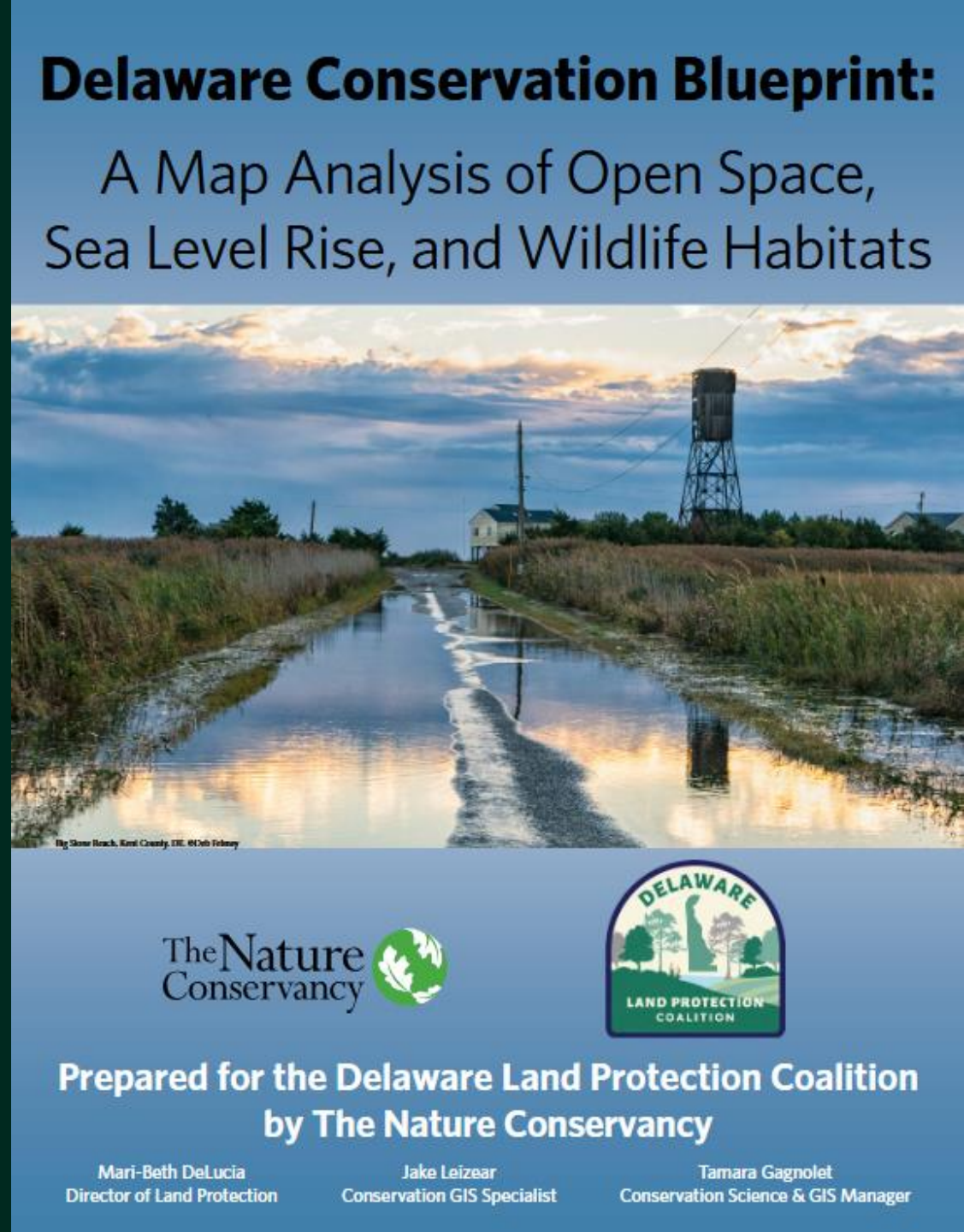
Delaware Conservation Blueprint

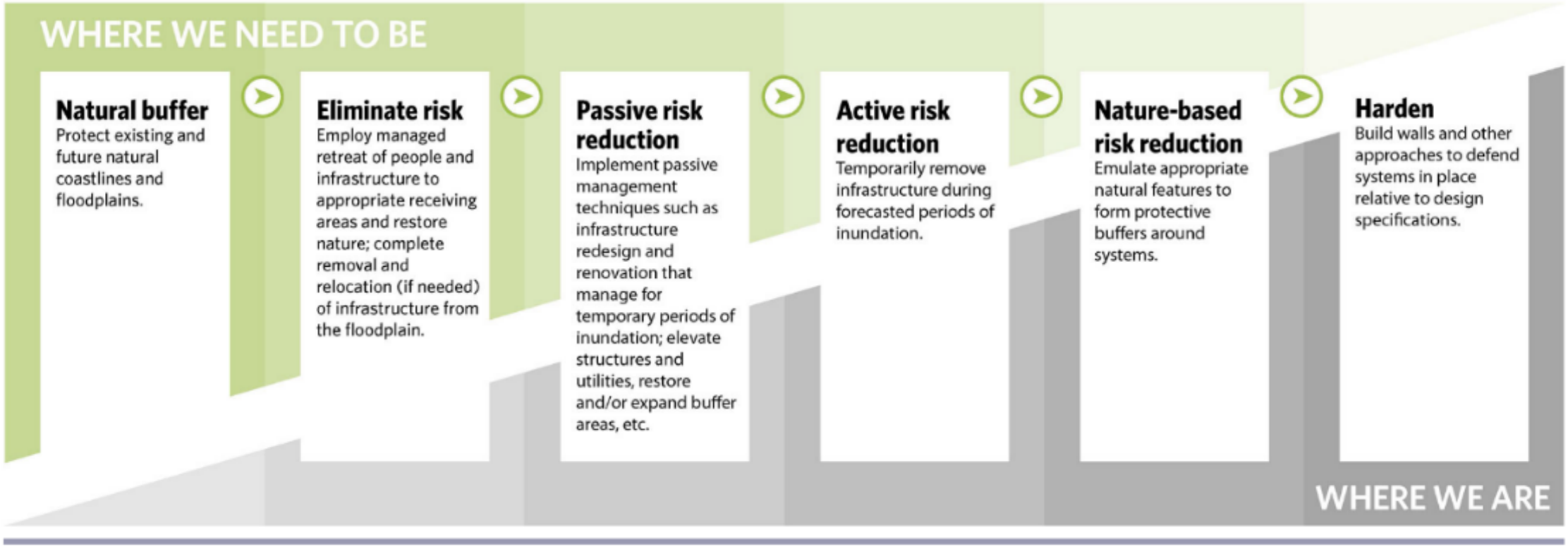
nature.org/DEBlueprint



A new framework for flood adaptation: introducing the Flood Adaptation Hierarchy

Andrew J. Peck [1], Stevie L. Adams [1], Andrea Armstrong [1], Anna K. Bartlett [1], Marci L. Bortman [1], Alison B. Branco [1], Michelle L. Brown [1], Jessica L. Donohue [1], Mali'o Kodis [1], Michael J. McCann [1] and Elizabeth Smith [1]

Fig. 1. This paper is focused on prioritizing approaches to flood risk management, not on practices or tactics. The proposed flood adaptation hierarchy ("Where We Need To Be," on the top, moving left to right) is contrasted with the current practice ("Where We Are," on the bottom, moving right to left). Clearly, all tiers will need to be deployed to achieve flood resilience at the landscape scale. However, a paradigm shift is needed to place a greater emphasis on protecting and/or restoring the dynamism of natural systems, as these features will yield more robust, long-term flood resilience than built or engineered solutions.



