



Connecting Communities to Water

Rejuvenating Ecosystems & Enhancing Livelihoods

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Water and Geomorphology Lead

eocene.com





Southeast Vietnam



Morning in Nha Trang



Connection to Place

Connection to Place



Mississippi River: Alma, WI

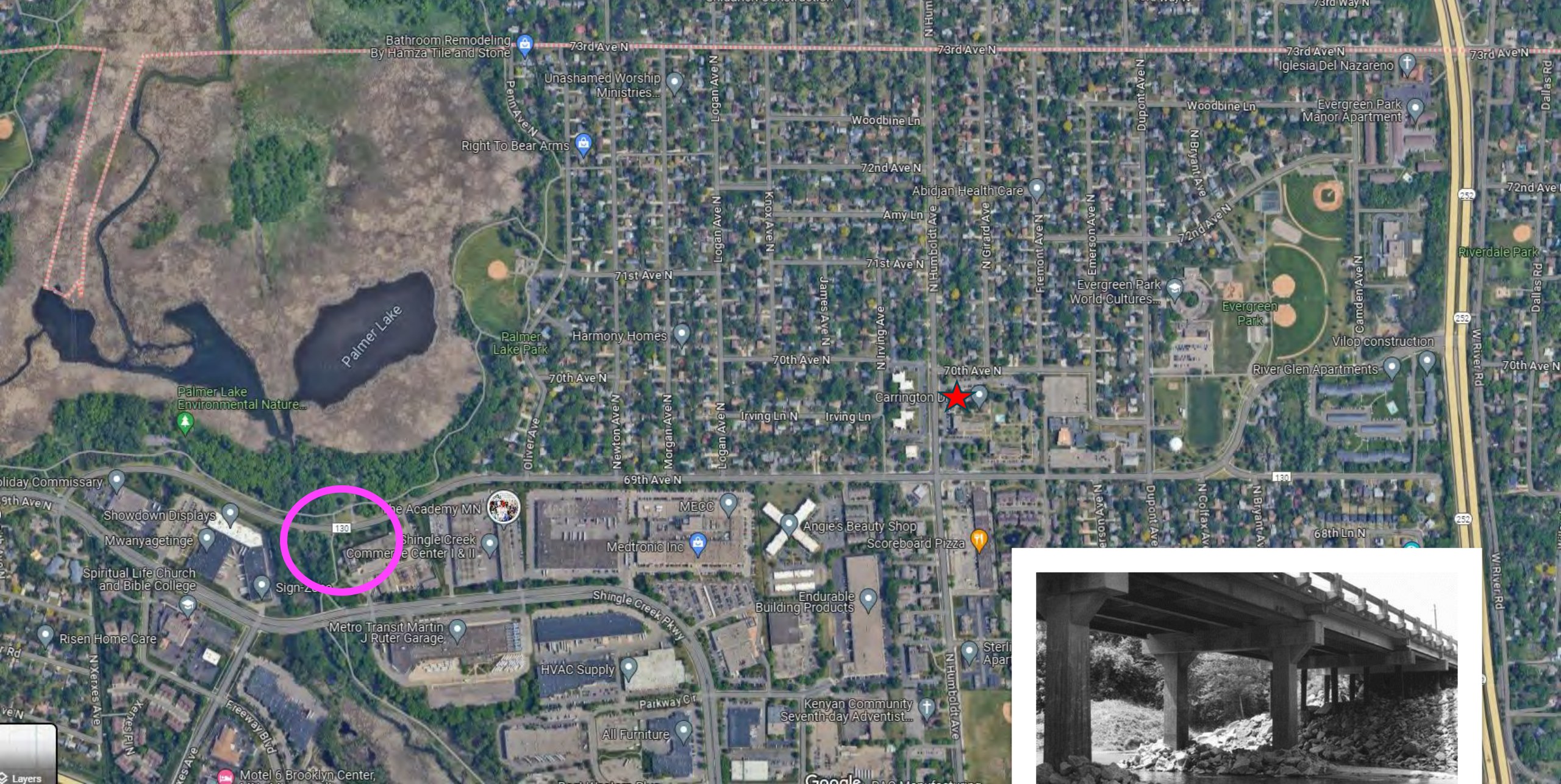


Connection to Place



Connection to Place



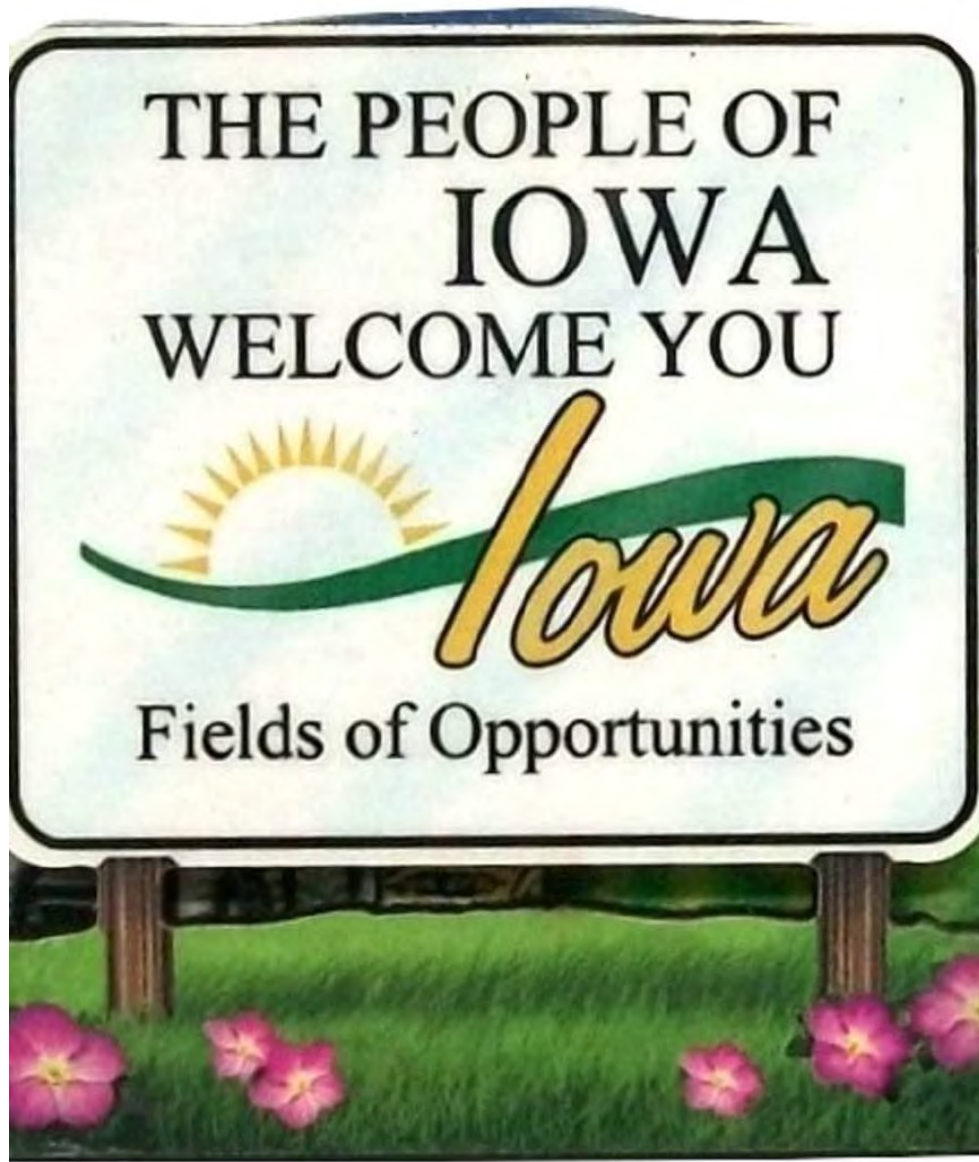


Connection to Place

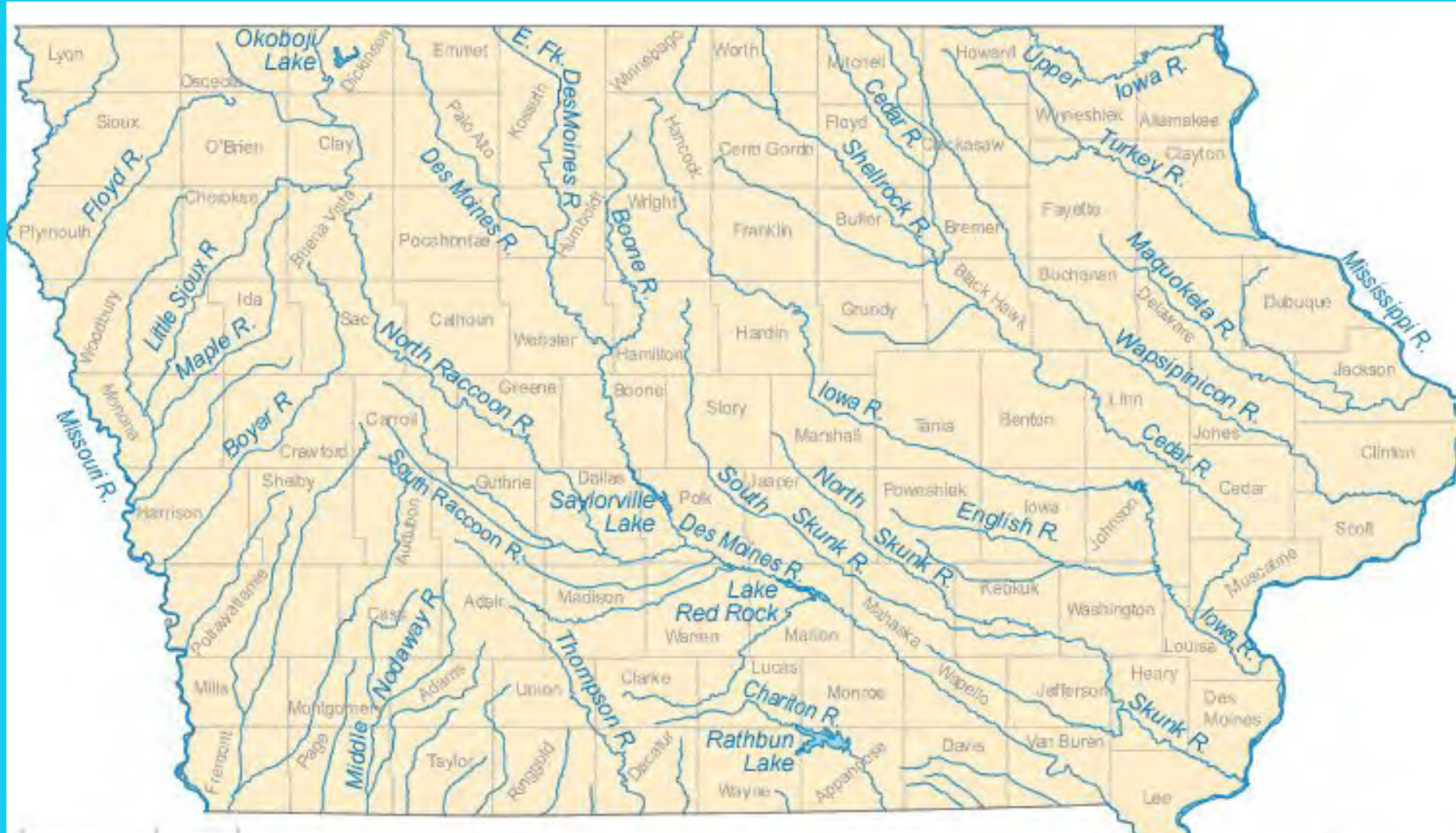
Iowa

IS THIS
HEAVEN?
NO, IT'S
IOWA!





