



U.S. ARMY

# COLLECTING, COMMUNICATING, AND CREATING A COMMUNITY FOR NATURE-BASED SOLUTIONS

Todd S. Bridges, Ph.D.  
Senior Research Scientist (ST), Environmental Science  
National Lead, USACE EWN Initiative

U.S. Army Corps of Engineers  
U.S. Army Engineer Research and Development Center

NNBF Symposium  
Edinburgh, Scotland  
16 May 2019



US Army Corps of Engineers

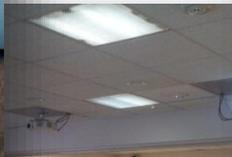


ERDC  
ENGINEER RESEARCH & DEVELOPMENT CENTER

# FRIANT DAM ON THE SAN JOAQUIN RIVER, CA



# ENGINEERING WITH NATURE *PROVING* *GROUNDS*: PEOPLE AT WORK



US Army Corps of Engineers • Engineer Research and Development Center

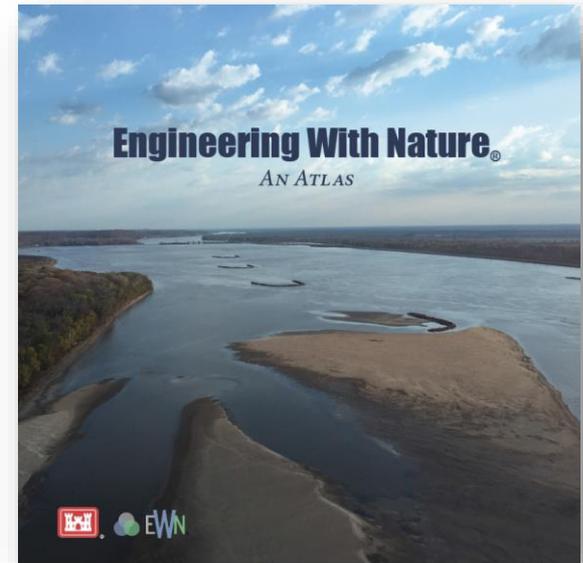
# EWN ATLAS LAUNCH EVENT

10:30-12:00

January 16, 2019

National Building Museum  
Washington, D.C.

“Engineering With Nature is an important initiative for the U.S. Army Corps of Engineers.” James Dalton, USACE Director Civil Works



[www.engineeringwithnature.org](http://www.engineeringwithnature.org)

# Call for Project Nominations

## *Engineering With Nature®: An Atlas – Volume 2*

### Publication Launch fall 2020!

## Evaluation Criteria

Using science and engineering to produce operational efficiencies.



Using natural processes to maximum benefit.



Increasing the value provided by the project to include social, environmental, and economic benefits.



Using collaborative processes to organize and focus interests, stakeholders, and partners.



[www.engineeringwithnature.org](http://www.engineeringwithnature.org)

<https://ewn.el.erdc.dren.mil/atlasv2.html>

# INTERNATIONAL GUIDELINES ON THE USE OF NATURAL AND NATURE-BASED FEATURES FOR SUSTAINABLE COASTAL AND FLUVIAL SYSTEMS

**Purpose: Develop guidelines for using NNBF to provide engineering functions relevant to flood risk management while producing additional economic, environmental and social benefits.**

- Publish NNBF technical guidelines by 2020:
  - ▶ Multi-author: government, academia, NGOs, engineering firms, construction companies, etc.
  - ▶ Addressing the full project life cycle
  - ▶ Guidelines in 4 Parts
    - Overarching
    - Coastal Applications
    - Fluvial Applications
    - Conclusions



THE WORLD BANK



Environment Agency



NLST

# NNBF GUIDELINES F2F WORKING MEETINGS

- Vicksburg, MS; Oct '16
- London etc., UK; Jul '17
- Silver Spring, MD, Oct '17
- Delft, NL; Mar '18
- Santa Cruz, CA; Sep '18
- Edinburgh, Scotland; May '19



US Army Corps of Engineers • Engineer Research and Development Center