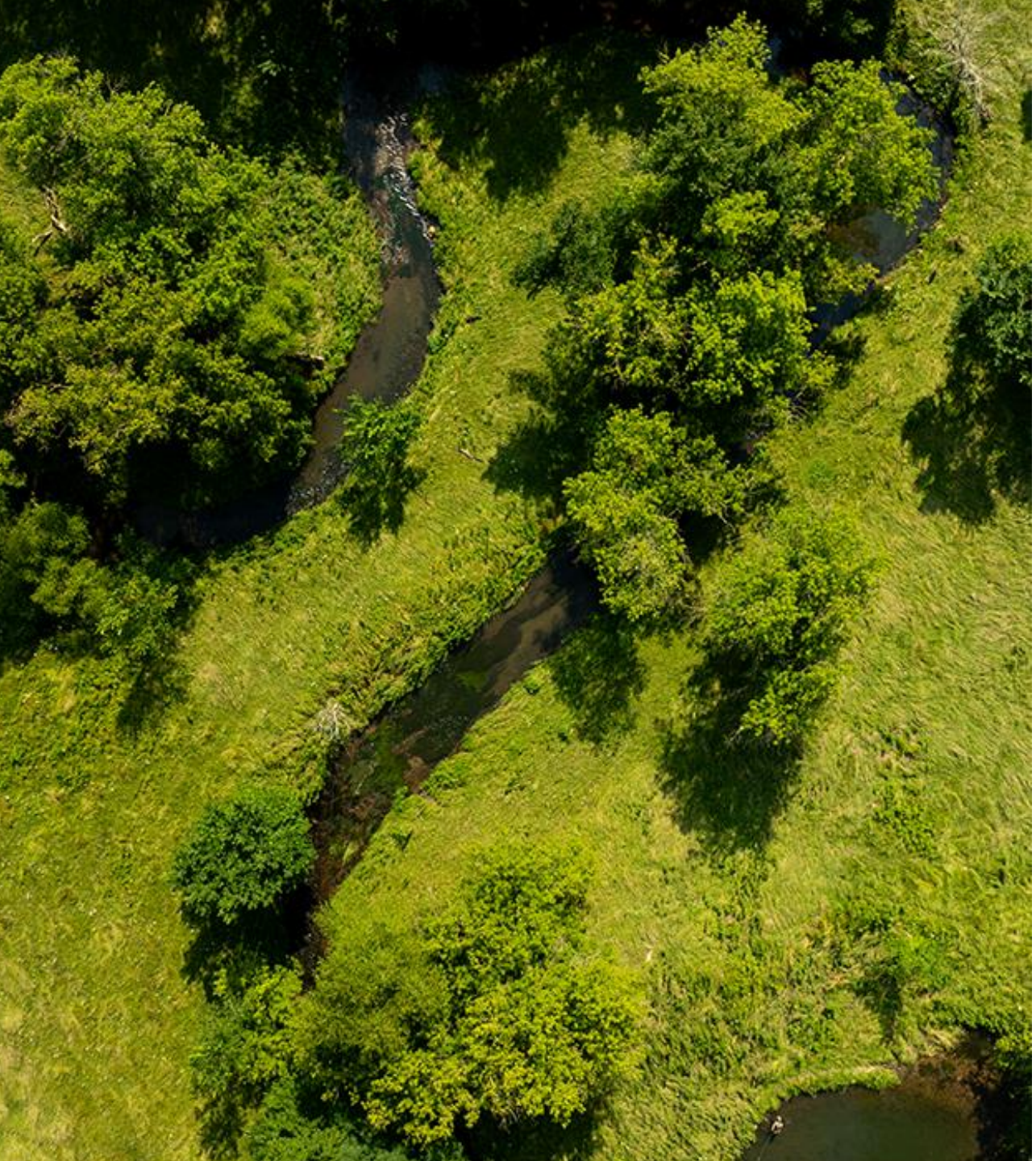

Driftless Area Restoration Effort

Presented to the National Fish Habitat Board

September 18, 2025

Minneapolis, MN

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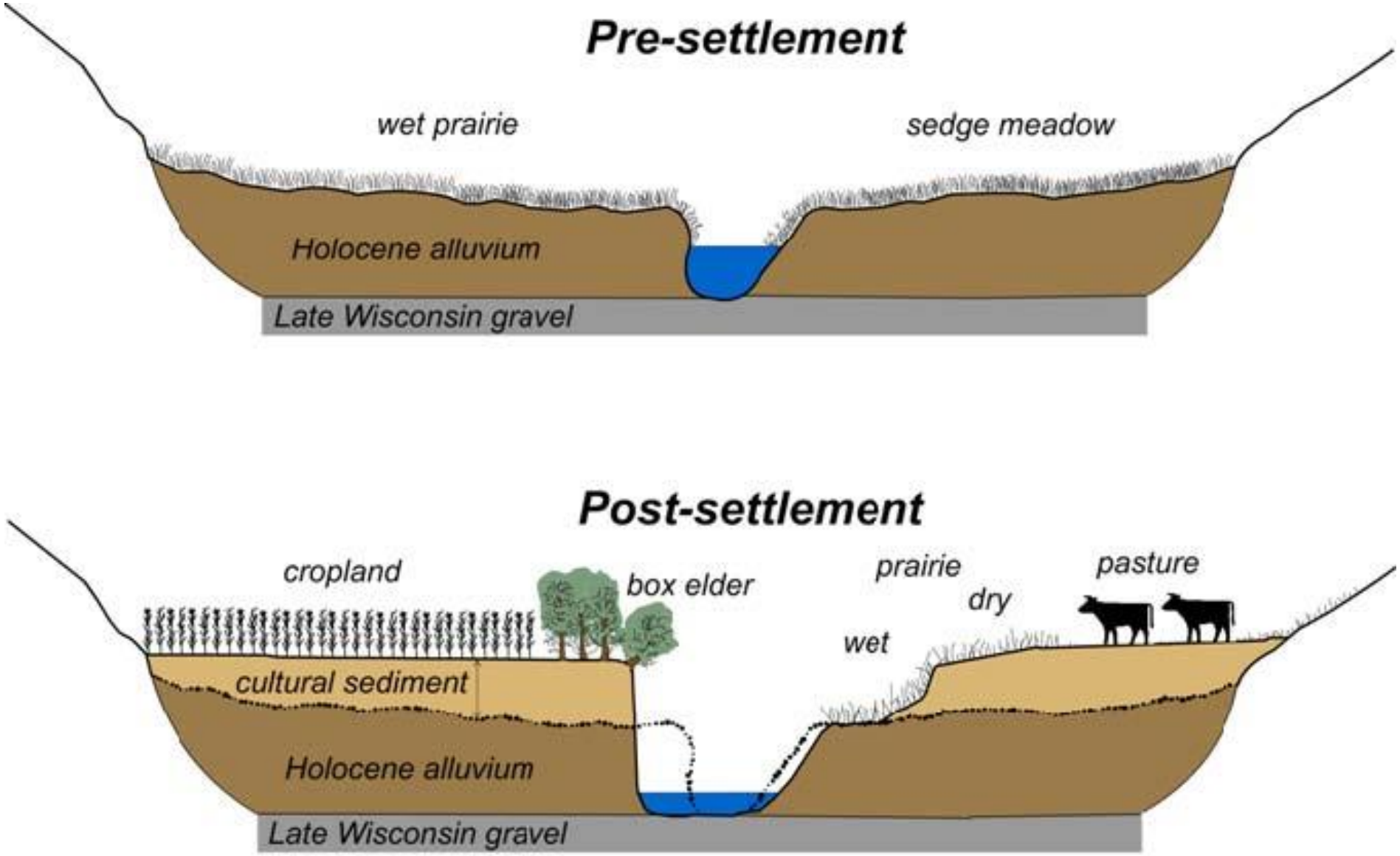
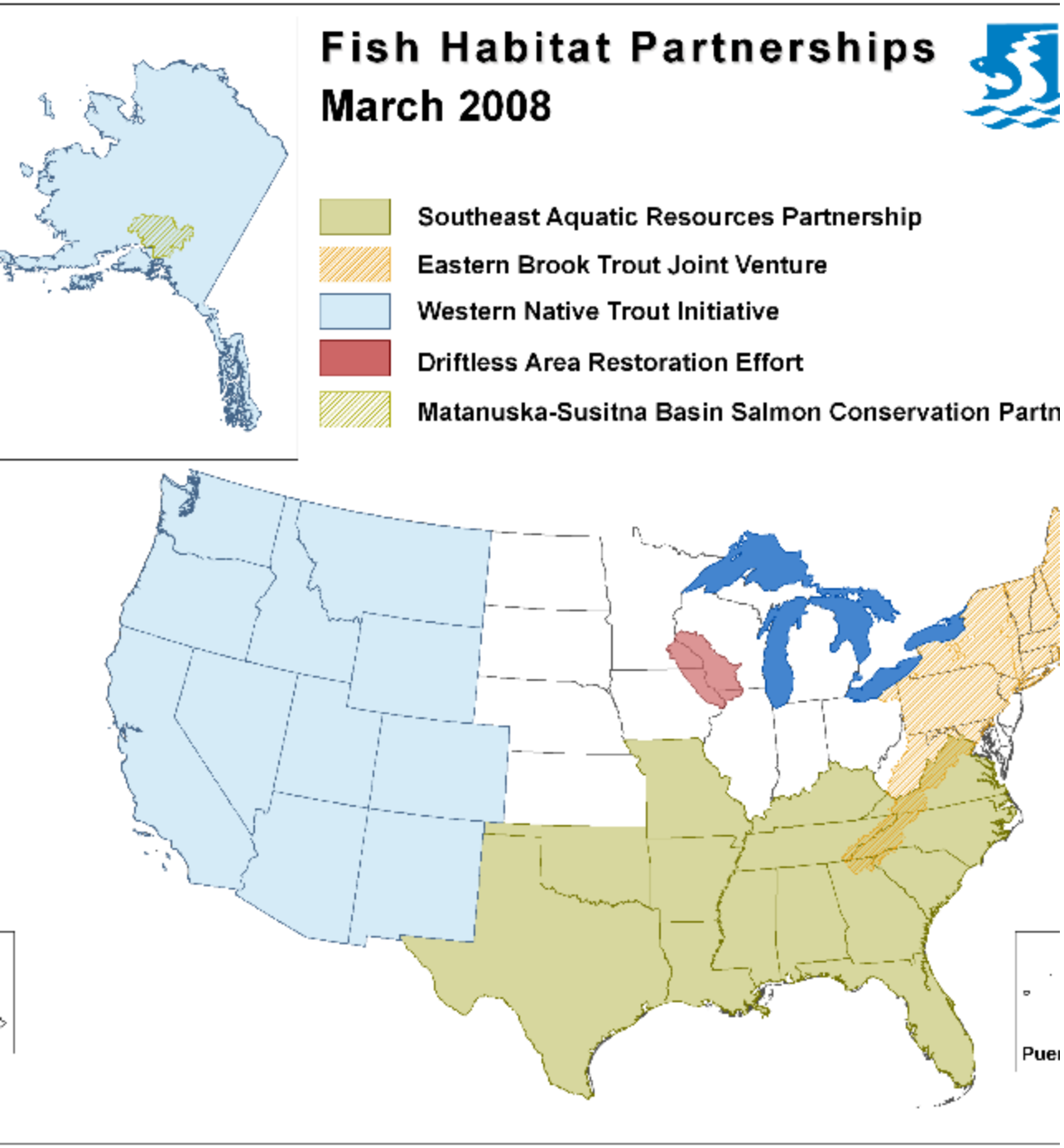

