

# Missouri River Joint Water Board

Understanding and Pursuing Missouri River Benefits for North Dakota

Educate ~ Advocate ~ Engage

Program Funding
.....North Dakota Depart of Water Resources
.... Garrison Diversion Conservancy District
.... Missouri River Joint Water Board
.... Southwest Water Authority

Missouri River EAE Program

### Educate

#### Do You Know?

- ~ What Is the Pick Sloan Act in North Dakota?
- ~ What did North Dakota contribute to be a part of Pick Sloan?
- ~ What did Pick Sloan promise to our State?
- ~ What was actually provided?



#### Missouri River Joint Water Board

Understanding and Pursuing Missouri River Benefits for North Dakota

Educate ~ Advocate ~ Engage

### Advocate

## What Is Important to North Dakota?

- ~ As a primary source of drinking water for many in out State?
- ~ Irrigation Development and Farm Income Enhancement?
- ~ Recreational benefits and Tourism Opportunity?
- ~ Support for Industrial and Ag Processing Facilities?



#### Missouri River Joint Water Board

Understanding and Pursuing Missouri River Benefits for North Dakota

Educate ~ Advocate ~ Engage

### **Engage**

## Who Sets Policy for Our Use of the River System?

- Which State Agencies can hear and act on your concerns?
- ~ How does Federal Regulations apply to our use of the System?
- ~ Can your local county water boards play a part in river management?
- Is there legislative action or attention that is needed to ensure our beneficial use of the River System?



#### Missouri River Joint Water Board

Understanding and Pursuing Missouri River Benefits for North Dakota

Educate ~ Advocate ~ Engage

### Our Missouri River ... An Audit of Promises Made

This past year, the Missouri River Joint Water Board, which is an organization of the County Water Boards located along the Missouri River in North Dakota, enlisted a consultant to start a process of examination of the economic impacts, both positive and negative, of the management of the river system within our state. We embarked on that effort with the financial support and encouragement of the Garrison Diversion Conservancy District.

In particular, we were interested in the impact of an event which occurred more than 75 years ago, when the United States enacted the 1944 Flood Act, commonly referred to as the Pick Sloan Program, That act made a promise to North Dakota to forever change our Missouri River System, arguably, for the better.

Now many years later, we believed it appropriate to take another look at the program and ask some probing questions:

- What was required of our state to be involved?
- How were we enticed to participate?
- What has been the return on our investment with the program?
- . If we are not receiving any promised bonefits when

approximately
1.1 million acres to
the project. The lower
basin states contributed
no land for inundation,
except a few small
tributary impoundments.

Oftentimes, the
Native American
tribal sacrifice to this
program gets lost in
this discussion. My
comments here certainly
cannot convey the
sacrifices made by the
tribes; that can and



Wade Bachmeier, Chairman Missouri River Joint Water Board

should be a subject of a future editorial best provided by their own spokesperson. But as a quick measure of one part of that tribal contribution, it is worth noting that of the land taken in North Dakete, the test majority of that

# EAE Program is Coming to the Missouri River

The Missouri River Joint Water Board is embarking on a program tagged the EAE Program – Educate, Advocate, and Engage – for the Missouri River System in North Dakota.

The program supports the Joint Board mission statement which seeks to provide ... "a coordinated effort ... (for) ... management, conservation, protection, development, and control of the water resources in the Missouri River Basin."

The Joint Board believes an important component in achieving that mission statement lies in an aggressive and comprehensive program that:

EDILICATEC .



WADE BACHMEIER Chairman, Missouri River Joint Water Board



KEN ROYSE Program Manager, Missouri River Joint Water Board

members Jim Oderman of Dickinson, Eugene Veeder of Willison, and Jay Volk of Bismarck. North Dakota Department of Water Resources (DWR) Director Andrea Travnicek and her staff members have helped define the

# History of Pick Sloan of North Dakota

North Dakota water folks are well aware of the Pick Sloan Act – the basis of the Flood Control Act of 1944 that applies directly to our present-day use and management of the Missouri River System in North Dakota.

