

USACE NATIONAL INITIATIVES & KNOWLEDGE MANAGEMENT

Natural Resource Management Technical Support Team
18 August 2020

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US Army Corps
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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.

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*



GOALS

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



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.*



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*

NATIONAL INITIATIVES

Home National Fish Habitat Partnership Whooping Crane Migration Monarch Migration Exit

Projects_Master... DISTRICT STATE_ABBREVI...

Selection



Division	District	Name
NWDC	NWDC	WYVILLE CREEK FISH HABITAT RESTORATION
NWDC	NWDC	WYVILLE CREEK FISH HABITAT RESTORATION
NWDC	NWDC	WYVILLE CREEK FISH HABITAT RESTORATION
NWDC	NWDC	WYVILLE CREEK FISH HABITAT RESTORATION

ENG Projects

Projects

4

Monarch

Projects in I-35 Corridor

0

Whooping Crane

Projects in Flyway

4

Overall Migration Range

2

Core Migration Flyway

2

National Fish Habitat Partnership

eng-projects/national-fish-habitat-partnership

4

File Name



NATIONAL FISH HABITAT PARTNERSHIP



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Learn More about our projects

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NATIONAL FISH HABITAT PARTNERSHIP

NATIONAL INITIATIVES
Home | National Fish Habitat Partnership | Whooping Crane Migration | Monarch Migration | Exit

PARTNERSHIP
Selection

Environmental Stewardship Projects By Partnership

Division	District	Project
6011	606	LAKE MINNETONKA
6011	606	ZEPHYRUS KOOKERIKY
6011	606	OLDFIELD
6011	606	CHESHAMPTON
6011	606	BALL MOUNTAIN LAKE
6011	606	BURR HILLS DAM
6011	606	DELTVILLE LAKE
6011	606	BURR HILLS DAM

Description
Several USACE areas have project partnerships and multi-state partnerships for fish habitat. [Click here to learn more about Fish Habitat Partnerships.](#)

HEC 17 Units At FNS Projects By Level Of Anthropogenic Disturbance

Level	Count
Level 1	17
Level 2	16
Level 3	27
Level 4	22
Level 5	1

Project Partnership Websites

Partnership Name	Count
Waterways Foundation	1

Multi-State Partnership Reports

Partnership Name	Count
Colorado Habitat Exchange	1
Mississippi River	1
Northwestern River	1
Southwestern River	1

File Name



NATIONAL FISH HABITAT PARTNERSHIP

NATIONAL INITIATIVES Home National Fish Habitat Partnership Whopping Ocean Migration Monarch Migration Exit

DISTRICT

Environmentals Stewardship Projects By Partnership

Environmentals Stewardship

Several USACE also have partnerships for fish habitat. Click here to learn more about our partnerships for fish habitat.

Environmentals Stewardship

Division	District	Project
LRD	LRR	LAURENCEVILLE LAKE
LRD	LRR	LAURENCEVILLE LAKE
LRD	LRR	LAURENCEVILLE LAKE
LRD	LRR	LAURENCEVILLE LAKE
LRD	LRR	LAURENCEVILLE LAKE
LRD	LRR	LAURENCEVILLE LAKE
LRD	LRR	LAURENCEVILLE LAKE
LRD	LRR	LAURENCEVILLE LAKE

IBIC 17 Units At TNS Projects By Level Of Anthropogenic Disturbance

Project Partnership Websites

Partnership Name	Count
Partnership Name	Count
Partnership Name	Count
Partnership Name	Count

Multi-State Partnership Reports

Report Link
Report Link
Report Link
Report Link

File Name



NATIONAL FISH HABITAT PARTNERSHIP

Eastern Brook Trout
JOINT VENTURE
A Fish Habitat Partnership

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Eastern Brook Trout
JOINT VENTURE
A Fish Habitat Partnership

DONATE NOW

Find Your Niche

How you can be involved in this conservation effort.

About the Eastern Brook Trout Joint Venture

The Eastern Brook Trout Joint Venture (EBTJV) is a unique partnership between state and federal agencies, regional and local governments, businesses, conservation organizations, academia, scientific societies, and private citizens working toward protecting, restoring and enhancing brook trout populations and their habitats across their native range.