Iowa has 27,000 miles of perennial streams



Limited & Poor



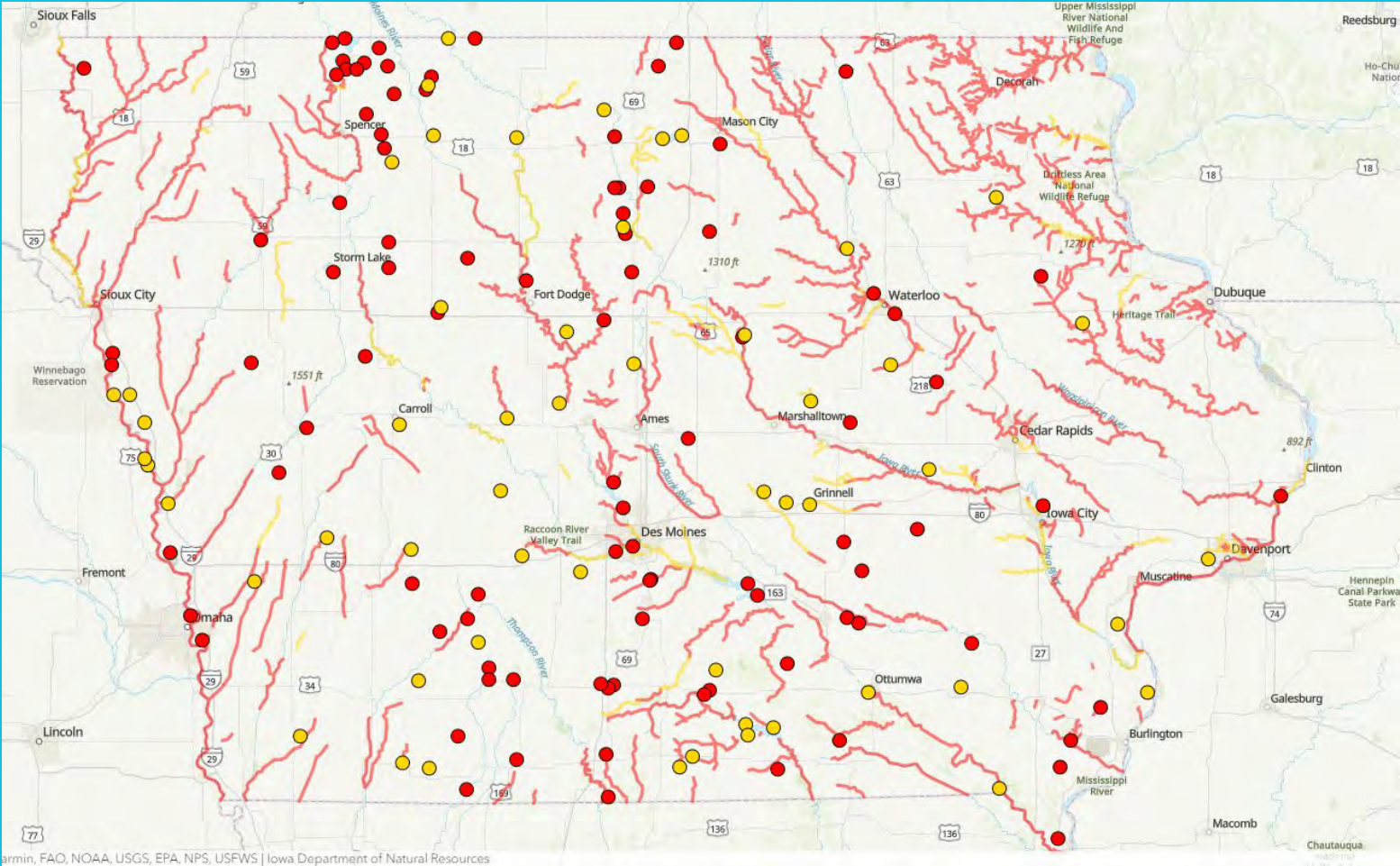
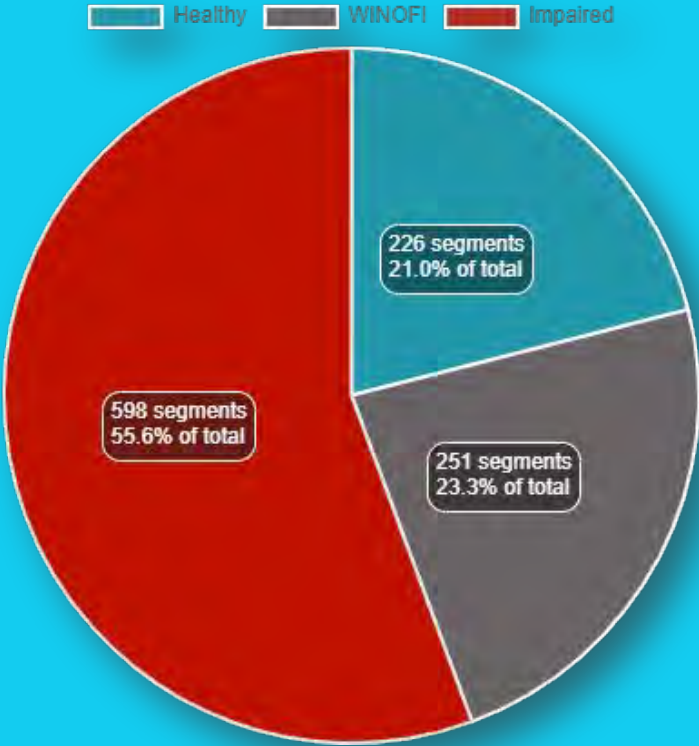
Acc



Flood

S

Water Quality: Impaired Waters



•Most of Iowa's landscape --
- more than 90 percent --- is
privately owned and used
for agricultural production.



