



Stewardship

news

YOUR Thoughts Volume 1, Issue 2: June 2018

We are looking for contributors and ideas .

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

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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

Jeff Krause, Chief of Natural Resources Management Branch

As I am adjusting to my new position as your Chief of Natural Resources Management Branch in HQ, I tried to reflect on the state of the Environmental Stewardship program over last 8 years that I have served as the business line manager. The approved President’s budget for FY18 environmental stewardship program was \$118 million, and as I am writing this, the appropriation work plan added an additional \$2M for a total of \$120M or the highest ever allocation for the program.

“Although our requirements and costs keep increasing, many may not realize that the Environmental Stewardship program is in a record budget year.” - Jeff Krause, Chief of Natural Resources Management Branch

We have also made some changes in the last half decade to further advance stewardship execution including having other business lines budget and pay for mitigation, biological opinions, curation, NAGPRA, and fish mitigation hatcheries. All told, other business lines are paying nearly \$30M in work that supports their missions that were previously paid by the stewardship program.

I also believe we have made some priority direction to focus on work that better contributes to the nation, our visitors and the environment. We have shifted budget and work to address basic protections such as boundary and encroachments, invasive species, and eroding and looted cultural sites. We have placed priority on Master Plans and have more than doubled the number of project plans that are in compliance with regulations. We now have teams of

people across the nation who are well experienced to continue the progress on our Master Plan metrics. Additionally, we have placed work on important national initiatives that

assist in conserving forest, fish and wildlife habitats that support national memorandums and efforts on pollinators, whooping cranes, monarchs, reservoir fish habitat, and invasive species. The efforts in the field are extraordinary and we are becoming more recognized as having a role in this work. Thanks for all the help to get to this point and I am committed to supporting my replacement in continuing this exciting and progressive program.

Project Spotlight: Building the Foundation for Restoration on J. Strom Thurmond

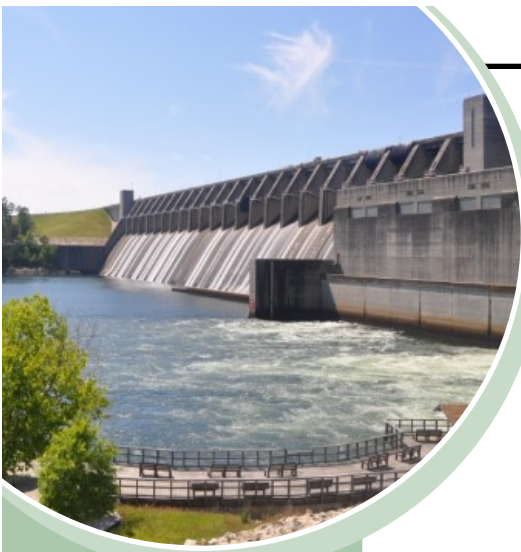
POC: Aaron Murphey, Project Forester, J. Strom Thurmond Project, 864-333-1113



Ninety million acres; that was the estimated expanse of longleaf pine that once covered the landscape from the Gulf Coast of Texas to the Atlantic shores of Virginia. It could be found as far north as the rolling foothills of the Appalachian Mountains in Georgia and as far south as the mesic flatwoods of central Florida. Within that range you will find J. Strom Thurmond Lake, a project with a land base of over 75,000 acres which still supports pockets of remnant longleaf pine. Restoration of longleaf pine habitat on J. Strom Thurmond started nearly 12 years ago but only recently came into the stewardship spotlight.

In late 2017, The National Fish and Wildlife Foundation established a Memorandum of Agreement (MOU) with the U.S. Army Corps of Engineers to support the protection, restoration, and enhancement of fish and wildlife habitat. (Article continued on page 2.)

Photo Left: Future look of Pollinator habitat restoration site at J. Strom Thurmond.



J. Strom Thurmond Lake

Constructed from 1946-1954 for the purposes of hydro-power, flood control and downstream navigation J. Strom Thurmond Lake is the largest Corps of Engineers lake east of the Mississippi River.

