

# Missouri River Panel Discusses Issues Surrounding River

By Kimberly Cook

What is the longest river in North America? Those who answered the Mississippi River will need to guess again. The longest river in North America is the Missouri River, originating in southwest Montana and continuing to flow through the central United States, ending at the border between Missouri and Illinois, where it joins the Mississippi River.

The sheer size of the Missouri River makes it an incredible water resource for North Dakota, accounting for 95 percent of North Dakota's surface water. Unfortunately, many people believe that North Dakota is a long ways from using this river to its greatest extent, making use of just over 1 percent of what flows through the state.

## Missouri River History

When Congress passed the Flood Control Act of 1944, the intent was to develop and manage the water and natural resources of the Missouri River Basin. The act authorized the Missouri River Basin Project, later renamed the Pick-Sloan Missouri Basin Program.

The Pick-Sloan Program was an extensive plan created

for the development and management of the Basin's water resources. Initially, the plan was to construct 95 dams and 17 hydropower plants along the Missouri River, along with facilities to irrigate some five million acres of land. Benefits of the Pick-Sloan Program were extensive, including municipal and industrial water supply, irrigation, hydroelectric power, flood control, navigation, sediment abatement, fish and wildlife enhancement, recreation, and pollution control. Authorized functions included irrigation, hydropower, flood control, and navigation.

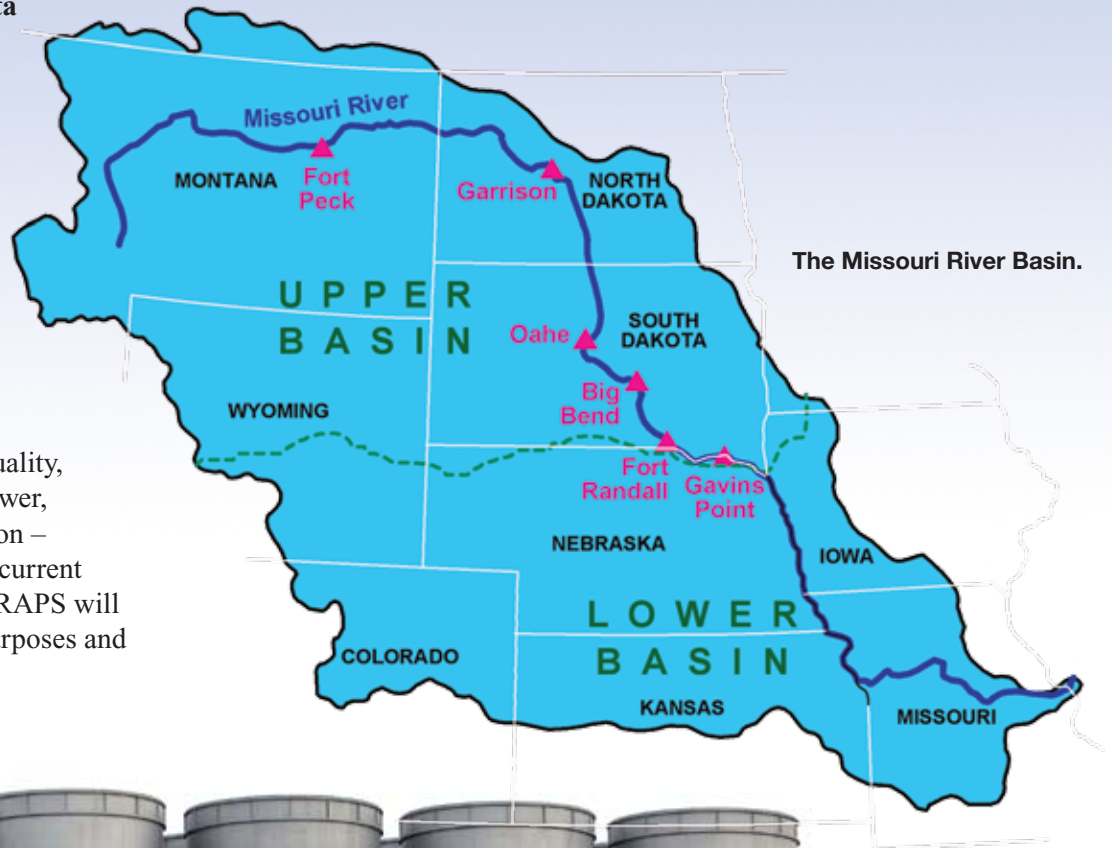
While some benefits anticipated by the Pick-Sloan Program remain to be realized, others, such as hydropower generation, flood control, and recreation, have exceeded the plan's original goals.

