

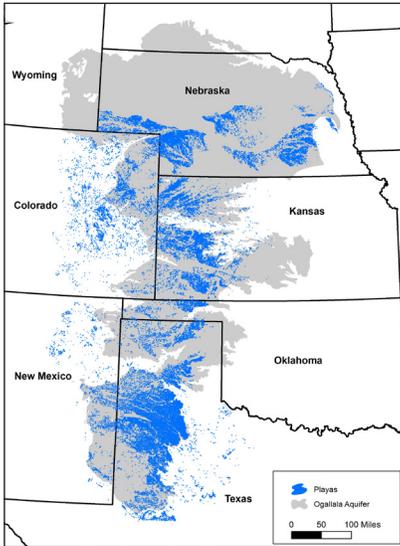


COMMUNITY ENGAGEMENT GUIDE

*Developing adaptable solutions
to enhance groundwater recharge
and water management
for your community*



CONNECTING PEOPLE, PLAYAS AND THE OGALLALA ACROSS GENERATIONS



People throughout the western Great Plains depend on the Ogallala aquifer for their water. However, as aquifer levels decline, many towns and communities are searching for solutions to continue providing abundant, clean water for future generations.

The Playa Lakes Joint Venture partnership has developed a collaborative conservation model called Tomorrow's Water that helps communities explore ways to provide future water by reducing the impacts from aquifer overuse and increasing groundwater recharge through playas.

It is designed to help communities create a water management plan that includes various conservation strategies, as well as

partnering with existing efforts.

Tomorrow's Water is an adaptive, collaborative process in which local communities partner with conservation organizations to create an actionable plan to stabilize their water supply — with a focus on incorporating playa conservation as part of broader water quantity and quality efforts.

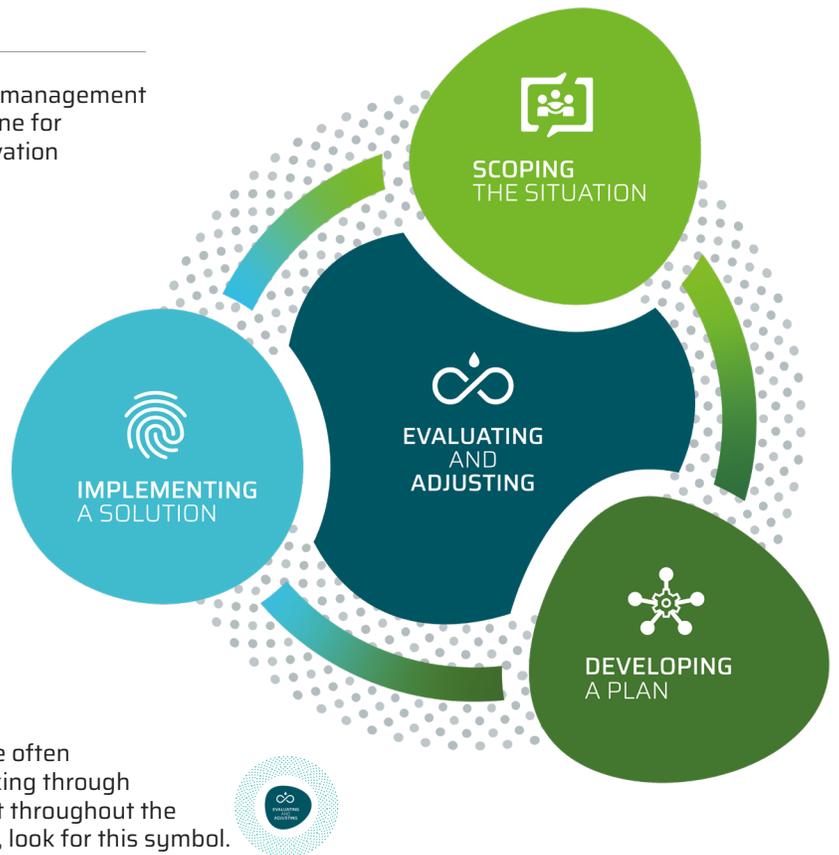
Although playas are a primary source of recharge, irrigation greatly exceeds groundwater recharge from playas. Therefore, Tomorrow's Water also includes strategies for reducing aquifer overuse — through irrigation efficiency, well retirement and other methods — and managing runoff within playa watersheds.

