

# **PUBLIC SCOPING MEETING LONG PINE CREEK WATERSHED PLAN-EA**

18 February 2020

# Agenda

- **Introductions / Sign-in**
- **Short Presentation**
  - Background/Purpose
  - Schedule
  - Community-Based Planning
  - Scoping Considerations
- **Group Scoping Discussion**



# Introductions



Mike Murphy, General Manager  
Chandler Schmidt, Watershed Coordinator



Janel Kaufman, Project Manager, Environmental  
Charles Ikenberry, Water Quality  
Bob Gregalunas, Hydrology/Hydraulics



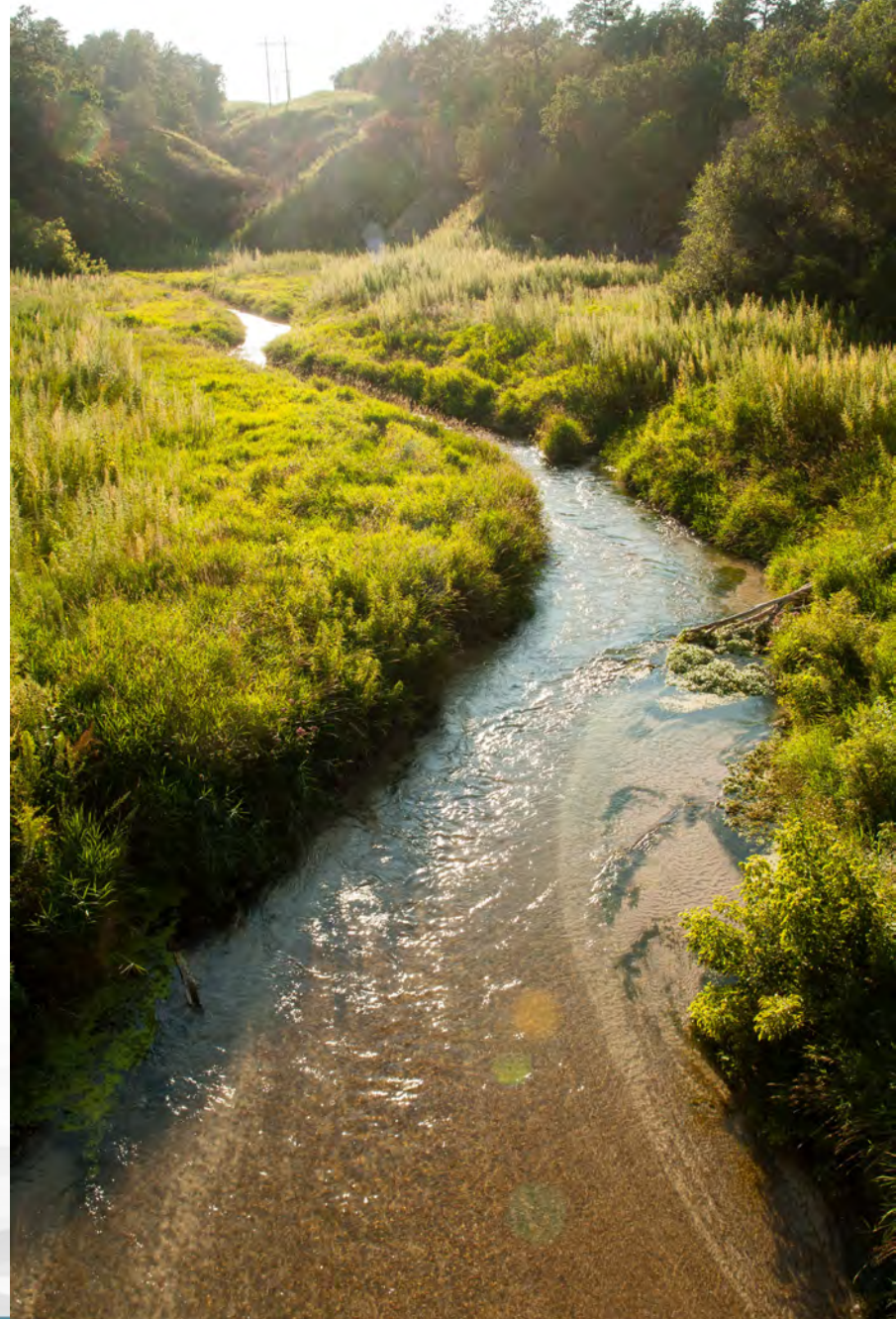
Allen Gehring, State Conservation Engineer  
Arlis Plummer, Hydraulics Engineer





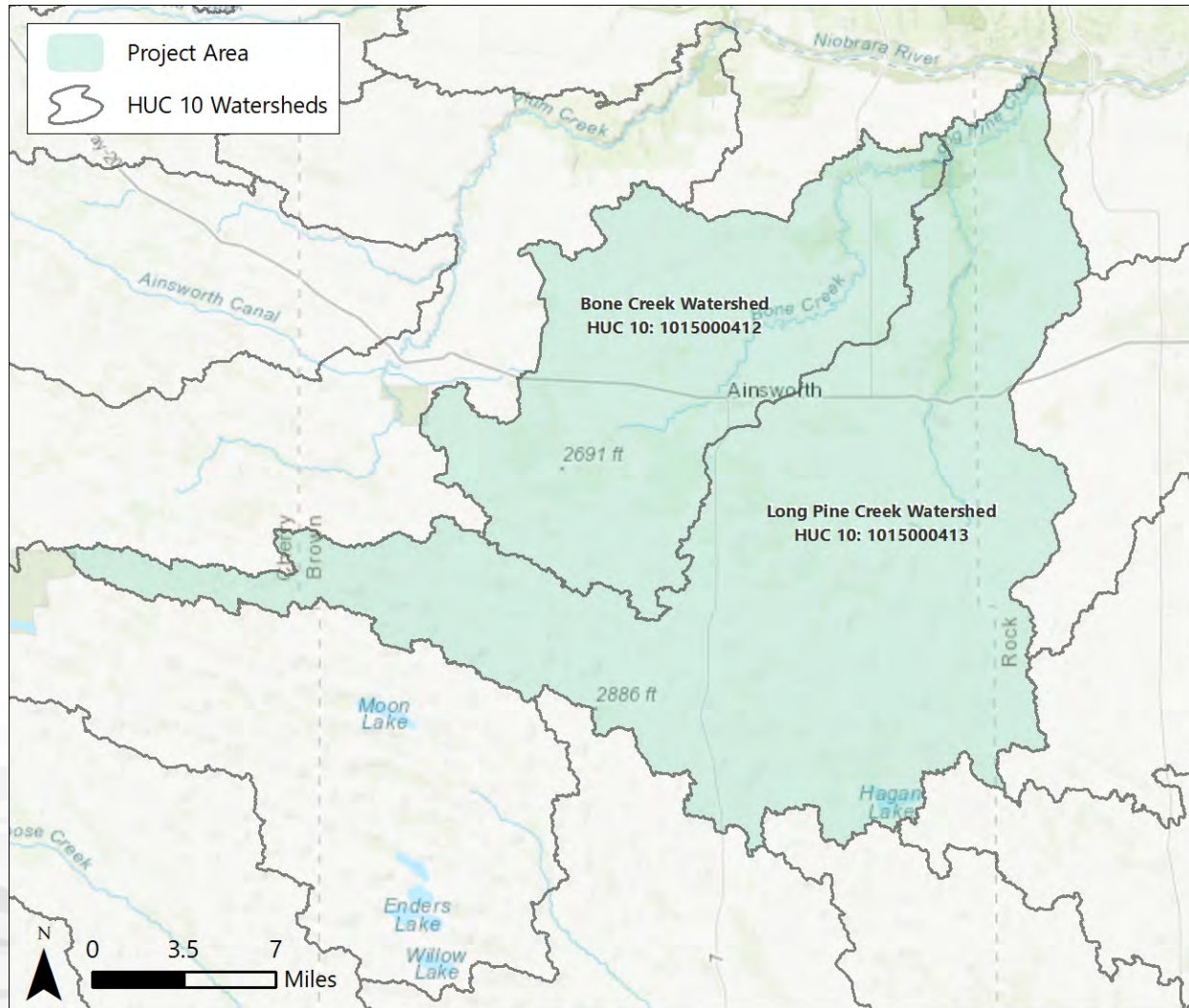
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# Project Background/Purpose

## PROJECT BOUNDARY



# Project Background/Purpose

## NRCS PROGRAM/FUNDING

- **Watershed and Flood Prevention Operations (WFPO)**

- Provides cooperation between federal government and states to work together to prevent erosion, flooding, etc.
- Provides up to 100% funding for planning, engineering, and construction
- Funds allocated from Congress

- **Guidelines / Policies / Procedures**

- Environmental Impact Statement vs. Environmental Assessment
- Modified benefit analysis
- Local funding





# Project Background/Purpose

## ELIGIBLE PROJECTS

### What types of watershed concerns will this be addressing?

There are many opportunities to improve the watershed and structural and nonstructural alternatives will be considered. The following are just some of the watershed concerns that the Plan may focus on.



#### **Fish & Wildlife Habitat Enhancements.**

Improvements can be directed towards providing robust habitats that supports diverse and healthy aquatic life and wildlife.

**Agricultural Water Management.** Improvements to irrigation infrastructure can benefit water quality and decrease stream degradation.



#### **Water Quality Improvements.**

Bone and Long Pine Creek are both listed on the State's 303(d) list of impaired waters due to high *E. coli* bacteria.

**Erosion and Sedimentation.** Stream and upland degradation is an issue that results in increased erosion and sedimentation downstream.

