

MISSOURI RIVER



ECOSYSTEM
RESTORATION PLAN

WELCOME

MISSOURI RIVER ECOSYSTEM
RESTORATION PLAN AND
ENVIRONMENTAL IMPACT
STATEMENT

One River. One Vision.



U.S. ARMY CORPS OF ENGINEERS - KANSAS CITY & OMAHA DISTRICTS & THE US FISH & WILDLIFE SERVICE





BASIN-WIDE PUBLIC SCOPING MEETINGS

Missouri River Basin Facts

- **Second Largest River Basin in the United States**
- **530,000 Square Miles, Including Ten States, Two Canadian Provinces, and 29 American Indian Tribes**



One River. One Vision.



U.S. ARMY CORPS OF ENGINEERS - KANSAS CITY & OMAHA DISTRICTS & THE US FISH & WILDLIFE SERVICE





BASIN-WIDE PUBLIC SCOPING MEETINGS



Missouri River Facts

- Longest River in the United States
- One of the Most Regulated Rivers in the United States
- Largest Series of Impoundments and More Than 700 Miles of Largely Regulated, Stable, and Uniform Channel
- River Management Under Multiple Programs and Jurisdictions

One River. One Vision.



U.S. ARMY CORPS OF ENGINEERS - KANSAS CITY & OMAHA DISTRICTS & THE US FISH & WILDLIFE SERVICE





BASIN-WIDE PUBLIC SCOPING MEETINGS

Human Changes to the Missouri River

- 1832 – Snag removal
- 1902 – Federal financing for irrigation
- 1912 – Navigation channel authorized
- 1917 – Flood control programs authorized
- 1937 – First main stem reservoir constructed navigation
- 1944 – Pick/Sloan Plan authorized construction of five dams
- 1945 – Additional length, width, and depth authorized for navigation channel

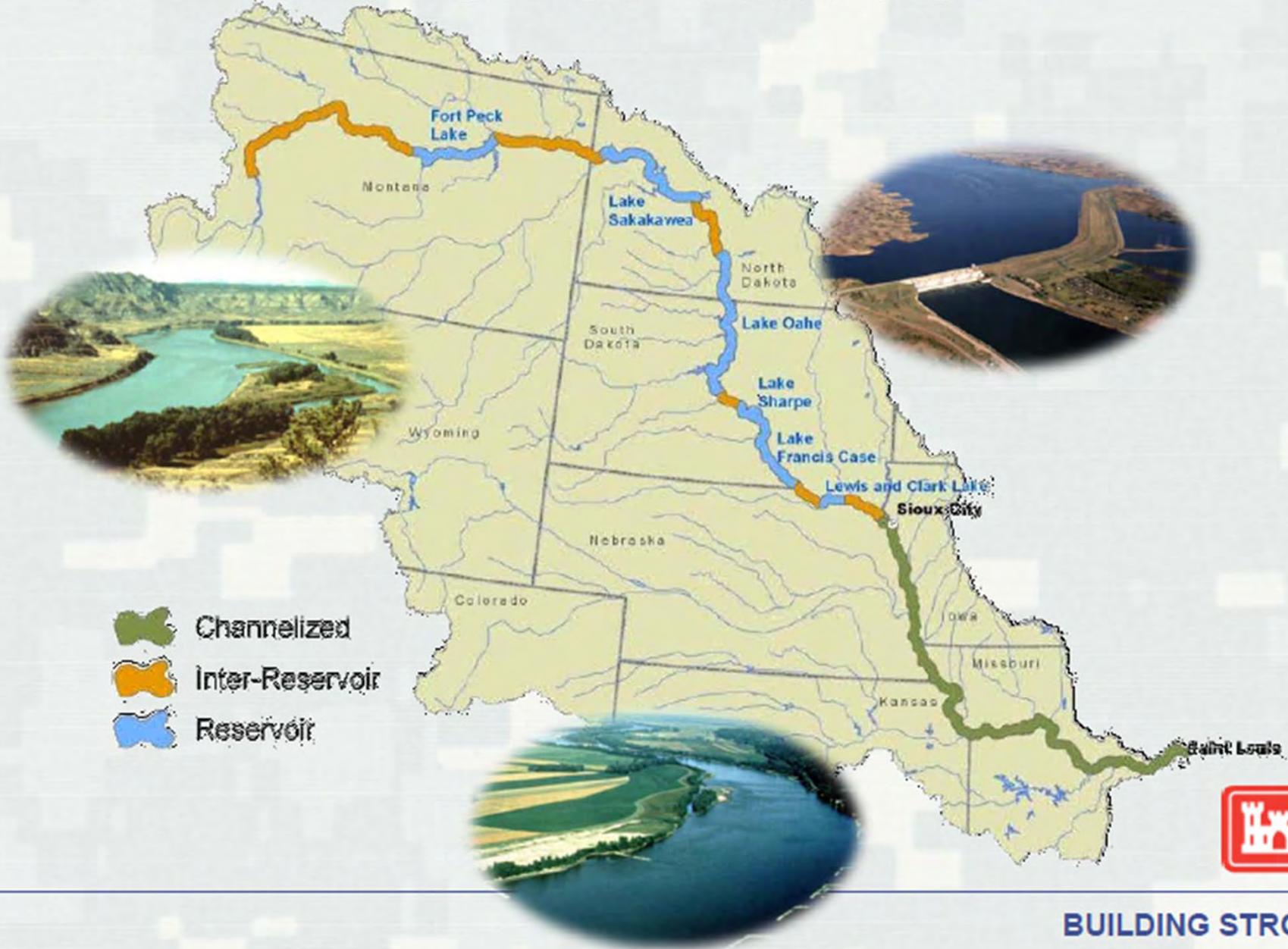
One River. One Vision.