Using the Guide

Each community is different and, as such, each water management plan will be different, too. This guide provides an outline for developing a community-based, collaborative conservation partnership while allowing room for each community to tailor it to fit their specific needs. The strategies focus heavily on incorporating playa restoration into water management plans. For tools to help determine if playa restoration can have a measurable impact on your community's water supply, see page 3.

Throughout the guide, you'll find suggested activities and questions to explore when engaging community members, potential avenues to pursue when building partnerships and securing funding, and other helpful strategies partners have already used. To get the most out of this guide, refer back to it, visiting and revisiting sections as they apply.

The guide has three main sections: scoping the situation, developing a plan, and implementing a solution. The strategies within and across sections are often interrelated and may require some fluidity while working through them, as well as continued evaluation and adjustment throughout the entire process. For tips on how to evaluate and adjust, look for this symbol.



Tomorrow's Water helps communities explore ways to provide future water by reducing aquifer overuse and increasing groundwater recharge through playas.



WHY PLAYAS?

Playas — also called mud holes, buffalo wallows, and lagoons — are round, shallow depressions at the lowest point of a watershed. They fill with water from rainstorms and run-off, which then slowly moves toward the Ogallala aquifer or evaporates. These temporary wetlands recharge the aquifer and support many kinds of wildlife.

WATER QUANTITY

Because playas are a primary source of groundwater recharge, contributing up to 95 percent of water flowing to the aquifer, they are an important part of a water management plan. Recharge rates in playas are 10 to 1,000 times higher than under upland areas. While

individual playa rates vary, the average recharge rate across the region is about three inches per year.*

That's three inches of water the size of the playa moving toward the aquifer each year. Since this is a continuous process, the water recharging through playas today will be available for use by the next generation.

WATER QUALITY

In addition, water reaching the aquifer through playas is of higher quality because they act as water filtration systems reducing contaminants reaching the groundwater. For municipal and domestic wells with

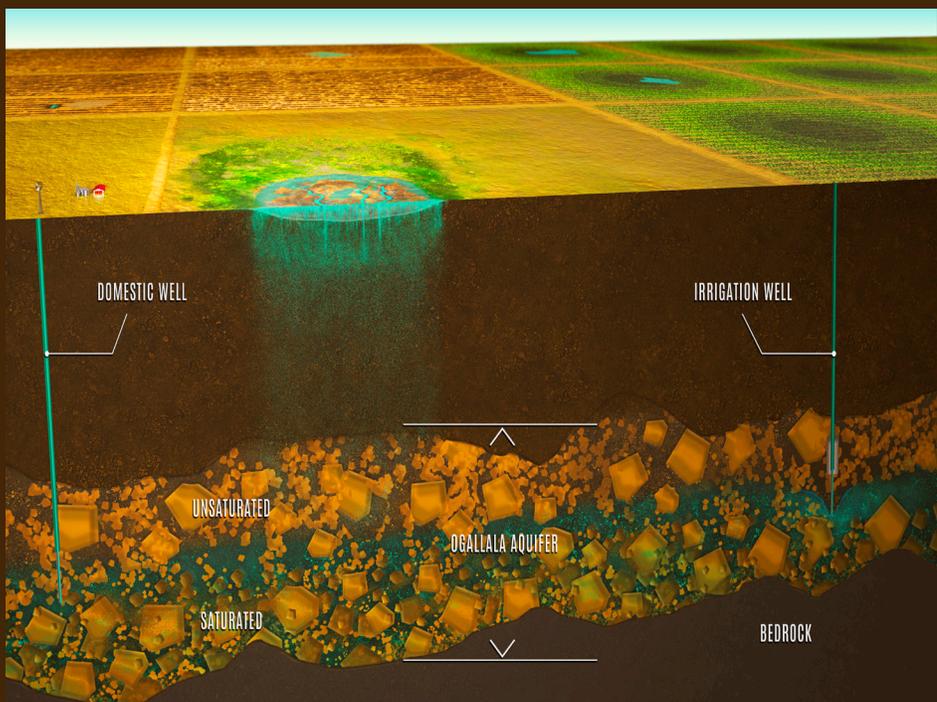
water quality challenges, playa restoration coupled with erosion and nutrient management practices near wells will help improve the quality of water entering the aquifer.

HEALTHY PLAYAS

Since many playas have been modified and are no longer functioning as healthy playas, restoration is an important component of the Tomorrow's Water model. In order to provide clean water for future generations, playas need to have an intact 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.