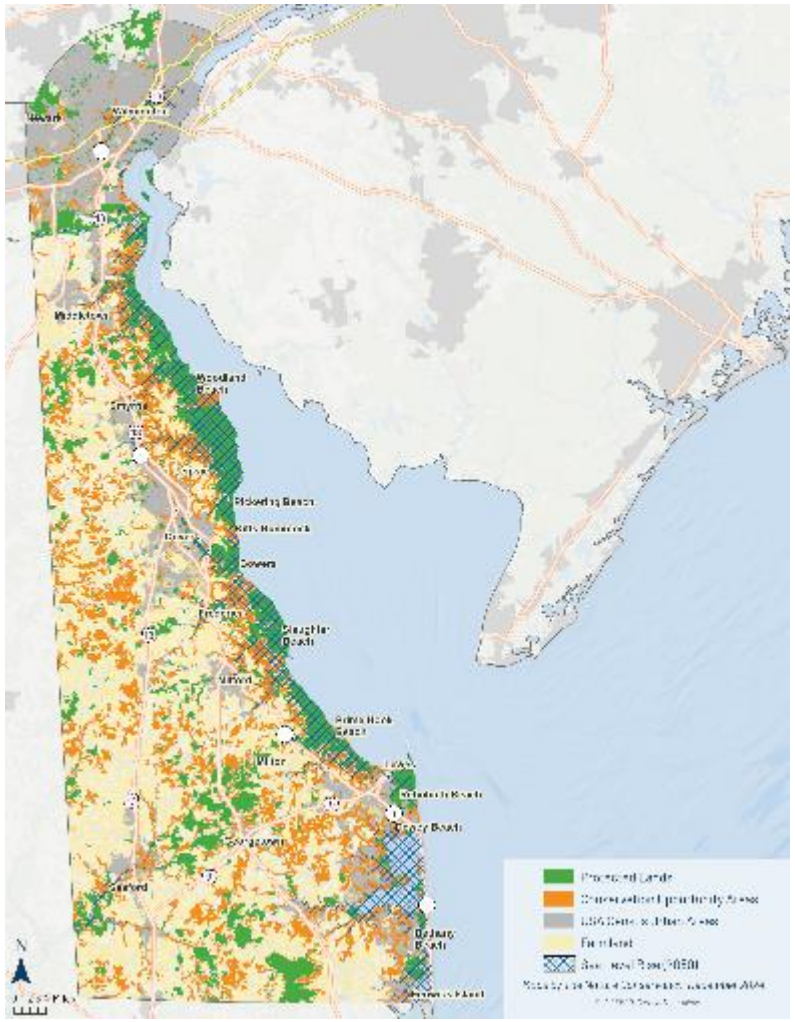
Now?

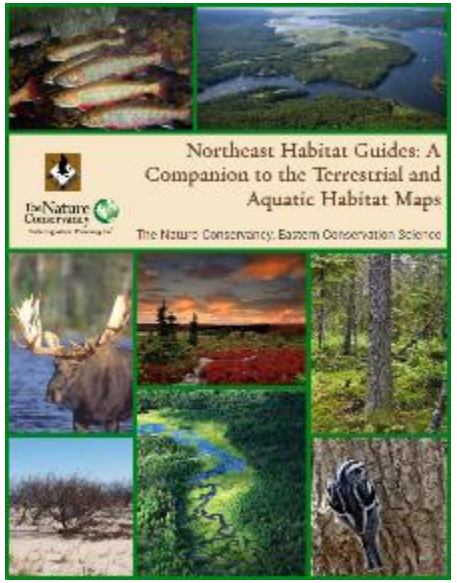
- **46% of protected lands in DE are projected to be impacted by SLR in 2050**
- **Increasing pressure and conversion of open space by development**
- **DE lacks a comprehensive framework for conserving lands that prioritizes key habitats while considering Climate Change**

Blueprint Objective:

Conservation Opportunity Areas (COAs) focus on rare target habitats (maritime forest, beach, dune, peat swamp) of any size and other target habitats (salt marsh; swamp; hardwood forest; tidal creeks and headwaters; tidal small and medium rivers; warm, low-gradient headwaters and creeks) in patches greater than 100 acres that are adjacent to protected lands and within DE Ecological Network corridors and cores. COAs also include potential marsh/ecosystem transition zones that are in natural cover and between 5-foot and 7-foot SLR projections.

