



SUNS

SCALING UP NATURE-BASED SOLUTIONS

Building Capacity and Partnerships to Plan and Implement a Portfolio of Nature-Based Coastal Resilience Actions in Three Florida Panhandle Counties

The Nature Conservancy 



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PHOTOGRAPHY

An aerial photograph of a coastal wetland. In the foreground, there is a dense area of brownish-green marsh grasses. A winding, shallow waterway or canal cuts through the marsh. To the left, a long wooden pier or walkway extends from the land into the water. The water is a deep blue, and the sky is a clear, bright blue. The overall scene depicts a natural coastal environment.

Building resiliency involves concerted, regional planning efforts that consider natural and nature-based infrastructure

SUNS Project Goals

1. Provide local government staff, planners, and communities with **decision-making knowledge and tools** to inform the use of nature-based solutions
2. Develop and facilitate a **regional, stakeholder-based planning process** to create a **prioritized portfolio of nature-based solution investments** across the project area
3. Encourage adoption and implementation of the portfolio by providing **technical assistance and capacity building support**

Timeline

Year	Months	Activity	Outcome
2021	March-July	Information gathering, Needs Assessment, data compilation	Established stakeholder working group and identification of capacity gaps
2021-2022	July - July	Convene Working Group to review and select nature-based solution options in Bay, Gulf, and Franklin Counties	Draft portfolio of nature-based solution projects, maps
2022	April-August	Community Dialogues and Final Portfolio of nature-based solutions	Prioritized portfolio of nature-based solutions based on feedback
2022-2023	August-February	Workshops and Trainings to build capacity to implement specific portfolio projects	Improved capacity to implement projects in the portfolio

Working Group Purpose

1. **Advance resilience planning** in the wake of Hurricane Michael across Bay, Gulf, and Franklin Counties by **facilitating increased coordination** across jurisdictions and agencies
2. **Identify potential projects and opportunities for policy-change** to support nature-based resilience solutions





**To create a prioritized,
regional portfolio of
NBS Projects:**

The working group will define -

1. The **types of NBS** that are locally appropriate and feasible within the region
2. **Selection criteria** for prioritizing NBS projects
3. The **specific types, locations, and projects** that should be prioritized

Objectives

1. Central map of existing planning efforts and/or projects with a NBS component across Bay, Gulf, and Franklin Counties (ie. EnvisionPC, Tyndall, Franklin 98).
2. NBS project selection criteria that reflects WG members' strategic priorities.
3. List of NBS project types for SUNS consideration (selected from list of NBS types that are applicable to Panhandle)
4. List of potential projects and project locations
5. Prioritized portfolio of NBS project recommendations for Bay, Gulf, and Franklin Counties

Expectations

Working Group members will contribute to WG through:

1. Strategy Development
2. Participation
3. Leadership + Outreach


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Email annajane.jones@tnc.org to volunteer as a WG Co-Chair



Many communities have already undertaken robust planning efforts that consider NBS. Additionally, planning and implementation money is available **now**.

Accelerator Track

1. Determine which projects need additional capacity to get to the next step – and which ones are aligned with SUNS priorities
2. Identify which funding opportunities are most appropriate
3. Offer aspects of the final SUNS ‘capacity building’ phase sooner (e.g., proposal strategy and development) where SUNS Project Team capacity allows

Working Group Kickoff

July 2021

State of Resilience Planning & Projects in the Hurricane Michael Region

Bringing It All Together

September 2021

Preferences, Suitability, Hazard Mitigation, & Conservation Goals

Characterizing Project Benefits

March/April 2022

Preparing Community Dialogues



Accelerator Track

Planning Efforts & NBS Suitability

August 2021

Suitability Break-out Meetings

Mapping the Portfolio

January/February 2022

Community Dialogues

Portfolio Finalization

July 2022

Review community feedback, finalize selection of portfolio projects

Measuring and Mapping the Impacts of Hurricane Michael in the Florida Panhandle to Better Understand the Role that Nature Plays in Coastal Resilience

The Nature Conservancy 

Hurricane Michael study key findings

- Overall damages (e.g. Insurance claims, tree damage, Dune over wash, home damage etc.) align with the track of the storm and wind speeds.
- Marsh systems had low levels of damages throughout the Panhandle, with marshes on public land quicker to recover
- Hardened shorelines do not provide more protection or a higher recovery from the storm than vegetated/more natural shorelines.
- Higher values of green space directly around a resident increases the probability of a higher/ faster recovery.

