



Stewardship

news

YOUR Thoughts Volume 1, Issue 1: January 2018

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

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. Mention of specific vendors does not constitute endorsement by the Department of the Army or any element thereof. Managing Editor: Tara Whitsel.

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Your Stewardship HQ Update

Why Stewardship News

As the Environmental Stewardship Program Manager and on behalf of Mary Coulombe, the Chief of Natural Resources Management, I would like to welcome everyone to the first edition of Stewardship News. Although our community has various media outlets such as the NRM Gateway, Facebook, and project websites, the Stewardship Advisory Team recommend the production of an electronic newsletter that can more easily highlight current activities and accomplishments. Please assist in this effort through content submission so that we can share our Environmental Stewardship story.

Looking Back: FY17

The end of FY 17 closes another dynamic year for stewardship of our natural and cultural resources. Items of national interest that challenged us included the Dakota Access Pipeline, an ongoing audit of our boundary and flowage

"With help from you, we will highlight your stories and hardworking efforts to reach more members in our community including partners, family and friends." — Jeff Krause, ES Business Line Manager

easement encroachments, new budgeting methodology, new Operations leadership, and of course a new Presidential administration. With all the noise of change, members of the ES community continued to dig deep and engage in successful programs and partnerships; some of which are highlighted in this newsletter.

Looking Forward: FY18

As FY18 begins, we will build on the success of the past few years with the highest ENS budget to date at \$117 million (M). Not including activities such as mitigation, biological opinions, and curation (now being funded by other business lines), this amount is \$7M more than the programs previous high of \$110M in 2008.

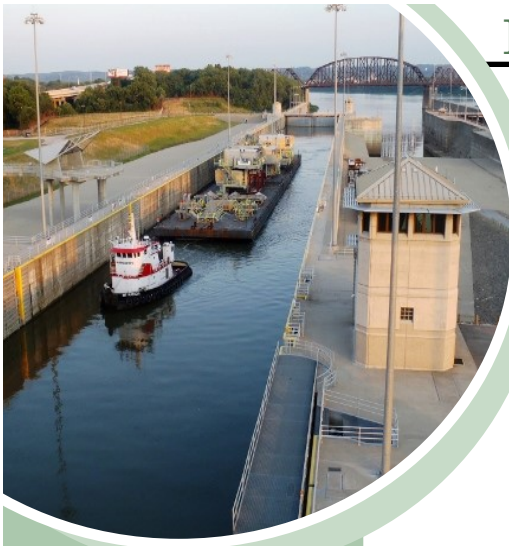
It also represents a steady increase from the average of \$95M the program experienced from 2007 to 2017. Now, we must execute and insure the completion of master plans, boundary work, and other packages that we fought hard to get approved. Thank you for all you do to protect our natural and cultural resources!

Project Spotlight: What's "Growing On" at McAlpine Locks and Dam?

Plans to improve and provide habitat for bees, butterflies and other pollinators on nearly 12 acres of land within the Falls of the Ohio Wildlife Conservation Area and McAlpine Locks and Dam on the Ohio River at Louisville, Kentucky are well underway. Lockmaster Dewey Takacy and project personnel grew pollinator plants from seed in the Resident Engineer Office building located at the viewing and interpretive area. Plants included purple coneflower, gray-headed coneflower, Black-eyed Susan, swamp milkweed, common milkweed, butterfly weed, Maximilian sunflower and New England Aster.

Pollinator declines over the past several years have become a worldwide concern. In May 2015, the White House announced the National Strategy to Promote the Health of Honey Bees and Other Pollinators. (Article continued on page 2.)





McAlpine Locks and Dam

The McAlpine Locks and Dam is located on the Ohio River 604.5 miles below Pittsburgh, PA, at the northwestern end of Louisville, Kentucky.

The Water Resources Development Act of 1990 authorized the McAlpine Locks Replacement Project. This work replaced the 600' and 360' locks with a 1200'x110' lock on the Kentucky bank side of the Louisville and Portland Canal adjacent to the existing lock. The new lock was completed and opened in 2009.

In 1982 Congress designated the fossil beds and falls area as "The Falls of the Ohio National Wildlife Conservation Area." Responsibility for operation and maintenance has been vested in the Louisville District.