Source: Iowa Department of Natural Resources

2% All public lands
1% DNR lands
Remote Areas
Limited Public Access



Connection to Place

Driftless Area



Minnesota

Wisconsin

Minneapolis

Menomonie

Red Wing

Rochester

Winona

Onalaska

Austin

La Crosse

Baraboo

Mason City

Madison

Cedar Falls

Waterloo

Dubuque

Cedar Rapids

Marion

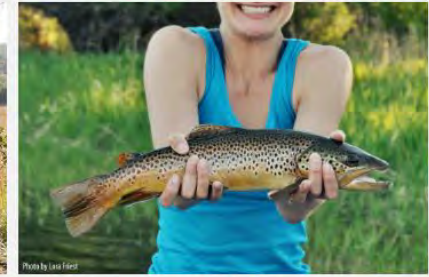
Des Moines

Illinois

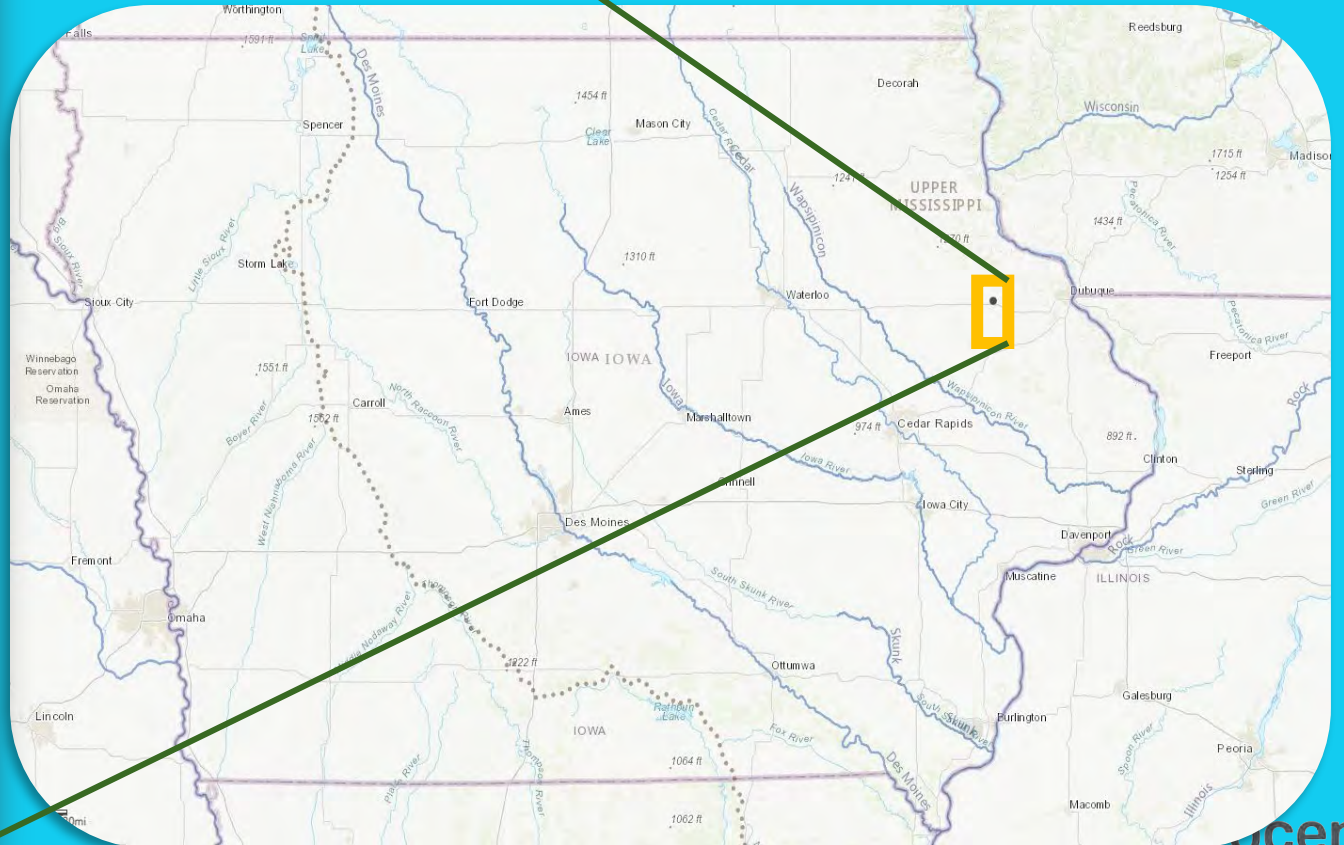
Springfield



Driftless Area Scenic Byway



Headwaters of the North Fork Maquoketa River (HUC 10 0706000608)

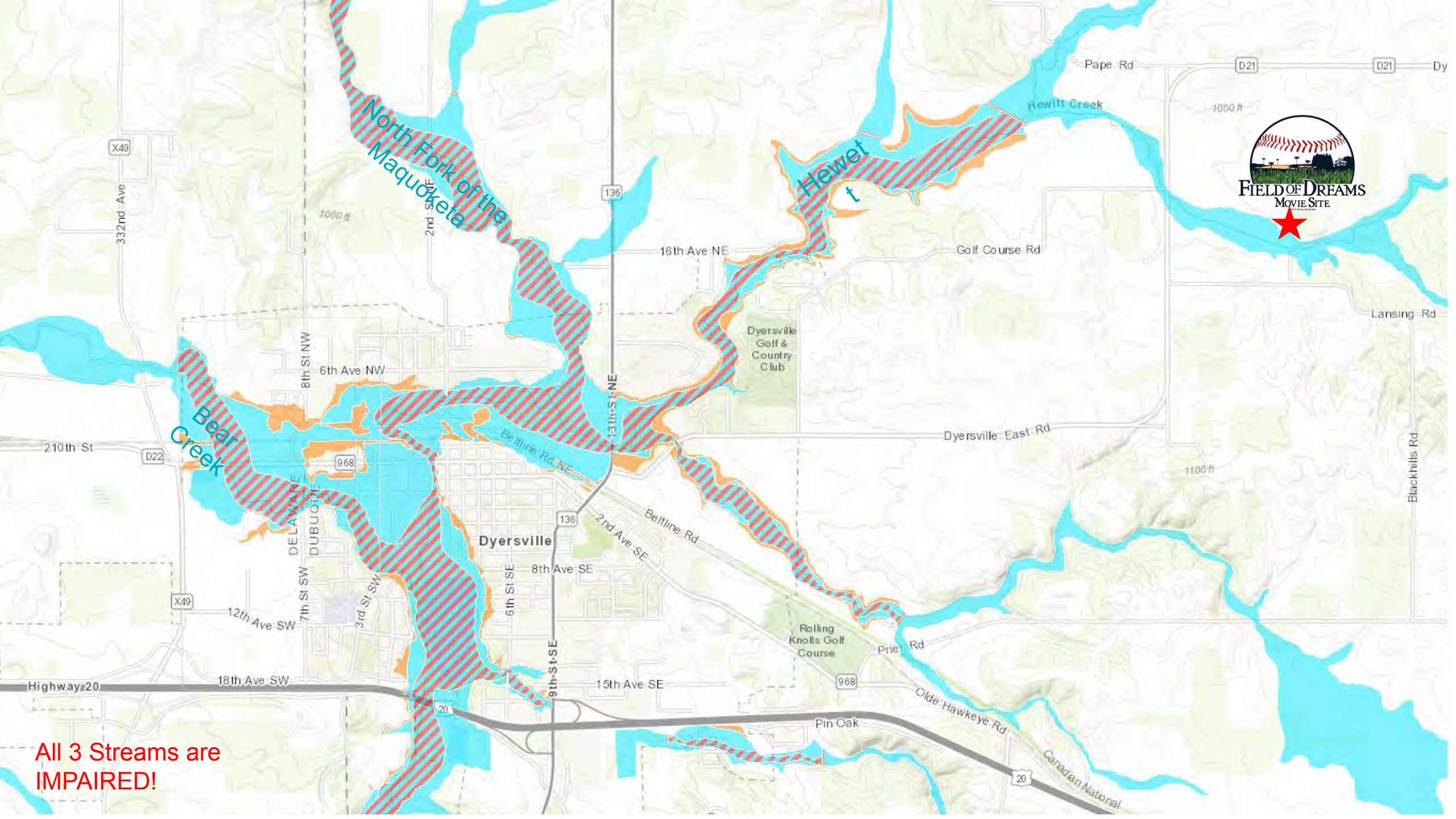


International Attention



Ted Cruz, Bernie Sanders, Frank Thomas, Naoki Ito (the consul-general of Japan), Lindsey Graham, Kevin Costner,

The “Field of Dreams” Watershed



All 3 Streams are
IMPAIRED!

What is the Community's relationship with its streams?