Pre-settlement
wet prairie
sedge meadow
Holocene alluvium
Late Wisconsin gravel
Post-settlement
cropland
box elder
prairie
dry
pasture
wet
cultural sediment
Holocene alluvium
Late Wisconsin gravel



The First Cohort

DARE among the first partnerships

- The Driftless Area Restoration Effort has its origin story in a 2004 grassroots meeting among TU chapters and partners to expand restoration efforts through collaboration

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Science Activities

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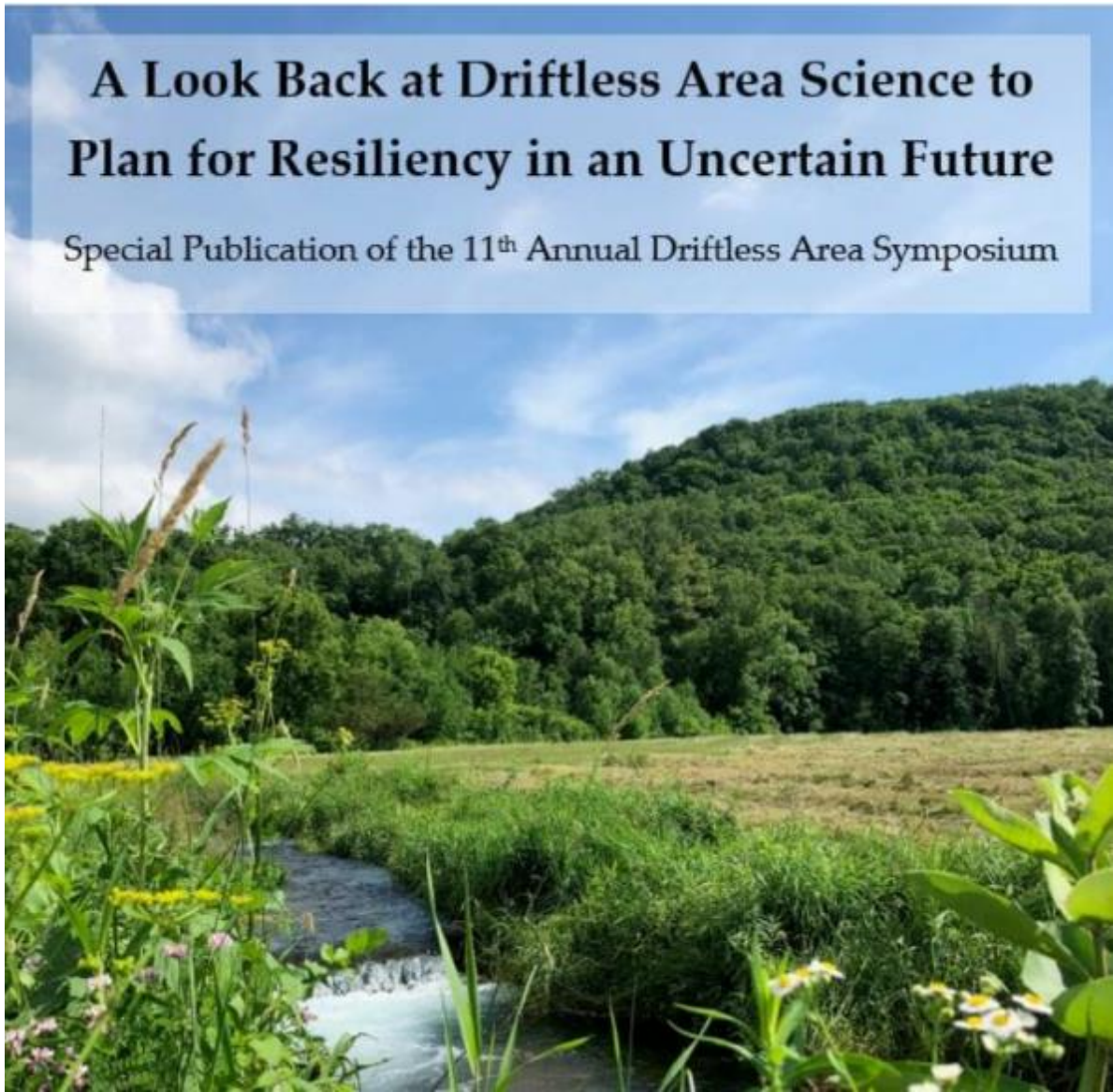
Annual Driftless Area Symposiums
2006 to present



remote sensing

MDPI

Article

Applying High-Resolution Satellite and UAS Imagery for Detecting Coldwater Inputs in Temperate Streams of the Iowa Driftless Region

Niti B. Mishra [1,2,*], Michael J. Siepker [3] and Greg Simmons [4]

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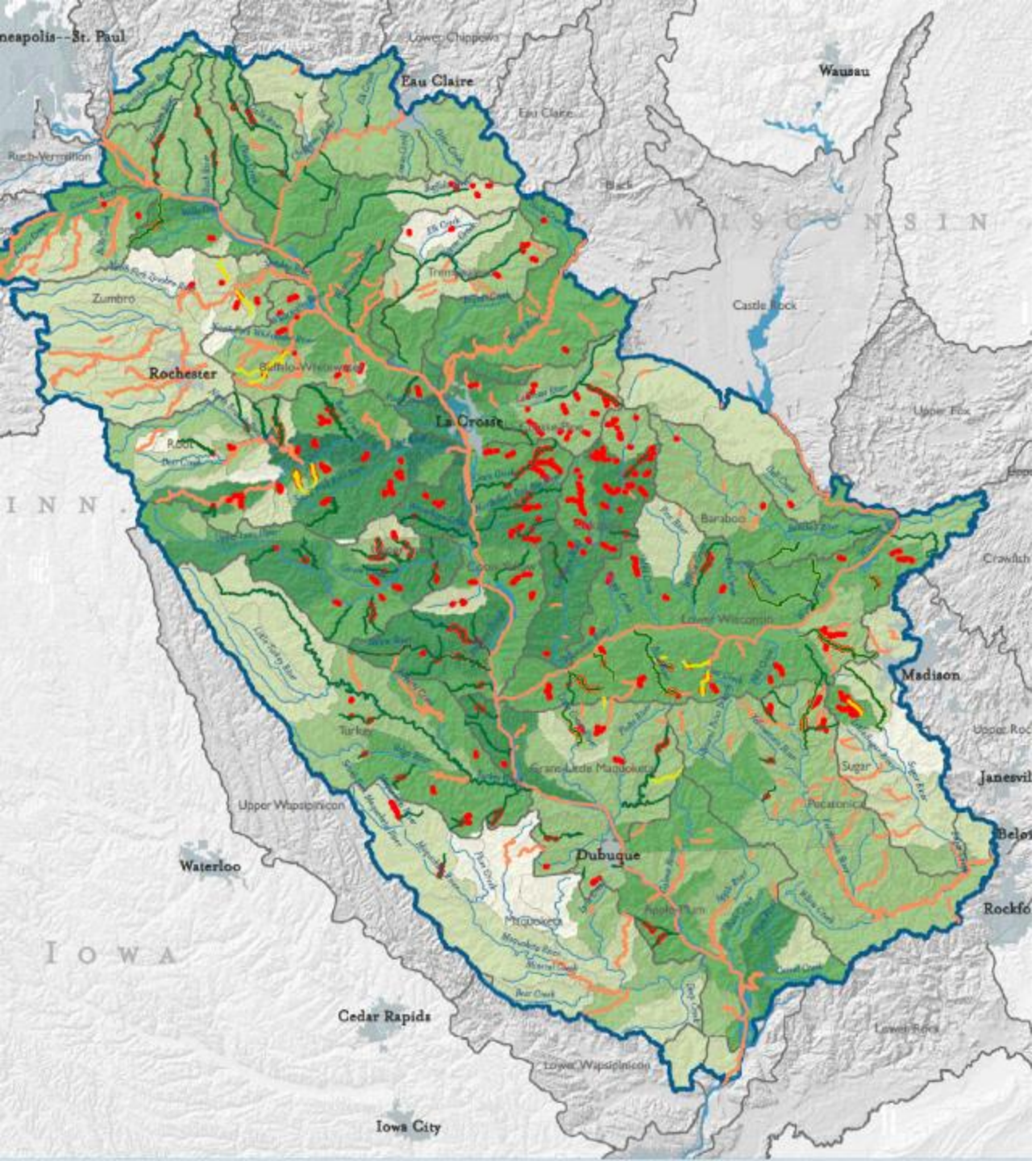
Our landscape & shared priorities