This strategy outlines a comprehensive approach to tackling and reducing the impact of multiple stressors on pollinator health, including pests and pathogens, reduced habitat, lack of nutritional resources and exposure to pesticides.

The initial 600 potted plants grown at McAlpine were planted

among existing grasses directly below the viewing and interpretive area, adding habitat benefit to the sloped 1.5 acres area that is next to the new 1200-foot lock chamber. Planting took place on May 14, 2016, through a combination of volunteer groups, individuals and project staff from McAlpine, Taylorsville Lake and other projects. USACE team members brought their families out to participate in the planting activities as well. The event day took place with other participants providing information on honey bees, butterflies, water safety, locking and other topics. Local businesses provided a BBQ lunch for all participants.

Management support within operations for creating and improving pollinator habitat at McAlpine is strong. Along with benefits to the pollinators, other benefits will result from these actions as pointed out by Locks and Dams Operations Manager Waylon Humphrey.



Lockmaster Dewey Takacy, McAlpine Locks and Dam, took the lead in ensuring that plants were watered weekly and that the growing facility was monitored for temperature and humidity for optimal growth. Takacy also made sure the oscillating fan was operating twice a day. The fan provided a "breeze" for the growing plants so that their stems gained strength rather than being flimsy and flopping over once planted outside.

"While the pollinator project at McAlpine is going to provide an excellent habitat for many species, the primary benefit for the navigation mission is rooted in reallocating Operations and Maintenance funding," said Humphrey. "In years past the steep hillside adjacent to the visitor overlook was maintained through labor intensive weed eating or through renting brush clearing equipment. By converting

this area to pollinator habitat we will reduce the dependency on O&M dollars to keep the area maintained which allows that money to be spent on maintenance that can increase the life cycle of our navigation equipment."

At the project level, Takacy was excited to take this project on. "Upon coming to McAlpine Locks and Dam, I saw the opportunity to enhance our Environmental Stewardship program by creating pollinator habitat," he said. "Not only will this activity improve

habitat, but I anticipate it will reduce labor and mowing costs, will reduce CO2 emissions and fuel use, and will provide an opportunity to get the local community involved. I hope to see Scouts and school groups utilizing the pollinator habitat as an outdoor learning laboratory."

For more information contact Keith Chasteen by phone at 502-315-6724.

Implementing Integrated Pest Management Strategies—*Aquatic Invasive Species Treatment in the Merrimack River Basin (New England District)*



Contoocook, New Hampshire - Variable milfoil significantly impacts approximately 240 acres of 652 total acres of water at Hopkinton-Everett Lakes used for flood risk management and recreation. Notably, Elm Brook Cove at the Elm Brook Park Day Use Area at Hopkinton Lake on the Contoocook River is so impacted by variable milfoil that the project has to treat the area annually to maintain unimpeded access to the swim beach area and boat ramp.

To tackle the impacts of invasive milfoil on the lakes, staff at the Merrimack River Basin and Hopkinton-Everett Lakes Project are working collaboratively with the State of New Hampshire Department of Environmental Services' Exotic Species Program Coordinator on developing Integrated Pest Management Strategies for aquatic invasive species control as part of a long-term management plan. The goal of the long-term management plan is to clear variable milfoil from the swim beach area at Elm Brook Cove, and keep the milfoil from spreading out of the waterway, which chokes the large-mouth bass shoreline nurseries.

Some of the Integrated Pest Management Strategies include reducing the use of herbicides treatments of variable milfoil by staggering the chemical treatment of small segments of the Elm Brook Cove over a 3-year cycle. The project has previously used broad applications of Diquat (Reward) in the Cove, but is now selectively applying Navigate, an aquatic granular formulation of 2, 4-D. *(Article continued on page 5.)*

Partnering with Audubon Minnesota

The National Audubon Society has taken an active role in partnering with the US Army Corps of Engineers on the Upper Mississippi River to promote the rehabilitation and restoration of floodplain forest habitat along the river. Floodplain forest habitat is critical for many bird species that Audubon lists as species of conservation concern, such as the Prothonotary Warbler, the Cerulean Warbler, and the Red-shouldered Hawk.