[READ MORE >](#)

News

National Fish Habitat Partnership Infographic 2019
Information about NHP... [MORE >](#)

EBTJV Projects



NATIONAL FISH HABITAT PARTNERSHIP

NATIONAL INITIATIVES

Home **National Fish Habitat Partnership** Whooping Crane Migration Monarch Migration Exit

DISTRICT

Environmental Stewardship Projects by Partnership

Description

Several USACE areas have... partnerships for fish habitat.

Environmental Stewardship

Division	District	Project
LMO	LMH	LAUREL CREEK LAKE
LMO	LMH	WINDY CREEK
LMO	LMH	WILSON CITY LAKE
LMO	LMH	WILSON HOLE LAKE
LMO	LMH	WILSON RIVER LAKE AND DAMS PROJECT
LMO	LMH	WILSON LAKE
LMO	LMH	WILSON DAM
LMO	LMH	WILSON LAKE

Central Midwest States Region

from
Through a Fish's Eye:
The Status of Fish Habitats in the
United States
2015

Steve Crawford¹, Gary Whelan², Dana M. Infante³, Kristan Blackhart⁴, Wesley M. Daniel³, Pam L. Fuller⁵, Tim Birdsong⁶, Daniel J. Wiefelich⁵, Ricardo McClees-Furinan⁵, Susan M. Stedman⁷, Kyle Herreman³, and Peter Ruhl⁵

¹ Redwood Florida Fish and Wildlife Conservation Commission
² Michigan Department of Natural Resources
³ Michigan State University, Department of Fisheries and Wildlife
⁴ ECS Federal, Inc. contracted to National Oceanic and Atmospheric Administration
⁵ U.S. Geological Survey
⁶ Texas Parks and Wildlife Department
⁷ National Oceanic and Atmospheric Administration

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

Map of the Eastern United States showing state boundaries and major cities. A red circle highlights the 'Partnership Reports' section in the bottom right corner of the map interface.

Partnership Reports

- Central Midwest States Region
- Central Monarch Migration
- Whooping Crane Migration
- Monarch Migration

File Name



WHOOPING CRANE MIGRATION

NATIONAL INITIATIVES Home National Fish Habitat Partnership **Whooping Crane Migration** Minich Mission Exit

Count of FWS Projects in Whooping Crane Flyway by Division

Division	Number of Projects
MWP	~5
MUP	~15
SWP	~28
SWC	~10
SWD	~18
SWE	~2
SWF	~25

Count of FWS Projects in Whooping Crane Flyway by District

District	Number of Projects
MWP	~5
MUP	~5
SWP	~18
SWC	~12
SWD	~20
SWE	~2
SWF	~65

Projects in Whooping Crane Flyway - Count - 94

Division	District	Project	Migration Category	Plan
SWP	SWP	JOHNS LIAZON	Core Migration Flyway	
SWP	SWP	MOORE LAKE	Core Migration Flyway	
SWP	SWP	SANDWELL LAKE	Core Migration Flyway	Approved
SWD	SWC	SOVER LAKE	Overall Migration Range	
SWD	SWP	SOVER LAKE	Core Migration Flyway	
SWD	SWP	SOVERBROOK LAKE	Core Migration Flyway	

Projects in Flyway: **94**

Core Migration Flyway: **34**

Overall Migration Range: **60**

Description:

Several USACE whooping crane flyway projects are currently in progress. The migration corridor may become more important in the near future because of the volume and quality of whooping crane habitat. USACE has entered into a joint venture with the 501(c)(3) nonprofit Friends of the Whooping Crane (FOTWC) to assess habitat on lands under Corps jurisdiction within the corridor.

[Click the links to learn more about Whooping Crane Conservation and view the MOU.](#)

File Name



WHOOPING CRANE MIGRATION

NATIONAL INITIATIVES

Home National Fish Habitat Partnership **Whooping Crane Migration** Monarch Migration Exit

Count of FINE Projects In Whooping Crane Flyway By Division

Count of FINE Projects In Whooping Crane Flyway By District

Projects In Whooping Crane Flyway - Count - 84

Division	District	Project	Migration Category	Plan
SWD	SWD	WATER LILY LAKE	Core Migration Flyway	
SWD	SWD	WATER LILY LAKE	Core Migration Flyway	
SWD	SWD	BARDWELL LAKE	Core Migration Flyway	Approved
SWD	SWD	BARRE LAKE	General Migration Flyway	
SWD	SWD	SOUTH LAKE	Core Migration Flyway	
SWD	SWD	SEVEROCK LAKE	Core Migration Flyway	

09/08/2011 14:00

the most important in the near future because of their location and quality of riparian areas habitat on lands under Corps jurisdiction within the corridor.