Major Waterway
Hydrologic Unit (Huc 8)
Urban Area
TUDARE Project Area
TU Chap. Priority
Restored Segments
303d
DNR Priority

Number of Agency Priorities

0 1 2 3 4 5

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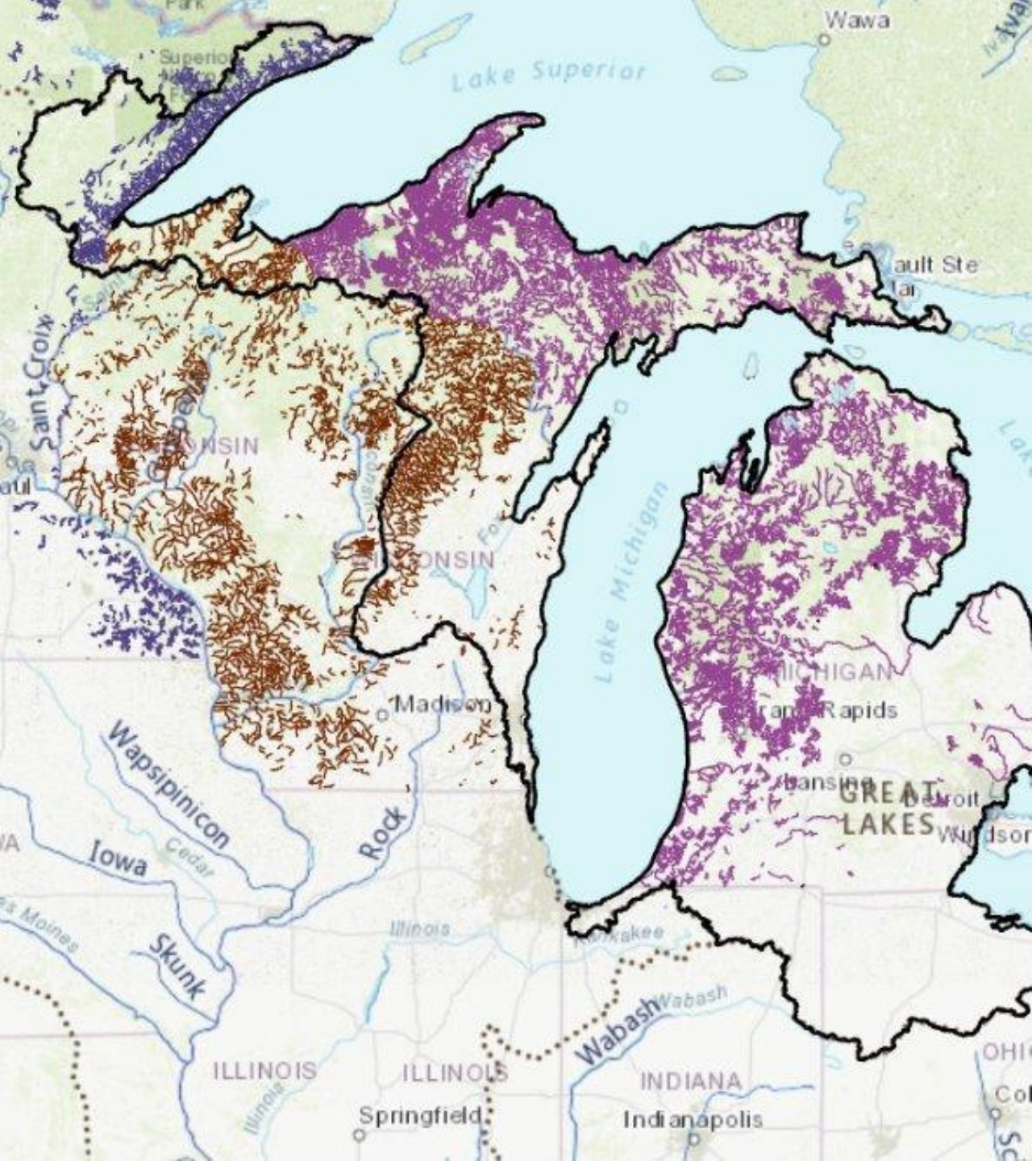

Conservation Portfolio

Brook Trout Conservation across the native range

-New analysis for the Driftless Area

-Updated analysis for the Great Lakes

-New components and analysis for Eastern Brook Trout Joint Venture

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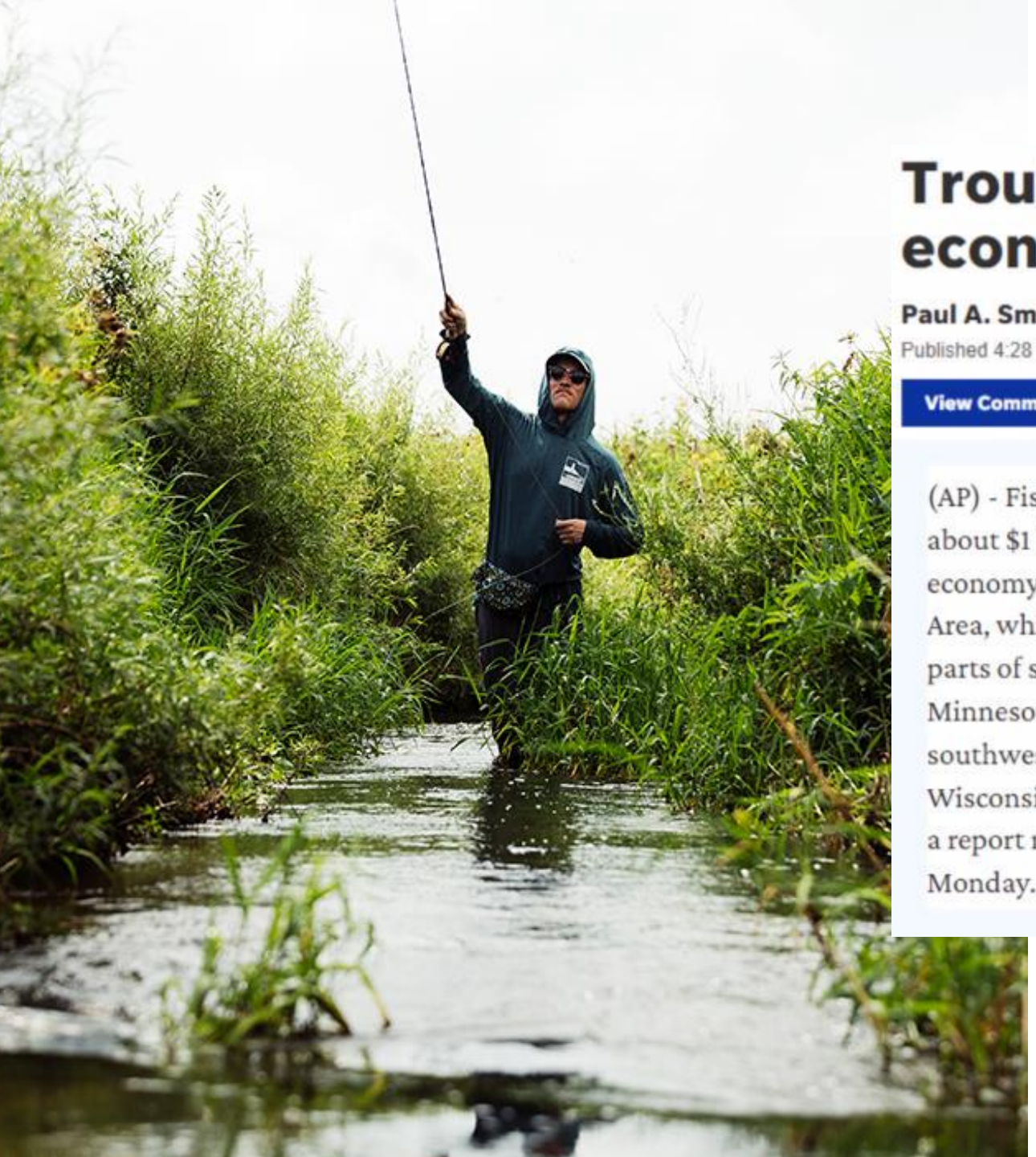

Trout fishing has $1.6 billion annual economic impact in Driftless Area

Paul A. Smith Milwaukee Journal Sentinel

Published 4:28 p.m. CT May 6, 2017 | Updated 8:08 p.m. CT May 6, 2017

View Comments

(AP) - Fishing generates about $1 billion for the economy of the Driftless Area, which includes parts of southeastern Minnesota and southwestern Wisconsin, according to a report released Monday.