Audubon Minnesota (<http://mn.audubon.org/landingwater-birds-and-people/restoring-floodplain-forests>) works closely with Corps of Engineers foresters and other Environmental Stewardship staff in St. Paul and Rock Island Districts, while the St. Louis District Environmental Stewardship office is co-located with the Audubon Center at Riverlands in West Alton, MO (<http://riverlands.audubon.org/audubon-center-riverlands-0>), facilitating multiple collaborations.

In St. Paul District, Audubon Minnesota has hired a full-time forester/forest ecologist to work with the US Fish and Wildlife Service and USACE staff. Collaboration between USACE and Audubon Minnesota has resulted in a number of projects primarily focused on reforestation of sites invaded by reed canarygrass and other invasive species. In Pool 3, Audubon has contracted competing vegetation control efforts following tree planting on USACE-owned land in the Gores Wildlife Management Area. In Pool 7, Audubon is currently using grant funding to implement invasive plant control in an area that has been impacted by tree loss from the emerald ash borer and where tree planting is scheduled to occur in fall of 2017 and spring of 2018.

In Rock Island, the Mississippi River Project partnered with Audubon Missouri to summarize over 30 years of avian data at select USACE forest management sites through a Cooperative Ecosystems Study Unit cooperative agreement with Iowa State University. *(Article continued on page 4.)*

The Travelling Trunk

The Invasive Species Leadership Team developed the idea of the travelling trunk; an interactive product for use in educating the public about invasive species.

Borrowing the trunk is **incredibly simple!** There are designated POCs across USACE who maintain the trunks and will ship them **TO YOU!** To borrow the trunk for your project, complete the request form available on the Gateway under ISLT and email it to the POC closest to you. They will ship you the trunk for 10 days, after which you simply ship it back. The trunks contain 2 games (K-3, 4-12) with lots of hands on materials. This is great for groups, fairs, and festivals! Check out the ISLT on the Gateway for more information, the request forms, and for team members in your division.



Partnering with Audubon Minnesota—Continued.

The monitoring was initially completed to show changes in bird usage due to harvesting, but were continued through 2015 resulting in a valuable long-term data set. Audubon helped quality check and complete data entry on a database with over 37,000 rows of data. Audubon provided \$10,000 funding through a Challenge Partnership Agreement to help fund the summary report which was completed in 2016. This information will aid USACE and partner

agency resource managers in their management decisions of these and other similarly important floodplain habitat areas.

In St. Louis, USACE has partnered with Audubon to develop and operate an Audubon Center that is focused on education and conservation of the Mississippi River and the Mississippi Flyway. The Center receives over 40,000 visitors annually and has 3 full-time staff including an avian ecologist/conservation manager who is focused on monitoring floodplain forests and aiding with the planning and implementation of management prescriptions in the floodplain. Beginning in 2011 Audubon and USACE have been partnering on a bottomland forest bird monitoring program. This project currently provides breeding bird surveys on 145 points at 25 river islands spread out over 120 river miles. This data as well as the development of an Avian Stewardship Plan are informing and helping USACE implement conservation measures on project lands. POCs for more information: Charlie Deutsch (MVS) 636-899-0082, Joe Lundh (MVR) 309-794-4528, and Randy Urich (MVP) 651-290-5894.



Corps staff partners with members of Audubon Minnesota perform bird banding and monitoring.

Whooping Cranes

Whooping cranes are the largest bird in North America standing 5 feet tall with a wing span of 7 feet.

These endangered birds migrate 2,500 miles two times each year between their

Canada nesting grounds and their winter habitat on the Texas coast, potentially crossing and utilizing USACE projects.

Whooping Crane “Stopover Habitats” on Lakes, Ponds, & Wetlands

Is your project suitable or can portions be made suitable to act as Whooping Crane habitat?

They require:

- Lakes/small ponds/wetlands 0.3 acres or larger in size.
- Shallow areas 5 to 10 inches deep for roosting sites.
- Flight glide path clear of obstructions for landing near roosting sites.
- No thick brush or trees in or near landing site.
- Gradual slopes into lakes where water is shallow.
- Extensive horizontal visibility from roost site so predators can be deterred.
- 300 + yards from human development or disturbances such as power lines.



WHY OMBIL?

