

Department of Navy Course

Nature-Based Solutions for Mission-Ready Infrastructure

Department of Navy (DON) installations face growing impacts from natural hazards. NBS can reduce these risks while supporting and sustaining natural systems, either alone or alongside conventional infrastructure.



OVERVIEW :::::::::::::

This course equips DON personnel with the skills to develop and implement nature-based solutions (NBS) at military installations. Developed by the US Army Corps of Engineers' Engineering With Nature Program (EWN_B), it is designed for DON personnel, including planners, engineers, facility managers, scientists, environmental professionals, natural resources managers, and installation leaders responsible for enhancing mission resilience and sustainability. Participants will learn foundational concepts, explore real-world case studies, and become familiar with a number of diverse tools, techniques, and practices to initiate and scale sustainable NBS projects that reduce risks from natural hazards and increase mission resilience.

OUTCOMES



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Engineering With Nature

CHARTING SUCCESS TOGETHER

The U.S. Army Corps of Engineers' Engineering With Nature (EWN) Program, has advanced Nature-Based Solutions (NBS) for over 15 years. EWN integrates natural processes into engineering design, combining environmental stewardship with mission objectives and fostering resilience through public and private partnerships.

Course Delivery

REGISTE

The nine-module course launches in January 2025 via a virtual platform, allowing participation from anywhere. Instructors and practitioners from diverse sectors will provide broad perspectives and practical insights into NBS.

Course Credit

The course offers 2 PDHs per module for attending live sessions. While recordings will be available for later viewing, PDHs won't be provided for recorded sessions.





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Introduction to NBS

Terminology, history, and examples of NBS to address natural hazards.

Strategies for Co-Developing NBS Projects

Framework, building the business case for NBS, scaling, and other considerations.



NBS in Coastal Systems - Part 1 Solutions utilizing beaches, wetlands, and reefs (coral and oyster).



NBS in Coastal Systems - Part 2 Solutions utilizing islands, mangroves, and horizontal levees (ecotones).

NBS in Inland Landscapes - Part 1

Techniques for streambank stabilization, floodplains, levee setbacks, re-meandering, riparian zones, and fish passage.

NBS in Inland Landscapes - Part 2

Approaches suited to the Desert Southwest, and arid environments.

NBS Regulatory Framework

Agency coordination, laws and regulations, example permitting actions, protected resources, and overcoming barriers.

Existing Guidance

Available engineering guidance, sediment as a resource in construction, NBS for roadways.

NBS from Concept to Construction

Financing, leveraging partnerships, transitioning designs, example bid packages.