Inputs

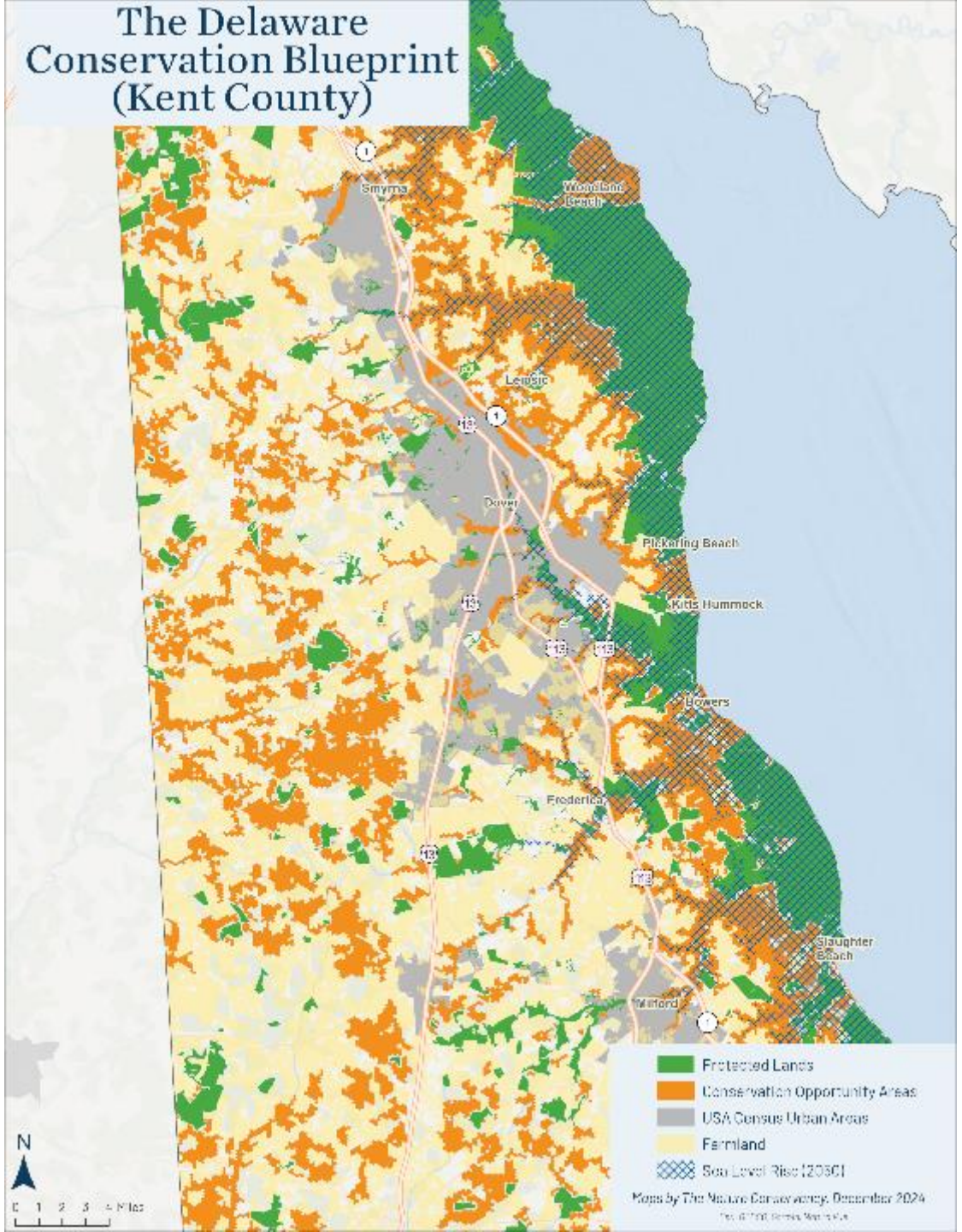




Land Use / Land Cover

DE Ecological Network

The Delaware Conservation Blueprint (Kent County)



