

AGENDA



US Army Corps of Engineers®



## Exploring Shared Interests in Engineering With Nature® April 15, 2019

**Locations:**

- 8:30 AM – 12:00 PM, ERDC Environmental Laboratory, Collaboration Room
- 1:00 PM – 4:00 PM, ERDC Headquarters, Room 2004
- 4:15 PM – 5:00 PM, EL Flume and Sediment Laboratory
- 5:00 PM – 5:30 PM, ERDC Environmental Laboratory, Collaboration Room

**Web Meeting:**

To remotely join the seminar and Lightning Talks starting at 1:30 PM, click the link below then select the “Call Me” option to access the audio portion of the meeting.

<https://usace.webex.com/meet/courtney.e.chambers>

If you are unable to join the web meeting, you are welcome to call in.

USA Toll-Free: 888-273-3658

Access Code: 2069467

Security Code: 4321

**Objectives:**

- ◆ Provide an opportunity for all participants to meet and participate in information exchange;
- ◆ Introduce participants to our organizations’ respective work that supports the advancement of EWN, nature-based solutions/practices, design of sustainable ecosystems, and the integration of society and the natural environment with water-resources infrastructure.
- ◆ Discuss related R&D in regard to future needs and opportunities; and
- ◆ Identify future collaboration opportunities, develop follow-on action items and/or capture recommendations for future engagement.

**April 14, 2019:** Travel to Vicksburg

**April 15, 2019:** All times listed are Central Time

Time	Action	Lead or Speaker
8:15	Arrive at US Army Engineer Research and Development Center (ERDC)’s Visitor Registration Office, 3909 Halls Ferry Road, Vicksburg, MS 39180	Dr. Nairn and Dr. Knox arrive at Visitor Registration Center Meet Daniel Farrar

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Time	Action	Lead or Speaker
8:30	Arrival at ERDC's Environmental Laboratory Bldg. 3270, Collaboration Room	Todd Bridges
8:30-8:45	Meet and Greet w/ Coffee	All
8:45 – 9:15	Welcome, Opening Remarks, Introductions, Review of Agenda, and Meeting Goals	Todd Bridges
9:15 – 9:45	Introduction to Engineering With Nature Initiative and Project Portfolio	Todd Bridges
9:45 – 10:15	OU's Civil Engineering and Environmental Science Program / Hydrology and Water Security Program	Bob Knox
10:15 – 10:30	Break	
10:30– 10:50	Ecosystem Management and Restoration Research Program (EMRRP)	Trudy Estes
10:50 – 11:10	Overview of ERDC's River & Estuarine Engineering	Keith Flowers
11:10 – 11:30	Ecological Modeling	Candice Piercy
11:30 – 12:00	Discussion: Opportunities	
12:00 – 1:15	Lunch	ALL
1:15 – 1:30	Speaker Prep	Bob Nairn
1:30 – 2:30	Seminar: "Ecotoxic Metal Retention in Ecologically Engineered Passive Treatment Systems: An Engineering With Nature Application in Small Mid-Continent Watersheds"  Location: ERDC HQ, RM2004 Web Meeting Info Above	Dr. Bob Nairn, University of Oklahoma Director, Center for Restoration of Ecosystems and Watersheds (CREW)
2:30 – 2:45	Break	
2:45 – 4:00	R&D Lightning Talks (5 min talk / 5 min Q&A)  Watershed Management and Modeling (WM)  An Integrated Framework for Flow and Transport Modeling at Regional Scales (WM)  Dynamic Processes in Stream Ecosystem Restoration  Potomology  Environmental Flows work on the Minnesota River Basin Interagency Study  Fluvial Geomorphology Toolbox (WM)	Speakers:  Billy Johnson  Ahmad Tavakoly  Sarah Miller  David Biedenbarn  Chuck Theiling  Chris Haring

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4:00 – 4:15	Quick Break and Walk to EL Flume Laboratory	
4:15 – 4:35	EL Flume R&D and Presentation	David Smith
4:35 – 4:55	EL Sediment Engineering R&D Lab	Don Hayes
4:55 – 5:00	Quick Break and Walk to EL Collaboration Room	
5:00 – 5:30	Discussion: Follow-On Opportunities and Actions	Todd Bridges and Bob Nairn
5:30	Adjourn	

### Participants:

Robert “Bob” Nairn

Director, Center for Restoration of Ecosystems and Watersheds (CREW); Associate Director, WaTER Center; School of Civil Engineering and Environmental Science, University of Oklahoma

Robert “Bob” Knox

Associate Director, WaTER Center; Associate Director, CREW; School of Civil Engineering and Environmental Science, University of Oklahoma

### US Army Engineer Research and Development Center (ERDC)

Todd Bridges

US Army’s Senior Research Scientist, Environmental Science and National Lead, USACE’s Engineering With Nature (EWN) Initiative

Al Cofrancesco

Environmental Technical Director  
Environmental Laboratory

Trudy Estes

Ecosystem Management Restoration Research Program (EMRRP), Program Manager  
Environmental Laboratory

Candice Piercy

Research Environmental Engineer; Integrated Ecological Modeling, Environmental Laboratory

Keith Flowers

Chief, River and Estuarine Engineering Branch,  
Coastal and Hydraulics Laboratory

Billy Johnson

Research Civil Engineer, Environmental Laboratory

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Ahmad Tavakoly	Research Hydraulic Engineer, Coastal Hydraulics Laboratory
Sarah Miller	Environmental Research Ecologist, Environmental Laboratory
David Biedenbarn	Research Hydraulic Engineer, Coastal Hydraulics Laboratory
Chuck Theiling	Research Ecologist, Environmental Laboratory
Chris Haring	Research Hydrologist, Coastal Hydraulics Laboratory
Dave Smith	Research Ecologist, Environmental Laboratory
Michelle Bourne	Research Biologist, Environmental Laboratory
Donald Hayes	Research Civil Engineer, Environmental Laboratory
Daniel Farrar	Research Biologist, Environmental Laboratory