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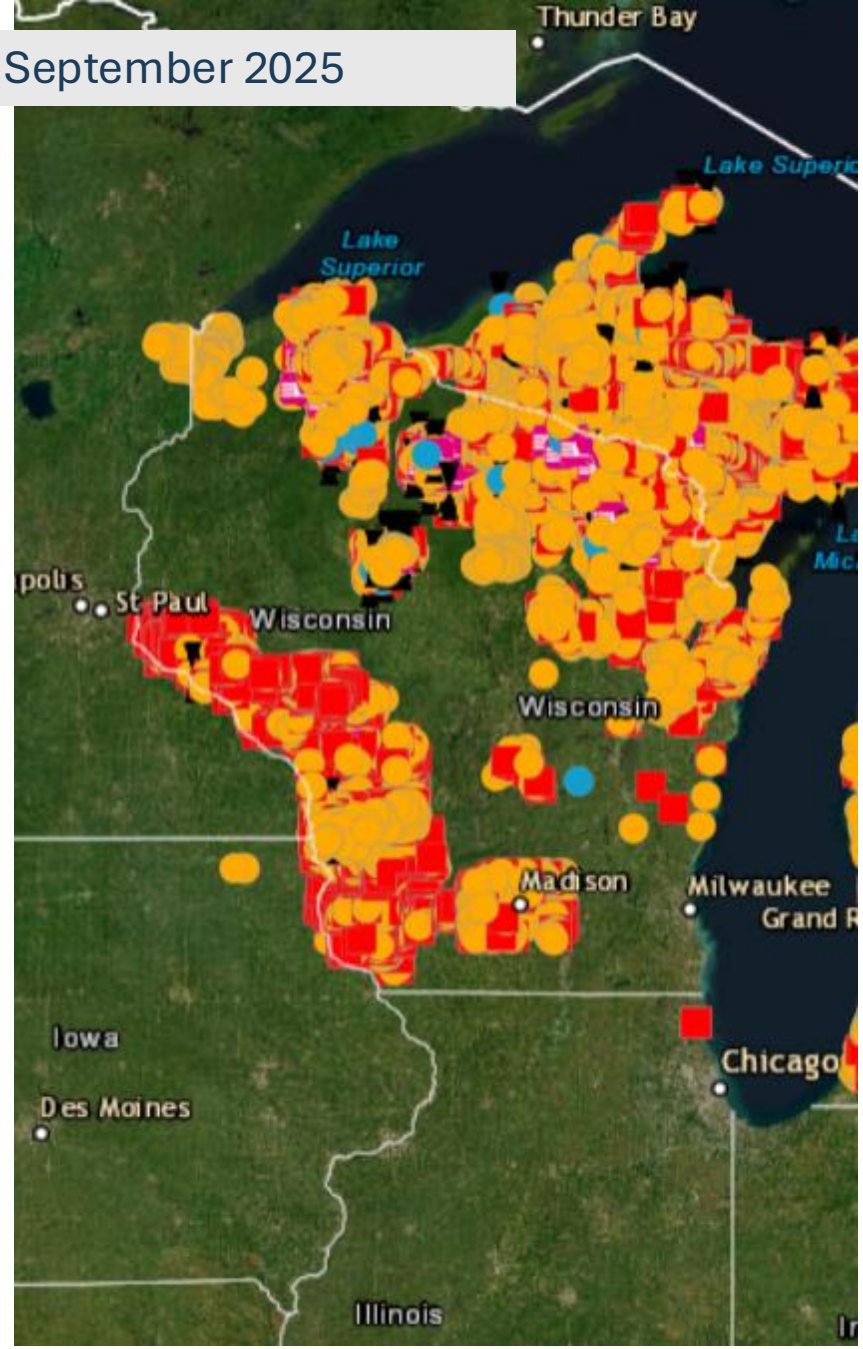
Before 2022

September 2025



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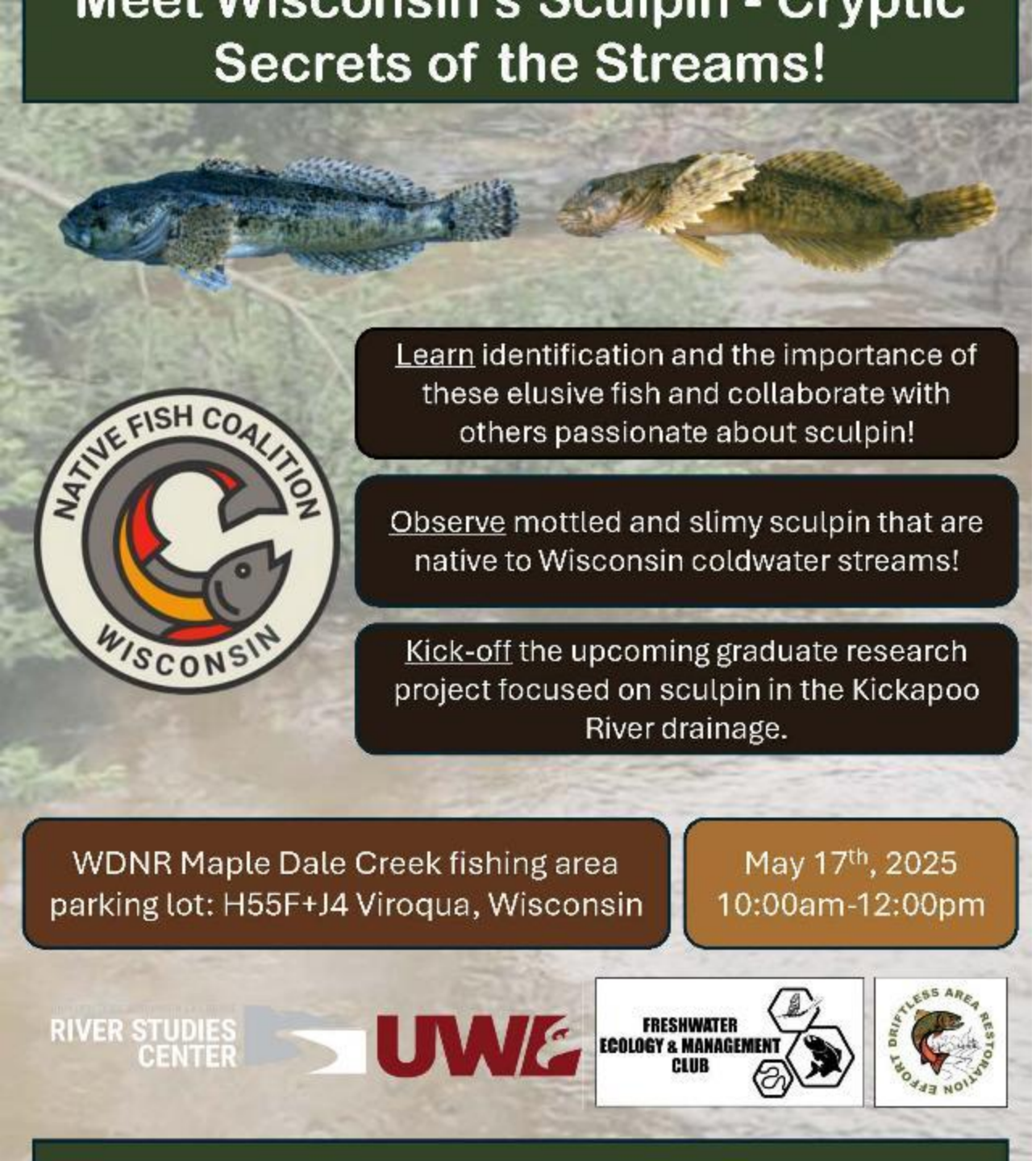

Education & Outreach

DARE-funded science

- Co-hosted with UW-L and Native Fish Coalition
- Local newspaper reporter attended
- Partners and citizens participated

