



## **Ogallala Project - High Plains Water Resource Resiliency Project to Mitigate Flooding and Protect the Socio-Economic Viability of the Six-State Ogallala-High Plains Region**

### **Background**

The Missouri River watershed is the longest drainage basin in the U.S. and encompasses most of the central Great Plains. The Missouri River has a long history of severe and devastating flooding events. The Army Corps of Engineers and the Bureau of Reclamation developed plans to mitigate flooding on the Missouri River that became a major part of the Omnibus Flood Control Act of 1944. Even after implementation of this plan, the Missouri River has continued to set flooding records that have caused billions of dollars in losses in multiple states, as recently as 2019. Diverting Missouri River flood water, available seasonal water, other excess water or purchased water can be a solution for mitigating flood damage in the Missouri River watershed. Diverting water to the Ogallala – High Plains region will help ensure the continued community and economic viability of the six-state region.

This is not a new idea and the need for a project such as this has become more necessary as time has passed. As early as 1967, Beck and Associates (in a study prepared for Mid-West Electric Consumers Association) proposed a transfer plan that would divert Missouri River water from near Fort Randall Reservoir in South Dakota to supply water along the Colorado- Kansas border into the Texas High Plains and into the Pecos River in New Mexico and finally into the Rio Grande River above Lake Amistad.

Depletion of the Ogallala – High Plains aquifer and the anticipated impacts of not meeting the regional water needs of the water user groups in the High Plains states include value-added losses, electric power purchase costs, job losses, tax losses on production and imports, water trucking costs, utility revenue losses, utility tax losses, consumer surplus losses for municipal water supplies, population decreases, and school enrollment losses. Producers grow approximately \$35 billion in crops each year on the High Plains, one of the most fertile regions of the world. In this region the Ogallala – High Plains aquifer is the primary, and often the only, water source. According to USDA National Agriculture Statistics Service data, farmland in the region produces nearly one-fifth of the wheat, corn, and cotton, as well as approximately one-half of the sorghum and cattle in the United States. In addition to agriculture, the aquifer supports all other user groups including municipal, manufacturing, mining, and steam-electric power. The aquifer continues to be the only water supply for most small communities and a primary water supply for larger communities on the High Plains. Groundwater withdrawals by these water user groups continue to outpace recharge, causing generally widespread depletion of the aquifer.

The Water Resources Development Act of 1976 authorized the Six-State High Plains-Ogallala Aquifer Regional Resources Study (High Plains Study) to address the problem of depleting High Plains-Ogallala aquifer water supplies. The study was completed in 1982 and confirmed the possibility of transferring water into the region.

The U.S. Department of Commerce, in coordination with the U.S. Army Corps of Engineers and other federal, state, and private entities, examined the feasibility of various alternatives to provide adequate water supplies to “assure continued economic growth and vitality of the High Plains region.” Among the five strategies included in the High Plains Study, one strategy evaluated construction of large-scale surface water transfer project alternatives from adjacent areas to restore irrigated acres.

In 2015, the Kansas Water office and the U.S. Army Corps of Engineers updated the High Plains Study for Alternative Route B (moving water to western Kansas). The 2015 update reveals that moving water to Kansas is technically feasible. The 2015 update also identified alternative ideas for water transfer systems, including ideas for moving water to the six states in the 1982 High Plains-Ogallala Study (TX, OK, KS, NE, CO, NM). Updating the 1982 study as proposed here would build on the past work and tell us if moving water to the High Plains is feasible, the systems needed to do it and estimated costs.

## **Proposal**

We request that Congress authorize and appropriate funds to confirm the feasibility of this concept to mitigate billions of dollars in flood damage on the Missouri River, to create jobs, to ensure food security and to provide much needed water supplies in the Ogallala – High Plains Region. If shown to be feasible, we request that Congress authorize and appropriate the funds necessary to construct the project. The funds will be used to update water transfer route feasibility already conceptually developed by previous studies and consider concepts for enlarging and extending the routes from the Missouri River south to Colorado, Kansas, Nebraska, New Mexico, Oklahoma, and Texas. This assessment should:

1. Initiate discussions with the U.S. Army Corps of Engineers and other federal agencies as discussed above. Build on the Corps’ 2015 High Plains Study, the Corps’ previous work to mitigate flooding in the Missouri River basin and other data to determine the feasibility of a project to move water from the Missouri River basin to the Six State Ogallala-High Plains Region.
2. Perform a comprehensive water demand analysis for agriculture (livestock and irrigation), food processing, municipal and other water user groups in the region.
3. Identify water transfer system components (reservoirs and conveyance systems) using updated GIS data, water demand forecasts and water availability. Develop conceptual-level alternatives, size of the transfer feature and capacity of the pumping systems.
4. Provide preliminary cost estimates for projected costs using 2020 base year costs. The projected costs should include construction related costs, anticipated annual recurring costs for maintenance and repair and energy costs.
5. Evaluate the legal and environmental issues related to constructing and operating the system including conflicts with existing state and federal laws related to surface water transfer between the states and environmental laws and constraints that would be encountered if a project of this scope is built.

Upon successful completion of the study, we request Congress authorize and fund the construction, and implementation of the water transfer project.