# USACE NATIONAL INITIATIVES & KNOWLEDGE MANAGEMENT

Natural Resource Management Technical Support Team 18 August 2020

"The views, opinions and findings contained in this report are those of the authors(s) and should not be construed as an official Department of the Army position, policy or decision, unless so designated by other official documentation."





# **OVERVIEW**

- USACE CW Environmental Stewardship Mission:
  - Manage, conserve, and protect the natural and cultural resources at USACE operated projects
- USACE is responsible for stewardship of approximately
  12 million acres located throughout all corners of the country
- Home to more than 500 species of concern and over 390,000 acres of environmentally sensitive areas.





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# **OVERVIEW**

- Vast geographic footprint is a vital component in fish and wildlife habitat networks nationwide
- Diverse landscapes and conservation priorities under the purview of the environmental mission
- Effective stewardship depends on landscape level information *beyond the bounds of any single project*





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# GOALS

- 1. Identify national conservation priorities
- 2. Connect priorities to the national collection of Projects
- 3. Develop communication tools for the field





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### **METHOD**

- Consult with National program leadership and seek input from USACE National Stewardship Advisory Team
- Review and process available data
- Identify key functionalities
  - Map enabled, sortable, links to documents and web resources, etc.





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### **METHOD**

- Select platform that best serves the audience
  - USACE CW Natural Resource Management community
- Utilize USACE expertise at Mobile District GIS Branch
- Qlik data analytics platform
- Review with sub-team from National Stewardship Advisory Team to gather initial feedback form:
  - Multiple levels in chain of command
  - Multiple geographic regions





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NATIONAL INITIATIVES

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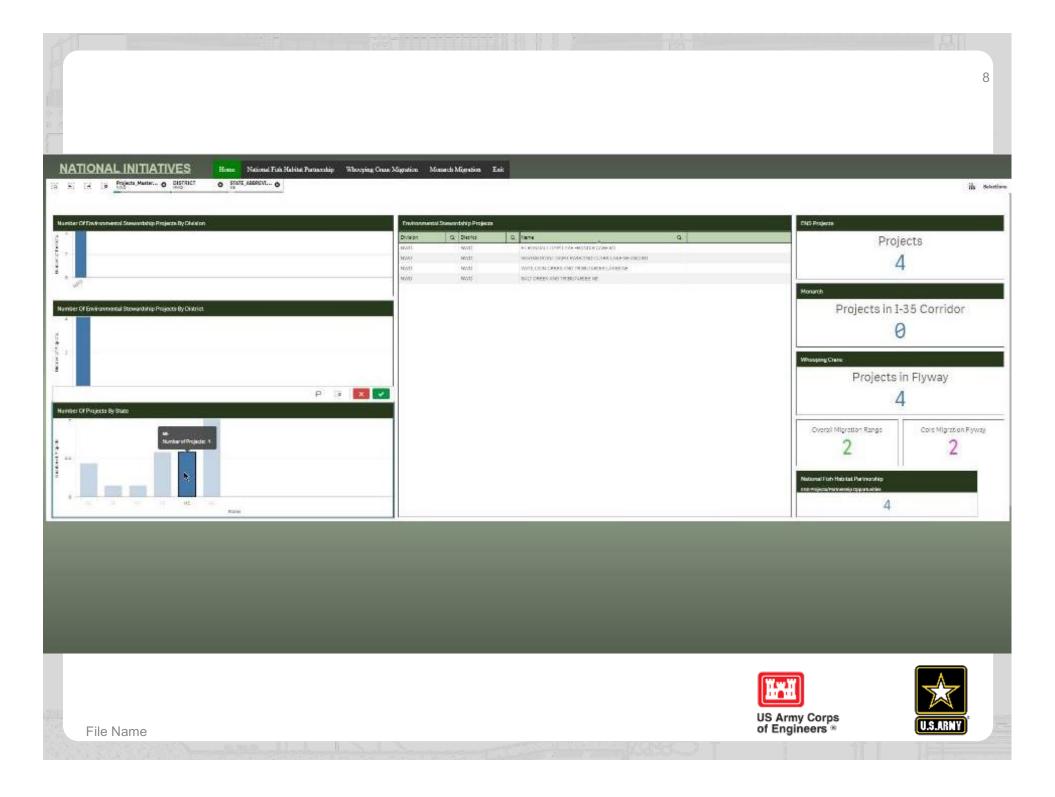
### Connected graphic and tabular filters reflected in summary figures