Figure 4. (Photo no. IMG_0601.JPG). 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 cranes need for roosting sites.

8

6

File Name



US Army Corps of Engineers



WHOOPING CRANE MIGRATION

NATIONAL INITIATIVES
Home National Fish Habitat Partnership Whooping Crane Migration Monarch Migration Exit

Count of FINE Projects In Whooping Crane Flyway By Division

Count of FINE Projects In Whooping Crane Flyway By District

Projects in Flyway

20

Core Migration Flyway

16

Overall Migration Range

4

Projects In Whooping Crane Flyway - Count - 20

Division	District	Project	Migration Category	Plan
SWF	SWF	SEBIS LITTLE	Core Migration Flyway	
SWF	SWF	SOUTHWELL LAKE	Core Migration Flyway	Shoreland
SWF	SWF	BOSTON LAKE	Core Migration Flyway	
SWF	SWF	SENBROOK LAKE	Core Migration Flyway	
SWF	SWF	CANNON LAKE	Overall Migration Range	
SWF	SWF	COOPERS CREEK AND JH CANNON LAKE	Overall Migration Range	

Description:

Several USACE sites are currently used by Whooping Cranes and USACE sites within the migration corridor may become more important in the near future because of their location and quality of riparian habitat. USACE has entered into a joint venture with the 581st nonprofit Friends of the Wild Whoopers (FOTWW) to assess habitat on lands under Corps jurisdiction within the corridor.

[Click the link to learn more about Whooping Crane Conservation and view the MOU.](#)

File Name



WHOOPING CRANE MIGRATION

NATIONAL INITIATIVES
Home National Fish Habitat Partnership **Whooping Crane Migration** Monarch Migration Exit

Count of FINE Projects In Whooping Crane Flyway by Division

Projects in Flyway

34

Count of FINE Projects In Whooping Crane Flyway by District

Core Migration Flyway

34

Overall Migration Range

60

Division	District	Project	Migration Category	Plan
WVD	WVD	SEEB LITTLE	Core Migration Flyway	
WVO	WVT	PROCEED LAKE	Core Migration Flyway	
WVO	WVP	SARDWELL LAKE	Core Migration Flyway	download
WVO	WVP	SELTON LAKE	Core Migration Flyway	
WVO	WVP	SEYMOUR LAKE	Core Migration Flyway	
WVO	WVO	BIG BEND DAM LAKE SHARPE	Core Migration Flyway	

Description:

Several USACE sites are currently used by Whooping Cranes and USACE sites within the migration corridor may become more important in the near future because of their location and quality of riparian habitat. USACE has entered into a joint venture with the 581st nonprofit Friends of the Wild Whopiers (FOTWW) to assess habitat on lands under Crane jurisdiction within the corridor.

[Click the links to learn more about Whooping Crane Conservation and view the MOU.](#)

File Name

MONARCH BUTTERFLY MIGRATION

NATIONAL INITIATIVES


Home National Falls

Count OFENG Projects in I-35 Monarch Corridor By District

Count OFENG Projects in I-35 Monarch Corridor By District

Projects in Monarch I-35 Corridor Count - 42

DIVISION	Q	District	Q	Projects
UICD	199	EL PASO - EL PASO/EL PASO MONARCH		
MYD	PPA	FAULKNER NEAR LAKA WILCOXSON		
MYD	PPA	RED ROCK DAM - LAKA RED ROCK		
MYD	PPA	SAND LAGO - RESERVOIR AT HEADWATERS		
MYD	PPA	SALENTILLE LAGOON		
MYD	PPA	CLINTON LAKE KARASIS		
MYD	PPA	HART'S TRILMAN DAM AND RESERVOIR		



MONARCH WAYSTATION PROGRAM

Each fall, 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 return flight in the spring. The monarch migration is truly one of the world's greatest natural wonders yet it is threatened by habitat loss at overwintering grounds in Mexico and throughout breeding areas in the United States and Canada.