U.S. ARMY CORPS OF ENGINEERS - KANSAS CITY & OMAHA DISTRICTS & THE US FISH & WILDLIFE SERVICE



River of Thirds



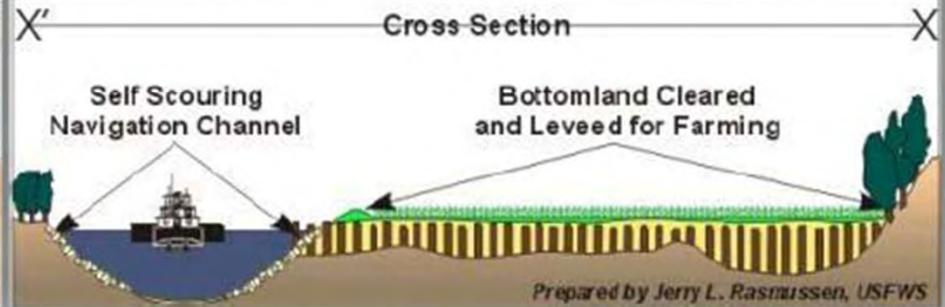
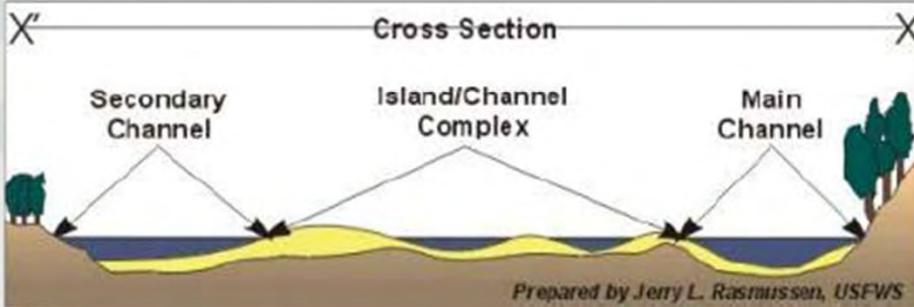
BUILDING STRONG®