A full understanding of the history of Pick Sloan requires a general sense of the history of the Missouri River Basin. The Missouri River, at nearly 2,540 miles in length, is the longest river in the United States. It is a recipient of water from the largest basin in the country (528,000 square miles), which is comparable to one-sixth of the size of the 48 lower states.

But even though it is the longest river and in the largest basin, it is one of the lowest-yielding rivers in terms of water runoff and conveyance in the country. This is so because it watersheds and who, in a general sense, have conflicting water management policies and principals. The Army Corps of Engineers has a water policy based on water abundance, so its historical



KEN ROYSE Program Manager, Missouri River Joint Water Board

emphasis is how to manage and use such abundance. Its policies, therefore, revolve to a large part around flood control and navigation. Conversely, the US Bureau of Reclamation has a water policy based on water scarcity. From that perspective, the Bureau of Reclamation focuses on using all available water for consumptive purposes, such as irrigation and water supplies, and for power generation

# THANK YOU O'Mahoney and Millikin

All of us in North Dakota owe a big thank you to Joe O'Mahoney and Eugene Millikin. Never heard of them? Well, that's not unusual. But if your water supply is from the Missouri River, or if you are an irrigator from that river, or use and enjoy its recreational benefits, or power benefits, or flood control benefits of its dams, then you should be aware of what these two did to help all of us in North Dakota achieve those benefits.

Joe O'Mahoney and Eugene Milliken were both U.S. senators during the 1940s when the federal government began finalizing legislation and plans to build the great dams along the Missouri River. Those large dams, and a collection of minor dams on minor tributaries, are placed from Montana through the Dakotag Nebraska and Kanage

River system and therefore had a stake in how that river system was to be managed. Despite their interests being somewhat less than in other states where most of the construction would take place, both senators had an



KEN ROYSE
Program Manager, Missouri
River Joint Water Board

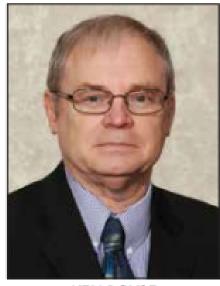
immediate and strong appreciation for the needs of the upstream states. The upstream states would contribute essentially all the land needed to construct the major dams – ultimately a contribution of more than 1.7 million acres shared almost equally and exclusively by Montana, North Dakota and South Dakota

# North Dakota Use of the Missouri River

Followers of these Missouri River articles are aware that the mighty Missouri River, the longest in the nation at more than 2,300 river miles, is a natural resource shared by a large part of our country.

Starting as a mere trickle in west-central Montana, it flows through and drains over 529,000 square miles of land in parts of 10 states and two Canadian provinces. All told, the Missouri River system provides drainage on more than one-fourth of all agricultural lands in the United States.

By the time it empties into the Mississippi River near St Louis, Missouri, the "Mighty Missouri" is of formidable size, providing a contribution to that river of an average of more than 60,000 cubic feet of water per second (cfs). It is such a valuable and visible resource that four state capitals are found along its banks: Helena, Mont., Bismarck, N.D.,



KEN ROYSE Program Manager, Missouri River Joint Water Board

Who holds North Dakota usage permits, and who uses that water? Figures 2 and 3 are again from the state engineer's presentation and provide some insight.

Figure 2 shows that most of the permit allocation is for the category entitled "multiple use." Those include

# Missouri River SWOT ... Lessons Learned

On August 14 of this year, 105 water managers, elected officials, members of the general public and representatives from local, state insert KWR photo and federal agencies met in Mandan, North Dakota for the Missouri River Stakeholders meeting.

