NNBF

International Guidelines on Natural and Nature-Based Features for Flood Risk Management

The Way Forward

Puerto Rico I May 2022

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The Way Forward

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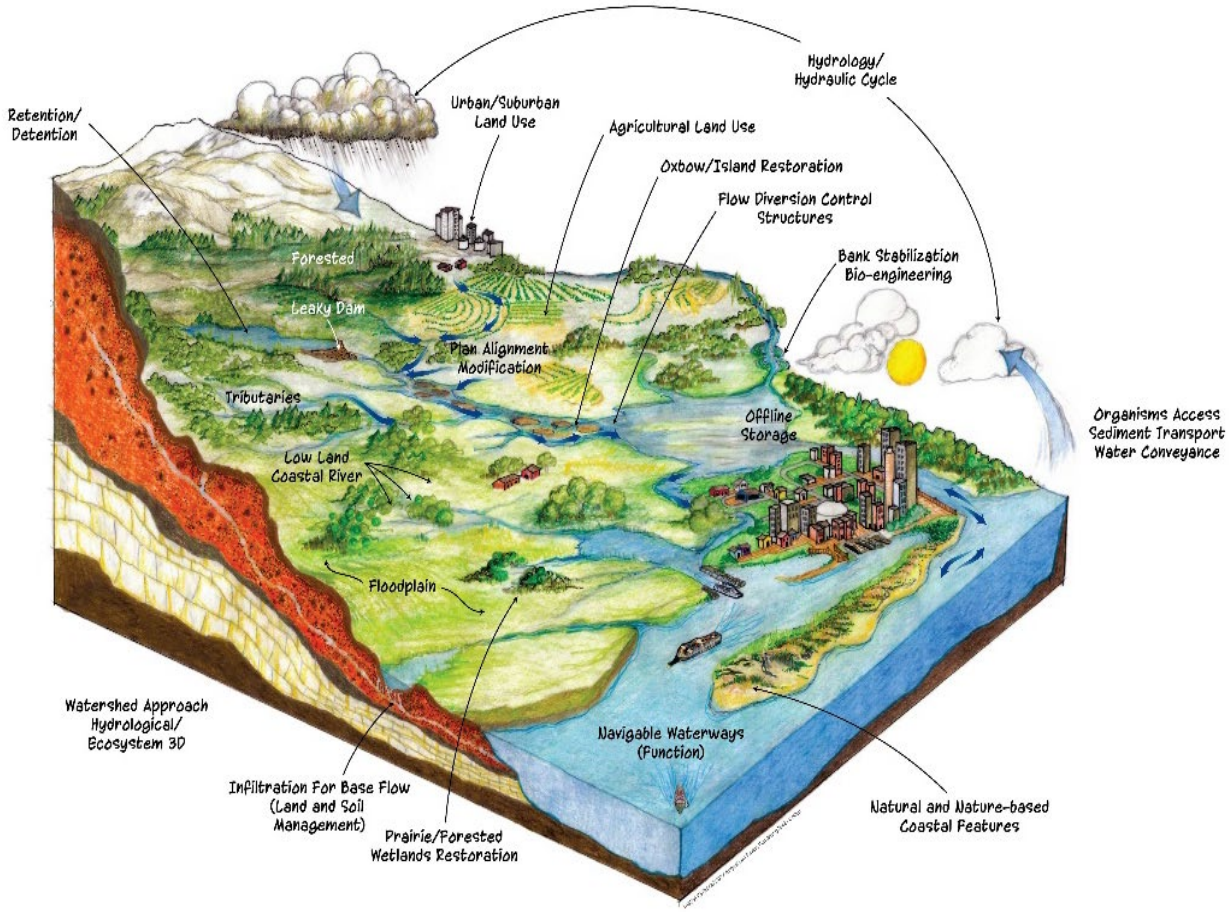
Developing and Delivering

- Deliver the right project, the right way
- Systems approach
- Measuring and managing performance and value
- Advance modeling tools
- Advance regulatory process