- Streams get the communities full attention during floods
- After events, efforts are made to address flooding and flood mitigation

**What is the relationship with the streams in a
“Normal” and “Low Flow”?**

The Streams are Ignored!

- Hidden
- Limited access
- Limited recreational opportunities
- Poor aesthetics
- No connection to the community!

Normal and Low flows are 99% of the time!





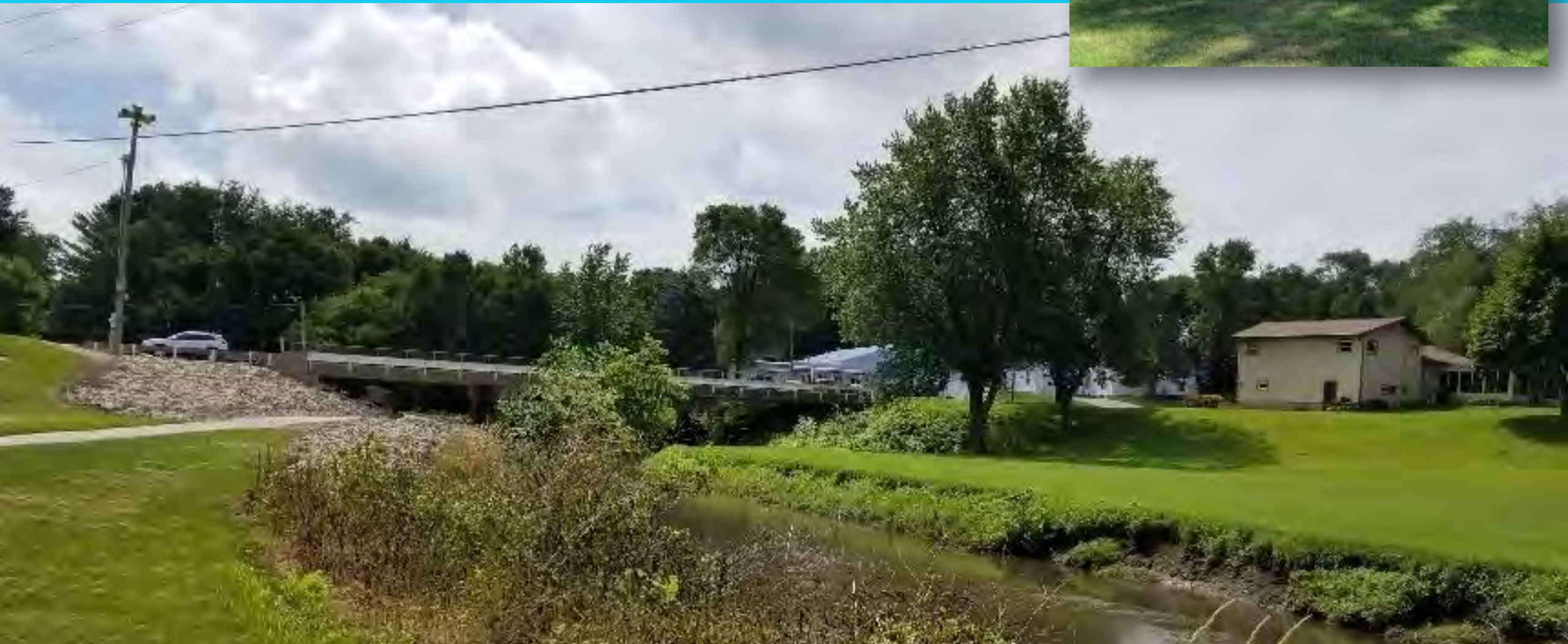
IF YOU BUILD IT,
THEY WILL COME.



What we needed was a Poster Child for WATER?

- Create Partnerships
- Share stories
- Make Connections
- Highlight Water as a Resource
- Build A Community

Bear Creek – Ignored!



Only for the adventurous



Bear Creek

3rd St SW







STREAM RESTORATION

, and community engagement in Dyersville.



0 25 100 feet
1" = 30'

INNER BERM

Inner berms are flat areas within the channel that define the low-flow channel and provide greater depth for improved aquatic habitat and recreation. These features are dynamic, changing shape and size in response to erosion and deposition.



Can you find these plants?

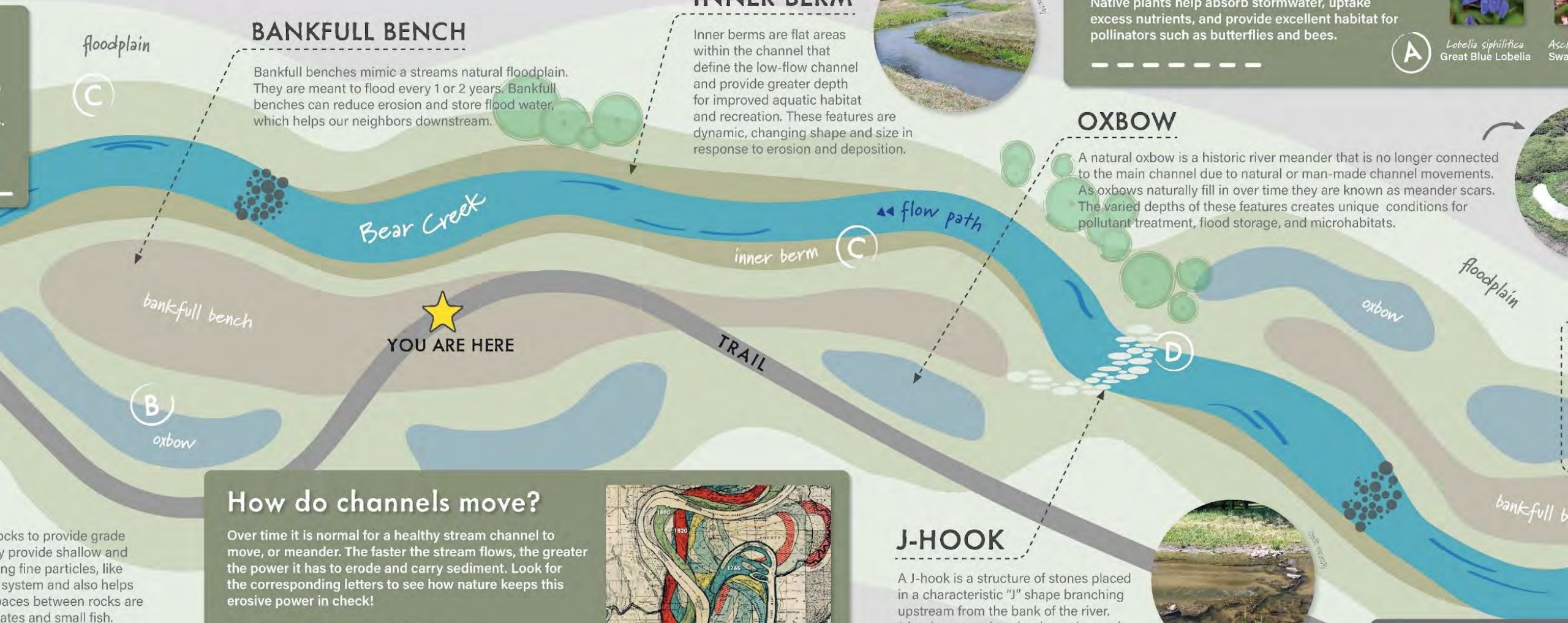
The vegetation along Bear Creek is predominately plants that are native to Iowa, which means they are adapted to Iowa's climate and soil characteristics. Native plants help absorb stormwater, uptake excess nutrients, and provide excellent habitat for pollinators such as butterflies and bees.