**Stream Restoration.** Restoring streams can help improve bank stability, provide grade stabilization, and improve aquatic habitat.

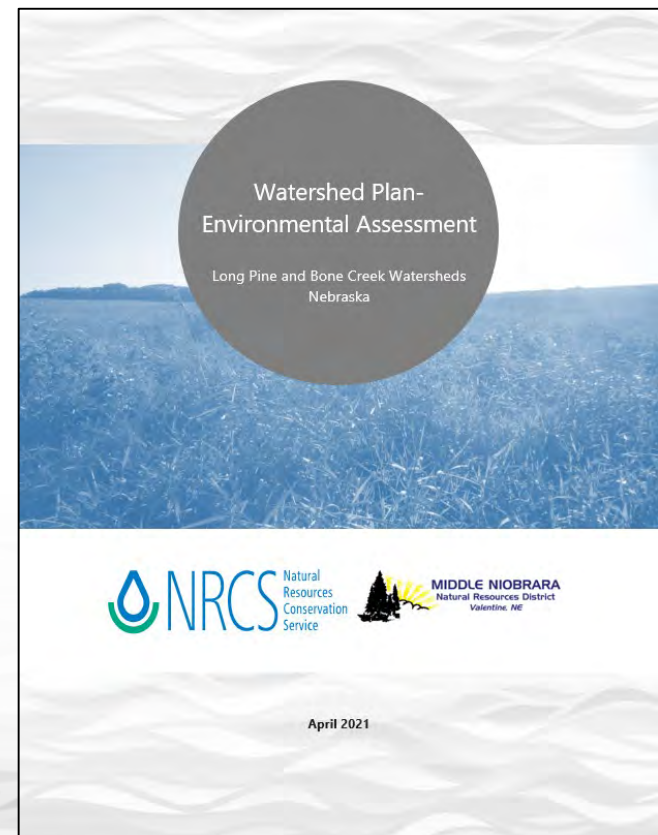


# Project Planning

## MEETING NRCS REQUIREMENTS

- **What will the Watershed Plan-EA Include?**

- Purpose and Need
- Project/Site Identification
- Develop Environmental Assessment to meet NEPA requirements
  - Cultural Resources
  - Wild & Scenic Rivers
  - Wetlands & Streams
  - Threatened & Endangered Species
  - Recreation
  - Water Quality
- Preliminary Design
- Economic Analysis



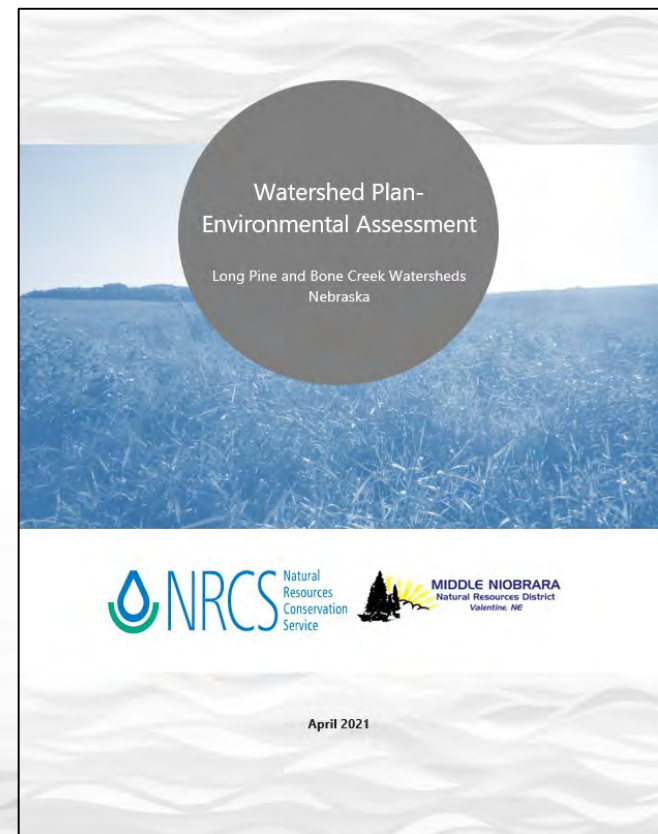


# Project Planning

## MEETING NRCS REQUIREMENTS

- **Affected Environment – Information from you**

- Cultural Resources - Please provide any information on potential presence of cultural resources
- Other Resources – Any Concerns
  - Wild & Scenic Rivers
  - Wetlands & Streams
  - Threatened & Endangered Species
  - Water Quality
  - Recreation
  - Others



# Project Planning

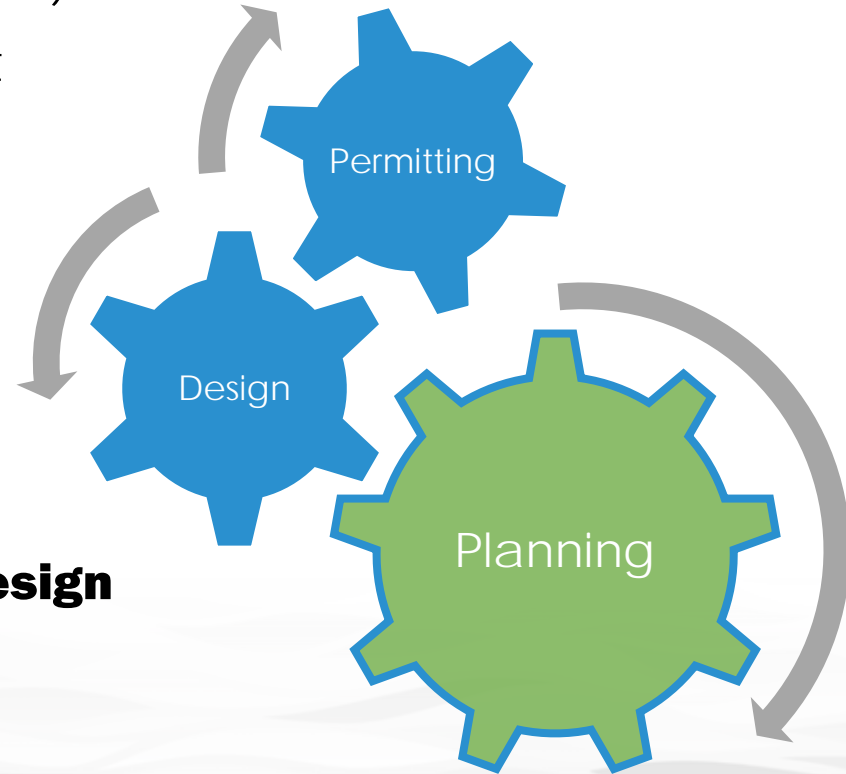
## INDIVIDUAL SITE EVALUATION

- **Maximizing project purpose**

- Grade stabilization (erosion control)
- Agricultural Water Management
- Infrastructure protection
- Water quality improvement
- Habitat enhancement
- Stream Restoration

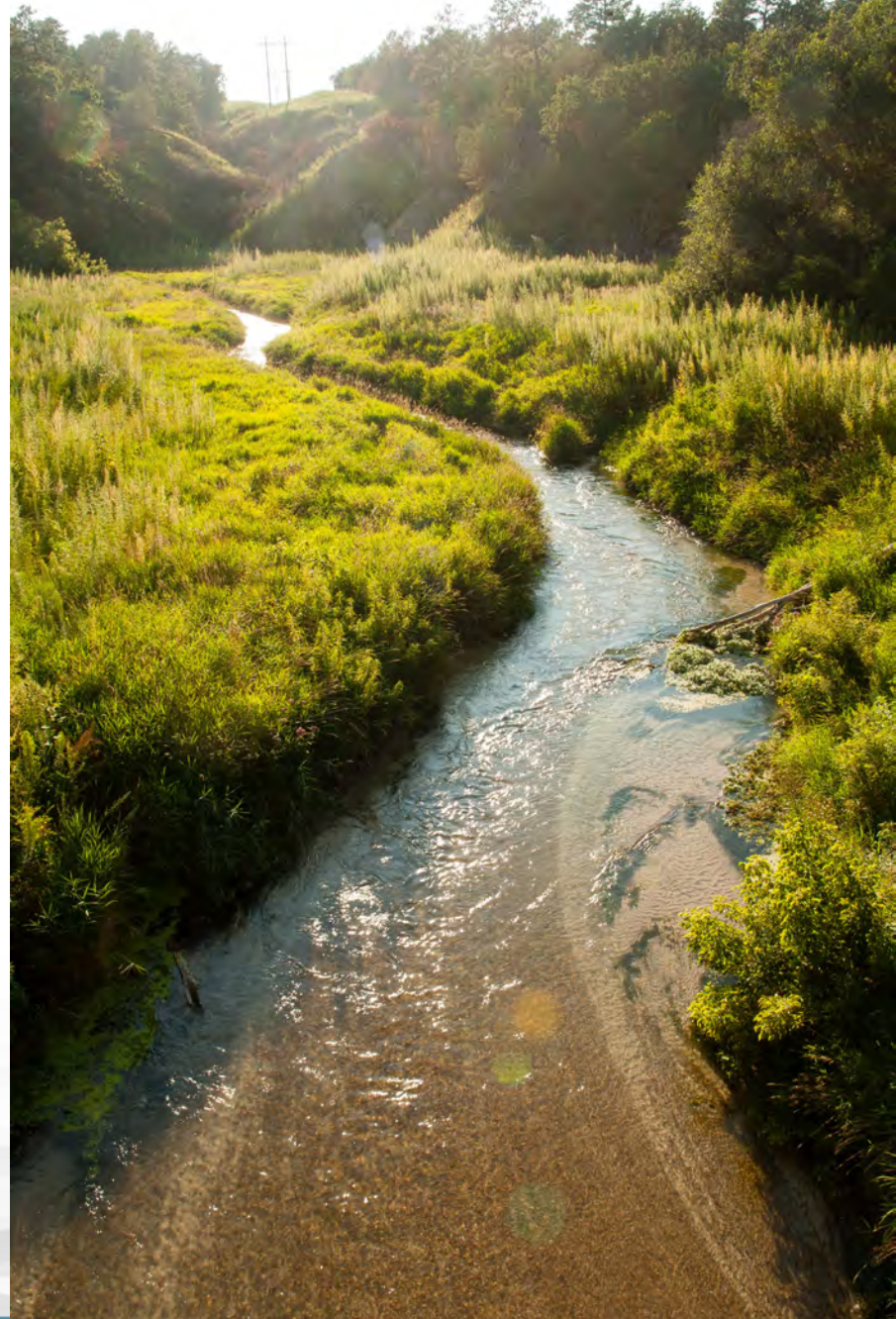
- **Transition from planning to final design**

