

Groundwater Recharge and Sustainability Project (GRASP)

Wichita and Greeley Counties



What is GRASP?

GRASP is a locally led USDA partnership program that leverages conservation dollars to support local water conservation efforts. It is designed to assist producers in Wichita and Greeley counties address declining aquifer levels through implementing voluntary irrigation conservation and efficiency practices and by restoring playas to increase groundwater recharge. GRASP is also supported by the Kansas Department of Agriculture's Water Transition Assistance Program. This voluntary, incentive-based program is designed to manage aquifers in critical need of restoration by compensating landowners for the permanent retirement of irrigation water rights.

How does GRASP help producers?

The conservation practices offered through GRASP are designed to help producers meet their water conservation objectives. These objectives may include conversion from an irrigated cropping system to dryland farming, implementing a reduced tillage system, introducing a cover crop to improve soil health and designing a less water intensive crop rotation. There are practices available to assist irrigators with improved irrigation water management by implementing irrigation scheduling, installation of soil moisture sensors and improvements in irrigation water use technology.

GRASP also provides financial assistance for restoring playa wetlands. When restored, healthy playas can help recharge the Ogallala Aquifer — and the water that reaches the aquifer through playas is cleaner than water that enters through other channels. Short term annual rental payments will also be available for the wetland and buffer area devoted to playa restoration activities. Land rental payments for playas will be based on local irrigated rental rates.

What is a healthy playa?

A healthy playa has an intact clay basin — without excavated pits or ditches — that is not buried by sediment from nearby fields. Water from the surrounding watershed freely enters the basin through a native vegetative buffer without being diverted from the playa by roads, terraces or other impediments.

Restoring Playas

Playa restoration is reversing past modifications to playas by removing accumulated sediment, filling drainage features, redirecting water back into the playa, and protecting the playa with a buffer composed of native vegetation.

For more information on best management practices for playas, visit the *Restoration* section at PlayasWorkForKansas.com.

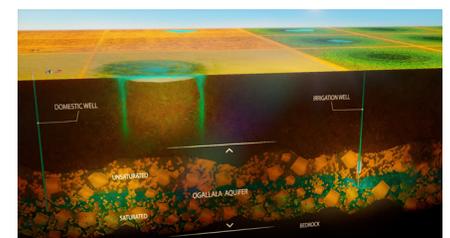


Illustration showing groundwater recharge through playas.

Irrigation Management

Advanced irrigation management is a productive way to save water and energy, optimize crop yield and quality and minimize negative impacts to limited resources. Best practices include evapotranspiration and crop growth modeling, automated soil moisture sensing, and spectral crop monitoring.

In recent years, technology has improved to allow for soil water monitoring and automated computer-aided irrigation scheduling to determine timing and quantity of applications, as well as improving soil health to maximize infiltration of precipitation and irrigation water, improve soil water storage capacity, optimize water extraction from the soil by roots; and drought-tolerant varieties, crops, and cropping systems (Steiner, et al).



Retiring Irrigation Water Rights

The Kansas Department of Agriculture's Water Transition Assistance Program (WTAP) is also available in Greeley and Wichita counties. The voluntary, incentive-based program is designed to manage aquifers and streams in critical need of restoration by compensating landowners for the permanent retirement of irrigation water rights.

To learn more about this separate program, contact Steve Frost at 785-564-6622 or visit agriculture.ks.gov/wtap.



How does the program work?

The program is open to producers in Wichita and Greeley Counties who would like to explore their water conservation options. The focus on playa conservation and restoration efforts will be near municipal and domestic water wells, supporting recharge where it is needed most, but the program does not require you to have a playa on your land to participate. Eligible producers with water conservation objectives can apply. Applications are accepted on a continuous basis at your local USDA Service Center in Leoti or Tribune. There will be periodic application ranking and funding decisions throughout the year.

How do I get started?

Your first step is to make an application for GRASP at the USDA Service Center in Leoti or Tribune. The application does not commit you to anything, but allows the planning process to start and learn how the program could help meet your needs. Planning assistance for your project will be provided by the GRASP partnership, including field staff from Playa Lakes Joint Venture, Ducks Unlimited, and Natural Resources Conservation Service.

To discuss options for restoring your playa, please call Abe Lollar with Ducks Unlimited at 620-214-2693 or Matt Smith with Playa Lakes Joint Venture at 785-269-1415.

For more information about playas, including playa maps, management tools, and a playa restoration guide, visit PlayasWorkForKansas.com.

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