Additional project purposes now include water supply, water quality, recreation, and fish and wildlife management. The project encompasses:

- 1,200 miles of shoreline
- 70,000 acres of water
- 80,000 acres of land

The lake stretches nearly 30 miles up the Savannah River and 17 miles of the Little River. Over 200 food plots are planted with a variety of annual crops, wild fruit trees, and mast producing trees to provide a supplemental source of food for wildlife.

Under this MOU, J. Strom Thurmond has been working with the Longleaf Alliance to establish projects geared towards enhancing current stands of longleaf pine and restoring sites capable of growing longleaf. In 2018, J. Strom Thurmond will replant over 200 acres of longleaf pine seedlings provided by the Longleaf Alliance. J. Strom Thurmond is also working on a pollinator/longleaf pine habitat demonstration area that will be used as an interpretation area for visitors. Guests will be able to take a walk along a trail that has beautiful wildflowers native to the area while also getting to see a longleaf pine restoration project immediately adjacent to the pollinator site. There will be kiosks placed along the trail to provide information to the public on the benefits of pollinators and the necessity to manage native habitats utilized by pollinators such as the longleaf pine forest. This site will also be used to inform the public on the benefits of prescribed fire and the part that it plays in our landscape. Through all of this we hope to give the public a better understanding of what we aim to accomplish at J. Strom Thurmond in native habitat restoration.



Restored longleaf pine forest at Shriver Creek on J. Strom Thurmond.

Migratory Bird Treaty Act and Incidental Take

Memorandum - 28 March 2018

Article summarized from Memorandum.

The Memorandum on the Migratory Bird Treaty Act (MBTA) and Incidental Take from the Director of Civil Works, Mr. James Dalton, affirms USACE policy on incidental take as it relates to the MBTA. Historically, the MBTA had been interpreted by the U.S. Department of the Interior to apply to both deliberate acts intended to take or kill migratory birds as well as the incidental taking or killing of such birds. That interpretation was overturned in December of 2017 stating the statute only applies to “direct and affirmative purposeful actions that reduce migratory birds, their eggs, or their nests, by killing or capturing, to human control”. Per the memo, “In light of the uncertainty

The Migratory Bird Treaty Act (MBTA) makes it unlawful at any time, by any means, or in any manner to pursue, hunt, take, capture, or kill any migratory bird, any part, nest, or egg of any such bird, or to attempt to do the same, among other prohibited activities. The Act protects nearly all species native to the United States, approximately 10% of which are also protected by the ESA.

regarding the correct interpretation of how the MBTA applies to incidental take and in light of the other authorities and policies that encourage or require the conservation of migratory birds, the Corps will continue to work to minimize the incidental take of migratory birds to the extent practicable, and will coordinate as appropriate with the U.S. Fish and Wildlife Service, until further clarification is provided. This is consistent with direction provided by the Deputy Assistant Secretary of Defense for Environment, Safety and Occupational Health”.

Got HABs?

POCs for more information: Dr. Tony Clyde (918-669-7556) and Erich Emery (513-684-3041).



Does the water look like someone spilled green or blue paint on it? If so, that color may be caused by a Harmful Algae Bloom or HAB. Cyanobacteria (aka blue-green algae) occur naturally in our waters, but under cer-

tain conditions their numbers can explode and a bloom can occur. Blooms may be triggered by a number of environmental variables such as excess nutrients or changes in conditions that upset the competitive balance between blue-greens and other species of algae such as diatoms and green algae. Diatoms and green algae can bloom as well, but what sets the blue-greens apart and what causes these blooms to be 'harmful' is their ability to produce toxins that can affect the skin, the gastro-intestinal tract, the liver or the nervous system. At high



Related Article: Association of State Wetland Managers Bulletin.

New Solution to Harmful Algal Blooms Raises Hope of Economic and Environmental Benefits

<https://www.jic.ac.uk/news-and-events/news/2018/03/new-solution-harmful-algal-blooms/>

Photos Above, Left, and Bottom: Examples of HABs occurring at USACE projects.

enough doses, certain toxins can cause human illnesses and even death in livestock and pets. This is why when bloom conditions

are or may be present agencies typically post signs advising the public to take action such as avoiding swimming in heavily discolored water and avoiding pet exposure.