- Intentional preliminary design decisions
- Planning for final design



# Agenda

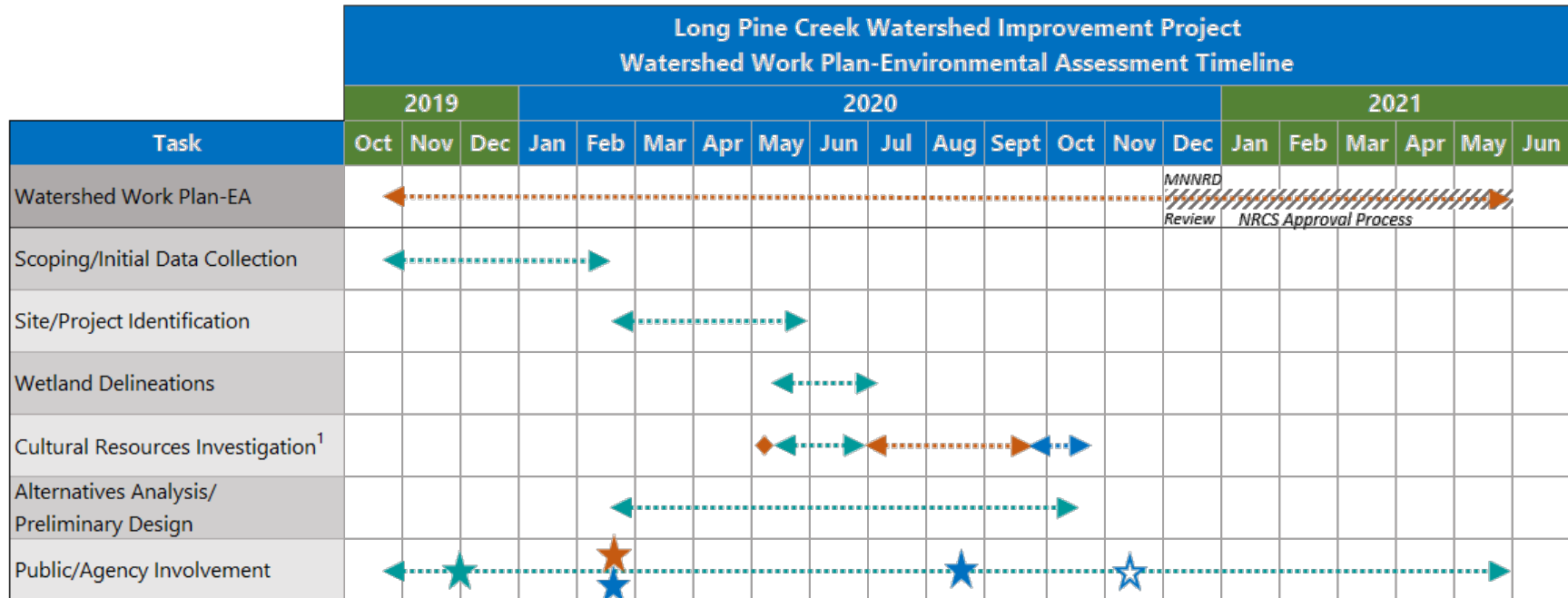
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# Project Schedule

## MEETING NRCS REQUIREMENTS/SCHEDULE



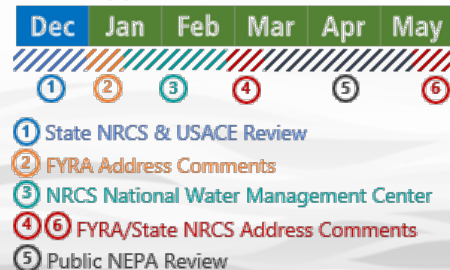
<sup>1</sup> Field work, Report of Findings, Further Review, and NRCS Local Review, SHPO/THPO Consultation

◆ Develop APE in Coordination with NRCS

### Potential Issues That Can Impact Schedule

- Significant Cultural Resources found at Site
- T&E Species: Field Survey Required
- T&E Species: Likely to Adversely Affect
- Selected Design/Site not Least Environmentally Damaging Practicable Alternative (LEDPA)

### NRCS Approval Process

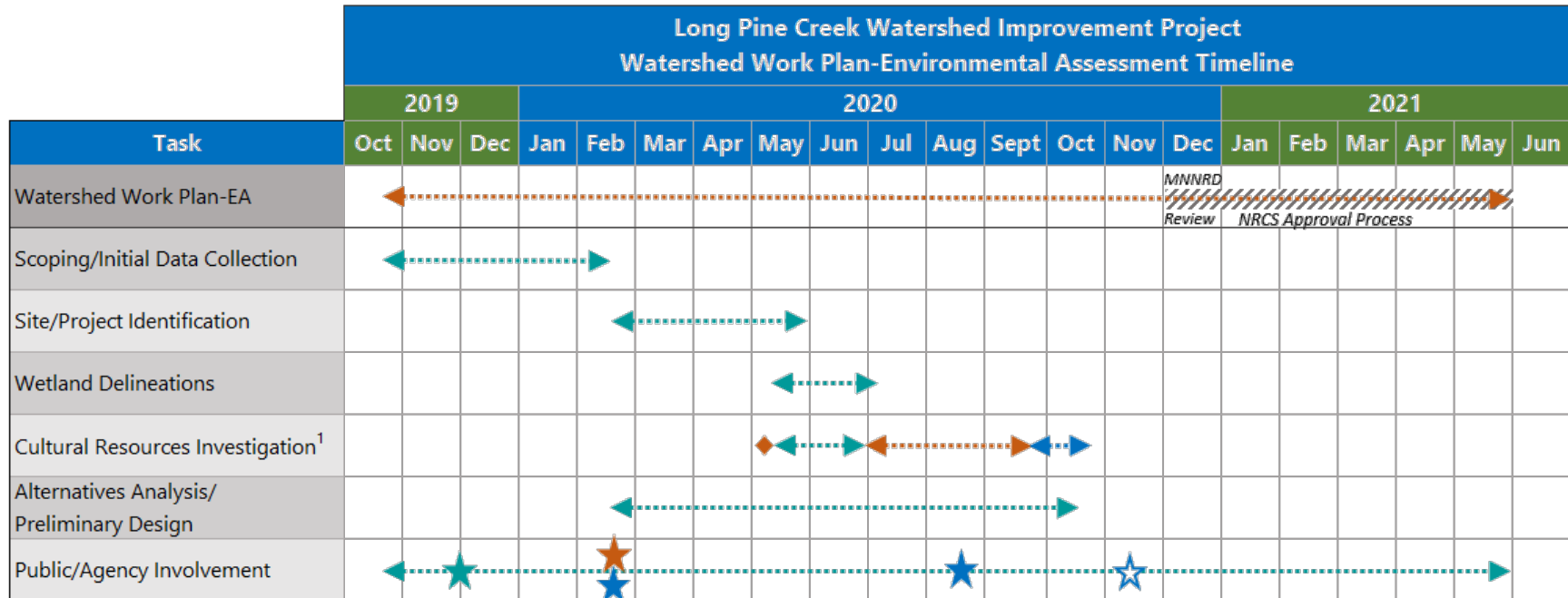


### Public/Agency Involvement

- ★ Project Kickoff Meeting
- ★ Public and Agency Scoping Meetings
- ★ W/TAC Meetings
- ★ Public, W/TAC, and Agency Meetings

