves Establish additional wildland reserves that are left to grow old and accumulate more carbon
- **Improved Forest Management (IFM)** Manage forests more effectively to yield increased carbon storage and sequestration
- Mass Timber Construction Store more carbon by constructing more buildings with wood products
- Urban and Suburban Forests Increase tree cover and patches of forest in urban and suburban areas

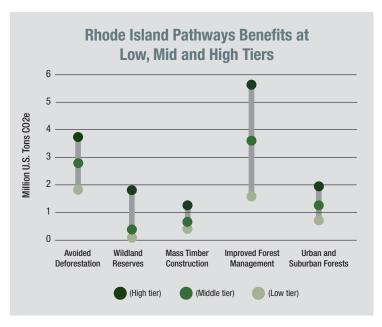
Every state in New England is addressing the climate challenge in ways that align with its current forest cover and its unique opportunities and challenges. Rhode Island can realize significant additional climate benefits by exploring these five pathways. And if the state works with its New England neighbors on a coordinated approach, the region can serve as a global example of forests' potential as a natural climate solution.

## **Rhode Island Climate Action & Emissions Reductions Goals: A Summary**

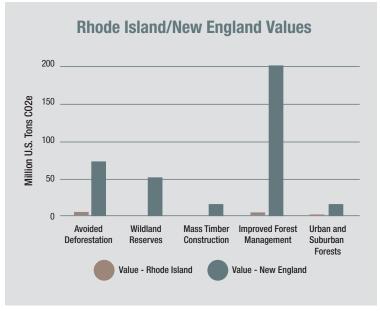
#### **Greenhouse Gas Reduction State-level Climate State Focal Areas Relevant Advisory Bodies** Goals & Legislation to Forests Rhode Island has an active Rhode Island Greenhouse Gas Emissions Reduction Requires state to achieve the following GHG emissions policy process around climate Plan (2016): reductions: 10% below 1990 change mitigation, adaptation, Protecting existing forest acreage, reforestation, levels by 2020, 45% below and resilience. conservation of riparian buffers, enhanced forest 1990 levels by 2030, 80% Since 2014, the Executive management programs (on both private and public below 1990 levels by 2040, and Climate Change Coordinating lands), reductions in soil erosion to minimize losses net-zero emissions by 2050 Council (EC4) has been tasked in soil carbon storage, coastal wetland protection - 2021 Act on Climate with planning for how the (e.g., blue carbon), and enhanced urban tree state will meet its greenhouse canopies. gas emissions reductions Continued public support for funding open space goals. protection. Prioritizing investments to support new growth within the existing Urban Services Boundary and in State-approved growth centers.

## **Potential Pathway Impacts**

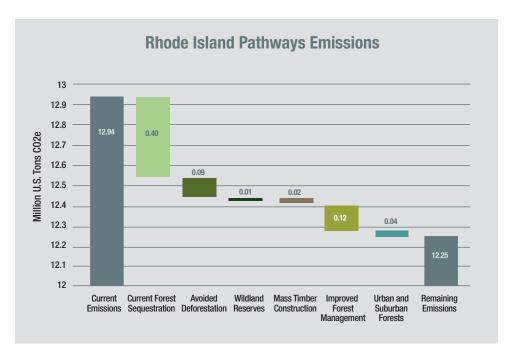
Together, the five pathways in Rhode Island could increase the amount of atmospheric carbon absorbed by Rhode Island's forests by 2%. And as Rhode Island implements its ambitious emissions reduction goals, the state's forests become even more valuable, with the potential of absorbing around 25% of Rhode Island's projected emissions by 2050 if proposed emissions reductions scenarios are implemented.



The accumulated carbon benefits of each pathway by 2050, shown at low, middle, and high levels of adoption



Additional CO2e sequestered by 2050 above the business-as-usual (BAU) scenario in Rhode Island and the New England region as a whole. Estimates shown are associated with the adoption of each pathway at its middle tier.



The adoption of each pathway (shown here at their average annual contribution when adopted at their middle tier) lowers Rhode Island's net emissions by sequestering more carbon in the forests. Please note, to show the detail associated with each pathway, the vertical axis has been scaled to start at 40 million U.S. tons CO2e.



#### **About this Brief**

The information in this document is drawn from the 2022 paper, *New England's Climate Imperative:*Our Forests as a Natural Climate Solution, which lays out, in detail, five pathways that can help Rhode Island, and New England as a whole, increase the climate benefits of forests. The paper was developed by Highstead, a regional conservation non-profit based in Redding, Connecticut. The full report can be found on highstead.net.