Lobelia siphilitica
Great Blue Lobelia



Asclepias
Swallowtail



How do channels move?

Over time it is normal for a healthy stream channel to move, or meander. The faster the stream flows, the greater the power it has to erode and carry sediment. Look for the corresponding letters to see how nature keeps this erosive power in check!

- (A) Native Plants
- (B) Meandering
- (C) Flooding
- (D) In-Stream Structures



Historic Migration of the Mississippi River.
Credit: NASA Earth Observatory

J-HOOK

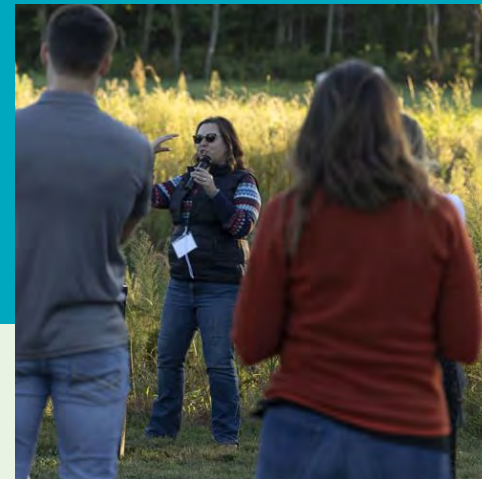
A J-hook is a structure of stones placed in a characteristic "J" shape branching upstream from the bank of the river. J-hooks can reduce bank erosion and the need for bank armoring and can even protect infrastructure like bridges by diverting water away from the banks of a river.



WESTSIDE
PARK

Scan with your phone
more about stream restoration

Iowa Water Conference



On the creek





We Listened to their Stories



Tom Olberding Owner Textile
Brewery

Photo Credit - Textile Brewery
Website



Jody and Russ Steger owners of
The Palace Saloon
Photo Credit Don Zieser



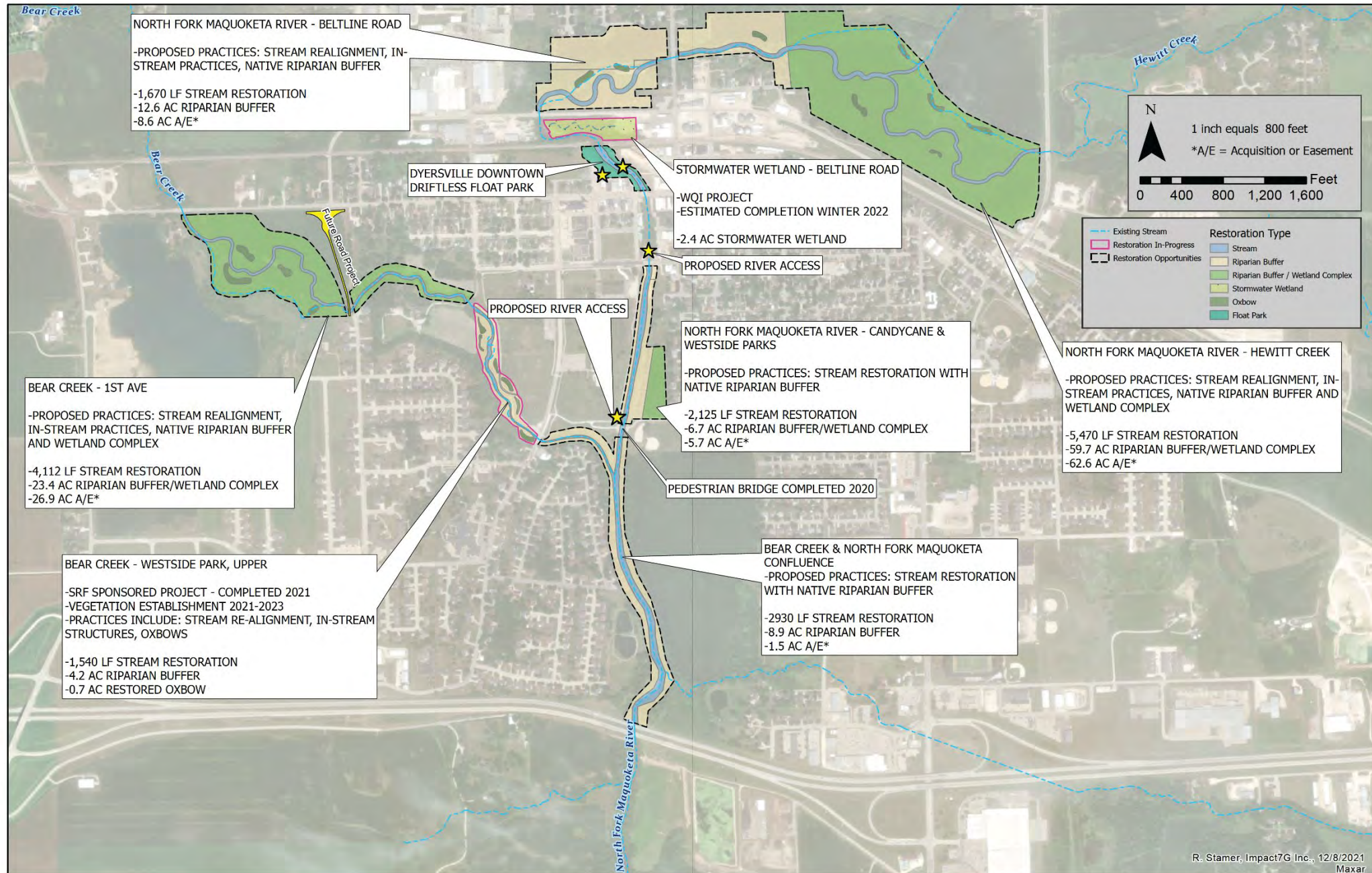
Tara Rahe, owner of FUSE
Photo Credit Dave Kettering

Connection to Place

Field of Dreams Watershed Vision Plan



THE FIELD OF DREAMS WATERSHED VISION PLAN



Field of Dreams Stormwater Wetland



- Construction completed in August 2022
- Treats 17 acres of urban watershed

Field of Dreams!