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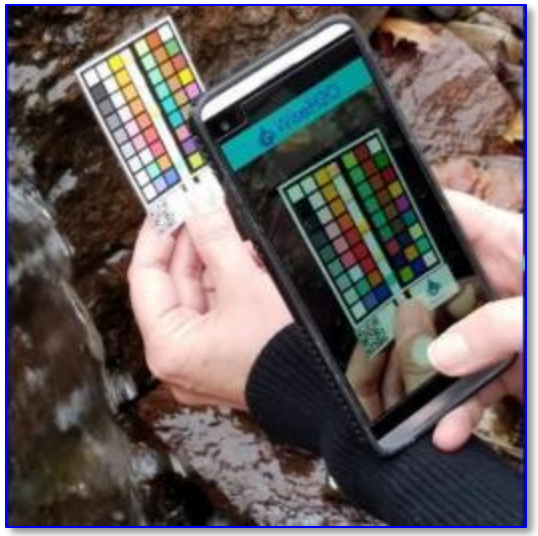
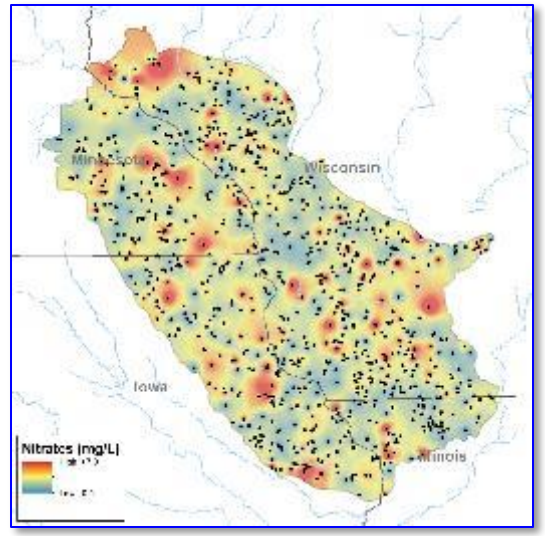
WiseH2O Water Quality by Anglers

A mobile-app based water quality assessment for education & outreach





Test strip-based

Parameters: pH, phosphorus, nitrogen, alkalinity, hardness, temperature, turbidity

Mobile phone submitted

Portable, quick, requires few supplies

Immediate results

Results are viewed immediately and interpretive information explains the data for water quality and fish impacts

Crowdsourced database

Data are backed up to a database that can be used for further research or evaluation

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Youth

DARE reaches youth through hands on activities

Waterfestivals &
Environmental Days

Habitat Boxes

Build Habitat

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Restoration
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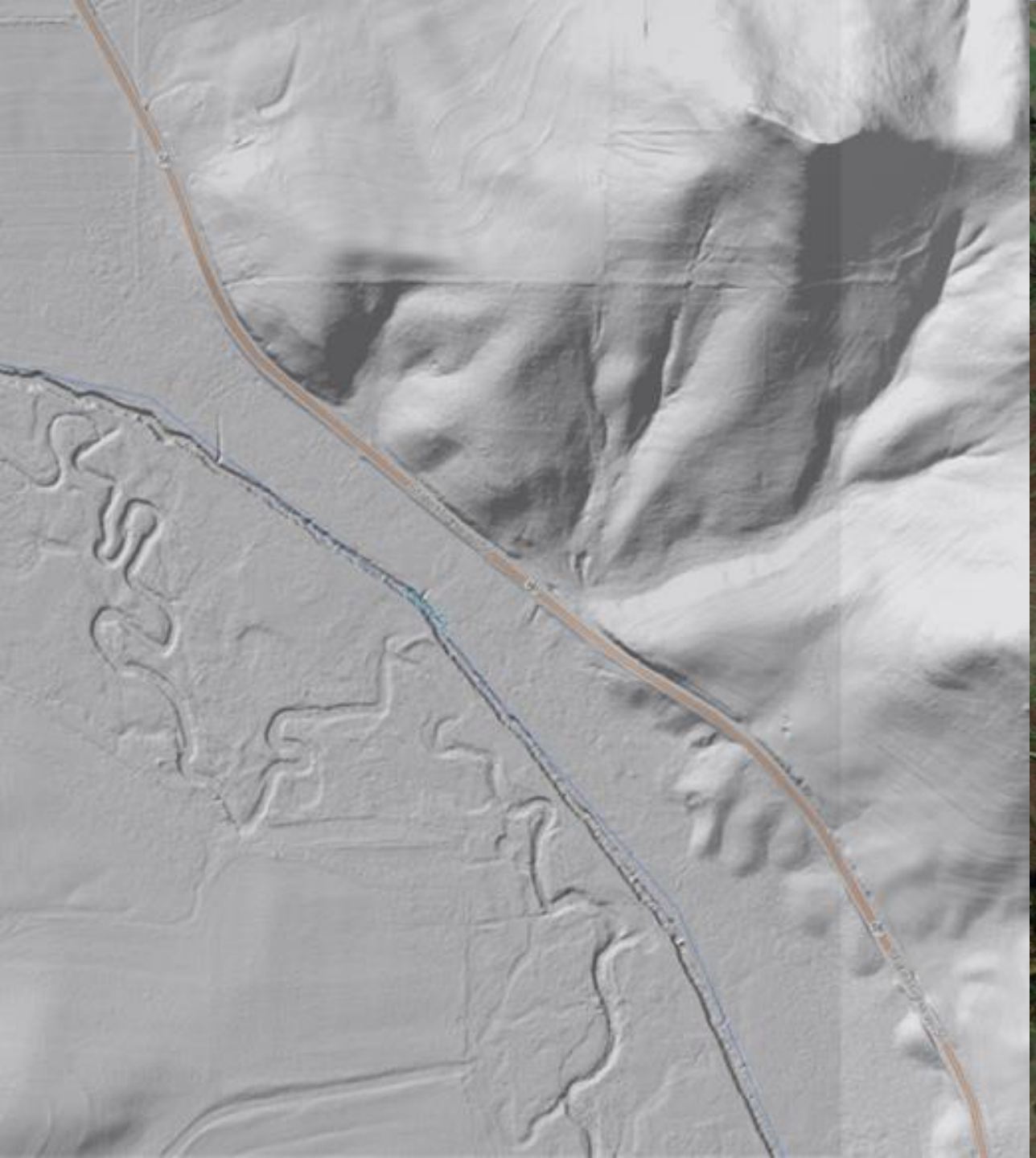