What do we mean by Nature-based Solutions?

There are many terms that refer to the idea of implementing and capturing benefits from natural systems.

1. ***Nature-Based Solutions*** - Project solutions that are motivated and supported by nature and that may also offer environmental, economic, and social benefits, while increasing resilience. This is an umbrella concept that covers a range of approaches, including restoration, management, conservation, and nature-based infrastructure (e.g., green infrastructure and low impact development).
2. ***Green Infrastructure*** - Intentional or strategic preservation, enhancement, or restoration of a natural system or semi-natural systems to provide a desired benefit (e.g., flood protection, water purification, carbon sequestration, etc.)
3. ***Low Impact Development*** - Systems and practices that use or mimic natural processes that result in a desired benefit. The practice is primarily used for capture and onsite treatment of stormwater runoff in urban areas to protect water quality and associated aquatic habitat.
4. ***Ecosystem Services*** - The services provided by the Earth's ecological systems and resources to support human life.

Source: Promoting nature-based hazard mitigation through FEMA mitigation grants (2021)

What types of projects are Nature-based Solutions?



TABLE 3-2. EXAMPLE INDIVIDUAL MITIGATION PROJECTS BY HAZARD TYPE

Scale	Setting	Riverine/Urban Flooding	Coastal Flooding
Watershed/ Landscape	More Urban	<ul style="list-style-type: none"> Greenways Culvert Upgrades Daylighting Low Impact Development Stormwater Parks Riparian Buffer Stream/River Restoration 	<ul style="list-style-type: none"> Culvert Upgrades Waterfront Parks Beach Parks* Tidal Circulation Living Shorelines Channel Restoration Beaches and Dunes* Coral Reef Restoration
	More Rural	<ul style="list-style-type: none"> Horizontal Setback Levee Floodplain Restoration Dam Removal Land Conservation 	<ul style="list-style-type: none"> Coastal Wetlands Restoration (Marsh, Mangroves) Land Conservation

What are the co-benefits of Nature-based solutions?



TABLE 4-2. ECONOMIC, COMMUNITY, AND ENVIRONMENTAL BENEFITS OF NBS

<i>Economic Benefits</i>	<i>Community Benefits</i>	<i>Environmental Benefits</i>
<ul style="list-style-type: none">• Appreciating property values• Energy conservation• Increasing retail business• Reduced stormwater treatment costs	<ul style="list-style-type: none">• Recreation• Aesthetics and placemaking• Reduced urban heat-island effect• Improved physical and mental health• Greenhouse gas sequestration	<ul style="list-style-type: none">• Air and water quality improvements• Reduced nitrogen and phosphorus/ nutrient cycling• Erosion control• Pollination• Habitat creation/ connection• Groundwater recharge





Photo credit: Halff

NBS Project Survey Activity

1. 15 minutes to complete survey (<https://forms.gle/ovuCC2YaJ8wKL8wG9>)
2. Survey will be open until July 26th COB
3. *For questions about specific NBS project:* complete these questions for projects in conceptual design phase (or beyond), and specifically projects which need additional capacity/funding to advance – *only if you have a project that is already in development*
4. Group share: Give the group a brief overview of planning work related to NBS in jurisdiction (specific projects, etc.)

Next Steps

1. Email Anna Jane (annajane.jones@tnc.org) to volunteer as WG Co-Chair
2. Funding webinar August 6th, 9:00 am CT
3. August 17th, 10 am CT – Working Group Session 2
4. September 30th – Working Group Session 3