PART OF THE SOLUTION

Although playas are a primary source of recharge, irrigation greatly exceeds recharge from playas. So Tomorrow's Water also includes strategies for reducing aquifer overuse and managing runoff within playa watersheds. Once water use has been reduced, healthy playas can provide future water to support towns and rain-fed operations.



**Gurdak and Roe, 2009. This report provides a review of all the playa studies with calculated recharge rates up to 2009. Three inches is an approximate average. Recharge rates beneath individual playas vary considerably — up to 10 inches per year — based on a number of factors including depth to aquifer, soil type, amount of soil saturation, evaporation and transpiration, and amount of rainfall. Recharge rates also vary during the playa wet/dry cycle.*

Top photo courtesy of Brittany Smith



SCOPING THE SITUATION

Before using the strategies in this guide, it is important to determine whether playas can provide a measurable contribution to your community's water. To understand if playa restoration can be an effective solution for your town, visit TomorrowsWater.org to use our Playa Recharge Estimator and other helpful tools. On the Estimator, draw a circle around your town to view the playas within two miles of your town wells and their potential recharge. You can also contact Playa Lakes Joint Venture staff to provide a more detailed analysis, including playas within two miles of town wells, and to answer specific questions.

Once you've taken the steps outlined above to determine if playas may be an effective component in managing your community's water, begin scoping what this looks like, starting with these questions.



- How many playas (and playa acres) are in proximity to town wells?
- How many playas (and playa acres) are there within the county?
- How many irrigation wells are in proximity to the town water supply?
- What is the saturated thickness of the underlying Ogallala aquifer?
- Are there any water quality impairments (such as nitrates)?

Exploring Project Potential

A key aspect to any successful conservation effort is listening to the needs of the people involved and shaping strategy around those needs. It is important to have a good understanding of the existing conservation practices being used and community attitudes and beliefs toward conservation.

Make it a priority to listen to a variety of people, including community members in various roles and industries, historically marginalized populations, and landowners and producers.

These conversations should provide an understanding of the water situation in the town, as well as individual and collective opinions about the situation.

Begin your conversations by discussing relevant water quality and quantity challenges and the ways those impact their lives. Talking about the benefits of playas can also be a good entry point into the conversation since they are often relevant because

of the recharge potential. Social science, the study of human behavior in its social and cultural aspects, can be helpful during this phase. Using social science principles in one-on-one conversations or small group meetings with a diversity of residents can help partners identify a relevant water conservation strategy that benefits both people and natural resources.

Opinions and Knowledge About Water

- What are the biggest water challenges for the town and broader community? What makes addressing them difficult?
- What efforts have been made to address water concerns?
- What is the level of community awareness around water challenges?
- What are community attitudes toward water conservation including reducing irrigation and well retirement near town wells?

Community Information

- What is your hope for the future of the community?
- What is the biggest industry? Is it a major water user?
- What are common land use practices?

Community Engagement

- What are your goals for pursuing broad water conservation efforts?
- Who in the community is interested and engaged in water conservation? What are indicators of their interest?
- What is the local capacity (time, money, infrastructure) to implement solutions?



DEVELOPING A PLAN

The overall goal is to create a collaborative, synergistic water conservation effort, and having a broad-based partnership is key to success in both the planning and implementation phases. This will most likely include partners at the state and local level, with local partners supporting on-the ground efforts and sustaining community engagement.

A diverse group of partners brings a diverse set of knowledge, relationships, perspectives, and experience. Each partner has a piece of the puzzle when it comes to stabilizing the water supply, improving water and soil quality, and providing habitat. Often, partners will focus on a specific aspect of conservation within the overall project or may provide unique funding opportunities.

Building a Partnership

Identify potential partners.

- Who (agencies, organizations, community leaders) can bring unique skills, perspectives or funding? What will they contribute?
- Are there local management entities (like Groundwater Management Districts) doing similar work that this could support or partner with?
- Are a variety of sectors in the community represented?
- Who is crucial to the project's success? At what point do they need to be involved?
- What stakeholder groups are represented (i.e. irrigators, agencies, wildlife groups, non-governmental organizations, landowners, etc)?

Set roles and responsibilities.

- What are the responsibilities of each member of the group?
- Who will lead the group, set up meetings, track progress, assign roles, etc?
- How often will the group meet?

Formulate a conservation strategy, design the project, and scope funding opportunities.

- What is the goal or intended outcome? Are group members aligned on the goal?
- What are the biggest conservation needs and what should be addressed first?
- What conservation strategies will be included?