This meeting, hosted jointly by the Missouri River
Joint Water Board (MRJWB) and the Missouri River
Advisory Council (MRAC), is part of the ongoing
Educate, Advocate and Engage (EAE) Program being
conducted by the MRJWB and funded, in large part, by
the North Dakota Department of Water Resources and the
Garrison Diversion Conservancy District. The focus and
intent of the meeting was to conduct a SWOT (Strength,
Weaknesses, Opportunities and Threat) assessment; a tool
often used by governmental agencies and private business
to assess their current operations and future needs. In



KEN ROYSE
Program Manager, Missouri
River Joint Water Board

projects in the west, central and east, from rural and urban North Dakota.

Significant regulatory entities also were represented, including the North Dakota Department of Water Resources, the U.S. Army Corps of Engineers and the

# The Flood That Never Ended

Much has been written on the impacts that the Pick Sloan Act has had and continues to have on tribal lands in the Missouri River basin. All six mainstem dams along the river are built on or near tribal lands and all have impacts on those lands.

Arguably, no tribe – upper basin or lower basin – has been impacted more from the building of the dams than the Three Affiliated Tribes of the Fort Berthold Reservation in central North Dakota. The impacts are well known. For the Fort Berthold Indian Reservation, more than 150,000 acres of land, much of it prime agricultural land, was subjected to a permanent flood; the reservation was split into geographic segments; longstanding and well-populated towns, communities and public facilities were forever lost; and families, friends and neighbors were divided.

Other tribes, like the Standing Rock Sioux Tribe in both North Dakota and South Dakota, had similar adverse impacts. South Dakota tribes also lost approximately

promise of an abundant supply of low-cost hydropower for downstream, nontribal, states.

Promises were made to various impacted tribes. Foremost was a promise to develop programs for safe, clean and dependable drinking water from the Missouri River system. Yet more than 75 years after that promise was



KEN ROYSE Program Manager, Missouri River Joint Water Board

made, some tribal members on the Fort Berthold Indian Reservation and Standing Rock Reservation have no reliable water supply and have to haul water.

Tribal impacts can perhaps be best understood by reviewing the notes of a meeting held in October 1945.

The meeting was chaired by Sen. Joseph O'Mahoney of Wyoming with participation from Chairman Martin Cross

# Missouri River FLOOD CONTROL

The Missouri River is a highly alluvial river modified via reservoir construction under the 1944 Flood Control Act. It is operated by the US Army Corps of Engineers (USACE) to provide for eight authorized purposes under what is referred to as the *Master Manual*. One primary authorized system purpose is *Flood Control*.

#### Flood Chronology - Awareness / Concerns

The flood of record for the Missouri River at the United States Geological Survey (USGS) stream gage at Bismarck, N.D., was 27.9 feet. This was associated with an ice jam break upstream from the Bismarck gage in the spring of 1952. The USGS has designated the flood stage at Bismarck to be 14 feet, while a 1% chance event (100-year) is around 17 feet.

Since the Garrison Dam closure that created Lake
Sakakawea in 1954, other flood events have created concerns.

by system mismanagement. This is far from the case. After-action reports noted the USACE successfully managed the event, within the system's capabilities, to prevent even greater impacts [1][2][3].

#### Flood Risks

The 1944 Flood Control

Act and the reservoirs
are designed for "flood control" not "flood prevention"
and are managed as events occur within the system's
design capabilities. Subsequently, flood risks remain and
continuously change as the floodplain and channel conditions
are modified by both man and nature.



MICHAEL GUNSCH Chairman North Dakota Missouri Advisory Council

# A DEPARTMENT OF WATER RESOURCES PERSPECTIVE: Missouri River Initiative Will Contribute to Continued Successes

During the process of formulating a five-year strategic plan for the newly established Department of Water Resources (DWR) in the spring of 2022, it was known early on that the importance of the Missouri River to the future success of North Dakota would need to be a key element. Ultimately, one of the five primary objectives included in the plan is to "Support beneficial use of Missouri River system water and other available water supply sources." To accomplish that objective, there are several related goals to guide DWR's progress.