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NATIONAL INITIATIVES

Number Of Environmental Streamdahip Projects By Division

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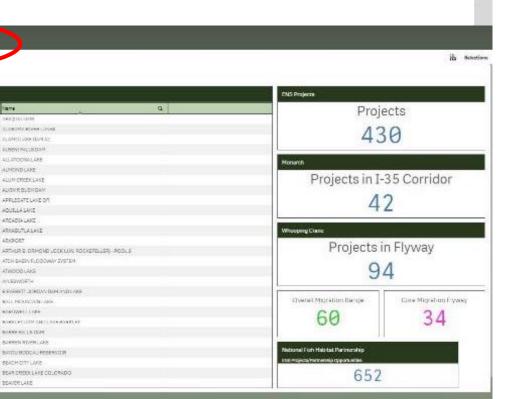
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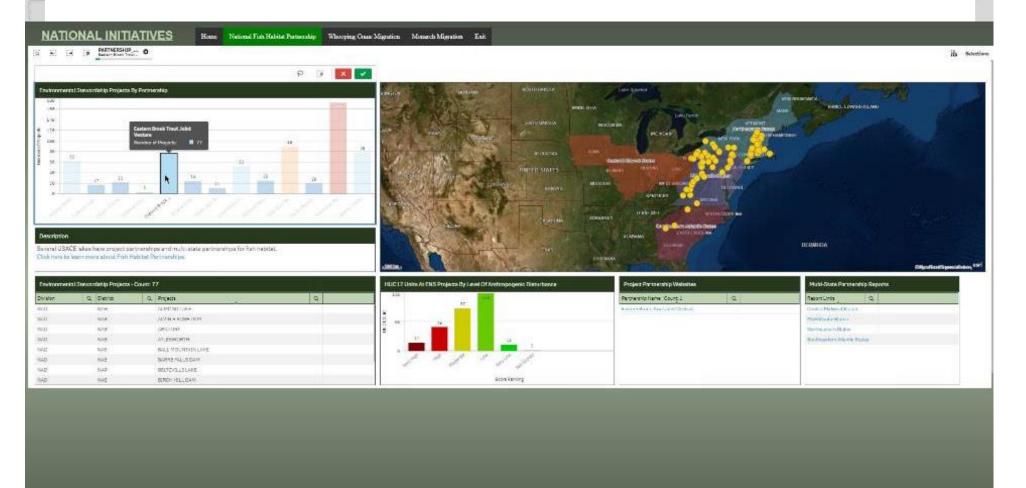
# ANNOUNCES 2019 "WATERS TO WATCH"