Missouri River issues continue to be at the forefront of North Dakota's water issues. Because of the importance of this resource and all the issues that surround it, a panel discussion was held during the 47th annual Joint North Dakota Water Convention to discuss the issues surrounding the management of the Missouri River. The following topics were presented during this panel.

# MRAPS and Missouri River Regulatory Issues

**Lee Klapprodt, North Dakota  
State Water Commission**

In 2009, Sen. Byron Dorgan obtained the original authorization and funding for the Missouri River Authorized Purposes Study, or MRAPS, a congressionally authorized study to review the original project purposes of the 1944 Flood Control Act. The eight authorized purposes – flood control, water supply, water quality, irrigation, recreation, hydropower, fish and wildlife, and navigation – are being analyzed in view of current basin values and priorities. MRAPS will determine if changes to the purposes and infrastructure are warranted.



The Garrison Dam power house provides hydropower, one of the original purposes of the 1944 Flood Control Act.

Scoping meetings have been held to look at the needs within the Missouri River Basin, as well as areas downstream into the Mississippi River Basin. These meetings are opportunities for the public to get involved. So far, there have been 31 meetings held in almost every state in the Missouri River Basin. Three of these have been in North Dakota. Tribal meetings have also taken place with three of 11 tribal meetings being held in North Dakota.

Klapprodt discussed current issues related to sovereign lands along the Missouri River. The term sovereign

land refers to land owned and controlled by the state that is in and around navigable lakes and streams. To be more specific, sovereign lands are areas lying within the ordinary high water mark of navigable lakes and streams. "Sovereign land management has become more active as increased usage and development has occurred on and around the Missouri River," Klapprodt said. "This often causes conflict between users." In 2007, a sovereign land management plan was completed by the Office of the State Engineer to provide consistency in the management of sovereign land.

## Missouri River Management Issues

### **Ken Royse, Chairman, Missouri River Joint Water Resource Board**

The intent of the Missouri River Joint Water Resource Board is to jointly exercise the powers of each individual water board along the Missouri River to provide a cooperative and coordinated effort in addressing the management, conservation, protection, development, and control of water resources in the Missouri River Basin. The Missouri River Joint Water Board was formed in 2005 by eight North Dakota counties – Burleigh, Dunn, Emmons, Mercer, Morton, Mountrail, Oliver, and Sioux.

During the panel, Royse discussed issues within the Missouri River Basin that must be managed in order to avoid negative impacts to the river and those who benefit

from it. One such issue was the impact of sedimentation in the Missouri River. Mainstem reservoirs, such as Lake Sakakawea and Lake Oahe, act as collection sites for sediment carried by the Missouri River. Since the six mainstem reservoirs were built, approximately 5 percent of the system's storage capacity has been filled with sediment.

"Sediment deposits have many negative impacts to the river and its habitat," Royse said. "Problems such as shoreline flooding, destroying wildlife habitat, limiting recreational opportunities, and reduced water quality are all linked to sediment deposits in the river. The economic costs associated with sedimentation in the river are also very high."



# Missouri River Water Withdrawals in North Dakota

**Dave Koland, General Manager,  
Garrison Diversion Conservancy District**

“The Missouri River system is so large that, even with the several rural water projects using its water, North Dakota only uses a fraction of the available water that runs through the state,” Koland said.