Reservoirs

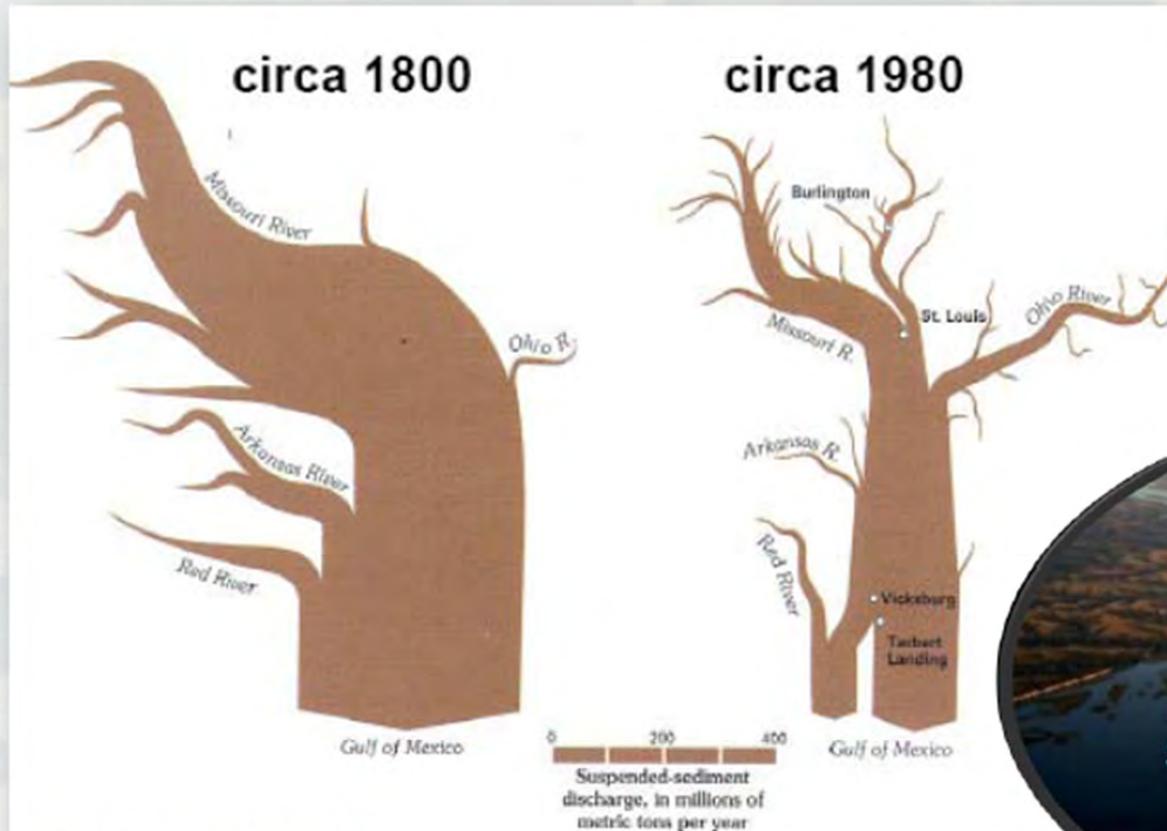


BUILDING STRONG®

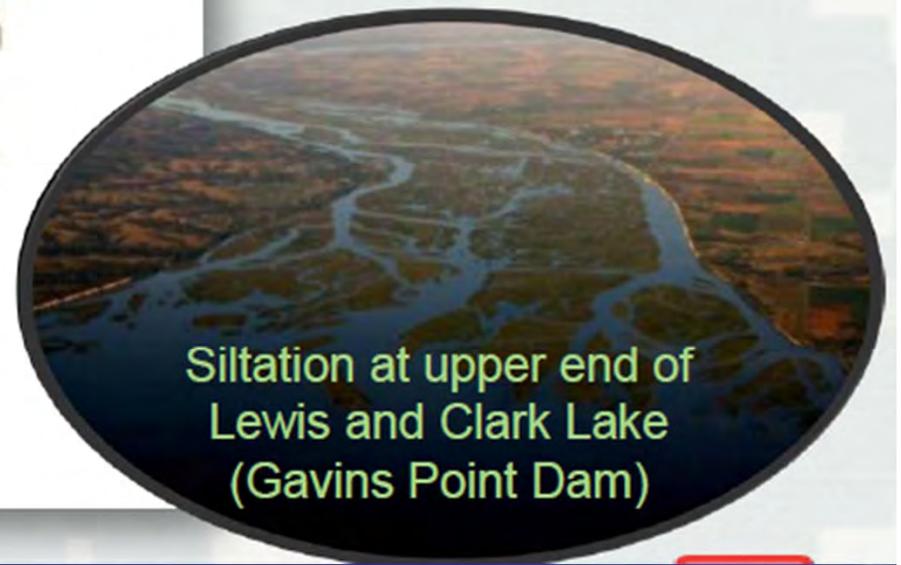
Self-Scouring Channel



Suspended Sediment Changes

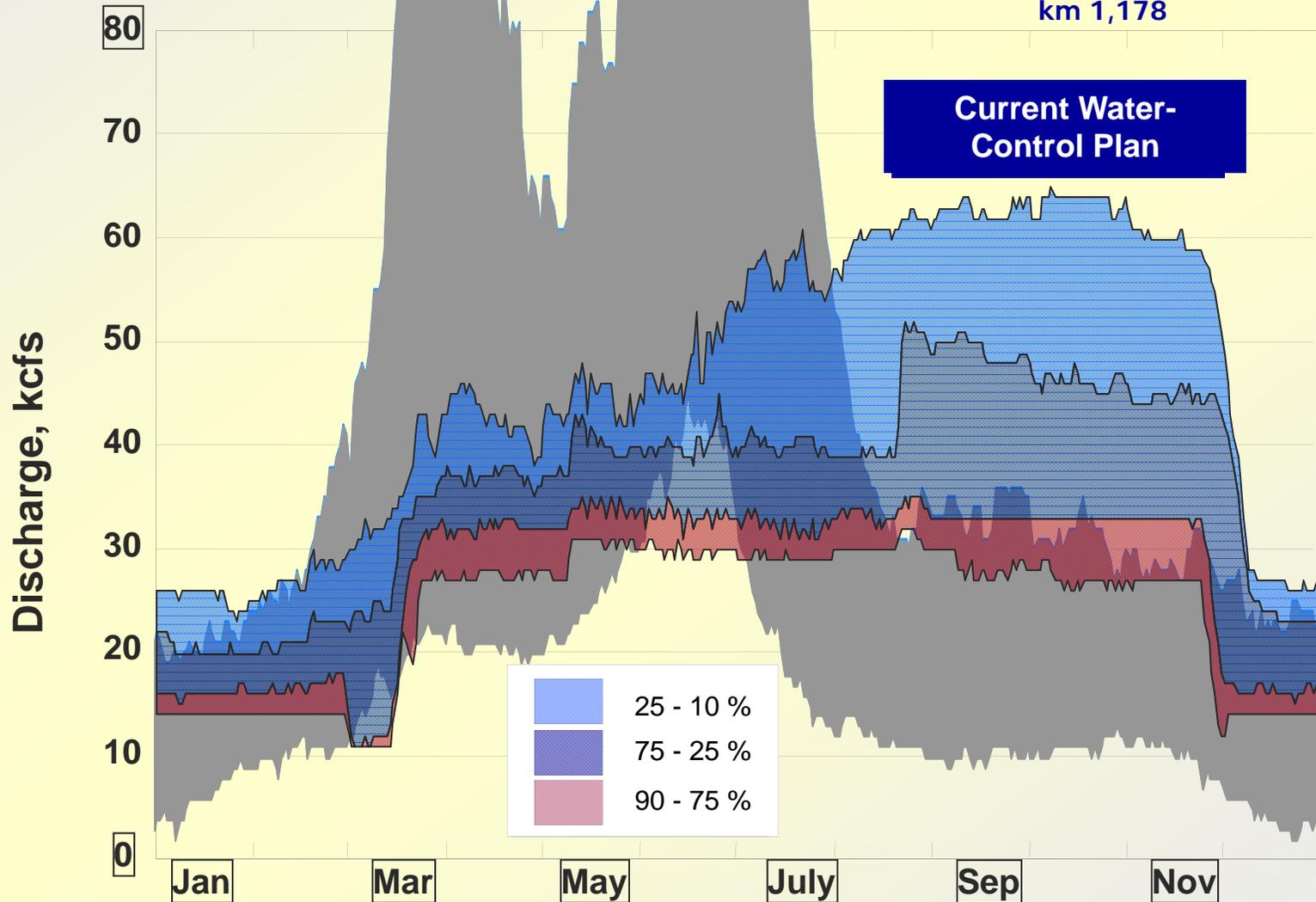


Meade & Moody 2008



Hydrologic Alteration, Sioux City, Iowa

km 1,178





BASIN-WIDE PUBLIC SCOPING MEETINGS



Identified Natural Resource Concerns

2002 National Research Council findings:

- Nearly 3 million acres of natural habitat altered
- Nonnative fish dominate many river reaches
- 51 of 67 native fish species listed as rare or decreasing
- Native fish food resources reduced by about 70%





BASIN-WIDE PUBLIC SCOPING MEETINGS

CURRENT MISSOURI RIVER RECOVERY PROGRAM ACTIVITIES



MISSOURI RIVER ECOSYSTEM RESTORATION PLAN & Potentially Other Studies and Plans

One River. One Vision.



