



# Stewardship

## news

### YOUR Thoughts

We are looking for contributors and ideas.

✖ If you have a topic, success story, lesson learned, or helpful suggestion—let us know.

Send to: [Tara.J.Whitsel@usace.army.mil](mailto:Tara.J.Whitsel@usace.army.mil)

*Stewardship News is an unofficial publication of the U.S. Army Corps of Engineers (USACE). This online publication is produced quarterly with the purpose of providing its readers information about the USACE Stewardship Program.*

*Editorial views and opinions expressed are not necessarily those of the Department of the Army.*

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Managing Editor:  
Tara Whitsel.

[Tara.J.Whitsel@usace.army.mil](mailto:Tara.J.Whitsel@usace.army.mil)

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## Your Stewardship HQ Update

**POC: Jeremy Crossland, Land Use Program Manager, HQUSACE**

**ENS 101 UPDATE:** The next offering of ENS 101 is scheduled for August 23-27, 2021 at the Raystown Lake Project, Pennsylvania. The instructor team will evaluate travel guidance approximately two months prior to the scheduled start date and determine if the class will be held in-person or conducted virtually. For more information or to register for the class, please contact Tara Whitsel by email at [Tara.J.Whitsel@usace.army.mil](mailto:Tara.J.Whitsel@usace.army.mil). Supervisor approval is required. Class size is limited to 25 students. ENS 101 provides an introduction to the concepts of natural resource management by examining the foundation and fundamentals of all aspects of the ENS program. Students will be introduced to topics such as master plan development, budgeting, cultural resources management, and habitat management for fish and wildlife through lectures, case histories, field visits, and structured student discussion. Additional classes for 2022 have been announced as well!

## USACE, Critical to Re-establishing Nesting Bald Eagles in Kansas

**Article provided by Michael A. Watkins, Wildlife Biologist, Kansas City District (retired), through the assistance of Kyle Ruona, Kansas City District**

In 1989 the first bald eagle nest in Kansas since extirpation was established at Clinton Lake, USACE. Kansas City District wildlife biologist, Michael Watkins, worked with the lake project staff at Clinton Lake, the U.S. Fish and Wildlife Service (FWS), and the Kansas Department of Wildlife—Parks and Tourism to develop and implement a management plan for protecting the nesting pair.

During that year, USACE staff placed buoys around the nest which was located in a snag tree that was inundated when the lake was impounded. Additionally, a restricted zone was established to prevent human activity from disrupting the avian pioneers. USACE assisted FWS staff with trapping and banding the two juvenile eagles that fledged from the nest in 1989. They were fitted with standard silver U.S. Geological Survey Bands and purple visual identification bands with silver letters A and B. This color combination was unique to Kansas.

During this process USACE and the FWS forged a unique and enduring partnership to monitor and document the bald eagle as it expanded across the state.

*Photo by Michael Watkins*





# Nesting Bald Eagles Continued

2



In 1991 the adult male at the Clinton Lake nesting territory was captured and fitted with purple visual identification band E. He was identified at the nesting territory until 2017. In 1993 Eagle B (from the 1989 nest) returned to nest at Hillsdale Lake and in 1994 Eagle A (from the 1989 nest) established a nest at Perry Lake. Both Hillside and Perry are USACE lakes. Dan Mulhern, biologist with the FWS was ecstatic upon hearing the news that both eagles had returned. "This is a very significant development for Kansas," he said. "It also demonstrates the importance of protecting the nesting sites of pioneering eagles, as their offspring are likely to return and fill other habitat voids."

From 1993 until present, tree climbers ascend the nest tree when the eaglets are about six weeks old. The nestlings are placed in bags and lowered to biologist who measure and band the eaglets before they are returned to their nest.