- Logistically, who will do the on-the-ground conservation work?
- Can playa restoration be incorporated into existing water conservation efforts and partnerships?
- Are there voluntary irrigation management or conservation efforts already in place?
- Is the group aware of any potential funding opportunities?





Courtesy of Abe Lollar

CONSERVATION DESIGN

While conservation design happens throughout the process, this refers to the point when the partners develop a plan for how to implement the necessary conservation actions to meet the community's water management goals.

The plan will be determined by the nature of the project and funding sources; however, it should include solutions and programs that help landowners stabilize levels of water use and restore playas.

Identifying Goals

Set goals and determine outcomes.

- What are the desired outcomes from the partnership? Are they realistic or do they need to be adjusted?
- What kind of actions are needed to meet the conservation outcomes (restoration practices, long term protection or technical assistance)?
- How will you target conservation efforts or programs? Are there priority areas where focus is needed? How will potential projects be prioritized or evaluated?
- What is the capacity and desire of each partner to contribute to this project? What is each partner's role? What resources, including financial, can each contribute?
- What are the gaps within the partnership (capacity, funding, etc), and how will they be filled?

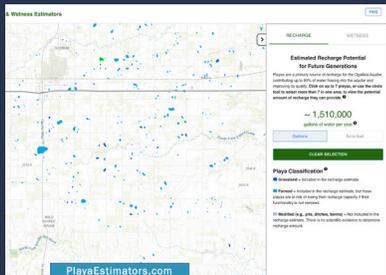


Quick Compare		BASELINE	ALTERNATIVE
		Plowed plays	Grass plays
LAND USE			
State	Kansas		
Crop (if any)			
Field size	100.0 ac	100.0 ac	
Playa size	10.0 ac	10.0 ac	
Acres in crops	100.0 ac	90.0 ac	
Acres out planted (playa plus grass buffer, if any)	0.0 ac	50.0 ac	
COSTS			
Plays restoration costs (seed, herbicide, etc.)	\$24,000.00	\$24,000.00	
Plays restoration costs (producer's annual per-acre costs)	\$0.00	\$24,000.00	
REVENUE			
Expected price	\$3.36	\$3.36	
Yield on non-playa acres	47 bushels/ac	47 bushels/ac	
Yield on playa acres	3.0 bushels/ac	0 bushels/ac	
Additional revenue earned on grass acres (example: hunting lease or grazing lease)	\$0.00	\$0.00	

PLAYA LAND USE CALCULATOR

The Playa Land Use Calculator helps producers make decisions about managing playas in fields that are typically farmed and shows how conservation programs can meet operational objectives. The calculator can help determine the amount needed to enroll a playa, instead of farming it, and estimate playa restoration costs. It also can help understand how much water could be sent back into the groundwater supply and the value of other benefits. You can enter individual field details or use defaults to get a ballpark figure to help determine program offers, and compare different situations by adjusting crop prices, crop types, and how often crops are lost.

Find the calculator at PLJV.org/playa-tools



PLAYA RESOURCES AND TOOLS

Playa Lakes Joint Venture has developed a set of online resources to help bring playas and their connection to the Ogallala aquifer to life for communities, farmers, ranchers, resource managers, and others throughout the region. Tools include an interactive playa map, downloadable playa maps by county, playa land use calculator and playa recharge and wetness estimators.

Visit PLJV.org/playa-tools

FUNDING STRATEGY

Collaboration and transparency are key for the funding development process to be successful. The project scope and capacity needs will inform which funding sources to pursue. Other factors such as partnership diversity and the ability to leverage existing or anticipated funding will also inform funding strategies.

The types of funding opportunities vary greatly, from what is funded to requirements for matching funds and project length. For instance, some funding streams are annual and some are multi-year. Some will only fund on-the-ground work, while others can be used for outreach and staff time. Look for opportunities to leverage existing efforts and funding sources. Grants and other programs can work in tandem and be used as match or leverage to bring in additional funding.

Developing a Concept

Develop a project concept. Talk to the funder to see if the project is a fit. Then develop a proposal.

Depending on the funding opportunity, the application process will vary. Resources and partners are available to help you navigate this process.

Some important things to consider:

- Who will manage and write the proposal? Who will submit it?
- What is the review process with partners and the community? How will they be kept informed?
- Who will administer the grant (payments, reports, etc), if funded?