That time of year has come and gone—OMBIL Data Entry. Data entry was available to the field October 1-31. In November, district management was provided with detailed reports to help quality control and check the information entered into OMBIL. If corrections were identified through the QA/QC process, data entry was re-opened. However, it is never too late to take that second look and contact the OMBIL User's Group if you notice an error in your data entry.

While this may seem like a routine—just click to get through the process—it is important to verify that the information entered for your project is up to date and accurate.

Data from ES OMBIL is used to pull Performance Metric Data as discussed for not only master plans and sustainable lands, but has been submitted to support USACE data for pollinators and other national priorities. Need help? Just contact the NRM OMBIL users group—their info is on the Gateway!

The OMBIL NRM User's Group, led by Ms. Dena Williams, is available for questions and assistance with the data entry process.

Implementing IPM Strategies—Continued.

Another strategy includes coordinating with the USACE Engineer Research and Development Center on a 2016 field trial of an experimental 2, 4d herbicide, patent pending, that could potentially provide selective and long-term systemic control of milfoil with low to no toxicity to native fisheries and plants. A third strategy is to investigate the use of non-chemical treatment methods, including diving and mechanical harvesting.

In conjunction with the efforts of long-term pest management plan, Project and Basin staff initiated a water quality study in 2017 with NAE's Evaluation Branch to identify possible sources of nutrients that may be contributing to cyanobacteria blooms in the lake, and to determine if there has been any degradation of water quality in the lake attributed to the most recent herbicide treatment in Elm Brook Cove in September 2017. The Cove is a challenging area for herbicide treatment due to heavy concentration of variable milfoil within dense areas of native species, and limited flushing within the cove from a lack of major tributaries flowing into the lake. Most of the mixing occurs during rain or flood events when runoff from the local watershed flows into the lake and/or when flow backs up from the Contoocook River during flood control events. The assumption is that any dying or dead milfoil or other plant material will tend to remain in the lake, along with any nutrients that are being released (or recycled), and may contribute to the proliferation of algal blooms or infestations of aquatic macrophytes.

Point of Contact for the Integrated Pest Management Strategies and water quality study is Joshua Levesque, Merrimack River Basin Environmental Protection Specialist, Phone: 978-318-8304.

The graphic below is a great illustration to highlight all the databases in which OMBIL is either connected to or provides data to. Again, please check the data to make sure it is accurate for your project.

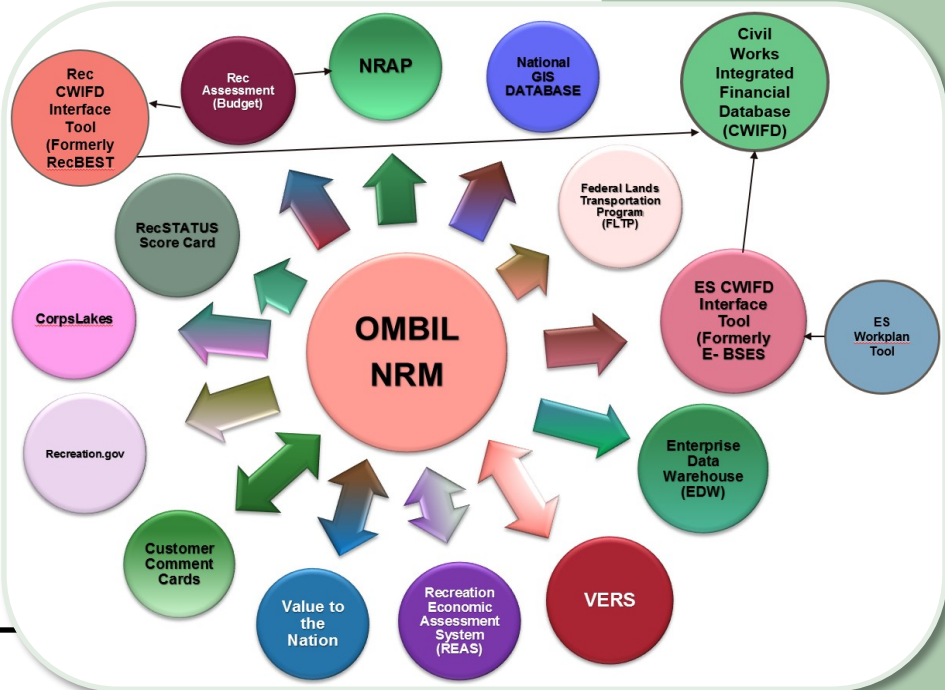


Photo Below: USACE staff members work with members of Audubon Minnesota to implement native plantings.



