

# Engineering With Nature Project Fact Sheet



## Equitably Incorporating the Wellbeing Benefits of Nature

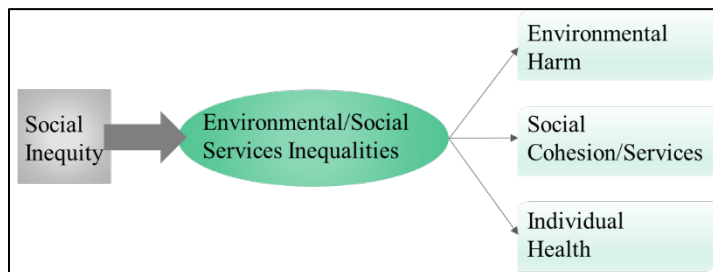
### Background

The Engineering With Nature (EWN) Initiative seeks to maximize the benefits associated with USACE projects by supporting planners to develop natural infrastructure alternatives and analyze them. A benefit that USACE does not currently account for is that associated with exposure or proximity to natural and nature-based spaces on individual and community wellbeing. Due to a growing body of research on the benefit of nature for human wellbeing, it is possible to leverage this benefit within comprehensive benefit accounting. Existing efforts outside the Corps to consider the benefits of nature for humans and human adaptation to climate change need to be interpreted and transferred for the USACE context. The nexus of EWN and equity – how nature and access should be more equitably distributed and accessible – is central.



### Objective

This project explores how EWN principles can help facilitate the equitable distribution of the health and wellbeing benefits of natural infrastructure and access to nature. The project seeks to provide a theoretical accounting of the nature benefits offered by EWN projects and how such benefits may or may not be realized by their intended beneficiaries. It will bring new information to benefits accounting so it can be including in planning and operations practices.



### Approach

The technical approach will be informed by mixed-methods approaches common within environmental justice research. It will leverage existing research on the wellbeing benefits and methods for documenting, quantifying, and/or

monetizing nature benefits. A process will be developed to help draw conclusions about whether nature provides reliable, repeatable benefits, and how those benefits flow to communities.

Geospatial analysis with equity metrics will provide insight into the existing distribution of nature and natural infrastructure and help identify opportunities to provide benefit where there are deficits. The project will also draw on established economic theory about the distribution of public infrastructure costs and benefits.

### Outcomes

A process to incorporate the benefits of nature for human wellbeing will help USACE achieve more comprehensive benefits accounting and therefore more informed project evaluation. Ideally this work, in combination with related work units, will continue to increase the EWN-centric portfolio and will support important shifts in public infrastructure planning currently underway in the nation including greater consideration of equity.

**Point of Contact: Margaret Kurth**  
**Margaret.H.Kurth@usace.army.mil; 978-318-8883**