Planning

Look broadly for funding opportunities. While not an exhaustive list, start with the entities listed below.

- *Local government organizations:* County Commission, Chamber of Commerce, tourism offices, water district, other local government officials
- *State agencies:* environmental, agricultural, wildlife, conservation districts, water office/authority, legislators
- *Federal agencies:* USDA Natural Resources Conservation Service and Farm Service Agency (Farm Bill programs), US Fish & Wildlife Service (Partners for Wildlife, North American Wetlands Conservation Act Grants), US Environmental Protection Agency
- *Private entities:* Non-profit organizations (i.e. human health, wildlife, sustainable agriculture), philanthropic programs (i.e. foundations, corporations, private individuals), industry at the local, state and national level

Before pursuing funding, determine the amount needed and a realistic timeline for implementing the project.

- What is the overall budget for the project?
- Is funding needed for capacity to manage and implement the project?
- How much funding is needed for communications and outreach to stakeholders?
- How much funding is needed for playa restoration and other water conservation activities?
- Are there any additional projected costs?
- What is the project timeline? (May vary depending on objectives, funding sources, etc.)



Continue to keep an eye out for additional opportunities that may arise throughout the course of the project. It is important to continuously source additional funding or adjust the plan to sustain the project.



Courtesy of Abe Lollar



COMMON PROGRAM CONSIDERATIONS

United States Department of Agriculture Programs

Environmental Quality Incentive Program (EQIP)

Provides cost share for restoration and management practices. Highly competitive ranking process. Limited opportunity to target funding or for partnerships.

Regional Conservation Partnership Program (RCPP)

Partner led and developed. Can leverage partner resources for increased levels of funding. Offers several funding opportunities for restoration practices, annual rental payments to supplement foregone income, and payments for permanent easements.

Conservation Reserve Program (CRP)

A component within CRP, the Kansas, Nebraska and Oklahoma State Acres for Wildlife Enhancement (SAFE) program offers a partner developed and targeted CRP practice for taking playas out of production and restoring them.

Wetland Reserve Easement (WRE)

Long term or permanent protection of high value wetlands. Highly competitive ranking process. Limited opportunity to target funding or for partnerships.

State and Non-Governmental Organization Programs

These programs are often more streamlined with a simpler process for participation, but funding can be limited. The funding is primarily in the form of cost share for restoration and management practices and can usually be stacked with other programs. Consider exploring your state's agriculture, health, and environment departments for additional information.

Also consider local water entities, such as Groundwater Management Districts, that have a history of working with producers on water management. They may have an interest in partnering with you on existing or new conservation efforts.



New funding opportunities are continuously becoming available. Consistently revisit which programs best fit your project as your needs change.

ALIGNING PROJECT OUTCOMES WITH FUNDING PROGRAM ATTRIBUTES

A variety of state, federal and non-governmental organizations offer funding for implementing conservation practices, with several providing funding for additional capacity. Choosing the right funding source depends on the project's outcomes, participant needs, and the partnership's ability to contribute to the project. When aligning project goals with funding programs, consider the following:

- Is cost share needed for playa restoration practices (filling pits, ditches, and diversions, installing native vegetation buffers, and managing surface water runoff to flow into playas)?
- Is cost share needed to implement irrigation management practices? Or for upgrades in technology?
- Does the project need long term protection of critical areas through a conservation easement?
- Will financial incentives need to be provided to compensate for lost income when removing playas or cropland from production agriculture?
- Can partners leverage funding sources to achieve greater outcomes?
- Are funds needed for additional technical assistance and capacity to implement the project?

Consider each program's proposal requirements and the resources needed to develop and submit the proposal. State and non-governmental organization programs are often much more simple and streamlined. Also get help from partners who understand program rules and policies to ensure it fits with project goals.

“My advice to other towns is to have a plan. Have a plan, work that plan, but keep an open mind and be ready to implement new ideas, such as leveraging playa lakes as a way to recharge the aquifer.”

— Mayor Mike Morris, City of Clovis, New Mexico



IMPLEMENTING A SOLUTION

Finally, it is time to implement the solutions you've identified and start seeing action on the ground. What this looks like will evolve and change over time, depending on the capacity of the partnership, roles and responsibilities of partners, timelines, and what is learned along the way.

Executing the Plan

Define partner roles and responsibilities.

- Who will lead the project? Is it through an individual, a steering committee, etc?
- Who will execute the day-to-day work?
- Who makes big-picture decisions, who approves changes, and who will hold the team accountable?