In 2020, Kansas had a record 175 active bald eagle nests in the state. USACE lake projects have and continue to provide critical habitat for re-establishing a stable population of nesting bald eagles. Nine of the first 20 nests in Kansas were located at USACE lake projects. Today numerous lakes have multiple active bald eagle nests including Clinton and Perry Lakes which have a record five each.

As for the legacy of Eagle E; during the 29 breeding seasons he was observed at his nesting territory, the pair produced 63 nestlings of which 42 were banded. As part of the banding and re-sighting program we have documented 284 descendants from Eagle E (63 offspring, 207 grand offspring and 14 great-grand-offspring). Several have returned to nest in Kansas and Missouri.

A complete history of nesting bald eagles in Kansas can be found in the September 2020 issue of the Journal of Raptor Research; "THIRTY YEARS OF BALD EAGLE POPULATION RECOVERY AND NESTING ECOLOGY IN KANSAS, 1989–2018." <https://bioone.org/journals/journal-of-raptor-research/volume-54/issue-3/0892-1016-54.3.255/Thirty-Years-of-Bald-Eagle-Population-Recovery-and-Nesting-Ecology/10.3356/0892-1016-54.3.255.short>



Photos From Top to Bottom, Left to Right: 1. Clinton Lake nest number 1. Photo by Michael Watkins, 2. Eaglet in a nest at Milford Lake. Photo by Michael Watkins, 3. Michael Watkins, left, holds the first juvenile eagle trapped and banded at Clinton Lake in 1989. FWS biologist Mike Lockhart holds an adult bald eagle used to decoy the juvenile into the trap set. Photo by Dave Rhoades, 4. FWS biologist Dan Mulhern measures the bill depth of an eaglet which is held by Michael Watkins. Photo by Marty Birrell, 5. Aluminum bands placed on the legs of eagles banded in Kansas. Photo by Michael Watkins, 6. A volunteer tree climber prepares to place an eaglet in a cloth bag and lower it to biologists waiting below. Photo by Michael Watkins



# From Villain to Victor: History of the Bald Eagle Watch

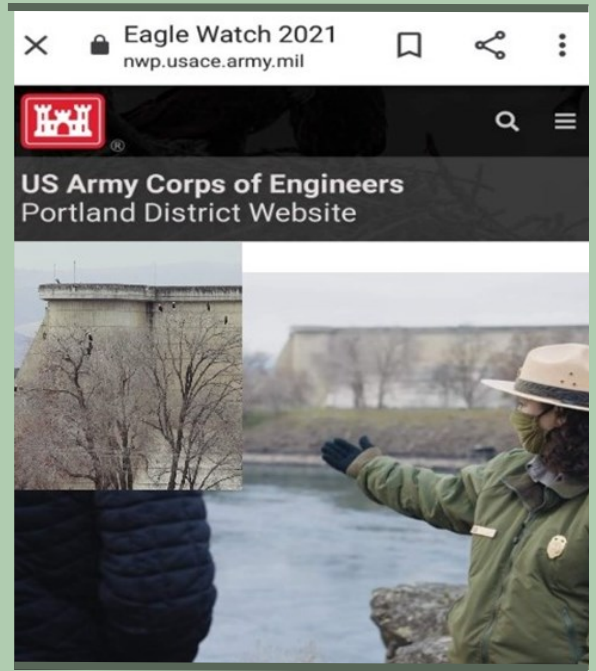
**POC: Amber Tilton, Park Ranger, 541-506-8471**

Bald eagle watches are a popular winter event in many states with wintering eagle populations. Watches began after eagle populations crashed in the 1960s to share information about challenges threatening the birds' survival. The main challenges at the time were pesticide DDT use and habitat loss.

A lesser talked about cause of death was eagle unpopularity. It's hard to imagine, I know. However, the saying "gossip kills" holds truth as tall tales of bald eagles carrying away children and killing livestock contributed heavily to the senseless shootings and poisonings of eagles. Add to that the myth that they would outcompete fishermen for salmon and well, they basically suffered from a bad image in the extreme. Shoot-to-kill on a wanted poster, kind of way.