# Project Schedule

## MEETING NRCS REQUIREMENTS/SCHEDULE



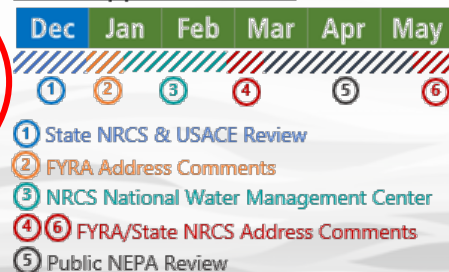
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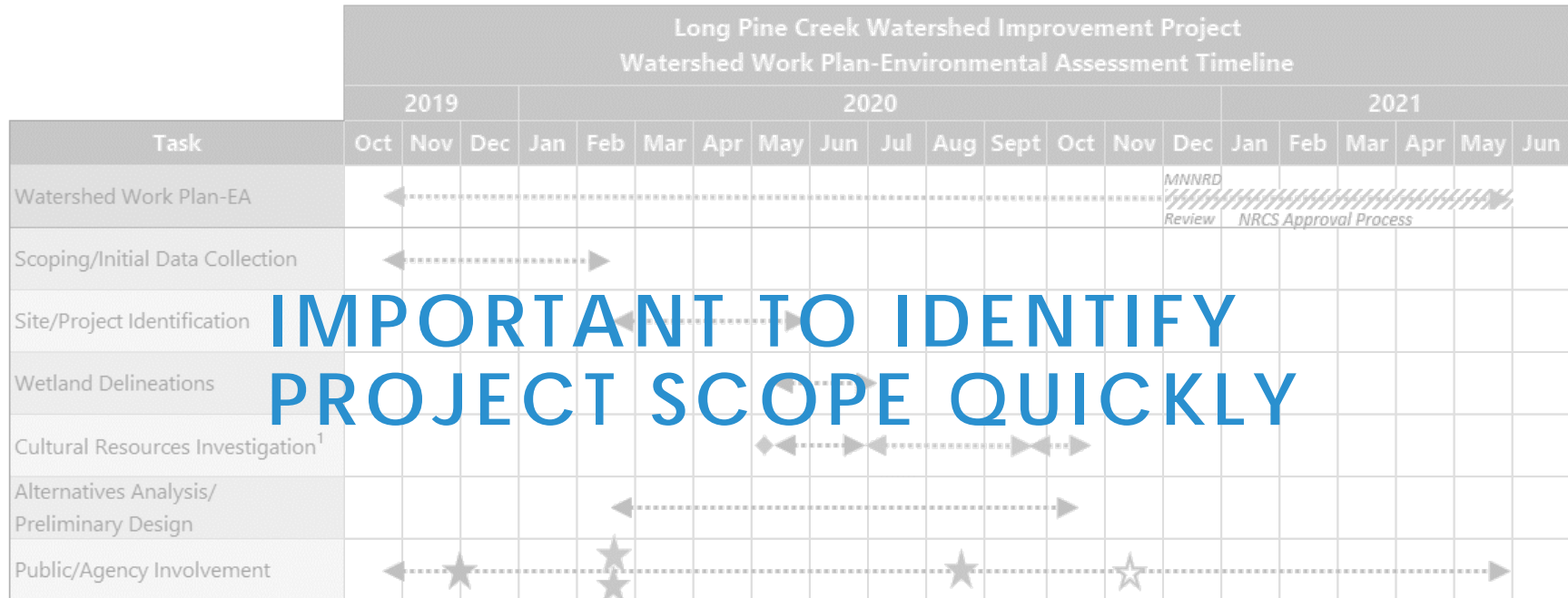


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# Project Schedule

## MEETING NRCS REQUIREMENTS/SCHEDULE



IMPORTANT TO IDENTIFY  
PROJECT SCOPE QUICKLY

<sup>1</sup> Field work, Report of Findings, Further Review, and NRCS Local Review, SHPO/THPO Consultation

◆ Develop APE in Coordination with NRCS

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### NRCS Approval Process



- ① State NRCS & USACE Review
- ② FYRA Address Comments
- ③ NRCS National Water Management Center
- ④ ⑥ FYRA/State NRCS Address Comments
- ⑤ Public NEPA Review

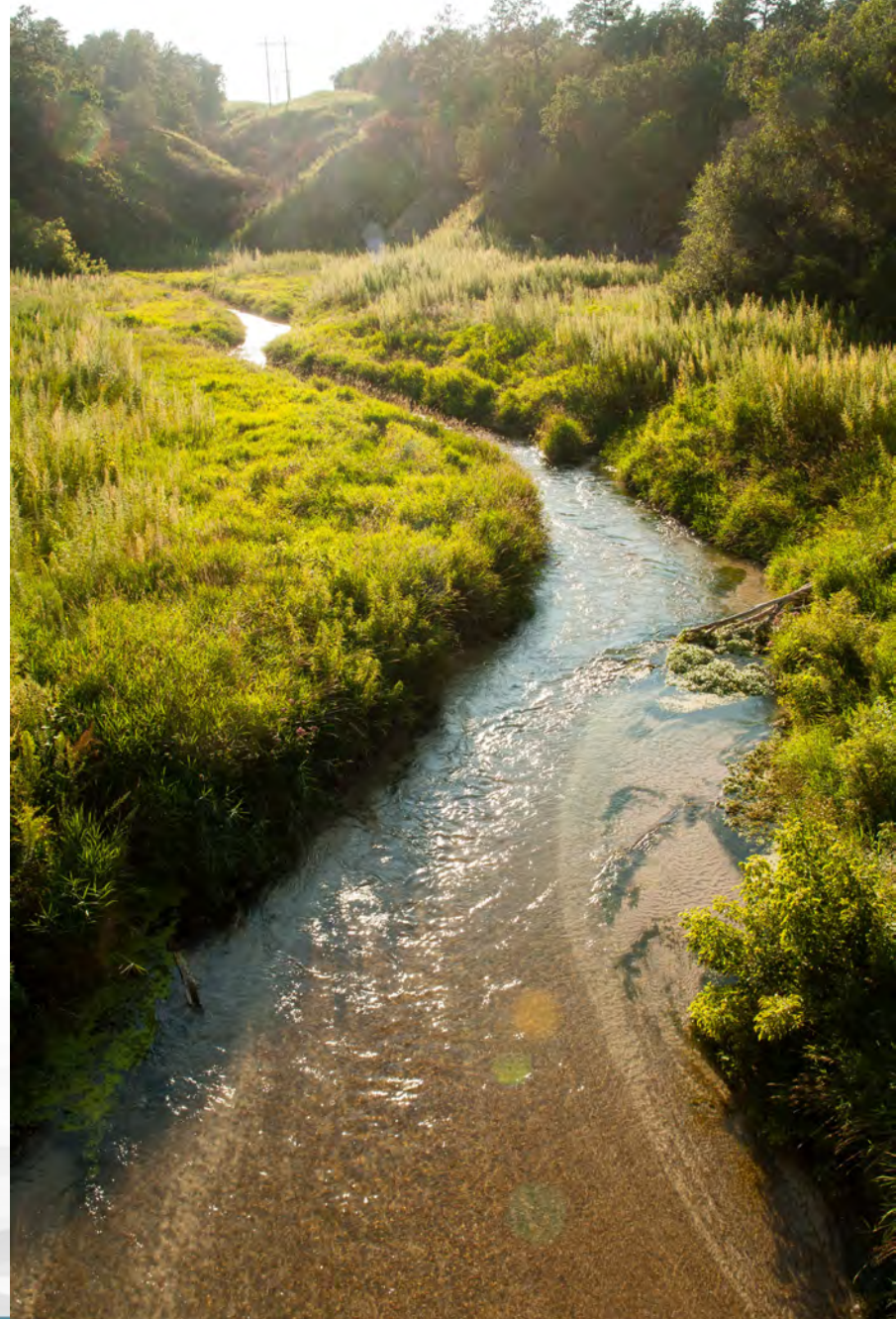
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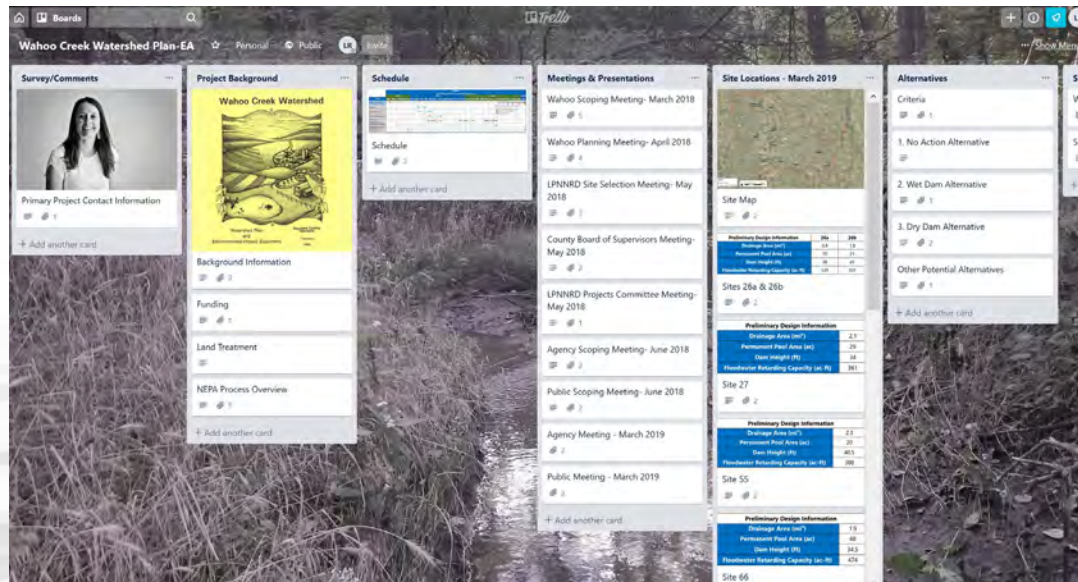