Determine what is needed for success.

For the project to be successful, there needs to be a clear understanding of conservation goals and how they will be measured (i.e. playa acres protected or restored, wells retired, etc). This will help determine what assistance will be needed to meet those goals (i.e. connecting people to programs, providing direct assistance on restoration needs, etc).

- Do people have the knowledge and resources necessary to complete a project?
- If not, are there people who are able to help with planning or implementing projects?
- What kind of training is needed? When and for whom?

Build a timeline for the work.

Set realistic goals and deadlines. Determine your desired outcomes using SMART goals (Specific, Measurable, Achievable, Realistic, and Time-Bound).

Create a communications and outreach plan (see next section).

- What will be the process for communicating about projects with the various partners and the community?
- Can one of the partners provide marketing and communications leadership or support?
- When, throughout the timeline of the project, will you take time to evaluate and adjust?

Restoring & Maintaining Healthy Playas



What is a Healthy Playa?
A healthy playa has an intact clay bottom, undisturbed drainage features, and native vegetation. It is a natural water storage area that helps recharge groundwater and provides habitat for native plants and animals.

How Do Playas Work?
Playas are natural water storage areas that help recharge groundwater and provide habitat for native plants and animals. They are a natural water storage area that helps recharge groundwater and provides habitat for native plants and animals.

Why is it Important to Restore Playas?
Playas are important for water storage, groundwater recharge, and habitat for native plants and animals. They are a natural water storage area that helps recharge groundwater and provides habitat for native plants and animals.

How Do We Restore Playas?
Playa restoration involves removing accumulated sediment, filling drainage features, and protecting the playa with a buffer composed of native vegetation.

Who Can Help?
The Playa Restoration Guide provides information on restoring and maintaining healthy playas and what to expect as you work with conservation delivery staff to plan and implement a playa restoration project, as well as how to get financial and technical assistance for your project. It can also help to inform other funding opportunities.

Find the guide at PLJV.org/restoration-guide

PLAYA RESTORATION GUIDE

Playa restoration reverses 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.

The Playa Restoration Guide provides information on restoring and maintaining healthy playas and what to expect as you work with conservation delivery staff to plan and implement a playa restoration project, as well as how to get financial and technical assistance for your project. It can also help to inform other funding opportunities.

Find the guide at PLJV.org/restoration-guide

COMMUNICATIONS AND OUTREACH

Developing relevant messages, communications products, and outreach materials is an important part of supporting the implementation of the project. The stakeholder information gathered earlier in the process will help with identifying primary audiences and creating messages for those audiences. Understanding which messages are relevant to your audiences is key to creating a successful communications campaign and implementing the project.



COMMUNICATIONS AND OUTREACH RESOURCES

Communications and outreach resources - including educational information about playas, videos about playas and Tomorrow's Water, and printed materials - are available at TomorrowsWater.org.

Communicating About the Project

Communications Plan

Identify the primary stakeholders or audiences you need to engage to meet the project goals.

Create a communications plan and timeline. Spread out when and how information is delivered. Repeat messaging using various formats.

Be clear in the purpose of the communications, whether it's a meeting, handout, website, or something else. Keep the information simple and easy to digest. There is value in everyone knowing what you are talking about.

Personalize communications when appropriate. This can help people feel invited into the conversation and that they are part of the solution.

Timing is important. Start to advertise and share information as early as possible. Partners, landowners, and community members all have different schedules, and it is important to understand how those schedules align or differ.

Consistent Messaging and Storytelling

It is very important to vet information thoroughly before communicating it to make sure everything is correct and

accurate. Once information is out into the community, it is hard to change what was said.

Introduce the community to the project throughout each step; communicate with them over the course of the project; and keep them up to date on what's happening so they feel engaged. The community should feel ownership over the project, too.

Learning about the perspectives and experiences of others through videos, photos, and written materials can have a powerful impact. Personal stories can help people understand how the project will benefit the community and how they can be a part of it.



LOCALIZED AND PERSONALIZED COMMUNICATIONS

Personalized communications, such as mailing postcards or letters, is another effective way to reach community members and landowners in the surrounding area since these mailings go direct to their homes.