What a 180 for their image! It seems like we went from throwing darts at their pictures, to framing them! The introduction of the 'Bald Eagle Watch' has helped create that change by providing outdoor eagle viewing and educational opportunities focused on recovery efforts.

As many U.S. Army Corps of Engineers projects around the country have concentrations of wintering eagles congregating near dams, powerhouses and along the shorelines of our lakes and rivers, so too shall you find a dam ranger pointing at them. All over the country, USACE park rangers host annual eagle watch events. This year many groups held those activities virtually to help prevent the spread of COVID-19. Park rangers used videos, webinars, websites, press and social media to reach audiences.



Picture above: Bald eagles roost in the trees below The Dalles Dam. Photo Courtesy Below: Sean O'Conner from Story Gorge



**Watch Fly Like an Eagle: Exploring Winter Gorge Eagle Migration**, a webinar that explores migration, behavior, and biology; the history of the Gorge Eagle Watch program. You can find the recorded webinar, other videos and more here: [www.nwp.usace.army.mil/eaglewatch2021](http://www.nwp.usace.army.mil/eaglewatch2021)

Today, eagle watches are more of a celebratory event than an alarm bell as the bald eagle has made a full recovery! Once on the brink of extinction, they are now one of the greatest success stories of the Environmental Protection Act.

When people gaze at the bald eagle today, they no longer see villain, they see victory. We get to reflect on the success of the changes we have made as a society that prevented this species from disappearing completely.

There is hope, because if we can save the bald eagle, what else can we save?





**1 Interior Least Tern.** Check out this story (<https://www.dvidshub.net/news/383930/tulsa-district-surveys-endangered-species>) and video (<https://www.dvidshub.net/video/774443/tulsa-district-surveys-endangered-species>) from Tulsa District.



**i Click here to access the story!**

**i Click here to access the video!**

**Tulsa District surveys endangered species**



Photo By Preston Chasteen | An adult Interior Least Tern prepares to land near its nest on a sand bar in the... [read more](#)

## **3 DoD Partners in Reptile and Amphibian Conservation**

DoD PARC has completed two new Best Management Practices (BMPs) documents for the Eastern Diamond-backed Rattlesnake and Western Pond Turtles. These documents were developed in partnership with experts of these species, including those in the U.S. Fish and Wildlife Service. The recommended management practices described in these BMPs are intended as guidelines that DoD natural resource managers can use to help plan, prioritize, and implement conservation and management actions that provide a conservation benefit to these DoD priority at-risk species. We hope you find these documents a useful tool for supporting and enhancing military readiness.



**Click here for DoD PARC Resources!**

## **2 Surveillance for Harmful Algal Bloom Events and Associated Human and Animal Illnesses — One Health Harmful Algal Bloom System, United States, 2016–2018.** Authors: Roberts VA, Vigar M, Backer L, et al.

### **What is already known on this topic?**

Harmful algal blooms occur in fresh, brackish, and salt water throughout the United States. They can affect human and animal health and have ecological and economic impacts.

### **What is added by this report?**

Eighteen states adopted use of the One Health Harmful Algal Bloom System and entered 421 reports during 2016–2018, including information about 389 human illnesses and at least 413 animal illnesses associated with harmful algal bloom events.

### **What are the implications for public health practice?**

Information about harmful algal bloom exposures and health effects support efforts to detect these events and mitigate and prevent associated illnesses. Human, animal, and environmental health partners can work together to document the occurrence and impacts of harmful algal bloom events and characterize associated illnesses.