Delaware Bayshore Coastal Resilience Roadmap

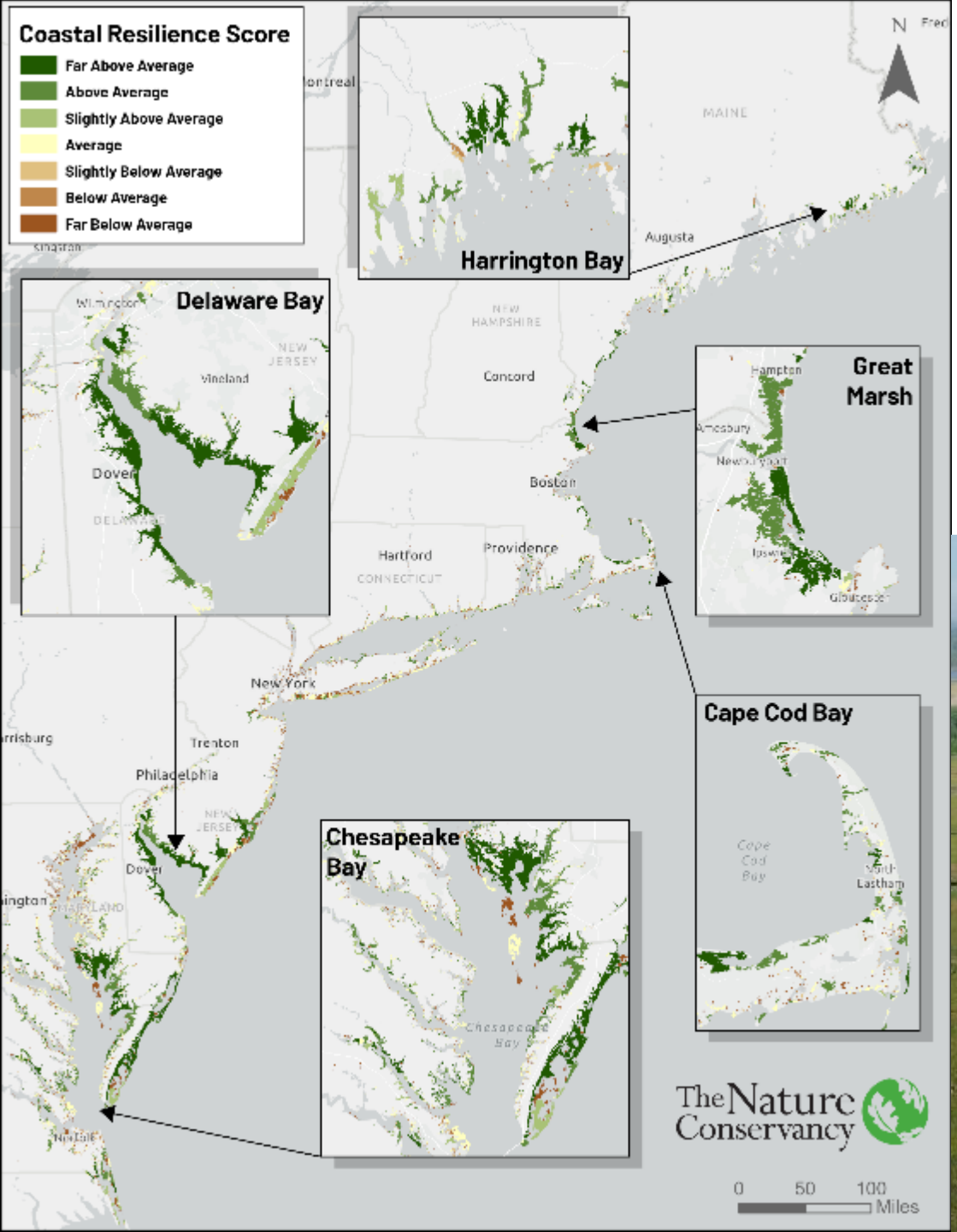
Image Credit: William Sherman

nature.org/DEcoastalroadmap

TNC Coastal Resilient Sites Analysis

The Nature Conservancy

Ecological Importance



Project Goals

- **Identify strategies that will increase the resilience of the Bayshore's coastal ecosystems and vulnerable human communities**
- Build awareness and support for nature-based strategies
- Develop a coalition of partners aligned on a vision for a resilient Bayshore

Identified Strategies

- **Protecting coastal habitat migration space**
- **Enhancing and restoring the ecological function of coastal habitats**
- **Increasing community resilience to coastal flooding**
- **Promoting climate-considerate policies**


Thank you!