Though that objective is part of DWR's five-year strategic plan, North Dakota's citizens and economy will only be able to maximize the river's benefits by working together. Looking back to what now seems fortuitous timing, a collaborative approach in support of North Dakota's interest in the Missouri River – the Missouri River Joint Board's EAE (Educate, Advocate, and Engage) initiative – was also gaining momentum last spring.

In understanding the importance of what grassroots stakeholders were trying to accomplish with the EAE initiative. DWR and water commissioners partnered to



# Moving Missouri River West ... Truck by Truck

In October 2022, an interesting article appeared in the Missouri Independent newspaper, published out of Jefferson City, Mo. The article was titled "Officials plan to truck 6,000 gallons of water From Missouri River across Kansas."

The essence of the story was that a local water management district in western Kansas was seeking a solution to the decades-long decline of the Ogallala Aquifer (such aquifer being a significant source of water for users in states from Oklahoma all the way north to South Dakota). The Ogallala, according to the article, has only half the water that was once available, and additionally could be fully depleted within the next 10



KEN ROYSE Program Manager, Missouri River Joint Water Board

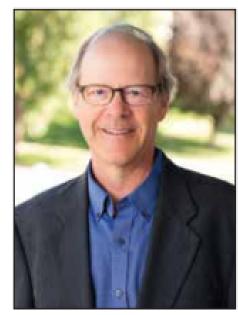
feet of water per year. This would be a hugely ambitious and expensive project to address a water shortage issue in western Kansas and the Great Plains.

It annears however that not all water managers in

vears

# Recreation an Invaluable Resource

There are eight authorized purposes under the 1944
Flood Control Act. Reservoir and project lands acquired in
North Dakota are operated and managed by the U.S. Army
Corps of Engineers (USACE) using its *Master Manual*.
One often overlooked purpose is recreation. The economic
values associated with recreation are comprised of many
elements. The federal nexus of reservoir management
along with the jurisdictional oversight on the free-flowing
river is as important to understand as is knowing that
recreation is not simply hunting and fishing but also
includes camping, picnic areas, athletic events, boating,
hiking, birding, and others. In addition, recreational



MICHAEL GUNSCH Vice Chairman, Friends of Lake Sakakawea

locations are restricted due to archeological sites, critical wildlife habitat, or policy.

# Presentations ... Made and Scheduled

- Water Topics .... Feb. 2022
- Water Topics ... April, 2022
- Water Topics .... June, 2022
- Water Topics .... Sept 2022
- NDSWC ..... April, 2022
- Garrison Diversion .... April, 2022
- Water Topics ... June, 2022
- NDWU ..... July 2022
- ND State Fair Water Day ... July, 2022
- Burleigh County WRD .... May, 2022
- League of Cities .. Pending
- Association of Counties ... Oct 2022
- Williston Rotary ... Dec 2022

- Southwest Water Authority .. June 2022
- ND State Water Resources ... July 2022
- Bismarck Am Vets Club .... July, 2022
- Sheyenne River Exec Board ... April, 2022
- Devils Lake Joint Board .... Pending
- Red River Joint Board ... Pending
- Upper Missouri Association .. Oct. 2022
- Souris River Joint Board ... Pending
- Williston Lions .... Dec 2022
- NDSPE ..... Pending March 22
- Red River Commission .... Pending

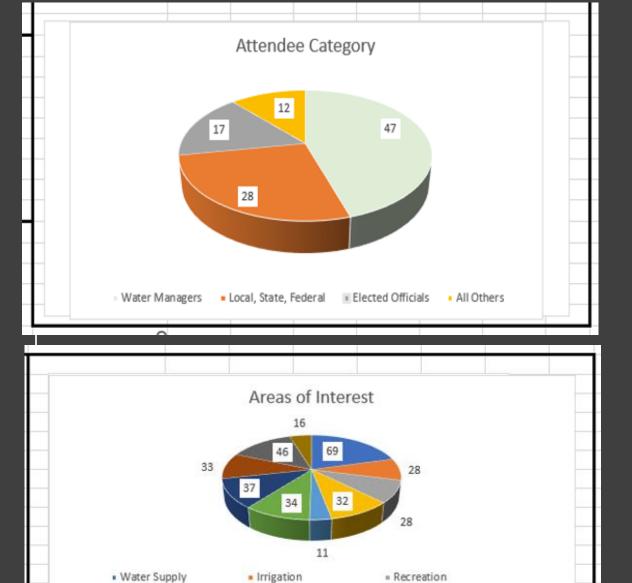
# REPORT ON MISSOURI RIVER STAKEHOLDER MEETING