Report:

[https://www.cdc.gov/mmwr/volumes/69/wr/mm6950a2.htm?s\\_cid=mm6950a2\\_e&ACSTrackingID=USCDC\\_921-DM44810&ACSTrackingLabel=This%20Week%20in%20MMWR%20-%20Vol.%2069%2C%20December%2018%2C%202020&deliveryName=USCDC\\_921-DM44810](https://www.cdc.gov/mmwr/volumes/69/wr/mm6950a2.htm?s_cid=mm6950a2_e&ACSTrackingID=USCDC_921-DM44810&ACSTrackingLabel=This%20Week%20in%20MMWR%20-%20Vol.%2069%2C%20December%2018%2C%202020&deliveryName=USCDC_921-DM44810)

**i Click here to access the article!**



## 4 From the North American Bird Conservation Initiative.

With the loss of three billion birds over 50 years, we need broad, impactful partnerships more than ever, to help bird populations recover while supporting other human goals such as water quality and availability, improved human health and community well-being, resilient landscapes, and productive working lands. The Field Guide to Developing Partnerships presents both practical guidance for identifying and developing such partnerships, while serving to encourage and empower bird conservation professionals to look outside of their existing communities to pursue unprecedented partnerships with the potential to implement lasting, positive change for birds and people.

**What it Is:** Our Field Guide to Developing Partnerships compiles expertise from 40 contributors representing 23 organizations and 13 partnerships, including 8 different Joint Ventures. The Guide provides tips and guidance on how to identify potential partners with common goals, reach out to new partners, and build relationships and develop trust, especially with organizations or individuals whose primary focus is not bird conservation. The Guide also provides an overview of building relationships with private partners such as corporations, foundations, individuals, and private organizations, and you'll find many short case studies of successful partnerships built

around complementary goals for birds and people. We also offer a partnerships worksheet, designed to guide professionals through the concepts in the Field Guide as these ideas relate to your own projects.

**How to Find It:** The Field Guide, Executive Summary, and Worksheets are housed on a new Partnerships page on the NABCI website. Download these three documents, or explore the content of each section online: Looking Beyond Birds to Find Partners, Reaching Out and Communicating, Developing Relationships, and Overview of Partnership Opportunities.

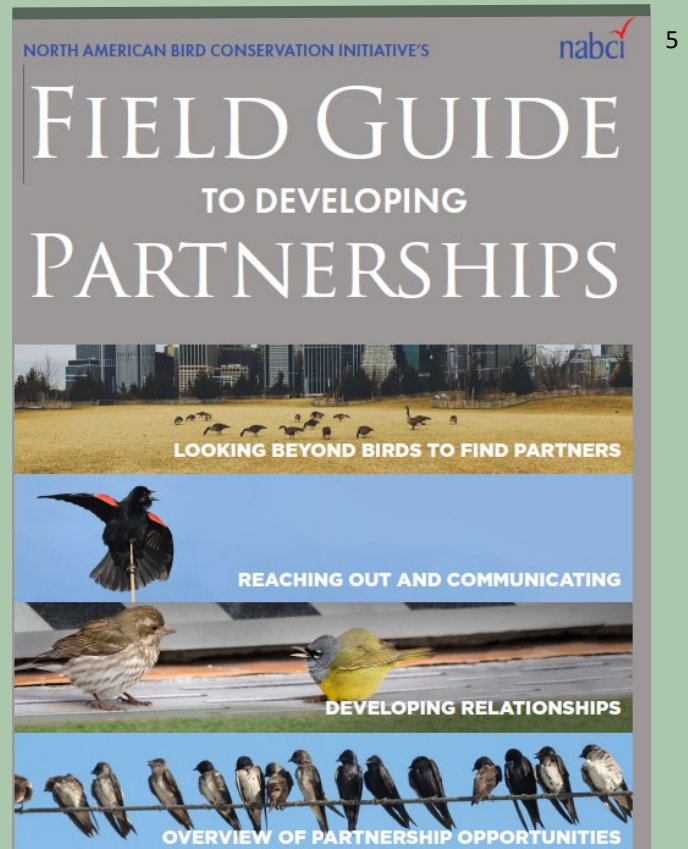
**Who it's For:** This document is for anyone working on partnerships. Whether you are new to partnership development or have been building collaborations for decades, this Guide offers sound advice and interesting, useful partnership examples. Much of this guide is by and for the Migratory Bird Joint Ventures- we've compiled Joint Venture partnership perspectives from across the US to better enable all Joint Venture staff and partners to develop broader, more effective partnerships. This Guide will also be useful to state fish and wildlife agencies as they implement the Relevancy Roadmap and has useful advice for organizations looking to partner across cultures.