The Missouri River Basin spans 10 states – Nebraska, Colorado, Iowa, Kansas, Minnesota, Missouri, Montana, North Dakota, South Dakota, and Wyoming – and also small southern portions of the Canadian provinces of Alberta and Saskatchewan. The Missouri River Basin covers 529,000 square miles.

Several large water supply projects in North Dakota use or are proposed to use Missouri River water. The Western Area Water Supply Project (WAWS) is a proposed regional water system covering portions of McKenzie and Williams counties, impacting users in the northwest corner of North Dakota. WAWS is estimated to withdraw 23,000 acre feet of water from the Missouri River.

The Northwest Area Water Supply Project (NAWS) is a regional water supply that has an annual withdrawal of 15,000 acre feet of water. When NAWS is completed, it has the potential to serve up to 81,000 people in northwest North Dakota.

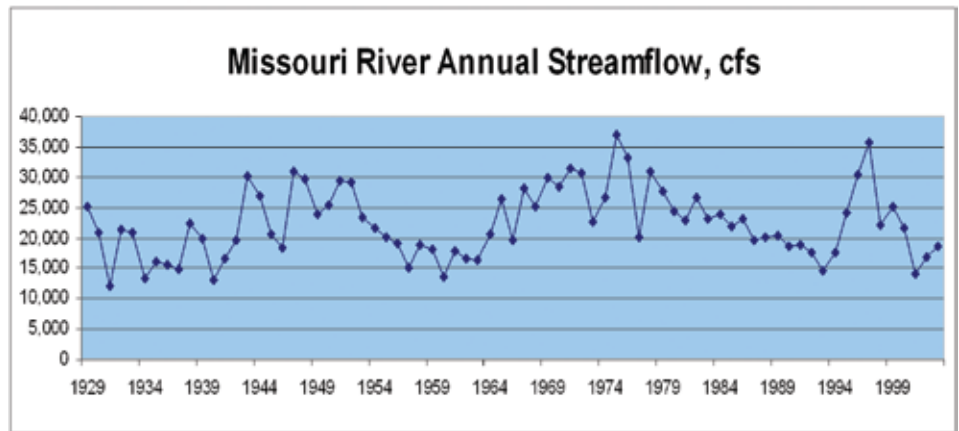
The Southwest Pipeline Project (SWPP) impacts some 35,000 users in the southwest corner of North Dakota. The project brings Missouri River water to 28 communities and more than 4,000 rural hookups. The quality water and thus, the quality of life, has exponentially increased due to the clean, reliable water supplied by the

SWPP. These impacts are received by taking only 6,800 acre feet from the Missouri River each year.

Other uses for Missouri River water include 45,000 acre feet per year for industrial uses, and 80,000 acre feet for the proposed Red River Valley Water Supply Project, which would provide a supplemental water supply to eastern North Dakota in times of drought.

“All these uses for Missouri River water are a drop in the bucket compared to what is available,” Koland said. “All of the water projects combined still leave 98.9 percent of the Missouri River flows for other water uses, most of it heading to our downstream neighbors. Though we utilize such a small amount of Missouri River water, huge, positive impacts have been made to the lives of those receiving the water through various water supply projects.”

Few North Dakotans would argue that the Missouri River is one of the greatest resources available to the state. By properly managing that resource, North Dakotans will be able to utilize the available water and maximize the benefits drawn from the river. The impact of the Missouri River will continue to be widespread.



**Average annual Missouri River flows available  
at Bismarck = 16,700,000 ac-ft**

**Less RRVWSP 80,000 ac-ft**

**INDUSTRIAL 45,000 ac-ft**

**WAWS 23,000 ac-ft**

**NAWS 15,000 ac-ft**

**SWPP 6,800 ac-ft**

**Missouri River flows unused = 16,530,200 ac-ft**

**Leaves 98.9% in system for other water uses**