Learn More about our projects











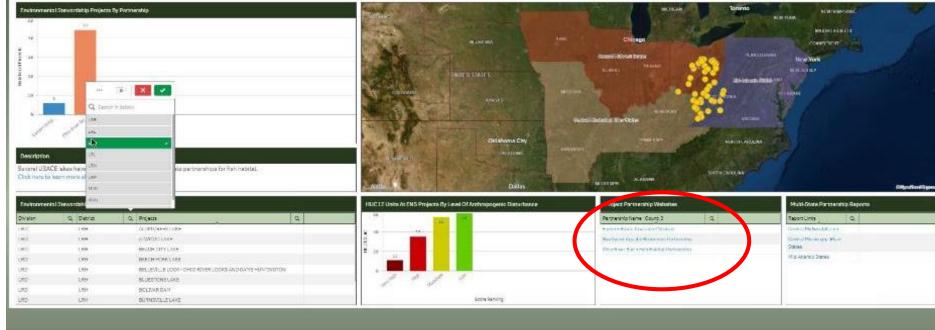


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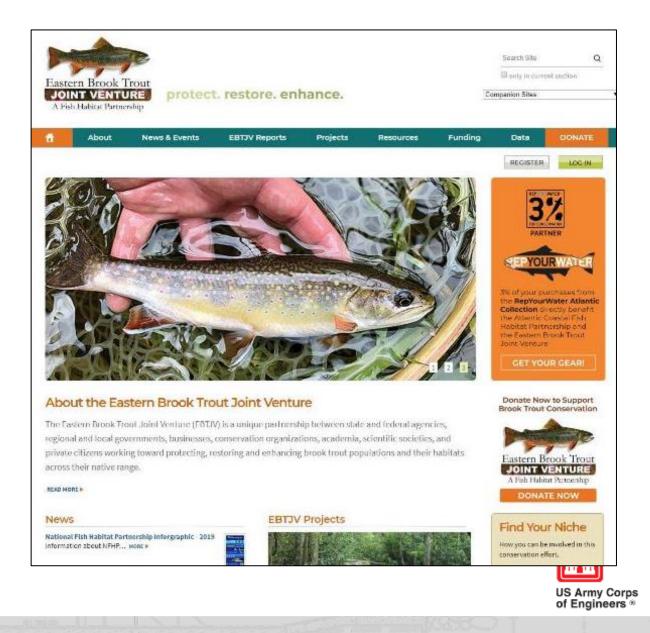


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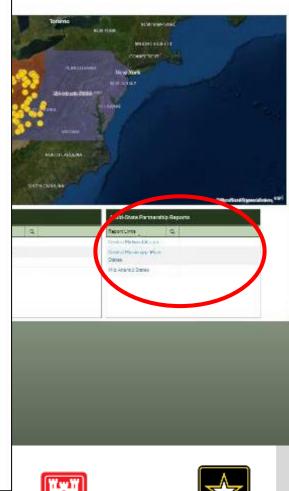
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# **Central Midwest States Region** from Through a Fish's Eye: The Status of Fish Habitats in the United States 2015

Steve Crawford<sup>1</sup>, Gary Whelan<sup>2</sup>, Dana M. Infante<sup>3</sup>, Kristan Blackhart<sup>4</sup>, Wesley M. Daniel<sup>3</sup>, Pam L. Fuller<sup>5</sup>, Tim Birdsong<sup>6</sup>, Daniel J. Wieferich<sup>5</sup>, Ricardo McClees-Funinan<sup>5</sup>, Susan M. Stedman<sup>7</sup>, Kyle Herreman<sup>3</sup>, and Peter Ruhl<sup>5</sup>

- Redired Florida Fish and Wildlife Conservation Controletion <sup>2</sup> Nichigan Department of Natural Resources
- Michigan State University, Department of Fisheries and Wildlife
- <sup>4</sup> ECS Federal (re-sontracled to National Oceanic and Amosphere Administration
- U.S. Geological Survey
- Texas Parks and Wildlife Department
- National Oceanic and Abrospheric Administration

This pdf was generated from the official online report at http://assessment.fishhabitat.org/ on 2017-





US Army Corps of Engineers \*



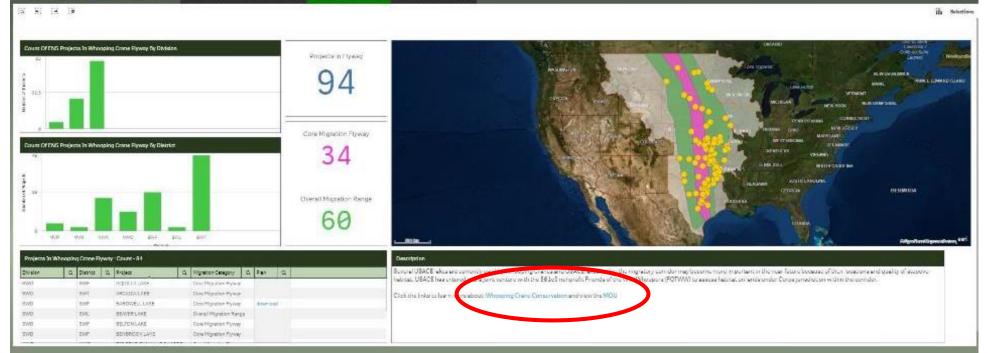
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Figure 4. (Photo no. IMG\_0601JPG). This photo depicts another section of shore on the northeast side of Bardwell Lake. Note that the shore is open with a gradual slope into very shallow water. This area of Bardwell Lake could be improved as a Whooping Crane stopover site if the bushes were cut back with a rotary cutter (Bush hog) a distance of 100 X 200 feet. The water is shallow all along this section of the shore. Much of the water is in the 2 inch to 10 inches depth range which the crases need for roosting sites.