## 5 High genetic diversity in the clonal aquatic weed *Alternanthera philoxeroides* in the United States.

The work detailed in the article is the largest alligatorweed genetic survey in the world and was carried out 1) to understand the introduction history of the weed into the US, 2) to help explain variability in herbicide and biological control success across the US, and 3) to inform future management R&D activities. 375 alligatorweed plants from 90 locations across the southeast US and California were sampled and genotyped. It was found that, despite reproducing clonally in the US, alligatorweed had high genetic diversity across its introduced range. Researchers discovered six unique haplotypes, which suggests that there were multiple introduction events over the last 100 years. The highest genetic diversity was identified in the lower Mississippi and Arkansas river basins, correlating with potential commercial shipping introduction vectors.

This journal article was also featured as the Invasive Plant Science and Management Journal cover and highlighted in the journal blog. The blog can be accessed here: <https://www.cambridge.org/core/blog/2020/12/18/do-genetic-differences-explain-why-some-populations-of-alligatorweed-escape-control/>

Photo: Alligatorweed, National Invasive Species Information Center



 **Click here to access the NABCI Partnership Website!**



**1 Virtual Watercraft Inspection and Decontamination Training.** Hosted by the Aquatic Invasive Species Network, this two-day, intensive, training is provided free of charge on a first-come first-served basis. The course is designed for those individuals who are currently or will soon become active in setting-up or implementing watercraft inspection and decontamination programs for their respective agencies, organizations or businesses. The class size is restricted to 10–12 people, and the focus is on actual inspections of various types of watercraft and the use of several decontamination systems. It is certified by 100th Meridian member agencies and successful graduates will receive a Certificate of Completion.

The training includes:

- Introduction and Western State AIS Programs
- Biology (Zebra/Quagga mussel and other Aquatic Invasive Species)
- Watercraft 101
- Inspection Procedures and practice
- Triggers for decontamination and Step-by-step procedures.

For any questions, please contact: D Davis, (702) 236-3814 or [quaggadee@cox.net](mailto:quaggadee@cox.net)

**Virtual Training March 23-25, 2021, 8AM-NOON (3 days):**

Zoom register here: [<https://us02web.zoom.us/meeting/register/tZwrcuyorj4qH9f-kRSeE9wzK0muibfWkDga> utm\_medium=email&utm\_source=govdelivery ].

**Virtual Training April 6-8, 2021 8AM-NOON ( 3 days):**

Zoom register here: [[https://us02web.zoom.us/meeting/register/tZApCumvqDwjH9HQwD89a83y5eZHKZNWzJ3q?utm\\_medium=email&utm\\_source=govdelivery](https://us02web.zoom.us/meeting/register/tZApCumvqDwjH9HQwD89a83y5eZHKZNWzJ3q?utm_medium=email&utm_source=govdelivery) ].