U.S. ARMY CORPS OF ENGINEERS - KANSAS CITY & OMAHA DISTRICTS & THE US FISH & WILDLIFE SERVICE





BASIN-WIDE PUBLIC SCOPING MEETINGS

2007 Water Resources Development Act

- The Missouri River Ecosystem Restoration Plan is authorized by the 2007 Water Resources Development Act (WRDA) Study
- The Secretary of the Army, in consultation with the Missouri River Recovery Implementation Committee, shall conduct a study of the Missouri River and its tributaries to determine actions required –
 - To mitigation losses of aquatic and terrestrial habitat
 - To recover federally listed species and;
 - To restore the ecosystem to prevent further declines among other native species.

One River. One Vision.



U.S. ARMY CORPS OF ENGINEERS - KANSAS CITY & OMAHA DISTRICTS & THE US FISH & WILDLIFE SERVICE





BASIN-WIDE PUBLIC SCOPING MEETINGS

The Plan will...

- **Consider ongoing programs and actions related to mitigation, recovery, and restoration**
- **Identify priorities for mitigation, recovery, and restoration throughout the Basin**
- **Outline a long-term adaptive management approach for restoration of the river**
- **Guide future program and site-specific action development to ensure that the overall goals of MRERP are met in the long term**

One River. One Vision.