Veterans Curation Program

The Veterans Curation Program (VCP) was created to process at-risk archaeological collections belonging to the Corps of Engineers. In 2009, USACE, St. Louis District's Mandatory Center of Expertise for the Curation and Management of Archaeological Collections (MCX-CMAC) implemented the VCP. The first VCP lab opened in October 2009 in Augusta, Georgia, and was followed by the opening of a second VCP lab in St. Louis, Missouri, in December 2009. A third lab opened in January of 2010 in Washington, D.C., which was relocated to Old Town Alexandria, Virginia, in 2011.



Since the inception of the program, over 325 veterans have been trained and employed by the program. Veterans are hired to participate in a 5 month employment and training program processing USACE important collections. Every veteran hired receives paid personal growth and development assistance including tie and instruction for resume building and job searches.

Many of the collections processed by VCP were excavated during the construction of reservoirs and other associated water control projects from 1947 to 1985. These collections are required to be stored in a manner that ensures their long-term preservation and facilitates access by the public for scientific research and education. Many of these collections, however, require rehabilitation (cleaning and repackaging) to meet federal standards. Veterans are employed as laboratory technicians to perform this work.

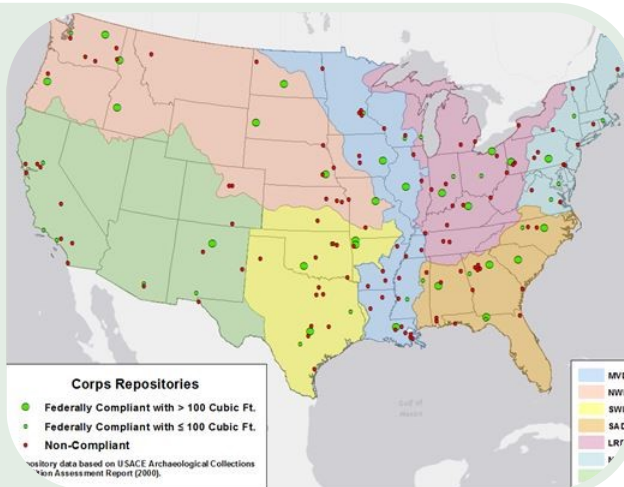
Curation Regionalization Effort

Recently, through a Regionalization Policy Memo signed September 7, 2017, USACE was instructed to gain physical and administrative control of cultural artifacts in order to properly rehabilitate collections and develop a standardized process to preserve them for the future. The goal is to establish 20 to 25 regional repositories, which equates to 3 to 4 per Division.

The Steps to the Regionalization Effort: 1. Conduct initial meetings with Divisions and Districts, 2. Begin Data Gathering, 3. Generate collections analysis report, 4. Conduct tribal information meetings, 5. Begin contracting actions, 6. Award regional center contracts, 7. Transfer collections, 8. Establish VCP Laboratories at regional centers. POC: Andrea Farmer 314-331-8067.

Quick Fact:

- USACE Total Artifact Volume: **47,832 ft³**
- USACE Total Records **3,634 linear feet**
- **165**—Facilities curating corps collections
- **67**—Repositories curating collections from more than 1 District.



St. Louis

District Projects

The St. Louis VCP laboratory has processed 2 document collections for the St. Louis District.

These investigations are currently housed in the St. Louis District and will be available for research purposes. Veterans processed over 120 photographic materials along with some associated documents.

In 2013, the St. Louis District Public Affairs Office received a package by mail that contained a letter and 25 photographic materials. In an interesting twist of fate, the photos were found in the estate of a former USACE employee after his passing. His son wrote USACE explaining the circumstances surrounding the creation of these photos. The images, which document the construction of Lock and Dam 24 are not only a record of the past, but they are also a valuable source of information about this USACE property that was opened on May 12, 1940. Lock and Dam 24 has well exceeded its 50-year design life and is currently undergoing major rehabilitation. Now that the photos have been preserved and digitized, they are expected to go on display as part of the district's library to showcase the work of the VCP.