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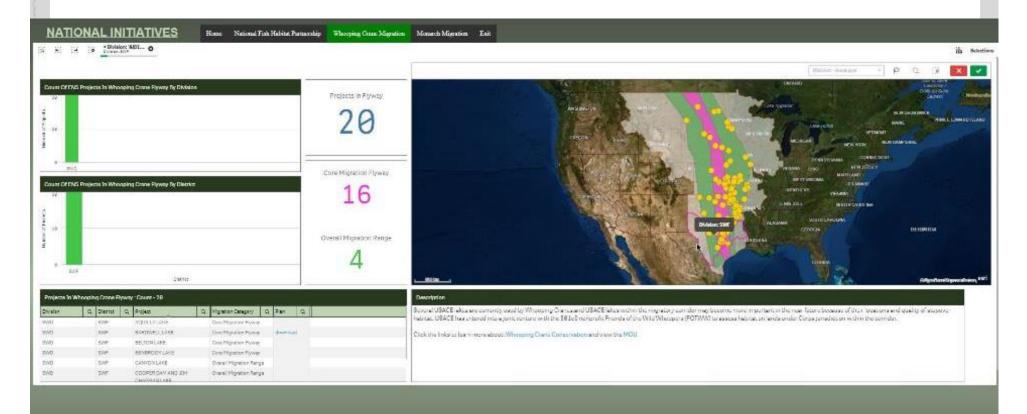
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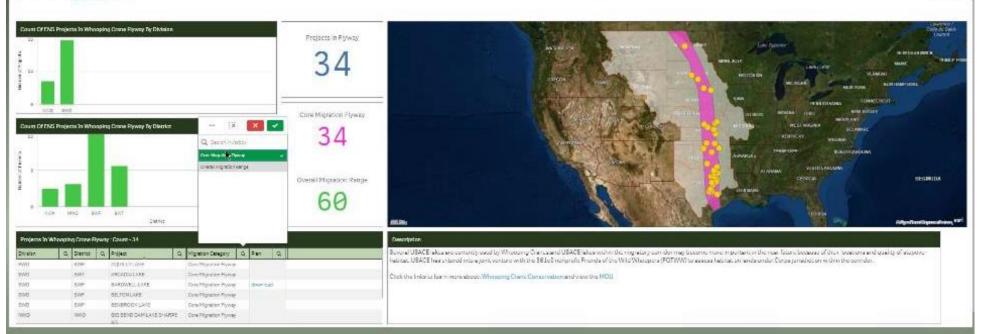


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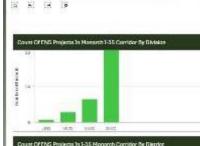
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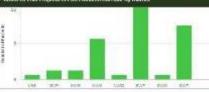
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### **MONARCH BUTTERFLY MIGRATION**

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### MONARCH WAYSTATION PROGRAM

Sach fail, hundreds of millions of monarch butterflies migrate from the United States and Canada to mountains in central Mexico where they wait out the winter until conditions favor a ratum flight in the spring. The monarch migration is truly one of the world's greatest natural wonders yet it is threatened by rabitat loss at overwintering grounds in Mexico and throughout breeding areas in the United States and Canada.

### MONARCH WAYSTATION HABITATS

Monach Waystations are places that provide resources necessary for monarchs to produce sourcessive generations and sustain their migration. Without milloweeds throughout their spring and summer preciding areas in North America, monarchs would not be able to produce the successive generations that culminate in the migration each fall. Similarly, without nector from flowers these fail migratory monarch butterflies would be unable to make their long journey to receivanceing grounds in Mexico. The need for host plants for larvae and energy sources for adults applies to all monarch and butterfly populations around the world.