U.S. ARMY CORPS OF ENGINEERS - KANSAS CITY & OMAHA DISTRICTS & THE US FISH & WILDLIFE SERVICE



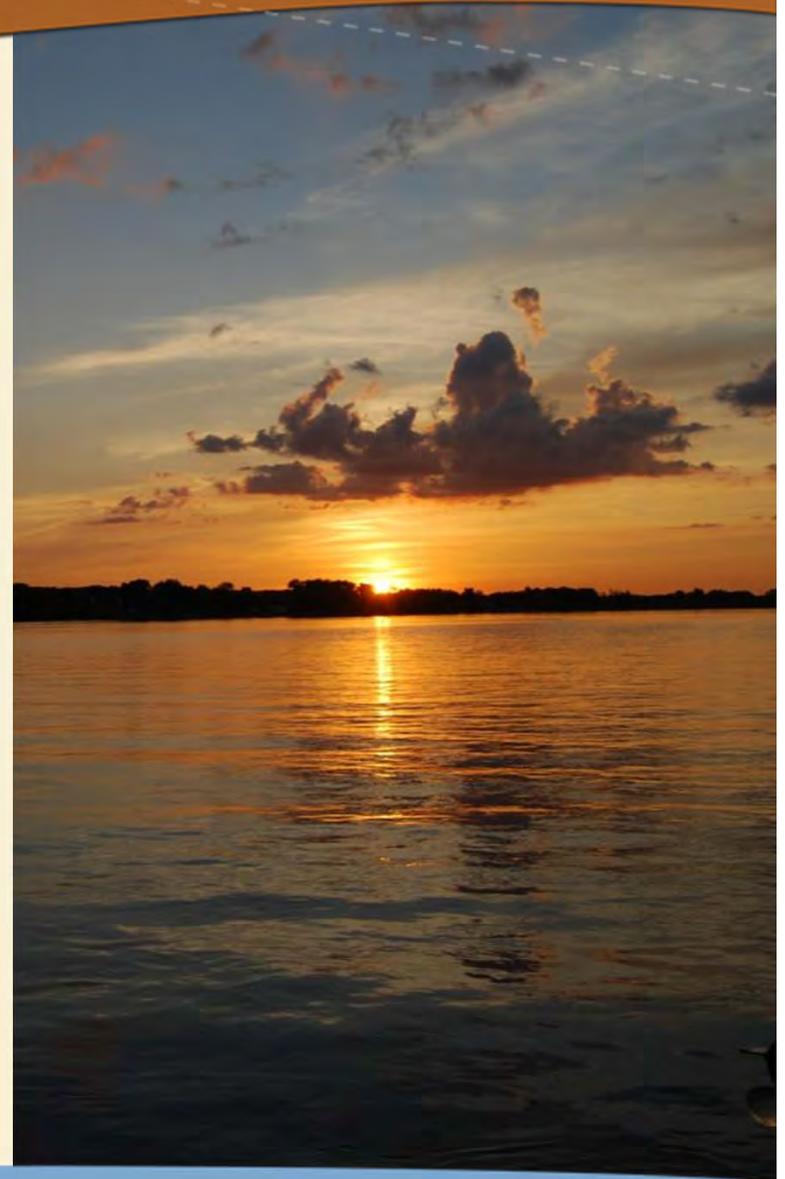


BASIN-WIDE PUBLIC SCOPING MEETINGS

Draft Purpose Statement

To determine the actions required:

- to mitigate losses of aquatic and terrestrial habitat
- to recover federally listed species under the Endangered Species Act
- to restore the ecosystem to prevent further declines among other native species, while seeking to balance with social, economic, and cultural values for future generations.



One River. One Vision.



U.S. ARMY CORPS OF ENGINEERS - KANSAS CITY & OMAHA DISTRICTS & THE US FISH & WILDLIFE SERVICE





BASIN-WIDE PUBLIC SCOPING MEETINGS

Draft Need Statement

The Plan is needed to fully implement the direction received in Subsection (a) of Section 5018 of the Water Resources Development Act of 2007; and address current trends indicating:

- diminished natural habitat;
- reduced populations of native species and communities;
- and reduced variability of physical processes such as flows, flooding, and sediment erosion/deposition.



One River. One Vision.



U.S. ARMY CORPS OF ENGINEERS - KANSAS CITY & OMAHA DISTRICTS & THE US FISH & WILDLIFE SERVICE





BASIN-WIDE PUBLIC SCOPING MEETINGS

Plan Scope

- Long-term, large scale strategy vs. short-term, site-specific actions
- Mainstem and tributaries (ecological nexus)
- Planning for 30-50 years into the future



One River. One Vision.



U.S. ARMY CORPS OF ENGINEERS - KANSAS CITY & OMAHA DISTRICTS & THE US FISH & WILDLIFE SERVICE





BASIN-WIDE PUBLIC SCOPING MEETINGS

Plan Participants

- US Army Corps of Engineers & US Fish & Wildlife Service
- Cooperating Agencies
- Public
- Tribes
- Missouri River Recovery Implementation Committee (MRRIC)



One River. One Vision.