August, 2022

#### Co-Sponsored by:

### MISSOURI RIVER JOINT WATER BOARD MISSOURI RIVER ADVISORY COUNCIL

Prepared by Ken Royse, Program Manager Missouri River Joint Water Board



Power Supply

- Env/Fish and Wildlife

Missouri River to East ND = Regulatory and Policy

Flooding

Tribal

Economic Opportunity

# Significant Interest in the Missouri River.

- Large event attendee list
- Good cross-sectional representation
- Follow up news coverage

Appreciation and Acknowledgement of the Resource.

 notations of 'good quality, abundant supply, affordable to treat .... '

### Apathy and Lack of Political Clout.

- Low population equals low federal congressional clout
- General public needs more education of resource value

### Greater Use Possibilities.

- Irrigation development.
- Attract high water use industry.
- Encourage more recreation and tourism.

## Burdensome Regulatory Issues:

Costly, time consuming and consuming permit process (access)

WOTUS, ESA, NEPA

Upstream interests are secondary to downstream interests.

# Threat of Depletion of the River.

- Downstream and out of basin interest in the water
- Continued threat of lawsuits
- Competition for power
- Possible River Compact

### ANS and Environmental Concerns.

- Zebra Mussel threat to infrastructure
- Delta Formation
- Drought effects on system

# Our Goals For 2023 ...

- Continued Targeted Presentations:
  - State Water Resources Convention
  - State Engineers Convention
  - ACEC
  - Annual State Water Convention
  - Upper Missouri Association Convention
  - Association of Counties Annual Meeting
  - League of Cities Annual Meeting
  - Garrison Diversion Semi Annual Water Conference
  - State Fair
  - Possibly .... Eastern ND Stakeholder Mtg

# Our Goals For 2023 ...

- Continued Water Magazine articles:
  - Colorado River in Crisis v Missouri River
  - Irrigation in the State; Value added
  - Sediment in the System
  - Focus on MRI Benefits
- Larger Program Exposure:
  - Other State Magazines
  - Talk Radio
  - Non-water groups

### Our Financial Outlook Beyond 2023 ...

#### • Budget in Process, but:

- Expect order of magnitude budget of \$120K per year
- Expect continued State Sharing, indicated at 50%
- May be GDU funding available
- Balance, up to 50%, would be about \$60K and a local issue

#### • Local Funding:

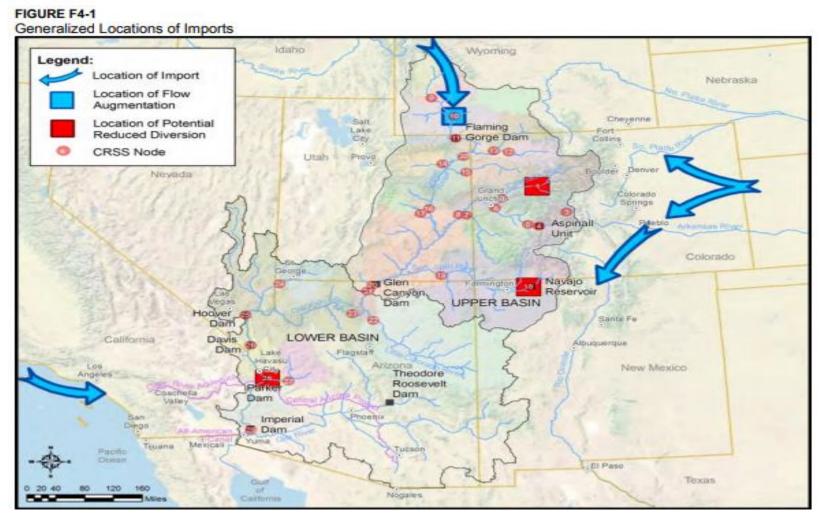
- Currently the local funds are provided by the member joint board members
- Challenge will be to raise up to \$60K with limited board membership
- SWA has been a good local contributor.