Communicating and Collaborating

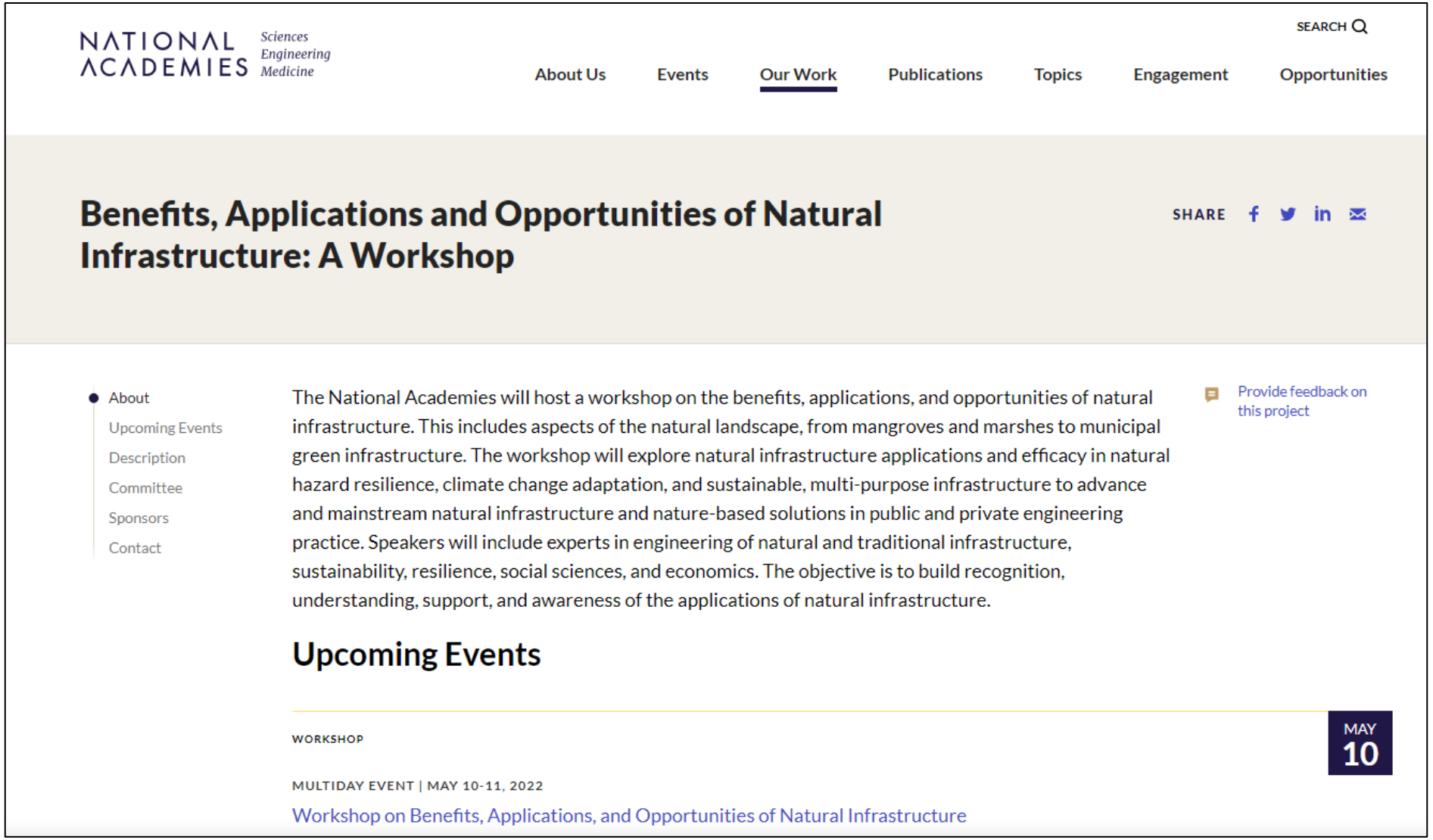
- Engage, communicate, collaborate
- Developing diversified value
- Working through uncertainties
- Creative exchange and investment across public and private sectors

Elevating and Educating

- Sharing information
- Developing knowledge
- Continual learning and innovation
- Sharing experience

National Academy of Engineering Workshop:

Natural Infrastructure, May 10-11, 2022



NATIONAL ACADEMIES Sciences Engineering Medicine

SEARCH

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Benefits, Applications and Opportunities of Natural Infrastructure: A Workshop

SHARE

- About
- Upcoming Events
- Description
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- Sponsors
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The National Academies will host a workshop on the benefits, applications, and opportunities of natural infrastructure. This includes aspects of the natural landscape, from mangroves and marshes to municipal green infrastructure. The workshop will explore natural infrastructure applications and efficacy in natural hazard resilience, climate change adaptation, and sustainable, multi-purpose infrastructure to advance and mainstream natural infrastructure and nature-based solutions in public and private engineering practice. Speakers will include experts in engineering of natural and traditional infrastructure, sustainability, resilience, social sciences, and economics. The objective is to build recognition, understanding, support, and awareness of the applications of natural infrastructure.

