

COMMUNITY ENGAGEMENT AND EDUCATION

Community-Driven Water Management: The Tomorrow's Water Model for Playa Restoration



The Ogallala Aquifer spans 174,000 sq mi beneath eight states of the central U.S., providing water for over 1.8 million people. Groundwater overuse, largely for irrigation, threatens the future water supply for many communities. Playas are a primary source of groundwater recharge, contributing up to 95 percent of water flowing to the aquifer. However, many playas are degraded and at risk of further destruction, decreasing potential benefits for wildlife and people. Tomorrow's Water, led by Playa Lakes Joint Venture (PLJV), helps communities incorporate playa restoration into water management plans to provide water for future generations.



KEY ISSUES ADDRESSED

Groundwater availability from the Ogallala Aquifer is rapidly declining due to overuse, drought, and degraded playas. The economic and societal benefits of playas are not always known and harnessed by communities. Human impacts on playas, such as being filled by excess sediment from nearby farms, decrease playas' abilities to recharge water. Each community faces unique challenges requiring a diverse set of partners to implement solutions. Tomorrow's Water has helped communities build diverse partnerships to find and implement water management solutions. However, no single organization has the capacity to support every community depending on the Ogallala.

PROJECT GOALS

- Reduce aquifer overuse through irrigation efficiency, well retirement, and community outreach
- Develop local partnerships to address water quantity and quality issues
- Restore playas around municipal and domestic wells
- Manage runoff within playa watersheds

CO-PRODUCING TOMORROW'S WATER

Tomorrow's Water has always been grounded in collaboration, considering the priorities and needs of all partners. PLJV continues to engage with stakeholders to improve available tools and resources.



Community Stakeholders Visit a Playa in Clovis, New Mexico/PLJV

PROJECT HIGHLIGHTS

Acres of Playa Restored: In New Mexico, PLJV facilitated the restoration of 708 acres of playas, now resulting in 11,302,283 pounds of sediment avoided annually. In Kansas, PLJV guided the restoration of 1,142 acres of playas. This included the installation of infrastructure to funnel water away from roads, preventing flooding, and into five previously dry playas.

Diverse Financial Support for Restoration: Multiple and diverse funding sources can be leveraged for playa restoration. Tomorrow's Water projects have leveraged funding from the National Fish and Wildlife Foundation (NFWF) and Wildlife Conservation Society (WCS), as well as Farm Bill programs through the U.S. Department of Agriculture's Natural Resource Conservation Service (USDA NRCS) and Farm Service Agency (USDA FSA).

Growing Interest, Shifting Understanding: For many years, PLJV had to initiate conversations about playas. In recent years, more communities are reaching out to PLJV and its partners to request support for implementing these strategies in their communities. This increase in awareness and interest is exciting, as Tomorrow's Water can help these communities find and implement solutions to continue providing abundant, clean water for future generations.

Collaborators

- Playa Lakes Joint Venture
- The Tomorrow's Water Collaborative
- See online for full list of partners

CART Author: Erin Connolly, Drought Learning Network, May 2023.

For more information on CART, contact Genevieve Johnson (gjohnson@usbr.gov) or Karlee Jewell (karlee_jewell@fws.gov).

Visit CART:



LESSONS LEARNED

Groundwater management requires many diverse partners working together to succeed, and productive partnerships may come from unexpected places. Tomorrow's Water encourages engaging a wide variety of stakeholders throughout the community, as well as knowledgeable agency and nonprofit organizations to increase capacity.

While multiple perspectives are critical for success, large-scale conservation efforts need a distinct goal and a leader. PLJV recommends that each community have a well-defined goal and a leader with the passion and capacity to organize the project. Additionally, community outreach is most effective when conducted by trusted, local partners. Success in projects such as these can be measured in both tangible and intangible ways. Ultimately, PLJV measures success through the number of playa acres restored, and, in some cases, the number of wells retired. PLJV also measures success through community interest and increased engagement. The number and breadth of communities interested in Tomorrow's Water is an important indicator of the ability to meet long-term playa restoration goals.

NEXT STEPS

- PLJV is working with towns in Kansas, New Mexico, and Texas, and is looking to expand Tomorrow's Water into Oklahoma, Colorado, and Nebraska
- Tomorrow's Water tools and resources are available at tomorrowswater.org
- Kansas Geological Survey is investigating how farming in playas affects recharge rates

For more information on this project, contact Miruh Hamend:

m.hamend@pljv.org



Smartweed (*Polygonum*) in a Healthy Playa/Abe Lollar/Ducks Unlimited