**Virtual Training April 20-22, 2021 8AM-NOON (3 days):**

Zoom register here: [ [https://us02web.zoom.us/meeting/register/tZAude6grj4vH9CvKmtNfq358pCW9L2FYnJw?utm\\_medium=email&utm\\_source=govdelivery](https://us02web.zoom.us/meeting/register/tZAude6grj4vH9CvKmtNfq358pCW9L2FYnJw?utm_medium=email&utm_source=govdelivery) ]

## 2 Upcoming Integrated Pest Management Webinars from EPA

- Mar. 9, 2021: Invasive Woody Plant Management, Part 2
- Apr. 13, 2021: IPM for Spotted Lanternfly
- May 4, 2021 IPM After the Storm, Vector Considerations, Part 2

<https://www.epa.gov/ipm/upcoming-integrated-pest-management-webinars#lanternfly-hidden>

 **Click link here!**

*Photos: Boat Inspection Stations in NWD in partnership with Oregon Department of Fish and Wildlife*





## Some Interesting Reading Continued

### 7 The Role of Local Municipalities and Entities in Addressing Aquatic Invasive Species.

Creative Resource Strategies, LLC and National Sea Grant Law Center, with funding from the US Fish and Wildlife Service, developed a project focused on helping municipalities access the tools necessary to play a role in aquatic invasive species prevention efforts. Although a substantial amount of attention has been placed on federal and state invasive species policy needs, the potential exists for municipalities to play a significant role in invasive species prevention efforts by addressing key gaps not addressed by state and federal regulations.

Specifically, the project developed an online hand-book/toolkit

([www.localgovAIS.com](http://www.localgovAIS.com))

for local entities

(municipalities and counties)

that guides them through the process of identifying high-risk priority AIS and key next steps

they could potentially take to advance interdiction efforts. Local water bodies

are an important source of water for local communities, and generate significant revenue for local

communities through recreational and other opportunities. The result is that local municipalities nationwide have an online toolkit to guide them through potential appropriate actions and strategies that align with state and federal laws, but that help to protect the health and integrity of their local water bodies, and advance AIS efforts overall. A series of 1-hour webinars will be held to share the new online toolkit with local governments (and others that are interested) and walk through the regional case

### National Invasive Species Awareness Week<sup>7</sup>

Part 1 of the National Invasive Species Awareness Week was held February 22-28, 2021.

This week focused on information sharing and advocacy.



Part 2 of the National Invasive Species Awareness Week will take place May 15-22, 2021 with a focus on outreach and education. While in-person events may or not be possible in your area, there is plenty that can be done to “spread” awareness of invasive species!

## Do YOU Know About the Traveling Trunk?



The Invasive Species Leadership Team developed an Interpretive Trunk to serve as a tool to enhance the public's understanding of invasive species, the negative impacts they have, management approaches and steps we can all take to help stop their spread. The Travelling Trunk is FREE to borrow!

Learn how on the NRM Gateway.