Over time, the frequency and magnitude of HABs has been on the rise. The Corps, like our counterparts in other federal and state agencies, responded with increased monitoring, public outreach and education and research to address the issue. Members of the Corps water quality community have held two national workshops on the issue that brought together experts to share information, ideas, and plot a path forward. This includes improved internal and external communication, networking, and active research being conducted by ERDC. ERDC's focus is on possible treatments to control HABs and operational strategies that may reduce the likelihood of HAB formation and proliferation. ERDC is also conducting district interviews and revising a technical report written in 2007 that documents the impacts to USACE operations attributable to HABs. In 2017 the Invasive Species Leadership Team (ISLT) formed a HAB subcommittee. The water quality community now has a conduit to vertically advance HAB related issues and concerns and is better positioned to keep the highest levels of management informed of HAB related issues.

USACE Districts Reporting HABs



Green: Districts reporting HABs.

Gray: Districts reporting in, but NO HABs.

White: No district report.



Crosscut Budget Report

Article summarized from the NISC Crosscut Budget Report.



Photo Above: Feral hog trapping at a USACE project. Photo supplied by the ISLT.

In 1999, Executive Order 13112 established the National Invasive Species Council (NISC) to coordinate and enhance the invasive species programs of federal agencies. The overarching duty of the Council is to provide the high-level vision and leadership necessary to sustain and expand Federal efforts to safeguard interests of the United States by preventing, eradicating, and controlling invasive species, as well as restoring ecosystems and other assets impacted by invasive species. Part of the 2016-2018 NISC Management Plan calls for an annual invasive species crosscut budget analysis. Overall, 10 NISC member departments/agencies provide budget data including USACE. USACE reporting is

FY2016 ACTUAL

Category	DHS	DOC	DOD (USACE)	DOI	DOS	DOT	EPA'	NASA	USAID	USDA	Total
Prevention	782,495	8	35,850	11,184	1,056	260	57,022	0	15	115,914	1,003,804
Early Detection & Rapid Response	0	289	15,254	16,834	801	0	-	0	1,125	287,306	321,609
Control & Management	0	131	61,066	49,631	12,505	0	-	0	1,370	683,462	808,165
Research	0	925	10,029	18,962	1,987	1,637	110	432	0	375,786	396,125
Restoration	0	188	18,638	5,219	0	0	0	0	0	91,485	129,273
Education and Public Awareness	0	1,102	7,334	613	14	0	-	0	385	149,166	158,615
Leadership & Int'l Cooperation	0	5	2,377	2,093	2,281	40	0	0	0	2,478	9,273
Total	782,495	2,649	150,548	104,536	18,643	1,937	57,132	432	2,895	1,705,597	\$2,826,864

By The Numbers

Invasive Management

Here is a summary of OMBIL data entered on all of YOUR work with invasive species.

of projects that reported AT-LEAST one significant infestation of an invasive species

294

of different species reported as invasive across Corps projects

312

consolidated by ERDC across all business lines. The crosscut budget report included: 1. agencies' actual expenditures for FY 2015 and FY 2016, 2. agencies' planned expenditures for FY 2017, and 3. agencies' requests included in the President's proposed budget for FY 2018. Above is a quick look at actual expenditures for FY 2016. Additionally of interest to the USACE community is the development of a fact sheet (released October 2017) on the impacts of invasive species on our nations infrastructure.

The full crosscut budget report along with additional council reports are available at: <https://www.doi.gov/invasivespecies>.



Did you know that National Invasive Species Awareness Week was held February 26—March 2? If not, consider holding your own invasive species awareness week or weekend at your project to raise awareness of the various species that threaten our natural biodiversity. Also remember that you can request use of the Travelling Trunk from the Invasive Species Leadership Team. This trunk is easy to borrow and is full of great hands on examples of many of the most common species that impact our lands and waters. Visit the Gateway for a request form!

Have YOU Heard of EDDMapS?