# Community-Based Planning

## GAINING WATERSHED COMMUNITY ACCEPTANCE

- **Your help is needed to develop the project scope**

- Identify key issues
- Identify projects of interest
- Prioritize





# Community-Based Planning

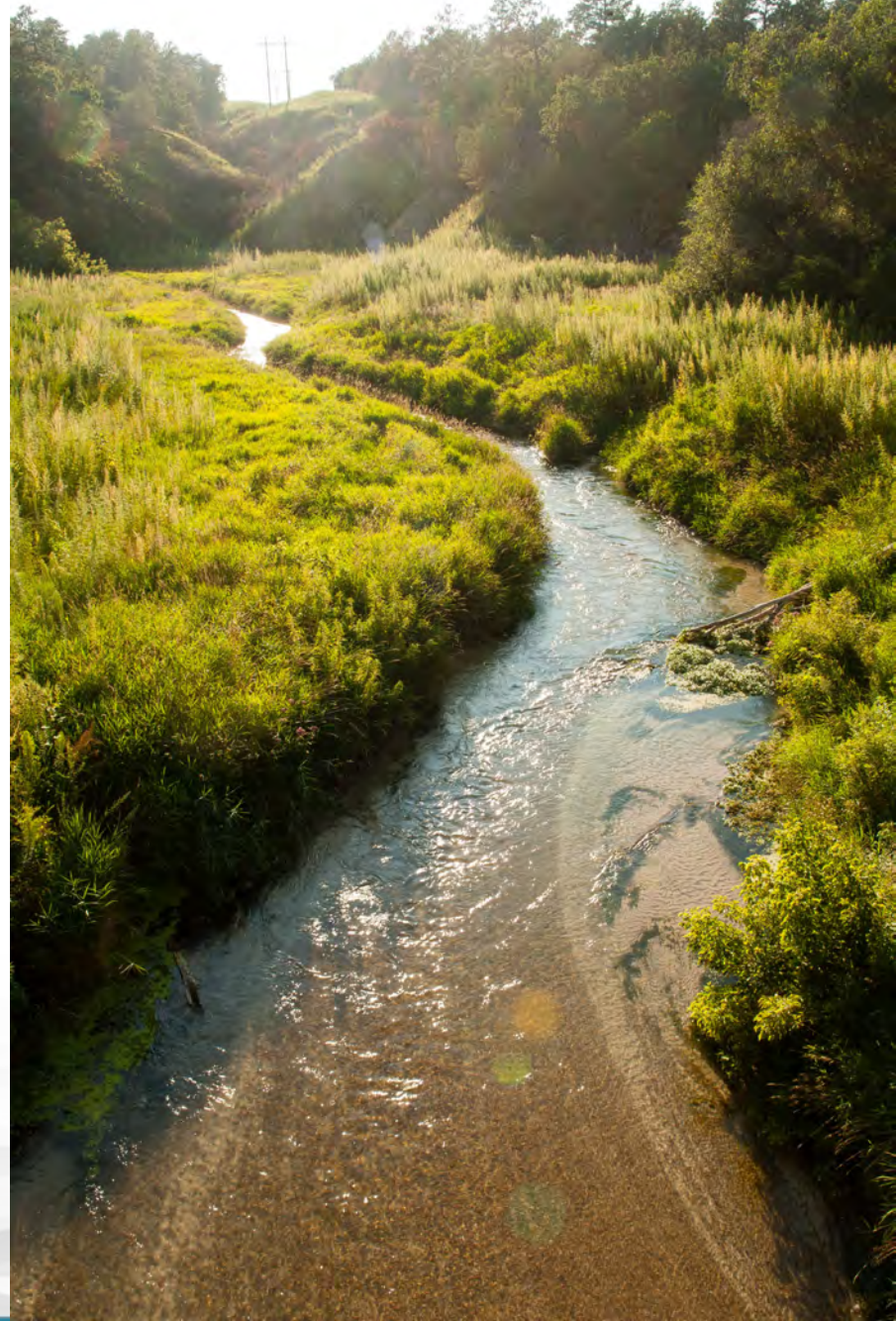
## GAINING WATERSHED COMMUNITY ACCEPTANCE





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# Thinking about Scale of Alternatives

## SPREAD-OUT VS. FOCUSED

- **Resolution (scale) of solutions**
  - Parcel level vs. local vs. regional alternatives



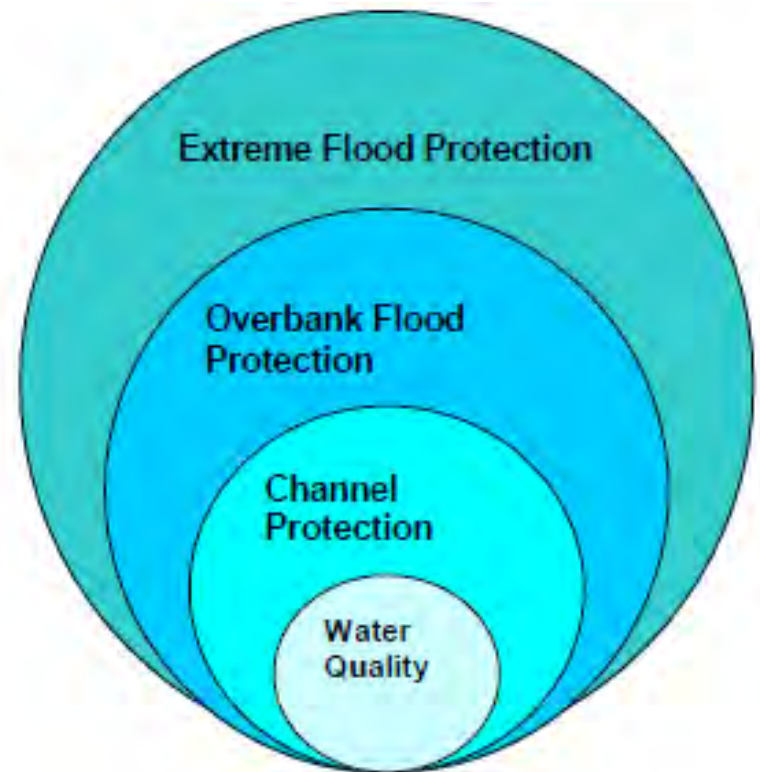
**SHOTGUN VS. RIFLE**



# Targeting Flow to the Issue(s)

SMALL/FREQUENT VS. EXTREME/INFREQUENT

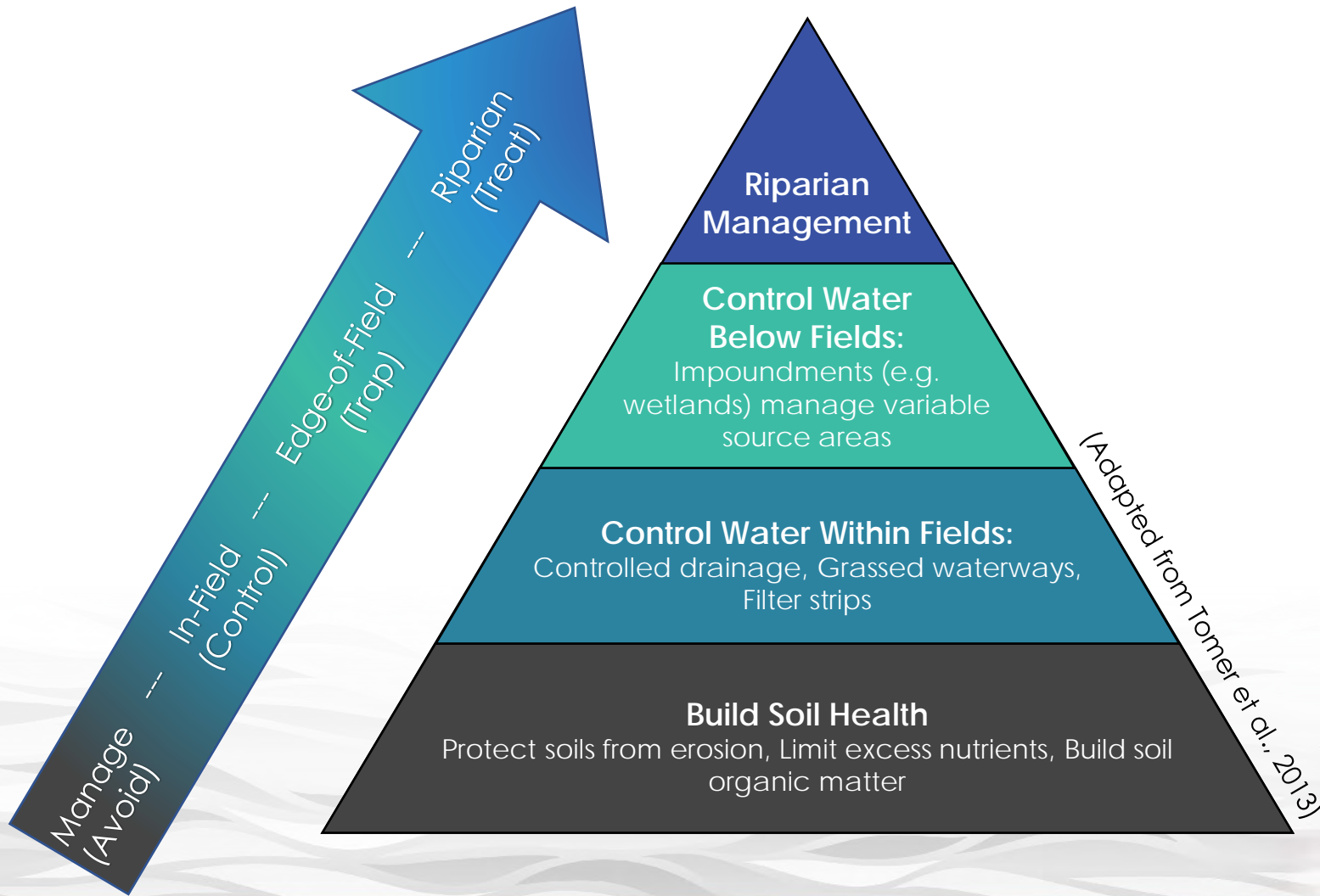
- **Managing Hydrology for:**
  - Water Quality Volume
  - Channel Protection Volume
  - Overbank Protection Volume
  - Flood Control Volume





