



## AGENDA

# Engineering With Nature and Galveston District Collaborative Meeting Introducing the EWN Opportunity and Implementation Guide

September 30, 2014: 8:00 a.m. – 4:30 p.m.  
Optional Dinner – 5:30 p.m. (Saltwater Grill)  
October 1, 2014: 8:30 a.m. – 4:30 p.m.

USACE Galveston District – Room # 175

### Sponsors:

Todd Bridges, ERDC-EL  
Edmond Russo, Galveston District  
Jeff Lillycrop, ERDC-CHL  
Linda Lillycrop, ERDC-CHL  
Cynthia Banks, ERDC-EL

### Facilitators:

Gordon Butte and Sarah Thorne, Decision Partners

### Support:

Patricia Agee, Galveston District

**Participants:** Meeting participants will be a cross section of people from the Galveston District, including people responsible for project management, operations, engineering and construction, regulatory, etc. Their collective work will represent all mission areas served by the Galveston District and will be joined by the EWN Leadership Team.

### Introduction to EWN:

Pursuing the objective of sustainable development of water resources infrastructure poses both challenges and opportunities for the U.S. Army Corps of Engineers (USACE). Advancing our practices involves identifying the practical actions that can be taken to better align and integrate engineering and natural systems to produce more socially acceptable, economically viable and environmentally sustainable projects.

The USACE Engineering With Nature (EWN) Program supports more sustainable practices, projects, and outcomes by working to *intentionally align natural and engineering processes to efficiently and sustainably deliver economic, environmental and social benefits through collaborative processes* ([www.engineeringwithnature.org](http://www.engineeringwithnature.org)). EWN's focus on developing practical methods provides an achievable path toward an ecosystem approach to infrastructure development and operations. Consequently, EWN principles and practices can and are being applied across multiple USACE missions and business lines.

There are four elements critical to the success of EWN projects:

- 1) Improving operational efficiency;
- 2) Using natural systems and processes to maximize the benefits;
- 3) Broadening the benefits of the project – economic, environmental and social; and
- 4) Using collaborative processes to engage stakeholders throughout the project.

USACE has a long history of implementing some of the elements of EWN in its projects. Today, the EWN Leadership Team is focusing attention on these successes and enabling expansion of this approach to water resources' challenges and opportunities across the Corps. The EWN Leadership Team and its partners are looking for opportunities to draw together leading practices while expanding and leveraging those practices to seek a broader range of opportunities on which to apply EWN principles and practices. The Galveston District has volunteered to serve as a "proving ground" as we expand EWN across the USACE, in part by testing key components of the draft EWN Implementation Guide.

Our strategy for the past five years has been to expand the application of EWN principles and practices across USACE business lines and mission areas by first engaging internal leaders and early adopters and then reaching out to our external partners and stakeholders and effectively collaborating with them to establish and achieve common goals. We are drawing on leading practices in science-based strategic risk communication<sup>1</sup> along with other leading social science practices to do so.

The purpose of this initial Collaboration Workshop is to identify opportunities in the Galveston District to incorporate EWN practices into District projects. To do this, the Galveston Team will undertake the initial step of the EWN Implementation Process – Opportunity Initiation -- and pilot the use of the methods and tools developed to support this step.

### **Meeting Purpose:**

The purpose of the meeting is to introduce the Galveston Team to the principles and practices of EWN and progress to date, then, following the first step of the EWN Implementation Process: a) identify opportunities for EWN-based solutions and b) prepare a detailed Opportunity Analysis for the highest value solutions identified.

The opportunities identified will span the full spectrum of Galveston District's missions and projects (i.e. Navigation, Flood Risk Management and Environment).

### **Objectives:**

The objectives for the collaborative meeting are to:

1. Provide an overview of the development of EWN, review progress to date and the path forward.

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<sup>1</sup> Strategic Risk Communication is a purposeful process of skilful interaction with stakeholders supported by appropriate information. It is an essential component of integrated risk management. Strategic Risk Communications helps decision-makers and stakeholders make well-informed decisions and take appropriate actions.

2. Discuss Galveston District opportunities and challenges with respect to applying EWN
3. Using tools developed to guide EWN project teams, identify specific EWN-based opportunities
4. Prepare a detailed Opportunity Analysis for the highest value solutions
5. Provide feedback on the use of the implementation tools for the first step in the EWN Implementation Process
6. Provide input into further development of the EWN Implementation Guide, and supporting methods and tools for the subsequent steps
7. Discuss requirements for success and next steps, including plans to complete Step 1: Opportunity Initiation

**Pre-Meeting Assignment:**

1. Review the EWN Implementation Guidance overview and the backgrounder on EWN.
2. Review the TX Coastal Protection and Restoration Project Fact Sheet and draft Section 905b Recon Report.
3. Bring at least one idea each to the meeting to collect, review, and distill into a general set for group discussion on where/why/when/how we might be able to act on these opportunities.