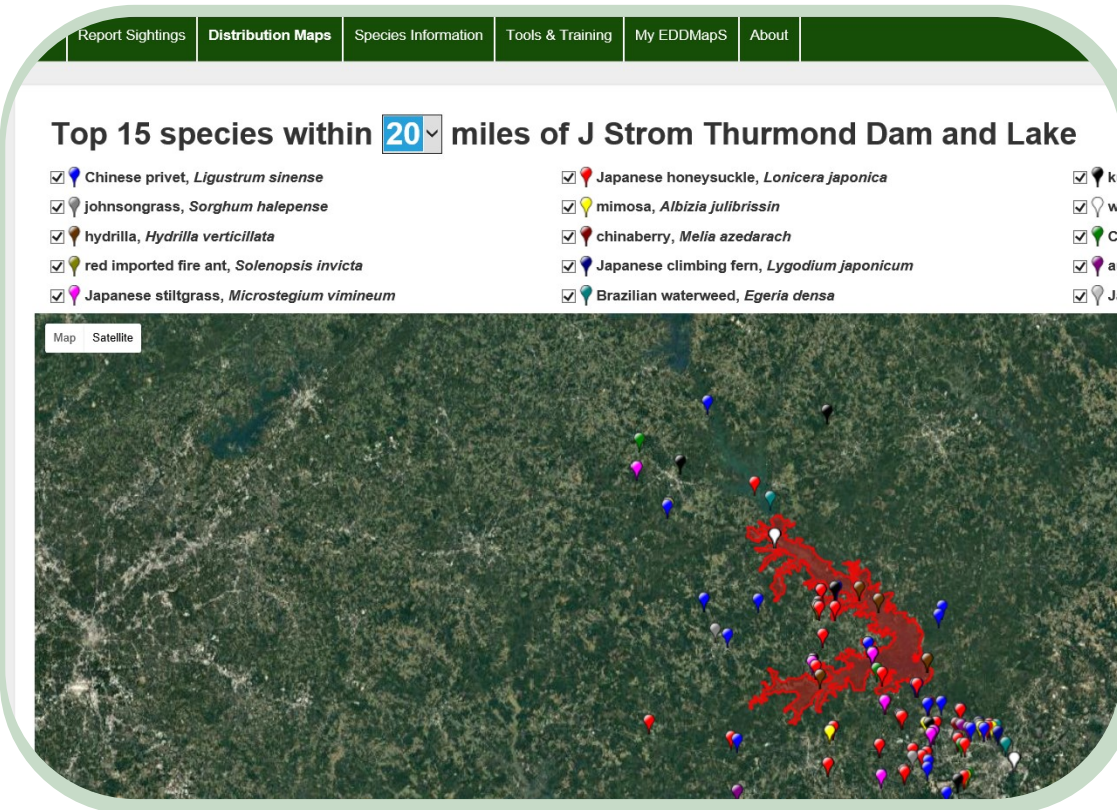
EDDMapS is a web-based map-

ping system for documenting invasive species' distribution. Launched in 2005 by the Center for Invasive Species and Ecosystem Health at the University of Georgia, it was originally designed as a tool for state Exotic Pest Plant Councils to develop more complete distribution data of invasive species. Overall, the goal of EDDMapS is to maximize the effectiveness and accessibility of the immense numbers of invasive species observations recorded each year. As of April 2018, EDDMapS has over 3.3 million records.

Just some of benefits of EDDMapS include:

- EDDMapS combines data from other databases and organizations with volunteer observations to create a national network of invasive species distribution data.

Image Below: A screenshot from EDDMapS depicting the location of the top fifteen invasive species within 20 miles of J Strom Thurmond Dam.



- EDDMapS doesn't require Geographic Information Systems (GIS) experience. If you are at a project that doesn't have ArcMap or other GIS mapping tools, EDDMapS will provide you with mapping capabilities.
- Data entered is immediately loaded to the website allowing real time tracking of species. Being able to see current data for a species as it moves into a new area helps to facilitate Early Detection and Rapid Response programs (EDRR).
- Local and national distribution maps by project, county, state, and species are available.
- All data entered is reviewed by state verifiers to ensure all data is accurate.
- User enter information from their observations into the standardized on-line data form, or through an app on your smartphone.
- Bulk loading of data (if you have hundreds or thousand of data points) is available.