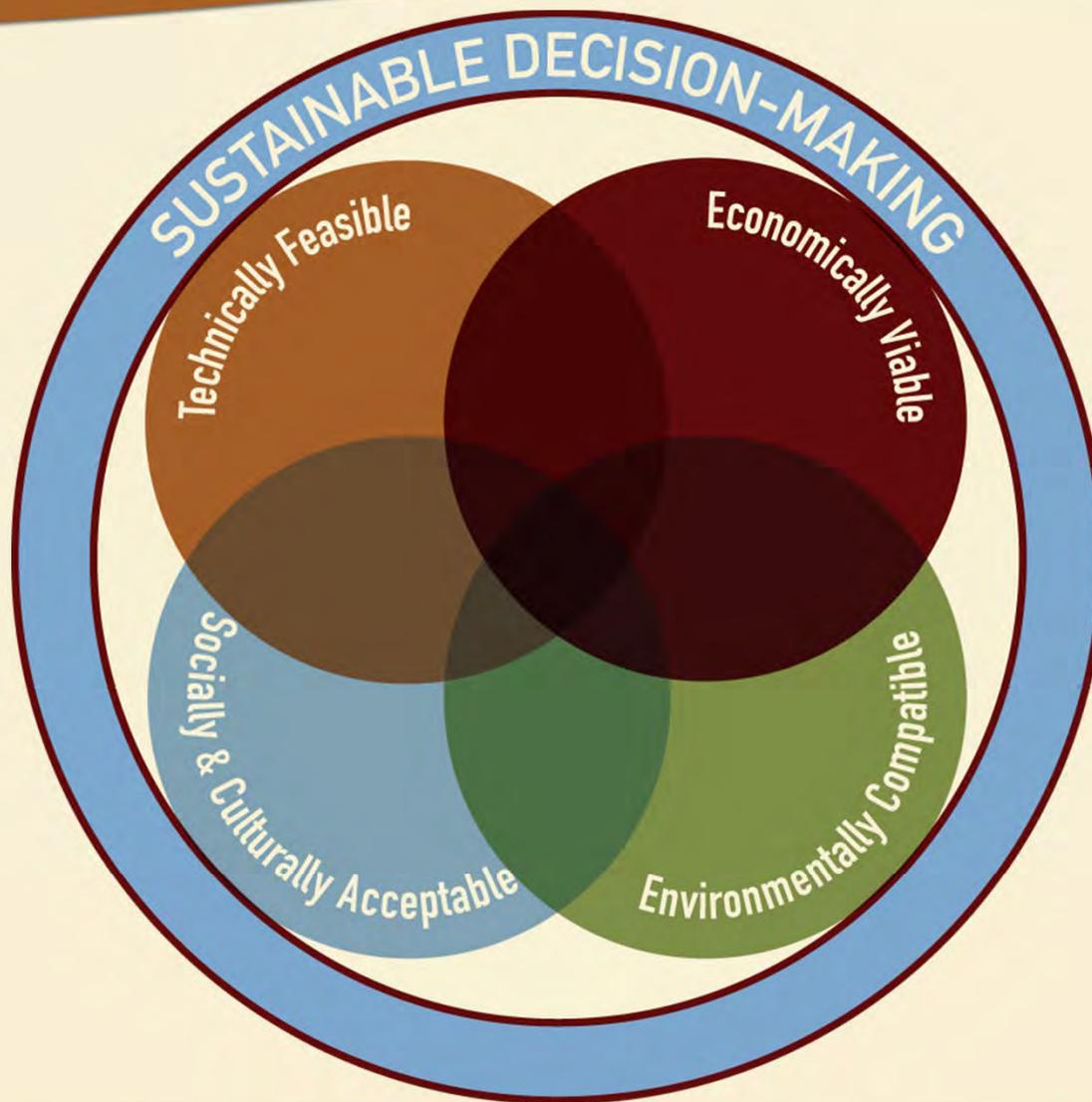
U.S. ARMY CORPS OF ENGINEERS - KANSAS CITY & OMAHA DISTRICTS & THE US FISH & WILDLIFE SERVICE





BASIN-WIDE PUBLIC SCOPING MEETINGS

**GOAL:
Sustainable
Decisions**



One River. One Vision.



U.S. ARMY CORPS OF ENGINEERS - KANSAS CITY & OMAHA DISTRICTS & THE US FISH & WILDLIFE SERVICE





BASIN-WIDE PUBLIC SCOPING MEETINGS

**GOAL:
Sustainable
Decisions**



One River. One Vision.



U.S. ARMY CORPS OF ENGINEERS - KANSAS CITY & OMAHA DISTRICTS & THE US FISH & WILDLIFE SERVICE





BASIN-WIDE PUBLIC SCOPING MEETINGS

Future Vision

What is Your Vision of the Missouri River in the Future?



One River. One Vision.



U.S. ARMY CORPS OF ENGINEERS - KANSAS CITY & OMAHA DISTRICTS & THE US FISH & WILDLIFE SERVICE





BASIN-WIDE PUBLIC SCOPING MEETINGS

MRERP Points of Contact

- **USACE**

- Randy Sellers, randy.p.sellers@usace.army.mil,
phone 402.995.2689

- Jennifer Switzer, jennifer.l.switzer@usace.army.mil,
phone 816.389.3062

- **USFWS**

- Wayne Nelson-Stastny,
wayne_nelsonstastny@fws.gov,
phone 402.667.2884

One River. One Vision.



U.S. ARMY CORPS OF ENGINEERS - KANSAS CITY & OMAHA DISTRICTS & THE US FISH & WILDLIFE SERVICE