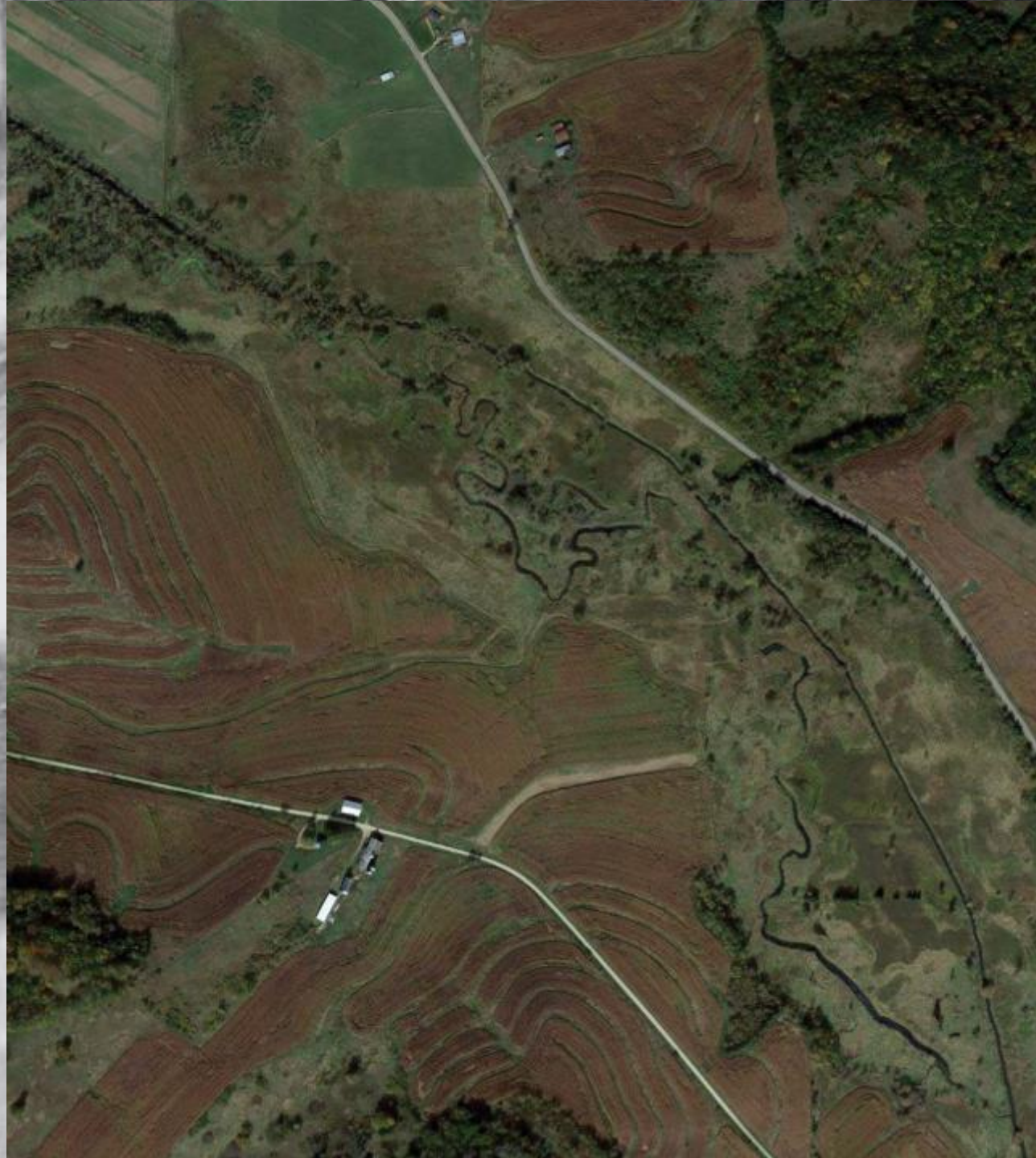

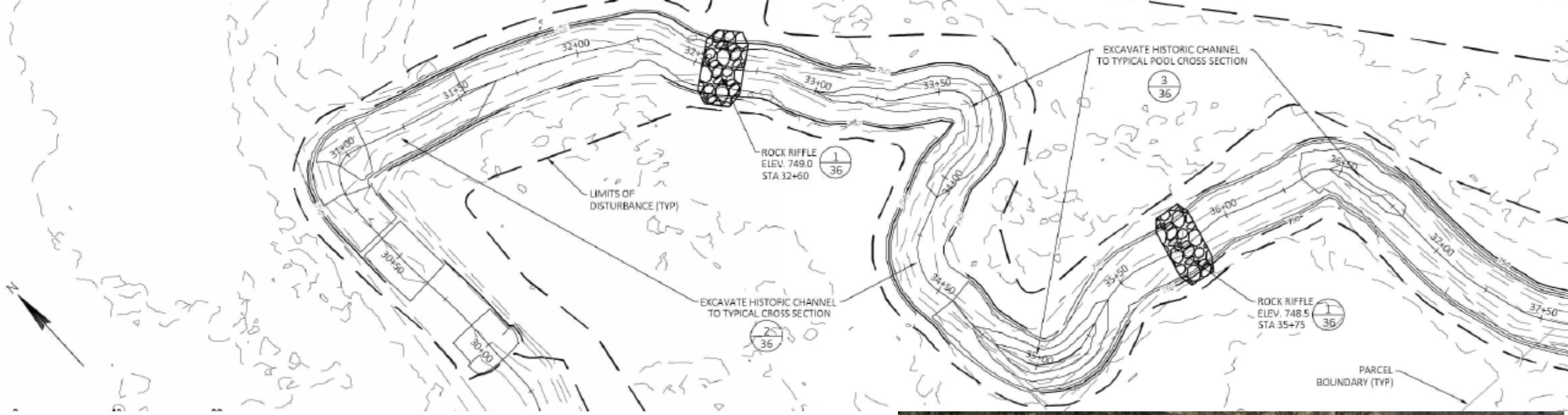

Stream Restoration

Riffles, pools, meanders

The stream restoration focal objectives are:
-Reconnect the channel with the floodplain

-Remove the drainage effects of the ditch to restore 50 acres of sedge wetland

-Create habitat within the channel with riffle and wood installations over 6,000’

-Outcome of increasing trout occupancy and demographics

-Dampen flood pulses

-Increases stream length by 2,700’

-Improve groundwater – channel connectivity

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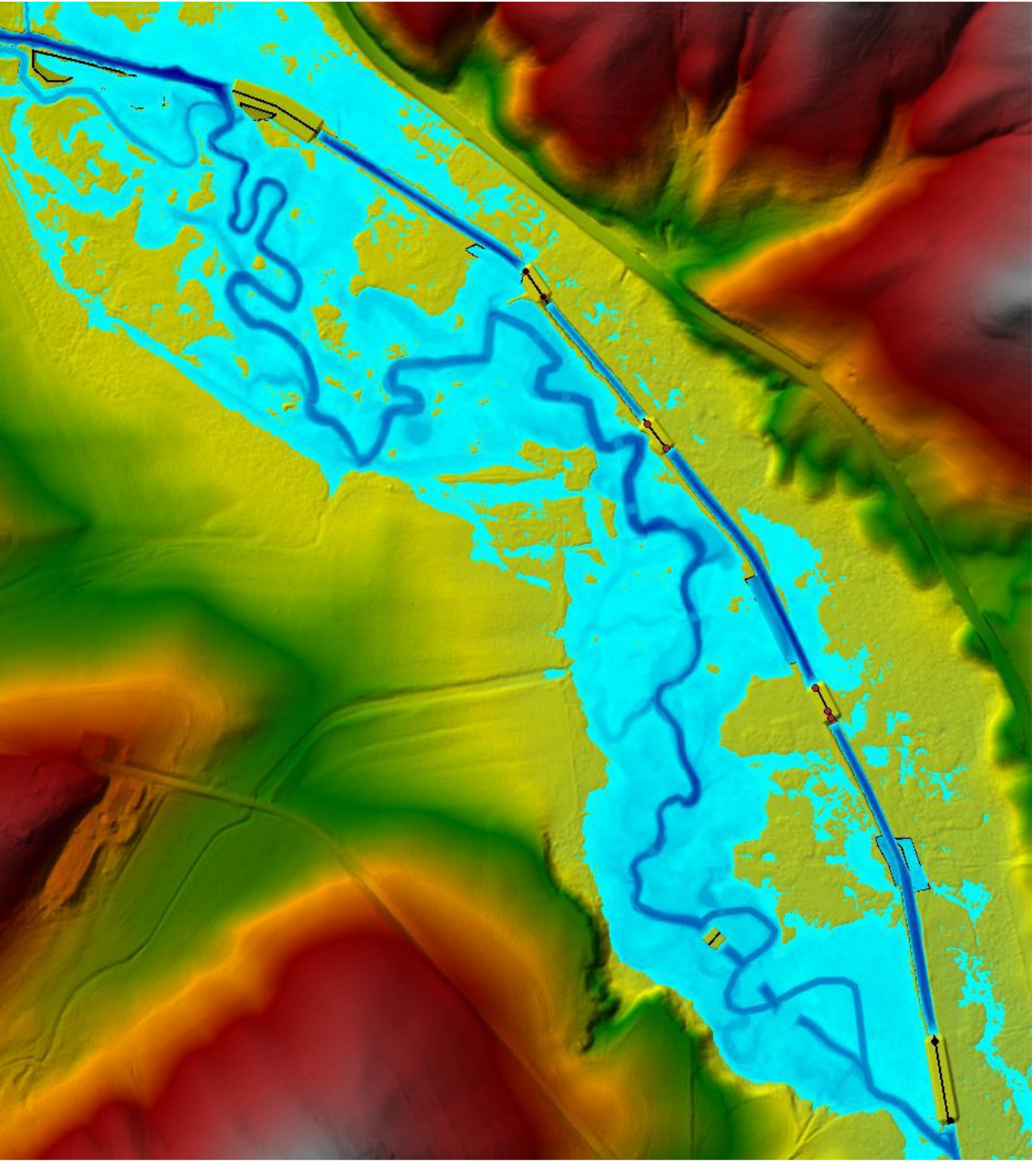

Floodplain Connectivity

Restoring Interaction

- Project will cut off flow in the ditch and reroute flows into the historic meander channel

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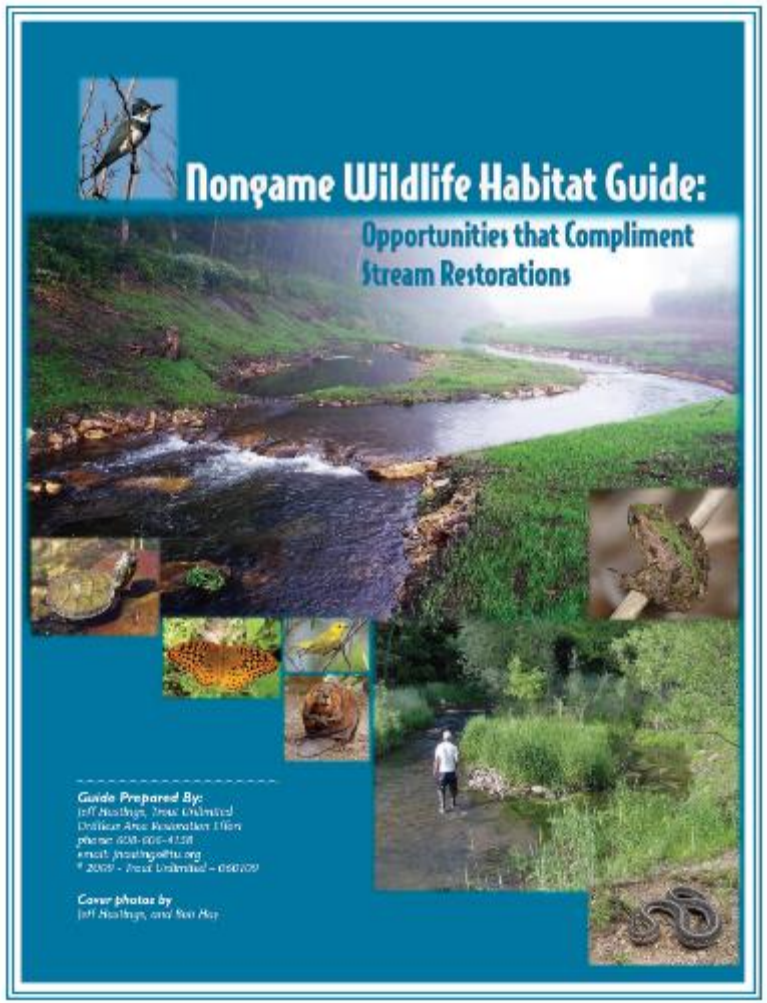


Birds(Class Aves)

Birds are warm-blooded species that maintain stable internal body temperatures regardless of external influences. Because winters in the Midwest impact food availability for many birds, they migrate south to take advantage of warmer climates where access to food resources is not limited by cold temperatures, ice or frozen soils. This includes many of the riverine and wetland- associated birds. Most water-associated non-game bird species fall into the categories of insectivores (which eat invertebrates including insects), piscivores (which eat primarily fish), or omnivores (more general predators, which eat a wide variety of prey including insects, fish, amphibians, reptiles and small mammals, along with wetland/aquatic vegetation and seeds). A wide variety of birds can be found along stream corridors, but are not dependent on these habitats alone.