# Water Quality Alternatives

## AG CONSERVATION PRACTICES



# Water Quality

## GOAL SETTING & EXPECTATIONS

- **Considerations for goals and priorities**

- Funding
- Expectations, Desired Uses
- Spatial and Temporal Scales

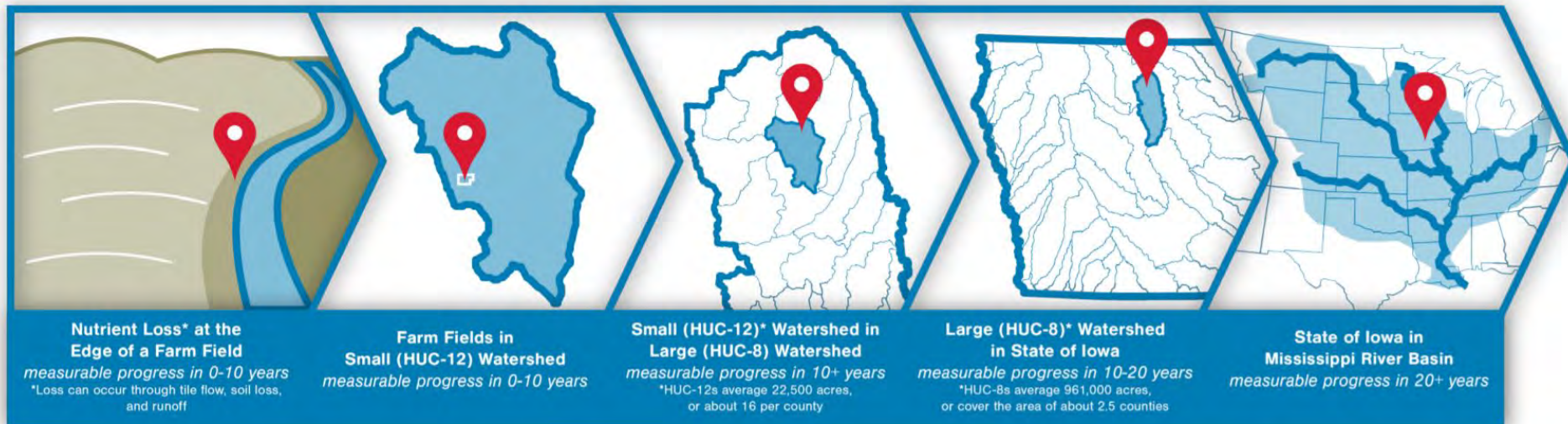
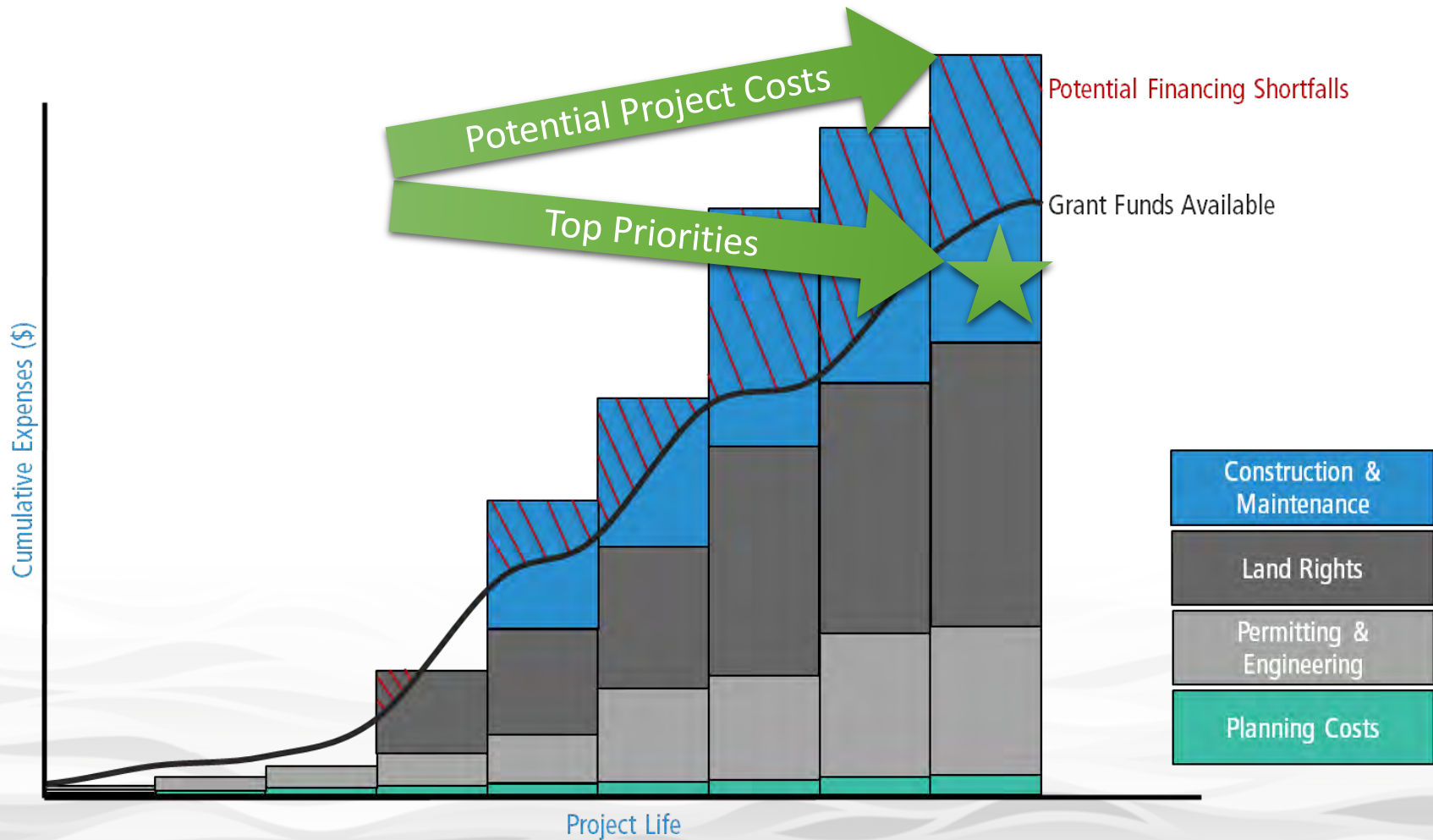


Image from Iowa Water Quality Initiative, 2017 Legislative Report

# Costs & Funding

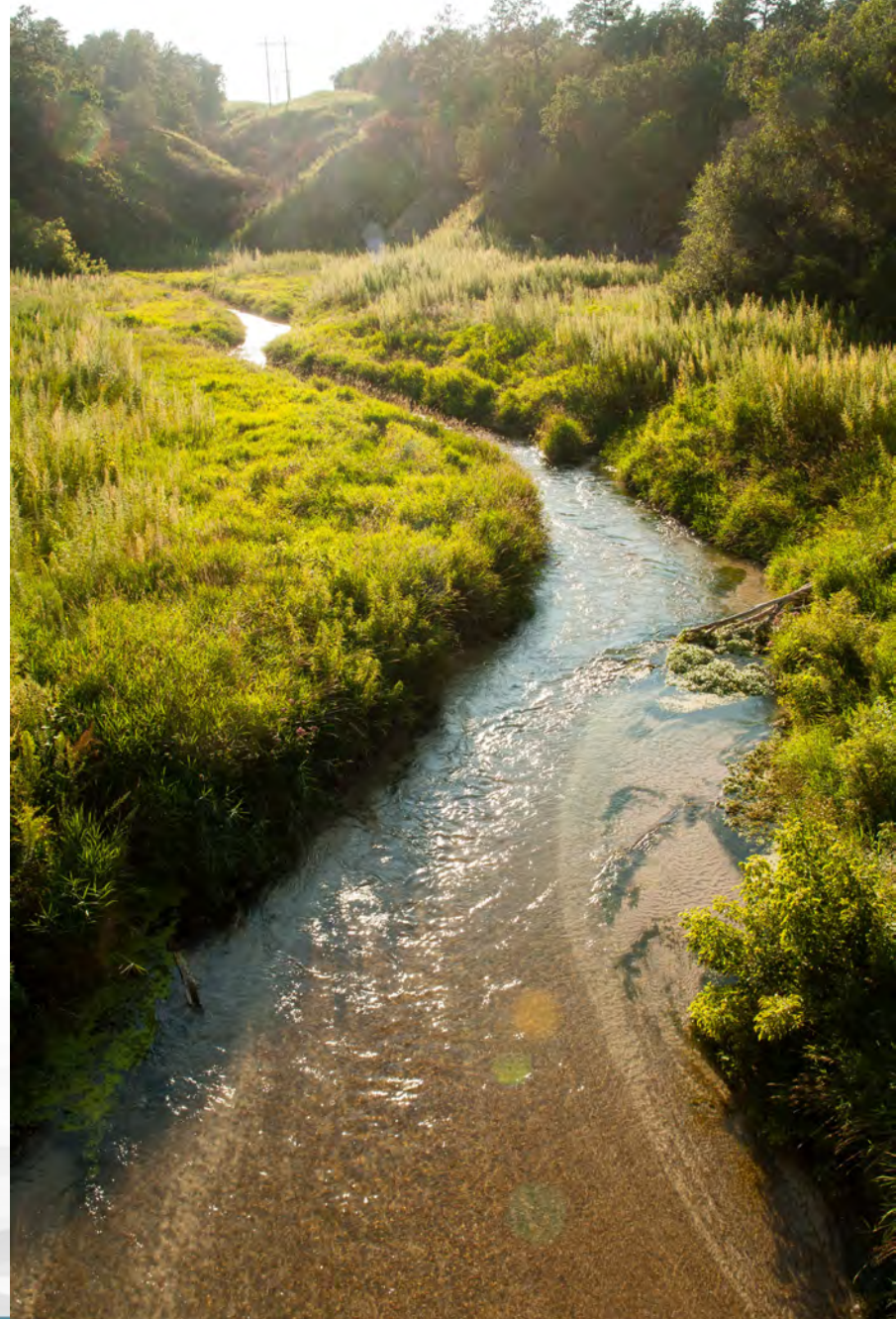
## ALIGNING PRIORITIES & DOLLARS





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# Purpose of Public Scoping Discussion