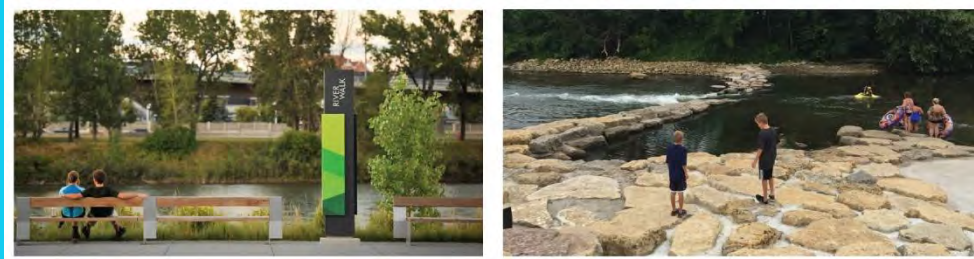
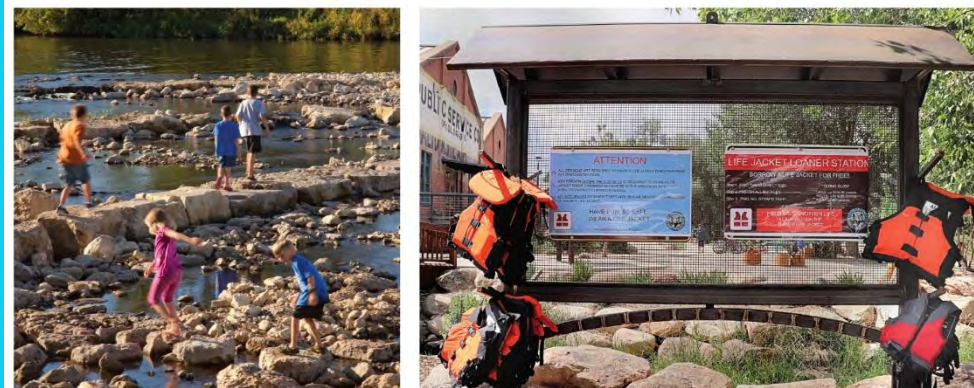
Hewitt Creek



Dyersville Downtown Driftless Float Park

One-of-a-kind, family-friendly outdoor recreation experience. The proposal is to create a lazy river float park, through stream restoration measures

If you CLEAN it, they will Come!



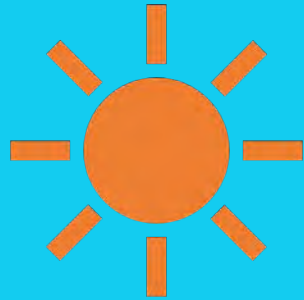


Field of Dreams Water Trail

Connection to Place

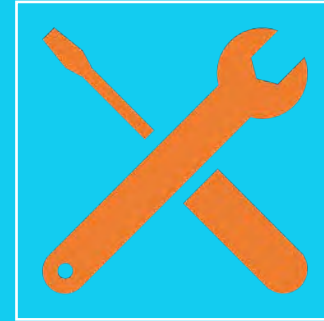
The World has Changed

How do we adjust to change?