### Why We Are Concerned

"Hikweeds and nector sources are declining due to development and the widespread use of herbicides in contands, pastures and roadsides. Recourse 90% of all milkeeed/insuerch habitats occur within the appicultural andscape, farm practices have the potential to strongly influence monarch populations.

Cevelopment (of subdivisions, factories, shopping centers, etc.) in the U.S. is consuming habitats for monarchs and other wildlife at a rate of 6,000 acres (0.4 square milas) a day - that's 2.2 million acres each year. This is roughly equivalent to losing an area of habitat the size of the state of Illinois (the 24th largest U.S. state) every sixteen years.

Widescread adoption of herbicide-resistant com and soybeans has resulted in the loss of more than 100 million acres of morarch habitat in recent years. The planting of these crops genetically modified to resist the non-selective systemic herbicide dyphosate (Roundup) allows provers to spray fields with this herbicide instead of tilling to control weeds. Milkweeds survive tilling but not the repeated use of glyphosate. This habitat loss is substantial since these croppands represent a significant portion of the summer preeding area for monarchs.

The use of hisbitides and frequent musting along modelides has converted much of this batistat to pressy areas that bock shelter and food for wildlife. Although some states have started to increase the diversity or plantings (including millioxect) planing modelides, these programs are small. Unfortunately, the remaining millioxeed habitats in pastures, hayfields, edges of forests, grasslands, notive prairies, and urban areas are not sufficient to sustain the large monarch butterfly populations sear in the 1990s. MONARCHS NEED OUR HELP.

### What You Can Do

To offset the loss of milkweeds and nectar sources we need to create, conserve, and protect monarch butterfly habitats. You can help by creating, "Nonerth Waystations" (monarch habitats) in home gardens, at schools, husinesses, parks, zons, nature centers, along coad-sides, and on other mused plots of land. Creating a Monarch Waystation can be as simple as adding millowoods and nectar sources to existing gardens or maintaining natural habitats with milkweeds. No effort is too sund to have a positive impact.

So sure to register your habitat(s) and encourage others to follow in your footstepsi

The Value of Monarch Waystations



Monarch Waystations

CREATE, CONSERVE, & PROTECT MONARCH HABITATS



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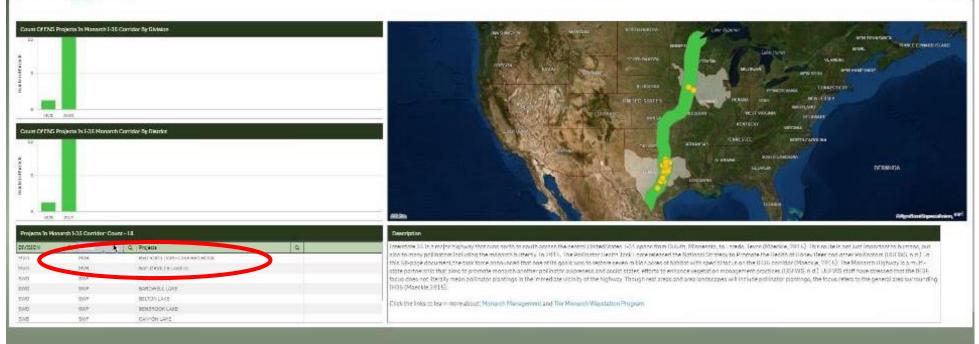
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### **MONARCH BUTTERFLY MIGRATION**

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# SUMMARY

- Connects field to external information
- Facilitates data exploration
- Helps identify other Projects that may be experiencing similar issues
- Relevance at multiple levels of program hierarchy
- A potential resource for work package development





# **NEXT STEPS**

- Collect user feedback
  - Email: benjamin.j.silvernail@usace.army.mil
  - Compile and provide updates to National Stewardship Advisory Team
- Provide updates and incorporate additional modules
  - State Wildlife Action Plans
  - DoD Partners in Flight
  - Bat Working Group
  - Invasive Species





# 23 **Questions?**

US Army Corps of Engineers \*