Solitary Sandpiper


Yellow Warbler


Great Blue Heron

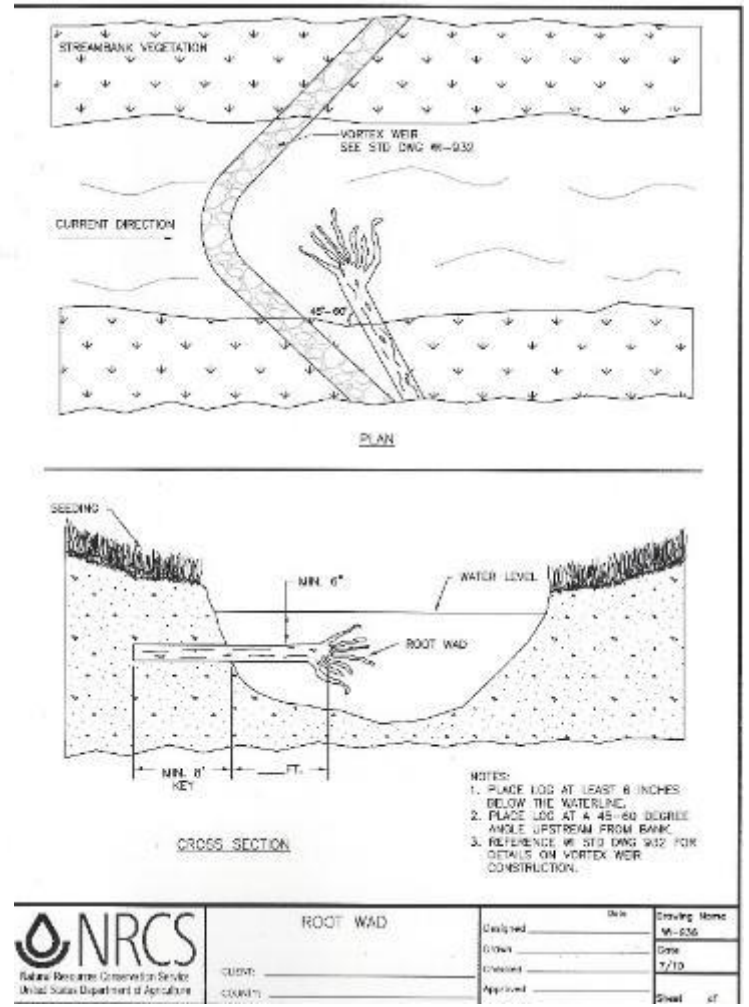

Not all trees are removed, only the immature/shadow excised trees

Shallow wetlands, low gradient shorelines of ponds, mud flats and backwater areas along streams provide excellent foraging areas for wading birds. Perches over the water are important for a variety of insect eating birds such as eastern kingbirds and for fish eaters like the belted kingfisher. Dead trees provide perching areas for hawks and other birds and can provide structure for nesting and foraging. Vertical banks can be important nesting habitats for bank swallows and kingfishers. Varied habitat structure (trees, brush and grasslands) in riparian habitats can provide a variety of nesting opportunities.

Invertebrates (protozoa, annelids, mollusks, arthropods, crustaceans, arachnids and insects)

This exceedingly diverse group of species is the backbone or base of the animal food chain and as a result is perhaps the most important. Providing for the life cycles of such a broad range of species may be best accomplished by replicating many of the macro and microhabitats that occur within an intact natural riparian community in the watershed or region where you are working. Providing standing and flowing water habitats with varied depths, temperatures, substrates and structures may be the best way to maximize aquatic invertebrate diversity. Some of these microhabitat features are likely to be naturally provided over time. Riparian and upland habitats should have varied vegetative structure and be planted with a diverse mix of species (forbs and grasses). In order to achieve this, we are suggesting seed mixes that contain both native and exotic species (grasses and forbs) that have the greatest likelihood of achieving a varied herbaceous vegetation layer once established. We are purposefully including some exotic plant species, such as Kentucky bluegrass, because it provides a low canopy structure that is valuable to a variety of non-game species from a thermoregulatory perspective. We include this species because we recognize that most of these properties will not receive management after they are initially planted. The establishment and maintenance of a diverse native planting typically requires significant management, especially in the early years, if a diverse plant community with variable habitat structure is to be achieved. Where a project is attempting to improve conditions for one or more of the SGCN target invertebrates, such as a butterfly, seed mixes can include host plant seeds as appropriate. Having knowledge about these species and their specific habitat requirements, including host

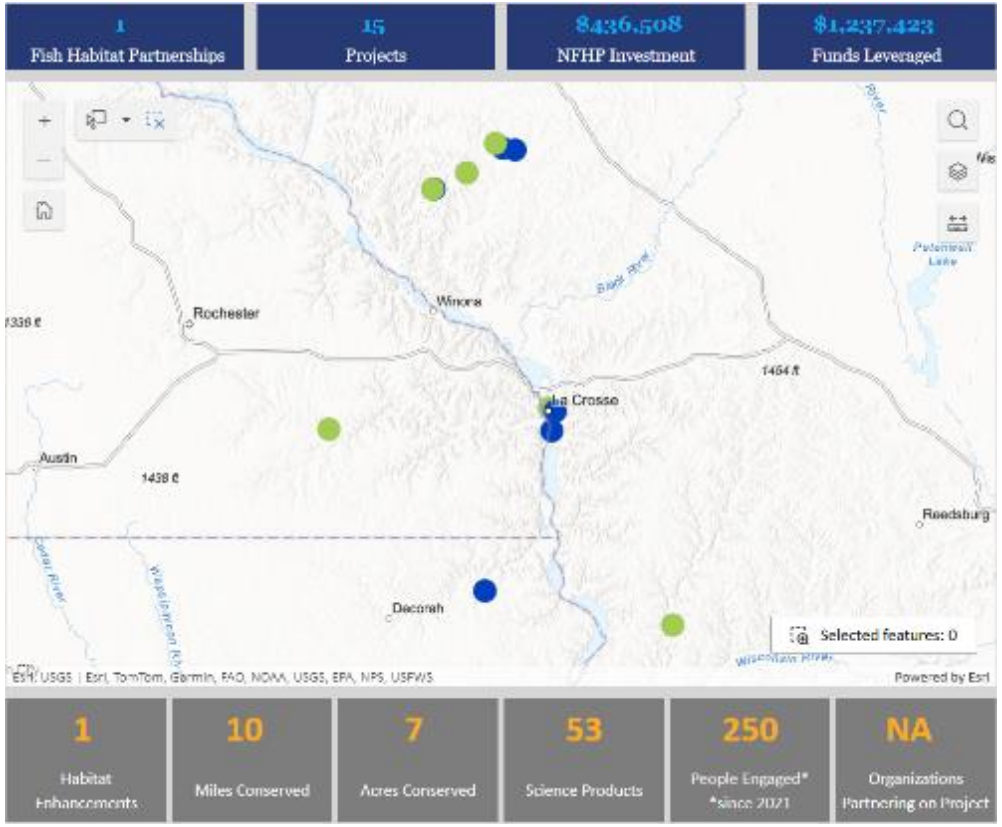

Black Swallowtail



Total Projects

126

2022-2025 NFHP Projects



Trout Unlimited welcomes projects under Driftless Area Habitat for the Wild & Rare Regional Conservation Partnership Program (RCPP), funded through 2028 by the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS)

Trout Unlimited works with landowners and growers to improve farm stewardship. They establish habitats in streams and adjacent land to support trout and other wildlife species, while reducing erosion and nutrient loss.

Examples of practices used to improve habitat, slow the release of sediment and nutrients into water systems, and improve water quality.