1. Listen and Obtain Comments and Input from YOU
2. Build Awareness & Understanding
3. Present Alternatives Evaluation Process
4. Discuss Potential Issues/Concerns
5. Encourage Future Participation



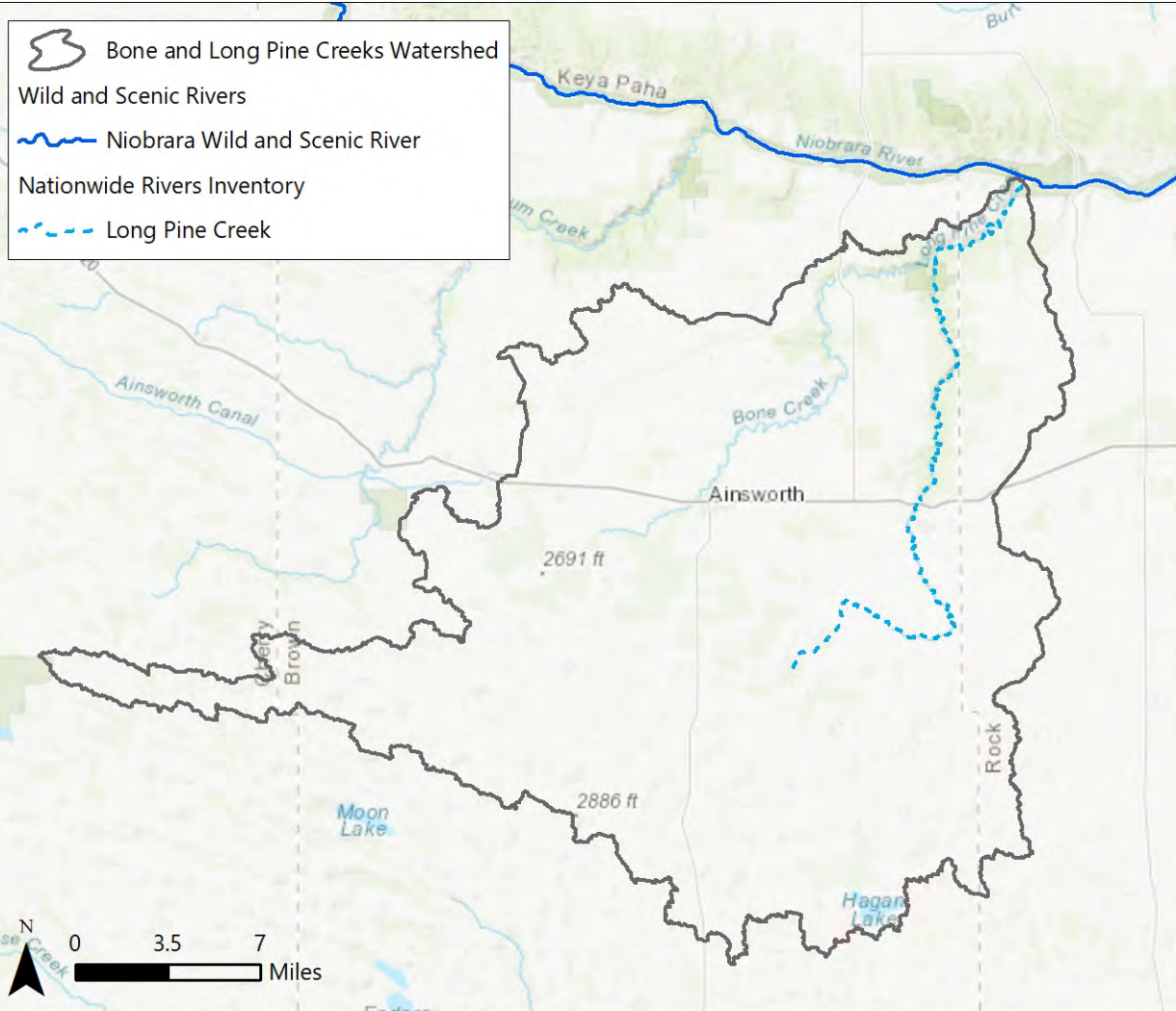
# Scoping Discussion & Questions



# **Additional Information on Affected Environment**

# Affected Environment

## WILD & SCENIC RIVERS



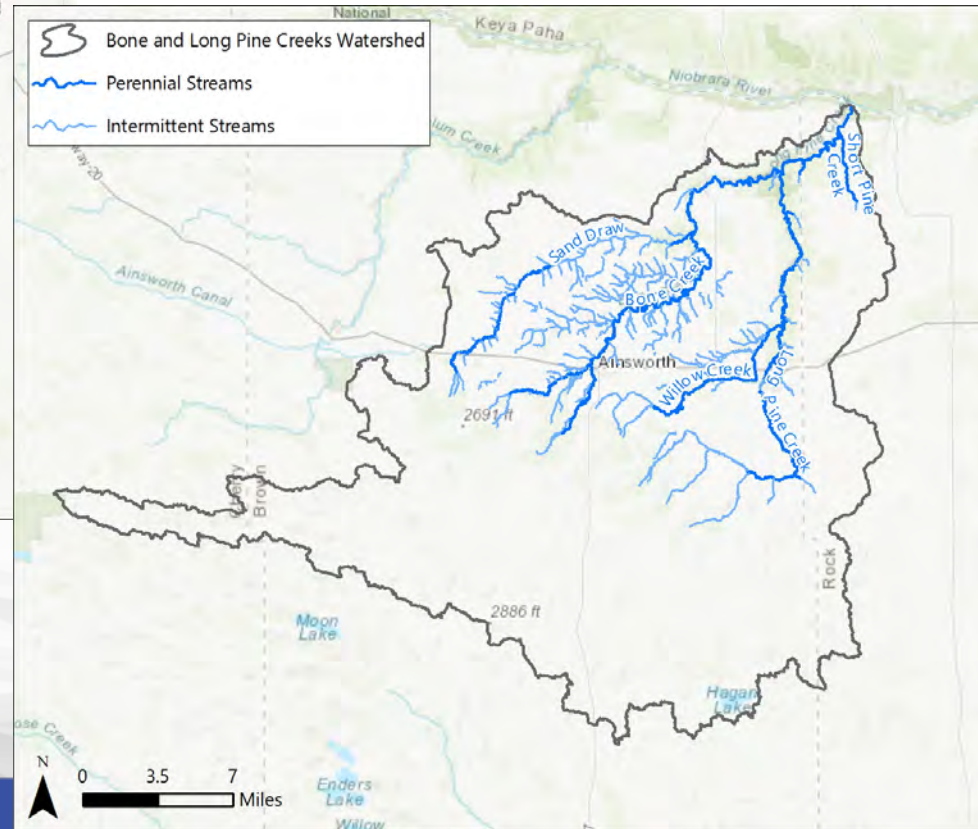
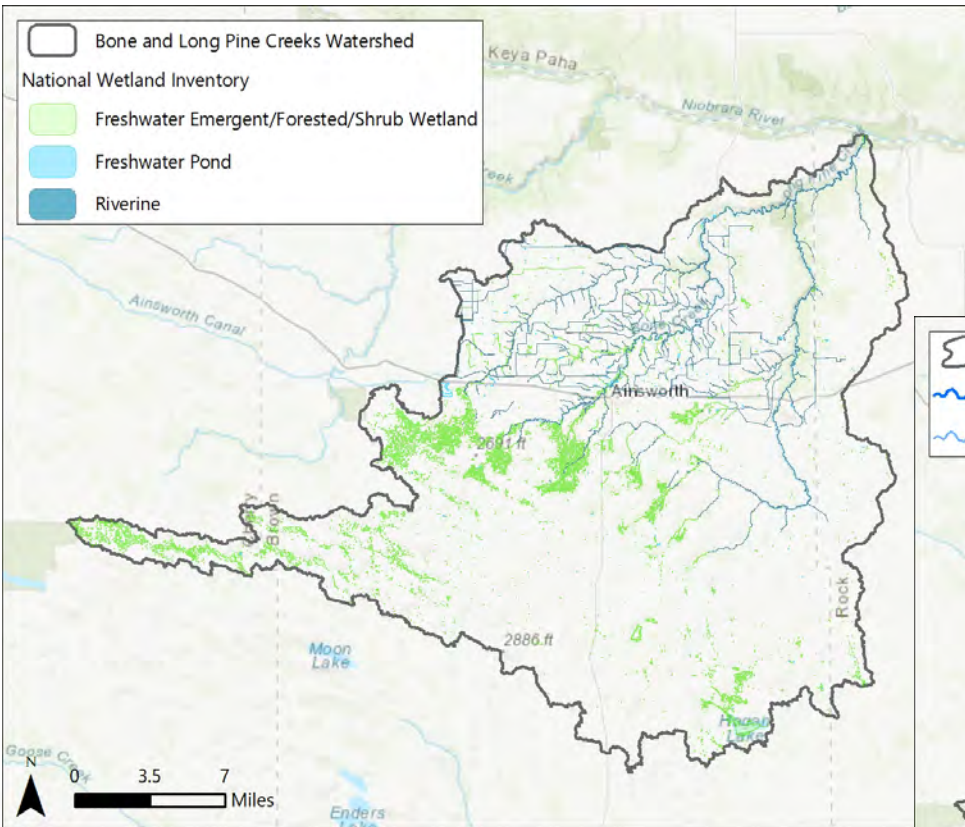
- 5(d)(1) Wild & Scenic River Act provides guidance
- Must take care to avoid or mitigate adverse effects to identified rivers
- NRI Includes 42 miles of Long Pine Creek.
  - Outstanding remarkable value: Fish (important trout fishery, highest priority fishery resource)