- Are direct mailings to landowners, producers, and other water users appropriate? If so, can you get address or email lists? Conservation districts or other local groups may be able to help with this.
- Do you want to include mailings to community members, too? If so, is there an existing organization that can help with a mailing list?
- Are there other personalized communications that are shared with the community that you can participate in? (i.e. newsletters, mailings, publications, etc)
- Is there someone who can call landowners, community members or key stakeholders to introduce the project, invite them to meetings, etc?

Local organizations, like water districts, conservation district offices, economic development groups, and community development organizations often have successful ways of reaching the community. Partnering with them to share messaging can be extremely effective and does not require you to start from scratch.

- Are there newsletters that are sent to landowners and producers from local agencies or partners? Are they willing to share information on your conservation efforts?
- Can you partner with local organizations, groundwater management, or conservation district offices to send mailings to landowners and producers?
- Are there local organizations that are popular among the community that can help spread the word by handing out flyers at an event, keeping flyers on an entry table, sponsoring an event, etc?



PUBLIC MEETINGS AND WORKSHOPS

Holding public meetings and workshops is a good way to engage community members, landowners and producers. These events can be excellent opportunities to listen and learn more about the community and to answer questions, especially as the project is getting started.

- Are there existing events where you can participate? This is often very effective in the beginning when people don't know much about the project.
- When will the event be held? Think about your audience and take into account planting and harvest schedules as well as other events that may prevent people from attending.
- When will you announce the event or invite people? Start early to give people plenty of time to plan to attend. How many reminders are needed? Will you focus on personal invitations as well as a broader promotional strategy?
- Where will the event be held? Is there a local partner you can work with to find a space?
- Will there need to be snacks, water or coffee provided? Who will pay for those?
- Create an agenda for the meeting. What is the main goal or desired outcome? Who will lead the event? Who will speak? How will attendees be engaged?

LOCAL NEWS

Local news outlets are a great way to reach your audience. Contact local newspapers, radio stations and other regional publications to find out how to submit articles or press releases and submission deadlines.

Gain an understanding of the types of stories each outlet publishes, as well as their audience and publication schedule. Build a relationship with a contact person and regularly share press releases and articles about the project.



Periodically check in to evaluate that your messages resonate with your audience and adjust as needed.

BRANDING



Branding the project can make a memorable impression on partners and community members and helps them to remember key messages.

The Tomorrow's Water name, tagline, and logo are available for partner use when implementing a project.

Learn how you can incorporate the brand in your materials by visiting TomorrowsWater.org.

LEARN MORE

THE GUIDE

The Tomorrow's Water Community Engagement Guide was developed based on experiences working with individuals and communities in the western Great Plains who have found success using this model.

You may find this useful if you live in a community interested in groundwater management, if you are a landowner or producer interested in participating in conservation efforts such as playa restoration, or an organization partnering with communities interested in water management.

THE COLLABORATIVE

The Tomorrow's Water Collaborative in Kansas was instrumental in drafting this guide. The Collaborative members represent the Department of Conservation at the Kansas Department of Agriculture, Ducks Unlimited, Greeley County Republican, Kansas Association of Conservation Districts, Kansas Department of Health and Environment, Kansas Natural Resources Conservation Service, Kansas Water Authority, Kansas Water Office, and Playa Lakes Joint Venture.

PLAYA LAKES JOINT VENTURE

Playa Lakes Joint Venture (PLJV) is a regional partnership of federal and state wildlife agencies, conservation groups and private industry dedicated to conserving bird habitat throughout the western Great Plains — including portions of Colorado, Kansas, Nebraska, New Mexico, Oklahoma and Texas.

PLJV's role is to facilitate communication and coordination among the partners, provide science-based information and tools, and remove roadblocks to conservation — with the goal of helping everyone be more efficient and effective at delivering on-the-ground conservation that benefits the people and wildlife of the Great Plains.

RESOURCES

To learn more about Tomorrow's Water and incorporating playas into a water management plan, visit [TomorrowWater.org](https://www.tomorrowwater.org)

The PLJV partnership works in Colorado, Kansas, Nebraska, New Mexico, Oklahoma, and Texas. We can help you determine if Tomorrow's Water is right for your community and get you started on developing a program. Visit [PLJV.org/Contact-Us](https://www.pljv.org/contact-us) to talk to a staff member and get connected to resources.

You can also find state-specific resources at:

[PlayasWorkForKansas.com](https://www.playasworkforkansas.com)

[PlayasWorkForNewMexico.com](https://www.playasworkfornewmexico.com)

[PlayasWorkForTexans.com](https://www.playasworkfortexans.com)

