



US Army Corps  
of Engineers®



**DREDGE  
RESEARCH  
COLLABORATIVE**

**USACE and Landscape Architect (LA) Community Workshop on Engineering With Nature (EWN)  
US Army's Engineer Research and Development Center (ERDC)  
July 25-27, 2017**

**Objectives:**

- ♦ introduce the two respective communities and identify potential relationships of interest;
- ♦ explore future opportunities for collaboration between the two communities to support EWN approaches for sustainable projects;
- ♦ establish consensus around a set of next steps and action items, based on active dialogue and the exchange of ideas among participants; and
- ♦ develop and publish a proceedings document that chronicles activities during the workshop, identifies outcomes, and codifies future actions that are derived by participants.

**July 24 - Travel to Vicksburg, MS**

**July 25 – Bldg. 3270, ERDC Environmental Laboratory, RM 1000**

Time	Action	Lead or Speaker
8:00 – 8:30	Arrival & Coffee	
8:30 – 9:00	Welcome and Orientation	Todd Bridges
9:00 – 10:00	Individual Introductions	All/Sean Burkholder
<b>Plenary Session Begins: “Setting the Stage”</b>		
10:00 – 11:00	Engineering with Nature (EWN) and Connections to Landscape Architecture	Bridges
11:00 – 11:30	Break and Informal Chat	All
11:30 – 12:30	Landscape Architecture Introduction	Dredge Research Collaborative
12:30 – 1:30	Catered Lunch	All
<b>Plenary Session Continues: “Projects On the Ground”</b>		
1:30-3:30	Project Vignettes	LA & USACE
3:30 – 3:45	Break	
<b>Touring ERDC</b>		
3:45 – 4:00	Explanation of Tour Stops & Procedure	
4:00 – 5:30	Tour Stops 1, 2, and 3 (~ 30 min per stop)	
5:30 – 6:00	Return to EL, Socialize	All
6:00	Catered Dinner on Site	

**July 26 – Bldg. 3270, ERDC Environmental Laboratory, RM 1000**

<b>Time</b>	<b>Action</b>	<b>Lead or Speaker</b>
7:30 – 8:00	Arrival and Coffee	All
8:00 – 8:15	Welcome to Day 2	Todd Bridges/Sean Burkholder
8:15 – 9:15	USACE Proving Grounds Presentations	LRB, SWG, and NAP POCs
9:15 – 9:45	Break and Informal Chat	All
9:45 – 10:00	Instructions for Breakout Session 1	Todd Bridges
10:00 – 12:00	Breakout Session 1 – Specific EWN Projects and Demos	All
12:00 – 1:00	Lunch Break	ALL
1:00 – 2:00	Session 1 Report Out & Discussion of Results (10 mins per group)	Team POCs
2:00 – 2:30	Instructions for Breakout Session 2	Todd Bridges
2:30 – 4:15	Breakout Session 2 – Network of EWN/LA Projects in a Large Geographical Area	All
4:15 – 4:30	Break	All
4:30-5:15	Session 2 Report Out (10 min per group)	Team POCs
5:15-5:30	Day 2 Wrap Up	Todd Bridges/Sean Burkholder
5:30	Adjourn Day 2 (Dinner on your Own)	

**July 27 – Bldg. 3270, ERDC Environmental Laboratory, RM 1000**

<b>Time</b>	<b>Action</b>	<b>Lead or Speaker</b>
7:30 – 8:00	Arrival and Coffee	All
8:00 – 8:15	Welcome to Day 3	Todd Bridges/Sean Burkholder
8:15 – 9:30	Plenary: Session 2 Discussion of Results Plus Chart Posting of Prioritized List of Project Ideas from Each Team (15 mins per group including Q&A)	Team POCs
9:30 – 10:00	Voting Exercise to Prioritize/Rank Top Proposed Projects	All
10:00 – 10:30	Break and Informal Chat	All
10:30 -11:30	Plenary: Review of Results and Discussion	TBD
11:30 – 12:00	Closing Thoughts & Next Steps	Todd Bridges/Sean Burkholder
12:00	Meeting Adjourns	