Provide feedback on this project

Upcoming Events

WORKSHOP

MAY 10

MULTIDAY EVENT | MAY 10-11, 2022

Workshop on Benefits, Applications, and Opportunities of Natural Infrastructure

EWN BCA Policy Research: Overview

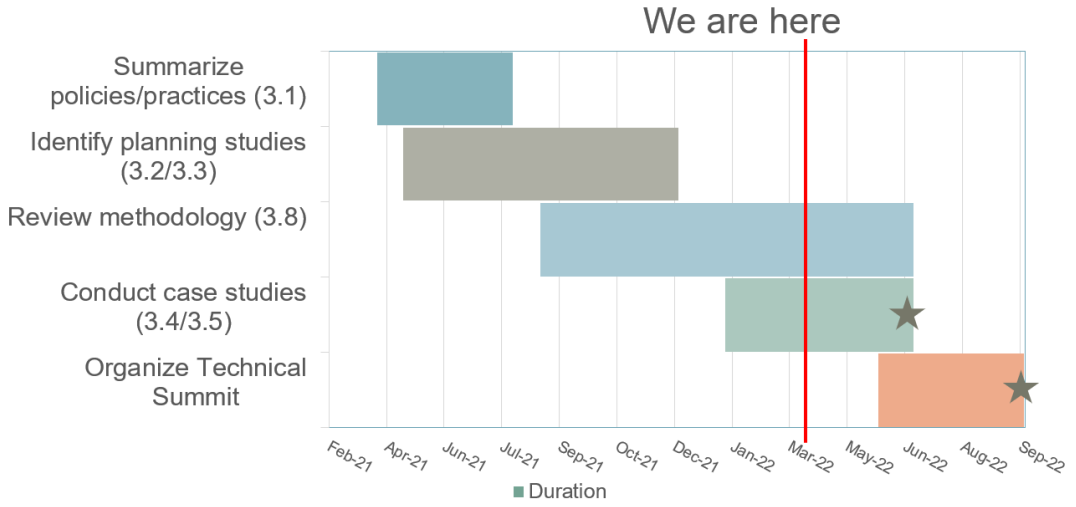
Current federal alternative evaluation process does not comprehensively value economic, environmental, and social benefits. These constraints screen out or exclude Nature-Based Solutions (NBS) and could lead to outcomes inconsistent with the Administration's priorities around community resilience and equity.

THE WATER INSTITUTE OF THE GULF

Approach:

- **Summarize** historical and current alternative evaluation policies and practices
- **Identify** 6 historical planning studies that considered NBS alternatives suitable for case study analysis
    1. *Jacksonville Harbor (NAV, South East)*
    2. *Jamaica Bay Reformulation (CSRM, North East)*
    3. *Southwest Coastal (CSRM, Gulf Coast)*
    4. *South Platte River and Tributaries (FRM, North West)*
    5. *West Sacramento (FRM, Pacific)*
    6. *South San Francisco Bay Shoreline (FRM, Pacific)*
- **Review** updated valuation methods and planning frameworks that incorporate environmental and social benefits
- **Analyze** case studies using updated methods and exploratory analysis to look beyond current policy constraints

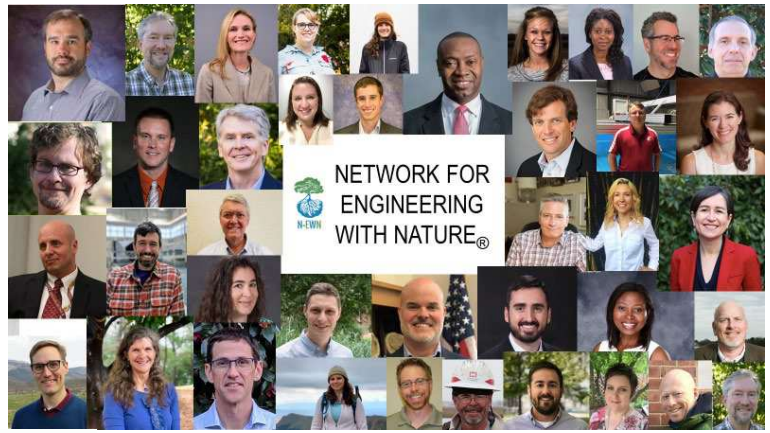
SCHEDULE AND PROGRESS



The Network for Engineering With Nature (N-EWN)

- Multi-sector network supporting innovation
  - Types of partners: public and private sector
  - Research – gov't, academic, private
  - Industry practitioners
  - Project owners
- Aligning research with the needs of practice
- Grounding approach in real projects
- EWN education: curricula and training
- Experiential learning for students – systems thinking, cross-disciplinary training
- Freely flowing communication and knowledge sharing
- Accelerate implementation

N-EWN



US Army Corps of Engineers.