Time	Agenda: Day 1, September 30, 2014	
8:00	<b>Registration</b>	
8:30	<b>Welcome and Introductions</b> <ul style="list-style-type: none"> <li>• Welcome</li> <li>• Around the table introductions</li> <li>• Overview of the collaborative meeting purpose and objectives</li> <li>• Implementing EWN in the Galveston District – Introducing the challenge and the opportunity</li> <li>• Lunch logistics</li> </ul>	<ul style="list-style-type: none"> <li>• Edmond Russo and Todd Bridges</li> <li>• Decision Partners</li> <li>• Edmond Russo and Todd Bridges</li> <li>• Patricia Agee</li> </ul>
9:00	<b>Overview of EWN and Accomplishments to Date</b> <i>(10-min briefs)</i> <ul style="list-style-type: none"> <li>• Orient participants to EWN and progress to date <ul style="list-style-type: none"> <li>• EWN Overview</li> <li>• RSM and EWN</li> <li>• Great Lakes Breakwaters</li> <li>• Horseshoe Bend</li> <li>• Post Sandy Natural and Nature-based Features</li> <li>• Interior Least Tern Modeling Summary</li> </ul> </li> <li>• Discussion of the four EWN elements and how to begin implementing them into projects</li> </ul>	<ul style="list-style-type: none"> <li>• Todd Bridges</li> <li>• Linda Lillycrop</li> <li>• Tom Fredette</li> <li>• Burton Suedel</li> <li>• Todd Bridges</li> <li>• Todd Swannack</li> </ul>
10:45	<b>Break</b>	
11:00	<b>Opportunity for EWN in the Galveston District</b> <ul style="list-style-type: none"> <li>• Overview of the Galveston District’s mission areas, issues, challenges and opportunities</li> <li>• Coastal Texas discussion</li> </ul>	<ul style="list-style-type: none"> <li>• Edmond Russo and team</li> </ul>
12:00	<b>Lunch - Order In</b>	
12:45	<b>Overview of the EWN Implementation Guidance and Process</b> <ul style="list-style-type: none"> <li>• Discuss the purpose of the EWN Implementation Guidance and the EWN Process</li> <li>• Discuss Step 1 – EWN Opportunity Initiation</li> <li>• Based on the morning presentations, brainstorm broad opportunities for EWN in Galveston District</li> <li>• Discuss and categorize</li> <li>• Discuss Breakout Group assignment</li> </ul>	<ul style="list-style-type: none"> <li>• Facilitated Discussion</li> </ul>
2:00	<b>Break</b>	
2:15	<b>Breakout Groups -- Assignment #1 – EWN Opportunity Discovery</b> <ul style="list-style-type: none"> <li>• Breakout teams work on Assignment #1 using worksheets</li> </ul> <p><i>Task: Identify opportunities, potential EWN demo projects and/or current projects that could/do incorporate EWN principles; prioritize; work up the top 2-3 as opportunities</i></p>	<ul style="list-style-type: none"> <li>• Facilitated Discussion</li> </ul>

4:15	<b>Wrap-Up</b> <ul style="list-style-type: none"> <li>• Recap accomplishments of Day 1</li> <li>• Overview of agenda for Day 2</li> </ul>	<ul style="list-style-type: none"> <li>• Edmond Russo</li> <li>• Todd Bridges</li> <li>• Decision Partners</li> </ul>
4:30	<b>Adjourn Day 1</b>	
5:30	<b>Optional Dinner</b>	Saltwater Grill

Time	Agenda: Day 2, October 1, 2014	
8:30	<b>Overview of Day 2</b> <ul style="list-style-type: none"> <li>• Discuss comments and questions from Day 1</li> <li>• Overview of Day 2</li> <li>• Lunch logistics</li> </ul>	<ul style="list-style-type: none"> <li>• Decision Partners</li> </ul>
8:45	<b>Breakout Groups – Assignment #2 – Opportunity Analysis</b> <ul style="list-style-type: none"> <li>• Breakout teams work on Assignment #2 using worksheets</li> </ul> <p><i>Task: Work up a detailed Opportunity Analysis for the top priority identified in Assignment #1</i></p>	<ul style="list-style-type: none"> <li>• Facilitated Discussion</li> </ul>
10:30	<b>Break</b>	
10:45	<b>Breakout Groups -- Assignment #3 – Opportunity Analysis</b> <ul style="list-style-type: none"> <li>• Breakout teams work on Assignment #3 using worksheets</li> </ul> <p><i>Task: Work up a detailed Opportunity Analysis for the second priority identified in Assignment #1</i></p>	<ul style="list-style-type: none"> <li>• Facilitated Discussion</li> </ul>
12:00	<b>Lunch</b> - Order In	
12:45	<b>Breakout Groups – Prepare for the Plenary</b> <ul style="list-style-type: none"> <li>• Breakout teams develop PowerPoint slides to summarize and report on their work on Assignments #1-3.</li> </ul>	<ul style="list-style-type: none"> <li>• Facilitated Discussion</li> </ul>
1:30	<b>Plenary – Breakout Groups Report</b> <ul style="list-style-type: none"> <li>• Each Breakout team has 15 – 20 minutes to present</li> <li>• Discussion on the opportunities and requirements for success</li> </ul>	<ul style="list-style-type: none"> <li>• Facilitated Discussion</li> </ul>
3:15	<b>Break</b>	
3:30	<b>Feedback on the EWN Implementation Tools</b> <ul style="list-style-type: none"> <li>• Discussion</li> </ul>	<ul style="list-style-type: none"> <li>• Facilitated Discussion</li> </ul>
4:00	<b>Wrap-up</b> <ul style="list-style-type: none"> <li>• Summary discussion of collaborative meeting results</li> <li>• Discussion of path forward, next steps on the Opportunities identified</li> <li>• Feedback on the meeting</li> </ul>	<ul style="list-style-type: none"> <li>• Edmond Russo</li> <li>• Todd Bridges</li> <li>• Decision Partners</li> <li>• Participants</li> </ul>
4:30	<b>Adjourn</b>	

