US Army Corps of Engineers

Environmentally Acceptable Lubricants and Engineering With Nature For Water Operations

Strategic Technical Meeting
ERDC Environmental Laboratory (Building 3270; Room 1000)
Vicksburg, MS
March 31 – April 1, 2015

Theme: Environmentally Acceptable Lubricants and the Integration of USACE Water Operations with Engineering With Nature Practice and Principles

Purpose: To investigate the use of Environmentally Acceptable Lubricants (EALs) at USACE hydropower facilities and locks and dams as well as the integration of Engineering With Nature (EWN) practices and principles with USACE water operations activities. The agenda consists of the development of four primary environmental focus areas in which EWN can be utilized in regard to water operation activities. Status reports designed to provide a clear picture of Corps' activities in each area will be presented and then focus area break out groups will be assigned to develop a path forward for EWN opportunities for each area.

Day 1, March 31 2015

0800	**Sign In**
0815—0830	**Welcome, Opening Remarks and Introductions** – Wilson
0830—0900	**EWN Overview** – Todd Bridges
0900—0930	**Water Operations Overview** – Pat Deliman
0930—0945	Break

Overview of Existing Activities and Technologies for: (1) Environmentally Acceptable Lubricants (EALs), (2) eFlows and Sediment Transport, (3) Habitat Development & Opportunities, and (4) Fish Passage

0945—1130	**Environmentally Acceptable Lubricants –** Victor Medina
1130—1300	Lunch
1300—1430	**eFlows and Sediment Transport –** Kyle McKay, Joe Gailani
1430—1500	Break

1500—1600	**Habitat Development –** Burton Suedel, Craig Fischenich, Cynthia Banks
1600—1730	**Fish Passage –** Dave Smith and Andy Goodwin
1730—1800	Tour of the Cognitive Environmental Effects Research Flume (CEERF)
1800	Optional Dinner

Day 2, April 1 2015

0800—0930	**Focus Area Break Out Sessions – Development of opportunities and identification of challenges for EWN implementation** ***(Each break out group will consist of members from both the USACE R&D Labs and Districts)***

NOTE: Each breakout group will be tasked with addressing each of the following issues:

1) **Challenges and opportunities**
2) **Stakeholder and partner identification and engagement**
3) **Demonstration/pilot opportunities**
4) **S&T needs**
5) **Communication needs**
6) **Short and long term actions**

0930—1000	Break
1000—1100	**Focus Area Break Out Session** ***(Continued)***
1100—1230	Lunch
1230—1430	**Focus Area Break Out Session** ***(Continued)***
1430—1500	Break
1500—1600	**Focus Area Report Outs** – Session Leaders (15 minutes per group)
1600—1645	**Strategic Focus** – Structure and prioritize ideas from focus area break out sessions. Identify potential locations to demonstrate, implement, and support these ideas.
1645—1730	**Summary and Action Plan** – Summarize innovation opportunities and actions to move forward
1730	Depart Workshop

Dial-in/Webmeeting Information:

Number: 877-336-1828
Access Code: 9487799
Pass Code: 1234

Web Meeting Address: https://www.webmeeting.att.com
Meeting Number: 8773361828
Access Code: 9487799

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). 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.

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.