Institute for Resilient Infrastructure Systems
UNIVERSITY OF GEORGIA

NYC Mayor's Office of Climate Resiliency

TRIBAL NATIONS TECHNICAL CENTER OF EXPERTISE

THE WATER INSTITUTE OF THE GULF

NCCOS
NATIONAL CENTERS FOR COASTAL OCEAN SCIENCE

UF UNIVERSITY of FLORIDA
CENTER FOR COASTAL SOLUTIONS

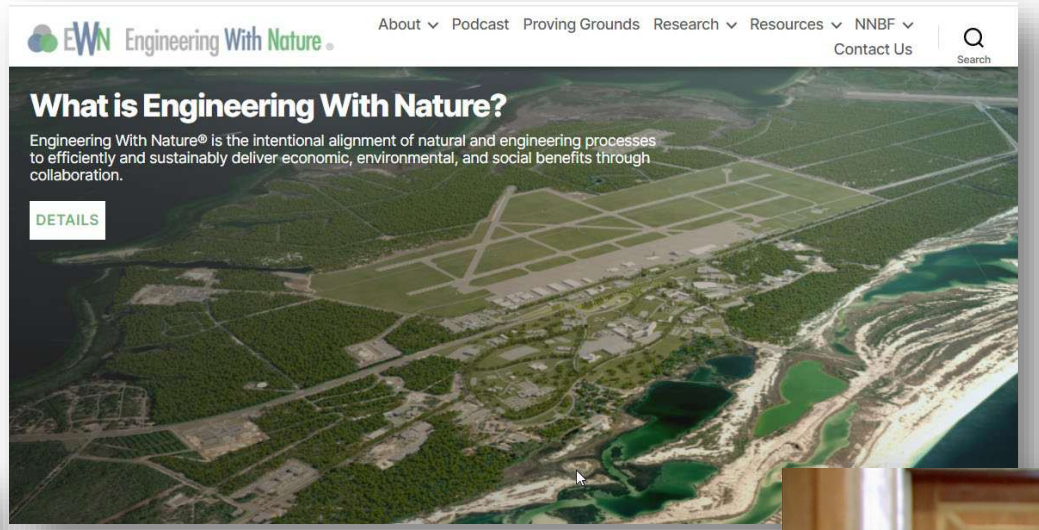
The UNIVERSITY of OKLAHOMA

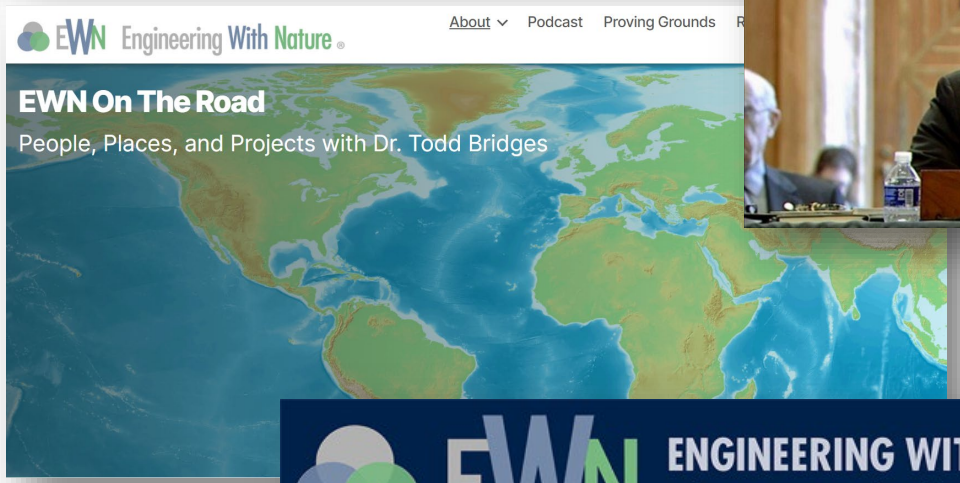
Arizona State University

GEORGIA DEPARTMENT OF NATURAL RESOURCES
COASTAL RESOURCES DIVISION

https://n-ewn.org/

Communicating Nature-Based Solutions





https://ewn.erdc.dren.mil/?p=3586

www.engineeringwithnature.org

Everything that depends on the action of nature is by nature as good as it can be.

— Aristotle

Questions?

EngineeringWithNature.org

Download

- Executive Summary (70 pages)
- International Guidelines on NNBF for Flood Risk Management (1,000 pages)