### **Breakout Session 1**

**Purpose:** The objective of this first breakout session is to identify specific project opportunities for using landscape architecture approaches (LA) to incorporate EWN principles and practice into water infrastructure project development and operations. How can LA be used to incorporate EWN principles and practices into existing projects and operations? How can LA be used to integrate EWN principles and practices into the development and planning of new projects? How can collaboration between the EWN and LA communities help support Project Development Teams across USACE? What do you consider to be the key aspects or elements of these collaboration projects? When considering your priority project(s), identify the key next steps that should be taken to advance the project

Every participant should identify 1-3 project ideas. These project ideas will then be briefly described and discussed within the breakout group. Each group will then collectively identify 3-5 high priority projects that will be presented during the plenary report-out. The projects should be evaluated or categorized by the following criteria:

- Feasibility – Is this an ongoing or planned project that could be modified vs. new effort?
- Project Timeline – Would the project be implemented in the near- (immediate to 1 year), mid- (2-4 year), long-term (5-7 year) timeframe? (Note: ideally, the project portfolio would include a range of timeframes, with a bias toward near-term).
- Interagency Involvement – Will the project be suitable for involvement by USACE and the LA Community represented here? At a minimum, is it appropriate for investment by both entities and perhaps other stakeholders?
- Regulatory Challenges – Are there particular regulatory/legal challenges that might delay or prevent project implementation?; and
- Geographic and Habitat Diversity – Diversity in geographical location and habitat type across the portfolio of collaboration projects (e.g., coastal, wetland, seagrass, oyster castles, etc.).
- Project Benefits (physical or intellectual)

#### **Report out:**

1. Present between 3-5 projects (10 min per group). Include: title, key aspects/elements, location, rationale for priority rank, and next step.
2. Provide a chart page(s) with your group's top 3-5 project titles separated with white space to allow for dot voting. You will post this chart in the Plenary room.

### **Breakout Session 2**

**Purpose:** The objective of the second breakout session is to consider the application of LA and EWN on the scale of systems, i.e., a network of individual projects operating within a large geographic area (e.g., watershed, estuary coastline). The example project type for this application is the Coastal Texas project currently underway within the USACE Galveston District where large-scale actions are being studied to enhance the resilience of the Texas coast. How can LA be used to integrate EWN principles and practices into large systems of projects? How can these approaches be used to reveal and communicate information about the function and benefits provided by such investments? How can LA

be used to highlight the importance of integrated approaches that combine the use of natural, nature-based, conventional engineering systems?

Every participant should identify 1-3 project ideas. These project ideas will then be briefly described and discussed within the breakout group. Each group will then collectively identify 3-5 high priority projects that will be presented during the plenary report-out. The projects should be evaluated or categorized by the following criteria:

- 1) Opportunity to evaluate alternative project designs
- 2) Opportunity use LA to integrate EWN into project development
- 3) Opportunity to visualize and communicate project function and value

**Report out:**

1. Present between 3-5 projects (10 min per group). Include: title, key aspects/elements, location, rationale for priority rank, and next step.
2. Provide a chart page(s) with your group's top 3-5 project titles separated with white space to allow for dot voting. You will post this chart in the Plenary room.

**Discussion Rules:**

Please silence all WMDs (weapons of mass distraction)

Share the Air

Limit Acronyse (explain first time used)

Respect Time Allotments

Avoid Sidebar Conversations until Chat Time

Minimize "Bunny Trails", Stay Focused on Topic

Limit War Stories – Use Headline Version

Focus on the Quality Few versus the Mediocre Many

Disagree without being disagreeable

ELMO Empowerment (enough, let's move on)

Thumbs Voting for Quick Consensus, Dots for Other

Have Some Fun!

Others?