# Affected Environment

## WETLANDS & STREAMS

- Wetland & stream delineation will occur once APE is determined
- Identified projects will need to be permittable under Section 404



# Affected Environment

## THREATENED & ENDANGERED SPECIES

- Ranges within Bone and Long Pine Creek Watershed

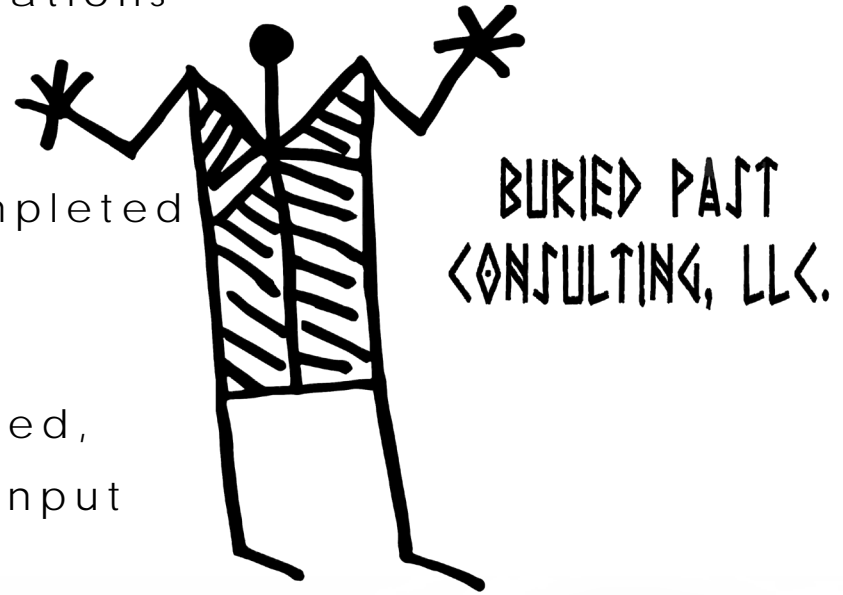
Common Name	Scientific Name	Status*
<b>Insects</b>		
American Burying Beetle	<i>Nicrophorus americanus</i>	FE, SE
<b>Fish</b>		
Finescale Dace	<i>Chrosomus neogaeus</i>	ST
Northern Redbelly Dace	<i>Chrosomus eos</i>	ST
<b>Birds</b>		
Interior Least Tern	<i>Sternula antillarum athalassos</i>	FE, SE
Piping Plover	<i>Charadrius melodus</i>	FT, ST
Whooping Crane	<i>Grus americana</i>	FE, SE
<b>Mammals</b>		
Northern Long-eared Bat	<i>Myotis septentrionalis</i>	FT, ST
<b>Plants</b>		
Blowout Penstemon	<i>Penstemon haydenii</i>	FE, SE
Small White Lady's Slipper	<i>Cypripedium candidum</i>	ST
Western Prairie Fringed Orchid	<i>Platanthera praeclara</i>	FT, ST
*FE = Federally Endangered, FT = Federally Threatened, SE = State Endangered, ST = State Threatened		

*Will need to ensure compliance with ESA Section 7*

# Affected Environment

## CULTURAL RESOURCES

- NRCS must take necessary actions to comply with Federal laws/regulations including the National Historic Preservation Act
- Field investigations will be completed by Buried Past Consulting and reviewed by NRCS
- If avoidance cannot be achieved, additional public and agency input will be sought
- Please provide any information on potential presence of cultural resources

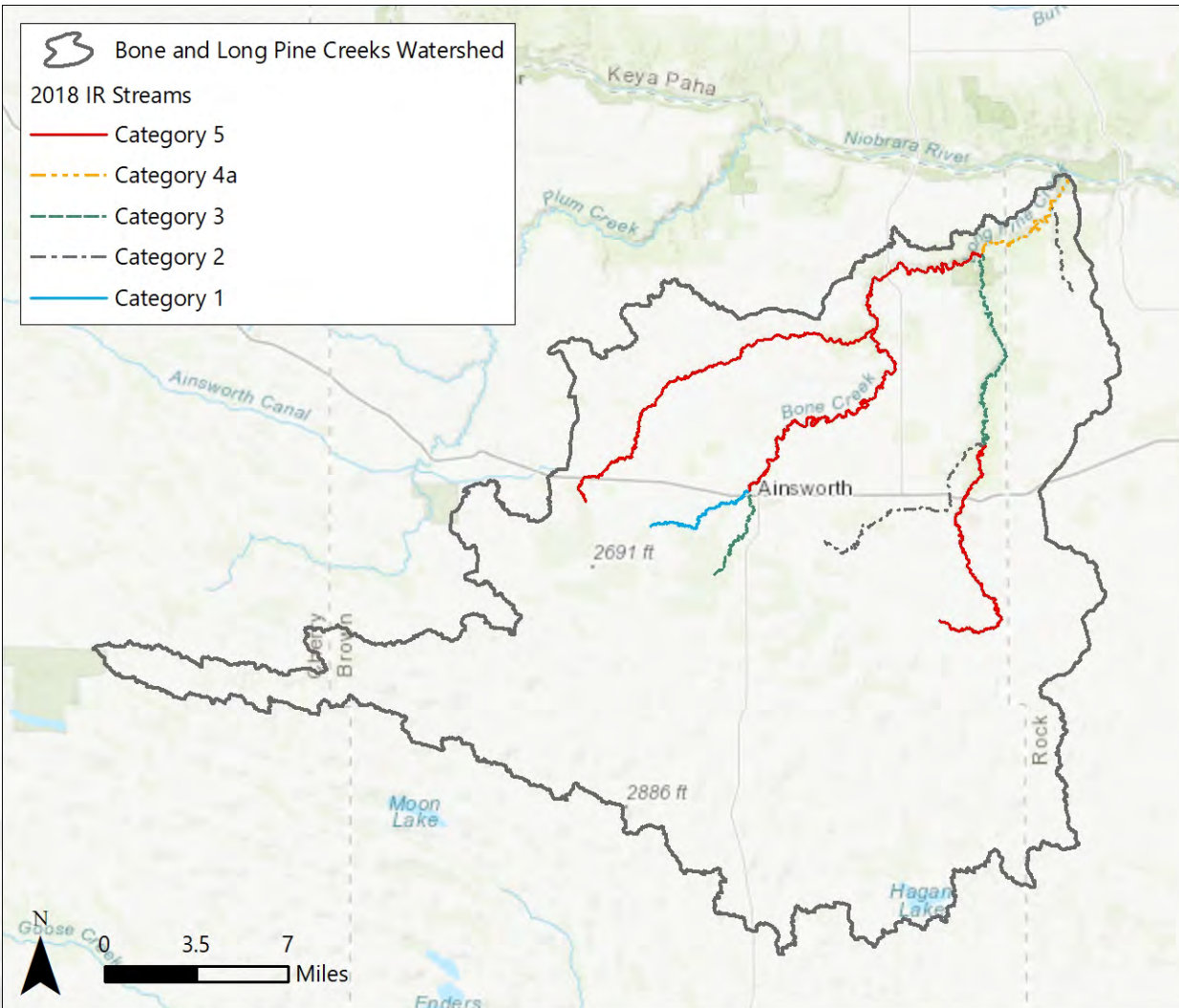




# Affected Environment

## WATER QUALITY

- Category 5 waters -  
Section 303(d) list  
subject to EPA approval



# Project Background

## PREVIOUS STUDIES

- LPC WQMP (3rd Draft, March 16)
- LPC Rural Clean Water Program: 10 Year Report
- MNNRD Master Plan 2012
- Cool Water Stream Management Plan - NGPC
- MNNRD Groundwater Management Plan
- USGS Ainsworth Canal Study (2006-07)
- Ainsworth Unit Project
- Ground-Water Resources of the Ainsworth Unit Cherry and Brown Counties, Nebraska
- Hydraulic and Bituminous Studies of Ainsworth Canal Dune Sand Missouri River Basin Project, Nebraska
- Merritt Dam- Technical Record of Design and Construction
- Temporary Stay on Surface Water
- 1993-94 Water Quality and Chemical Evolution of Ground Water
- Sand & Soapweed Middle Niobrara NRD
- Middle Niobrara NRD- Know your NRD
- 2017 Water Monitoring Programs Report
- USGS Long Pine Creek near Riverview
- Mechanisms of vegetation uprooting by flow in alluvial non-cohesive sediment
- Stability Thresholds for stream restoration materials
- Estimating the mechanical effects of riparian vegetation on stream bank stability using a fiber bundle model
- Simulation of Groundwater Flow, 1895-2010, and Effects of Additional Groundwater Withdrawals on Future Stream Base Flow in the Elkhorn and Loup River Basins, Central Nebraska - Phase Three