MONARCH WAYSTATION HABITATS

Monarch Waystations are places that provide resources necessary for monarchs to produce successive generations and sustain their migration. Without milkweeds throughout their spring and summer breeding areas in North America, monarchs would not be able to produce the successive generations that culminate in the migration each fall. Similarly, without nectar from flowers these fall migratory monarch butterflies would be unable to make their long journey to overwintering 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

Milkweeds and nectar sources are declining due to development and the widespread use of herbicides in croplands, pastures and meadows. Because 90% of all milkweed/monarch habitats occur within the agricultural landscape, farm practices have the potential to strongly influence monarch populations.

Development (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 (0.6 square miles) 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.

Widespread adoption of herbicide-resistant corn and soybeans has resulted in the loss of more than 100 million acres of monarch habitat in recent years. The planting of these crops genetically modified to resist the non-selective systemic herbicide glyphosate (Roundup) allows growers 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 croplands represent a significant portion of the summer breeding area for monarchs.


The use of herbicides and frequent mowing along roadides has converted much of this habitat to grassy areas that lack shelter and food for wildlife. Although some states have started to increase the diversity of plantings (including milkweeds) along roadsides, these programs are small. Unfortunately, the remaining milkweed habitats in pastures, hayfields, edges of forests, grasslands, native prairies, and urban areas are not sufficient to sustain the large monarch butterfly populations seen 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 "Monarch Waystations" (monarch habitats) in home gardens, at schools, businesses, parks, zoos, nature centers, along road-sides, and on other unused plots of land. Creating a Monarch Waystation can be as simple as adding milkweeds and nectar sources to existing gardens or maintaining natural habitats with milkweeds. No effort is too small to have a positive impact.

Be sure to [register your habitats](#) and encourage others to follow in your footsteps!

The Value of Monarch Waystations



MONARCH WAYSTATION PROGRAM

MONARCH WAYSTATION HABITATS

CREATE CONSERVE & PROTECT MONARCH HABITATS

MONARCH WAYSTATION PROGRAM

MONARCH WAYSTATION HABITATS

CREATE CONSERVE & PROTECT MONARCH HABITATS

MONARCH WAYSTATION PROGRAM

MONARCH WAYSTATION HABITATS

CREATE CONSERVE & PROTECT MONARCH HABITATS

File Name

MONARCH BUTTERFLY MIGRATION

NATIONAL INITIATIVES
Home National Fish Habitat Partnership Whooping Crane Migration **Monarch Migration** Exit

Count of FENG Projects in Monarch I-35 Corridor By Division

Division	Count
IWD	1
SWP	11

Count of FENG Projects in I-35 Monarch Corridor By District

District	Count
IWD	1
SWP	11

Projects in Monarch I-35 Corridor - 13

DIVISION	DISTRICT	Project
IWD	SWP	ROCKWELL (MAY-13) - ROCKWELL
IWD	SWP	ROCKWELL (JUNE 13)
SWP	SWP	
SWP	SWP	ROCKWELL LAKE
SWP	SWP	BELTON LAKE
SWP	SWP	BENNYHOOK LAKE
SWP	SWP	CANYON LAKE

Description:

Interstate 35 is a major highway that runs north to south across the central United States (451 miles from Duluth, Minnesota, to Laredo, Texas) (Moeckle 2011). It is not just important to humans, but also to many pollinators. In July the monarch butterfly (Danaus plexippus) more released the National Strategy to Promote the Health of Insects (here and other pollinators) (USDA 2014). In this guidance document the task force announced that one of its goals was to restore swarms of monarchs to the I-35 corridor (Moeckle 2011). The Monarch Highway is a multi-state partnership that aims to promote monarch and other pollinator awareness and action states. Efforts to enhance vegetation management practices (USFWS, n.d.). USFWS staff have observed that the I-35 focus does not directly mean pollinator plantings in the immediate vicinity of the highway. Though nest areas and area landscapes will include pollinator plantings, the focus refers to the general area surrounding I-35 (Moeckle 2011).

[Click the links to learn more about Monarch Management and The Monarch Waystation Program](#)

File Name

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

Questions?

File Name



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