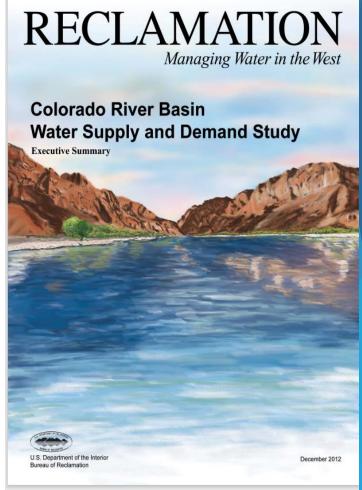
# Important Funding Note

• • •

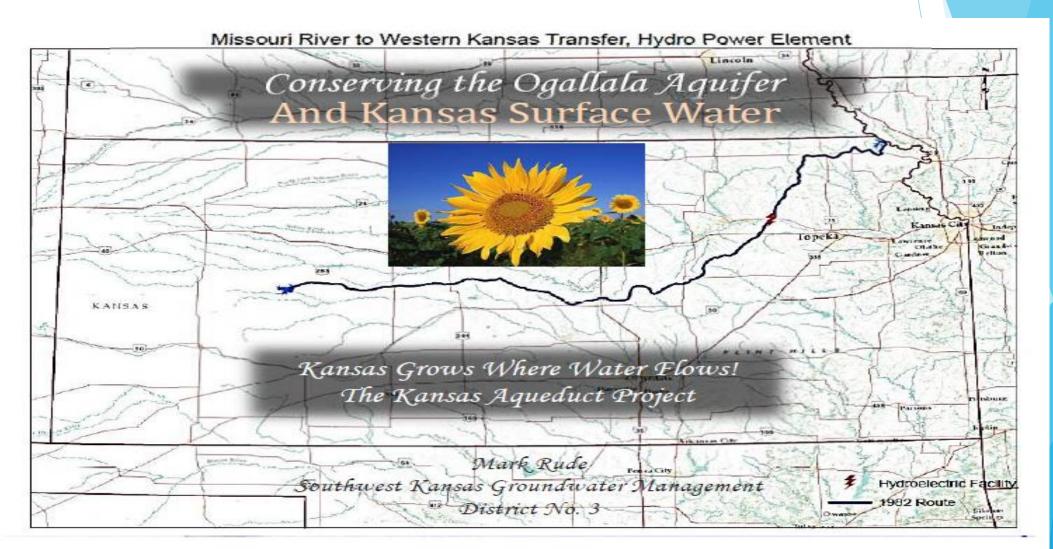
- State Funding, if received:
  - Not an Earmark
  - Part of normal DWR discretionary funds
- Local Funding:
  - If Joint Board cannot match the State, then program will be cut back
  - Will likely keep only the following:
    - Monthly Water Articles on the River
    - Limited Public Presentations and Panel participations
    - Defer on Eastern ND Stakeholder Meeting

# Colorado River Basin Study, USBR: 600,000 acre feet yr (minimum) from the Missouri





# Kansas Aqueduct Study, USCOE: 4,000,000 acre feet yr (minimum) from the Missouri



#### California wells run dry as drought depletes groundwater

ENERGY + ENVIRONMENT

### Officials plan to truck 6,000 gallons of water from Missouri River across Kansas

#### California readies for fourth year of extreme drought

"This is our new climate reality, and we must adapt," Karla Nemeth, director of the state Department of Water Resources, said in a statement.