Riffle


Cross Channel Log


Bank Shaping


Root Wads


Boulder Cluster


Riparian Planting

Wisconsin EQIP/RCPP Deadlines
Application: May 16, 2025
Ranking: June 20, 2025

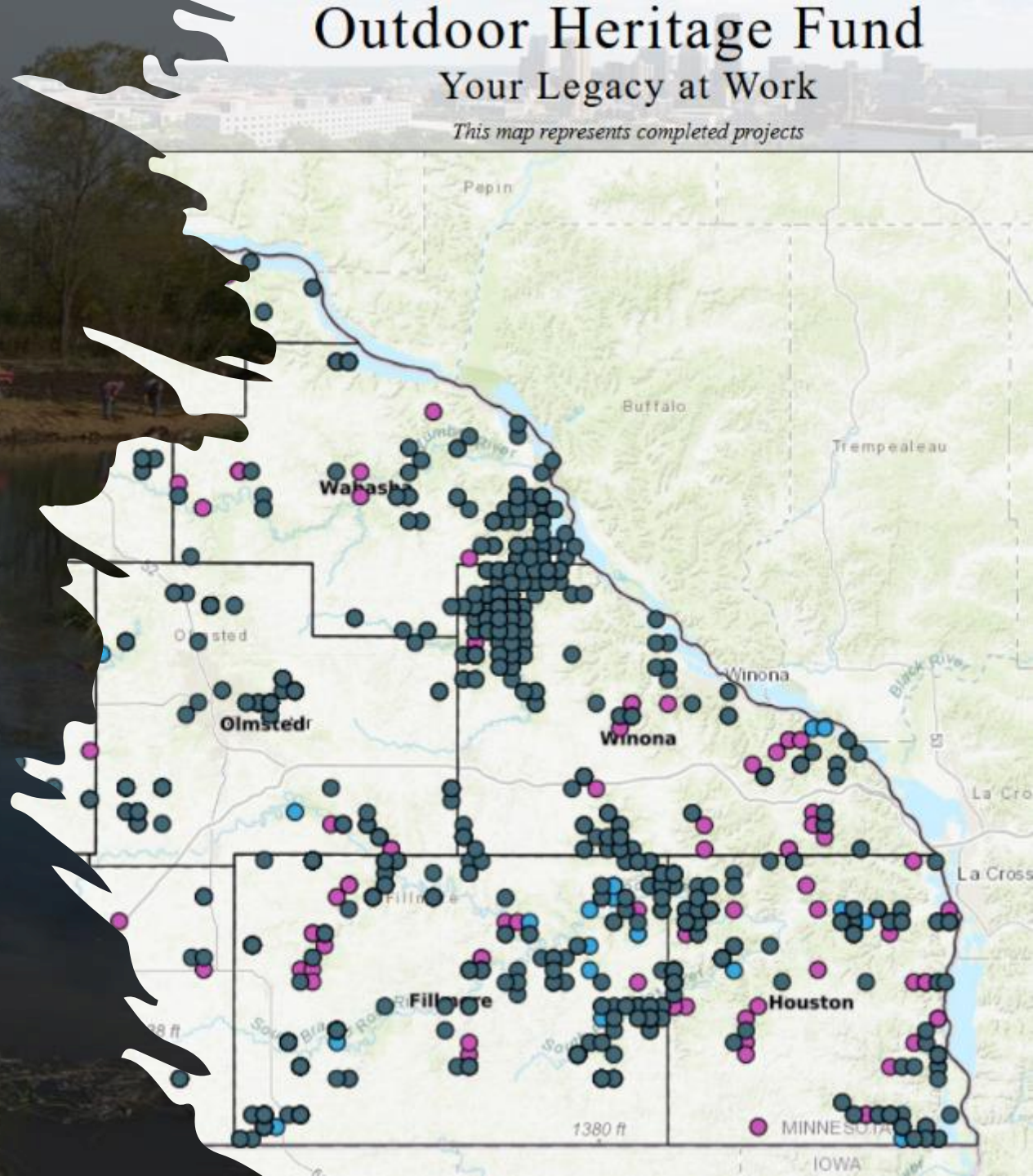
Contact Trout Unlimited Today!
Sara Strassman: (608) 668-1632
sara.strassman@tu.org
Paul Krahn: (608) 606-0565
paul.krahn@tu.org
Peter Jonas: (608) 323-2006
peter.jonas@tu.org

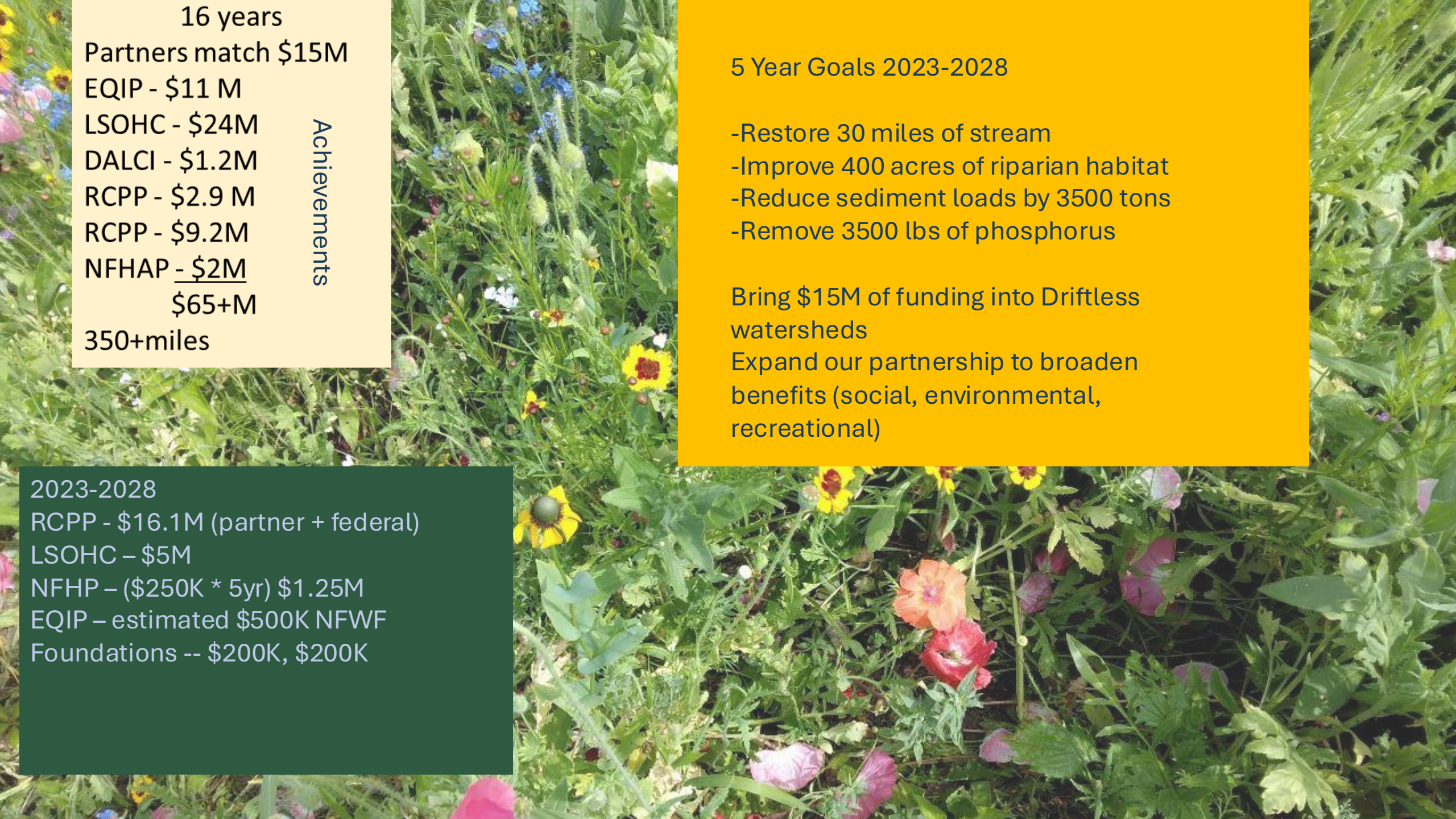
USDA is an equal opportunity provider, employer, and lender.

35 miles

$4M non-NFHP funds

- Groups that develop projects:
- County Field Offices
- State Fish Habitat Crews
- Trout Unlimited Chapters & Councils
- Conservation Groups
- Individual Landowners





16 years
Partners match $15M
EQIP - $11 M
LSOHC - $24M
DALCI - $1.2M
RCPP - $2.9 M
RCPP - $9.2M
NFHAP - $2M
$65+M
350+miles

Achievements

5 Year Goals 2023-2028

-Restore 30 miles of stream
-Improve 400 acres of riparian habitat
-Reduce sediment loads by 3500 tons
-Remove 3500 lbs of phosphorus

Bring $15M of funding into Driftless watersheds
Expand our partnership to broaden benefits (social, environmental, recreational)

2023-2028
RCPP - $16.1M (partner + federal)
LSOHC – $5M
NFHP – ($250K * 5yr) $1.25M
EQIP – estimated $500K NFWF
Foundations -- $200K, $200K

Driftless Area Restoration Effort

Thank you!

Driftless Area Team

Sara Strassman

Director & DARE Coordinator

Wisconsin

Paul Krahn

Stream Restoration Specialist

Wisconsin

Cameron Aker

Iowa Engagement Coordinator

Iowa

Peter Jonas

Partnerships Specialist

Wisconsin

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A Bit About Your Coordinator

Sara Strassman, Trout Unlimited

WISCONSIN DEPARTMENT OF NATURAL RESOURCES

LA CROSSE WISCONSIN

AMERICAN RIVERS

GREAT RIVER ROAD WISCONSIN

UPPER MISSISSIPPI RIVER CONSERVATION COMMITTEE

UNIVERSITY OF MICHIGAN

myXC 1993 2023

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