<https://corpslakes.erdcenter.mil/employees/invasive/trunk.cfm>

 **Click link here!**





# Learning More About USACE!

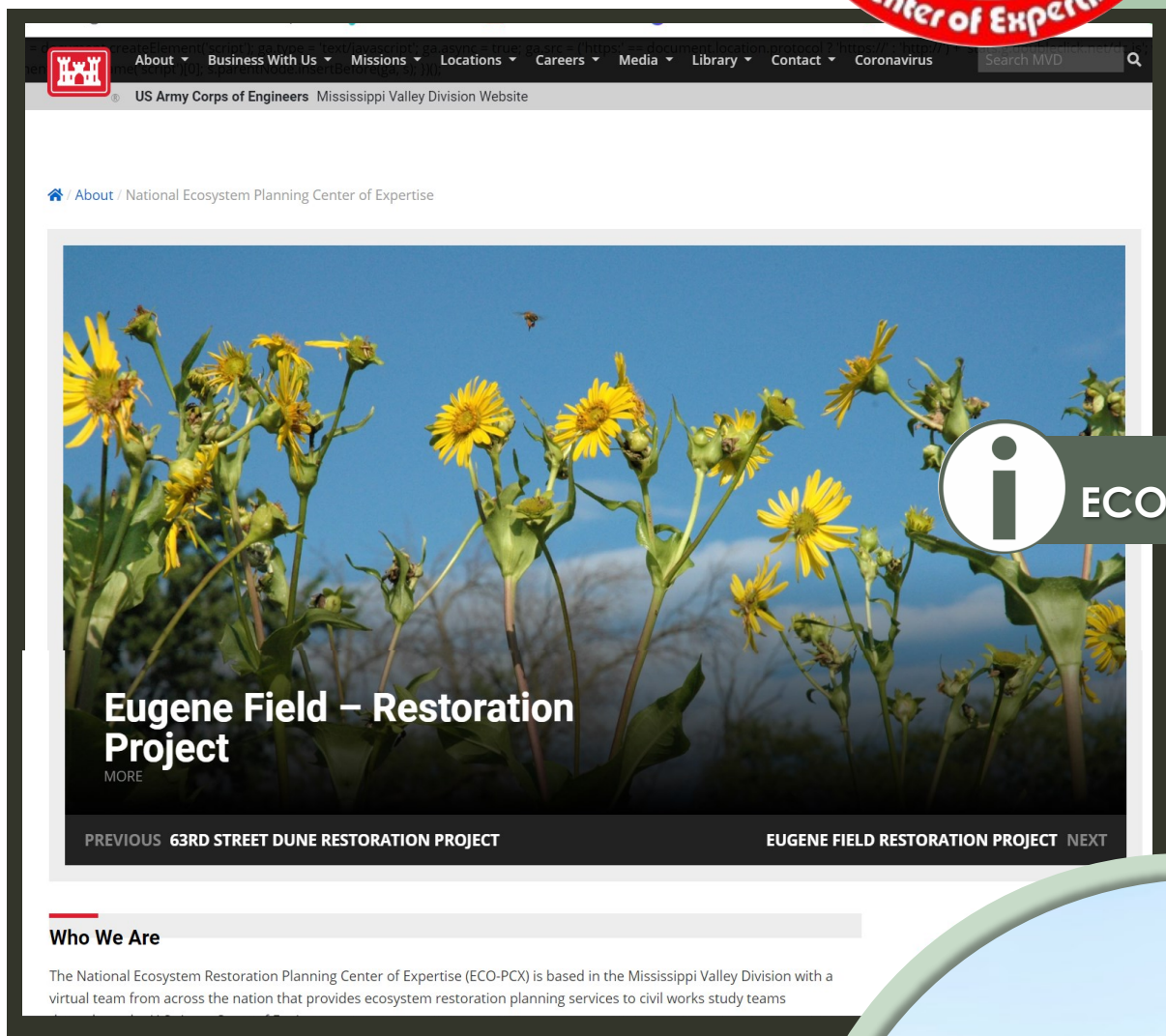
**POC: Greg Miller, 504-481-9683**

The USACE National Ecosystem Planning Center of Expertise (ECO-PCX) web page is now available at <https://www.mvd.usace.army.mil/About/National-Ecosystem-Planning-Center-of-Expertise/>. Learn more about the PCX and a variety of USACE ecosystem restoration projects. On the go? No worries! This page is compatible with your mobile device.



## National Ecosystem Restoration Planning Center of Expertise (ECO-PCX)

The ECO-PX was established in 2003 to support ecosystem restoration project planning. The center performs independent project reviews, technical training, expert planning support, and Model development.



**Click here for ECO-PCX Website!**

*Screen Capture Left: ECO-PCX website featuring the Eugene Field Restoration Project. Photo Bottom: Jackson Park Lagoon Restoration Project*

The National Ecosystem Restoration Planning Center of Expertise (ECO-PCX) is based in the Mississippi Valley Division with a virtual team from across the nation that provides ecosystem restoration planning services to civil works study teams throughout the U.S. Army Corps of Engineers.

The ECO-PCX leverages a 13-member virtual team with a large network of ad hoc technical experts that can provide specialized assistance with ecosystem restoration planning. The ECO-PCX team is comprised of the Director, Operating Director, Account Managers, PCX Independent External Peer Review Lead, and a Model Review Manager.