<https://www.eddmaps.org/usace/>

By The Numbers 5

Pollinators

In the last issue of Stewardship News, the importance of accurate data entry into OMBIL was stressed. Here is a summary of data entered for all of YOUR work with pollinators.

512 # of Pollinator Gardens at Corps Facilities

24,088 # of Acres Managed or Maintained for Pollinator Specific Habitat

26,463 # of Contacts with Interpretive Pollinator Programs in the FY

107,031 # of Acres of Potential Habitat That Could Be Restored for Pollinator Habitat



New in Stewardship: SADs Shoreline Management Software Development Pilot

POC for this project is Ryan Hartwig 404-562-5134.

South Atlantic Division encompasses roughly 1.5 million acres of land and water which house approximately 35,000 dock permits. During the spring meeting of the Stewardship Advisory Team, a new pilot software program for managing the vast amount of dock permits was unveiled. Previously, dock permit data was managed through various forms of Access databases. As predicted this resulted in little consistency between projects and districts within the division. Just a little over 2 years ago, the decision was made to develop a regional approach in the implementation of the shoreline management program. The approach included: a review and revision of the process for all permit actions; a review of the administration fee schedules; and a review of all Shoreline Management Plans.

Lake Lanier Snapshot

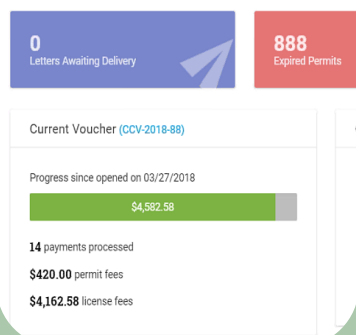


Image Above: Snapshot of the software program utilized for Lake Sidney Lanier in Shoreline permit management.

The developed software program has been through several pilots at various lakes and is now being implemented across the division. The program, which is available for use in the field on tablets, encompasses the entire permit process. The program tracks ownership, dates, invoices, inspections, and much more. Additionally, the program logs who is assigned to manage the permit at the project, who has been involved in each part of the permit process, and the time it has taken for each part to be completed. The program generates the entire permit packet for review and authorization which can be routed internally for signature and distribution to the permittee. The software program will continue to be reviewed with possible future implementation in other districts and divisions.



By The Numbers

Fire Management

132

of Corps Project Sites that Conducted Prescribed Fire in the FY

884

of Prescribed Fires Conducted

62,798

of Acres Impacted by Prescribed Fire

Photo Above: Contracted prescribed fire occurring at the Raystown Lake Project.

Environmental Sciences Day at Fishtrap Lake

POC for more information is Magan Boyd, Fishtrap Lake, 606-437-7496.

Fishtrap Lake, in eastern Kentucky, held an Environmental Sciences Day at East Ridge High School with a total of 5 schools in attendance. Corps staff members partnered with a variety of agencies including Letcher County Extension Services, West Virginia State University, Kentucky Fish and Wildlife, and the University of Kentucky. The event featured a variety of hands on exhibits and presentations that are commonly overlooked in the school districts. Corps staff members hoped to encourage students to learn more and reach for the sciences. Hands on activities included live birds of prey exhibits and demonstrations, an entomology lab with worms and composting, bear exhibits, veterinarian pathology labs, and the Corps invasive species travelling trunk. With mobile technology prevalent in schools, social media, and blogs, the labs went viral early in the day and students were asking to skip lunch and recesses to be a part of presentations and participate more. Overall, this event reached students in a region in which 85% of the population is at or below poverty level, only 20% of residents have a form of higher education, and over 30% of parents do not have a high school diploma or G.E.D.



Photo Above: Brett Salyers (Natural Resources Mgmt) with a Barred Owl. Photo Left: Magan Boyd (Park Ranger) with a Screech Owl.