Adaptable

Weather
Markets
Diseases



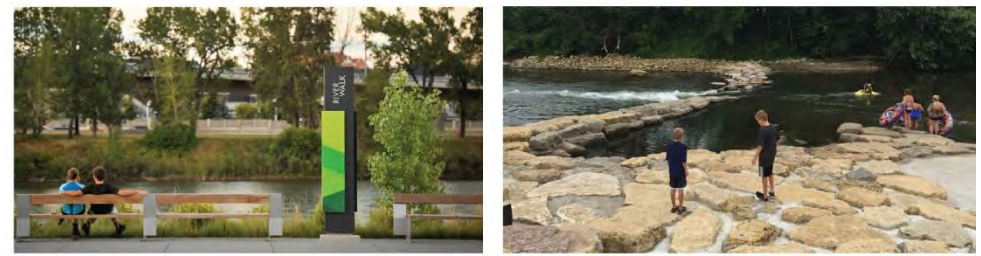
Build Resiliency

Floods
Drought
Wind & Storms

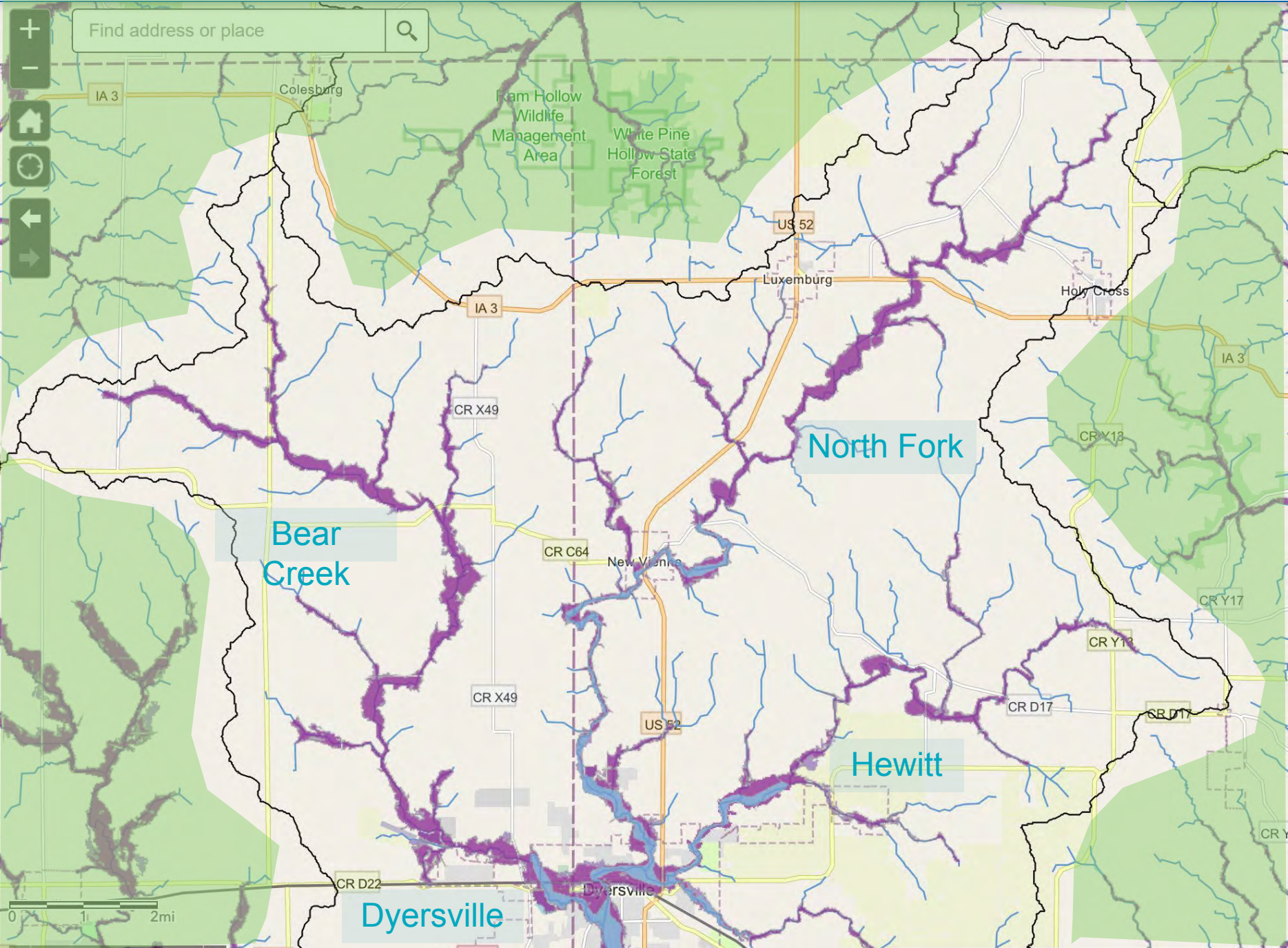


What is the **RISK**?

Can we **CLEAN** it???







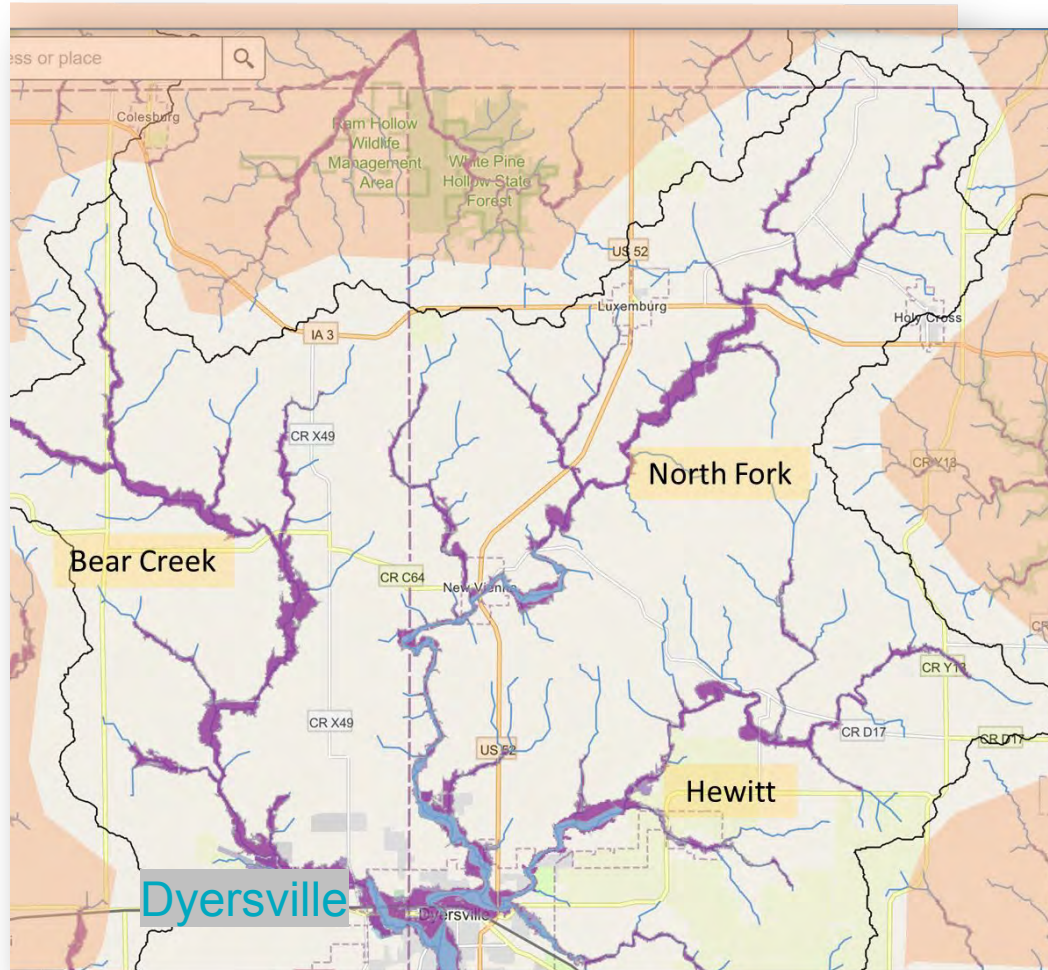
Floodplain Acres

- Hewitt Creek: 1220 acres
- North Fork: 2090 acres
- Bear Creek: 1050 acres

Total Acres: 4360 acres



Convert Floodplains from **row crop** to **regenerative agricultural**?



Floodplain and Row Crop.....



Restore our floodplains....



Do Regenerative Farming





Improve Iowa's Water



Connections



Diversify Landowner Income



Opportunities for small farmers

Agroecological Production Model

- **Core Idea:** Use floodplains for regenerative farming systems that thrive in wet or variable conditions.
- **Revenue Streams:**
 - Flood-tolerant crops (e.g., rice, hemp, elderberries, willows, perennial grains).
 - Rotational grazing with cattle, bison, or waterfowl.
- **Business Model:** Sell into premium local/regional markets emphasizing climate resilience and ecosystem benefits.

Brand it!



This Product was
grown in Field of
Dreams Watershed.

- Specialty or niche markets: heritage grains, organic certification, "wetland-raised" branding.

Is there a business
model for developing
floodplains to
regenerative farming?

Is there a mechanism
for a Regenerative
Farming Easement
with tax benefits?

Could a tool be
developed to connects
landowners to
regenerative farmers?

Do we create funding to:

- Restore streams
- Provide buffers
- Regenerative Farming practices
- Provide water quality and flood control benefits.

Connection to Place

Moment of Zen



We can Build a Connection to
Place



If you build it...



Thank you

A thick, horizontal yellow bar with rounded ends, spanning across the lower portion of the slide.