Community Engagement Strategies for Water Reuse:
A Practical Guide

February
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Section

01

PURPOSE

Purpose

This guide is designed to support utility leaders, educators, local organizers, and community members who are involved in planning or implementing water reuse projects. Its central goal is to provide accessible information that facilitate effective public engagement which ensures reuse projects surmount political hurdles and succeed. By outlining the types of water reuse, engagement strategies, and real-world case studies, the guide provides users with the resources to work effectively with local communities on water reuse solutions. Utility leaders may use the guide for project planning, while educators and local organizers can use it to support learning and dialogue, and community members can use it to better understand and advocate around local water reuse initiatives. This versatile resource can be leveraged for new initiatives or adapted for use in ongoing projects.



Photo by Marcin Jozwiak

How this guide was developed

To develop this guide, our team involved a diverse group of key stakeholders across the United States to document and learn from their experiences with community engagement for water reuse initiatives. This resource was primarily developed with input from communication and outreach professionals from utilities and related organizations. Participants shared expertise across direct potable reuse, non-potable municipal reuse, non-potable agricultural reuse, and onsite reuse. This guide is based on data from 23 interviews and three interactive workshops conducted between October 2023 and November 2024, with participants from California, South Carolina, Georgia, and Florida.

This guide synthesizes practical knowledge, lessons learned, and effective engagement strategies to assist utilities and organizations nationwide in planning and implementing reuse projects.

This guide is designed to shepherd water professionals through the key stages of understanding and applying community engagement principles in water reuse projects. It begins with foundational knowledge defining water reuse types and engagement frameworks, then offers practical strategies, tools, and case examples tailored to different project contexts. Modular sections allow users to work through the entire guide or focus on specific topics relevant to their role or project phase.

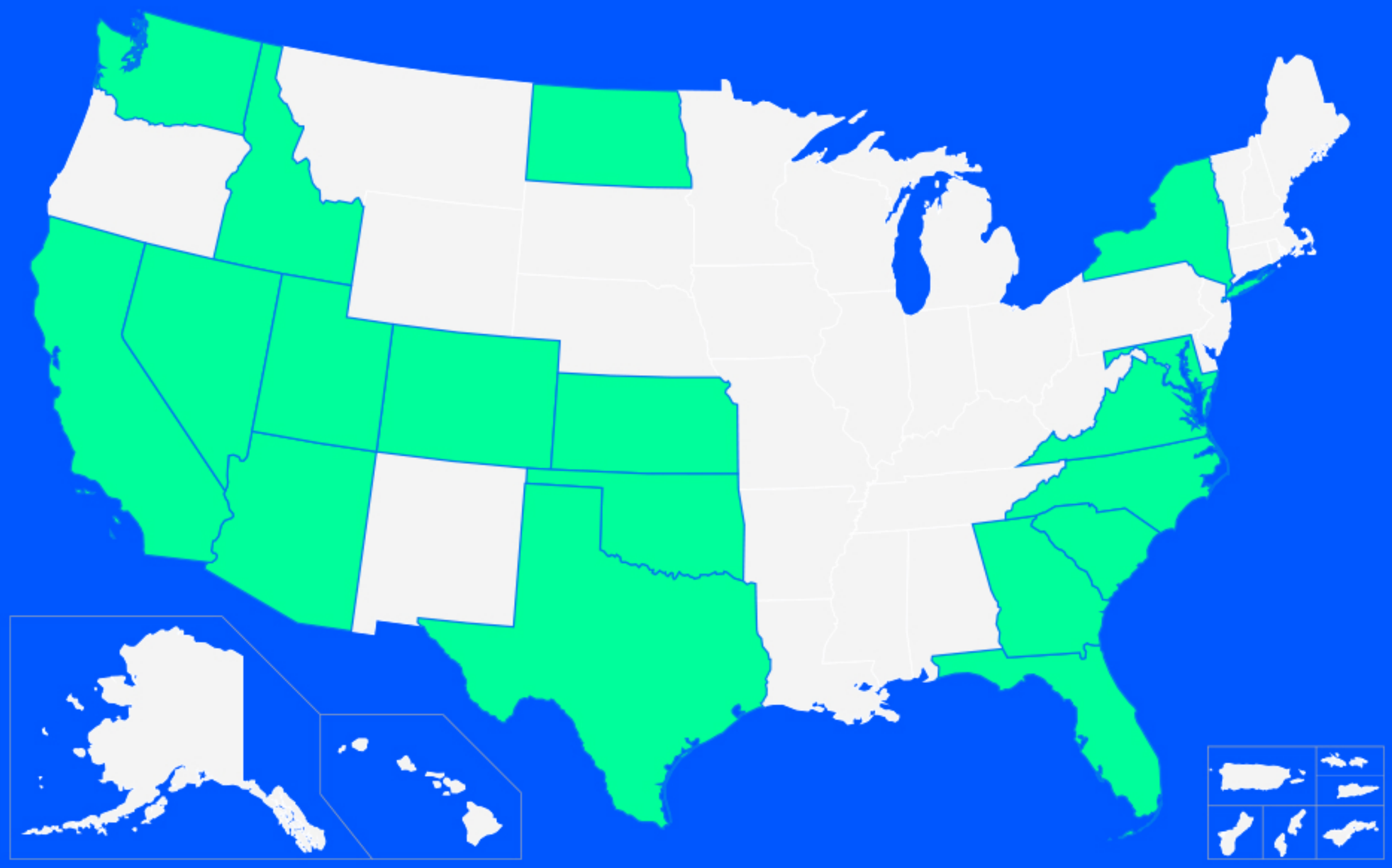
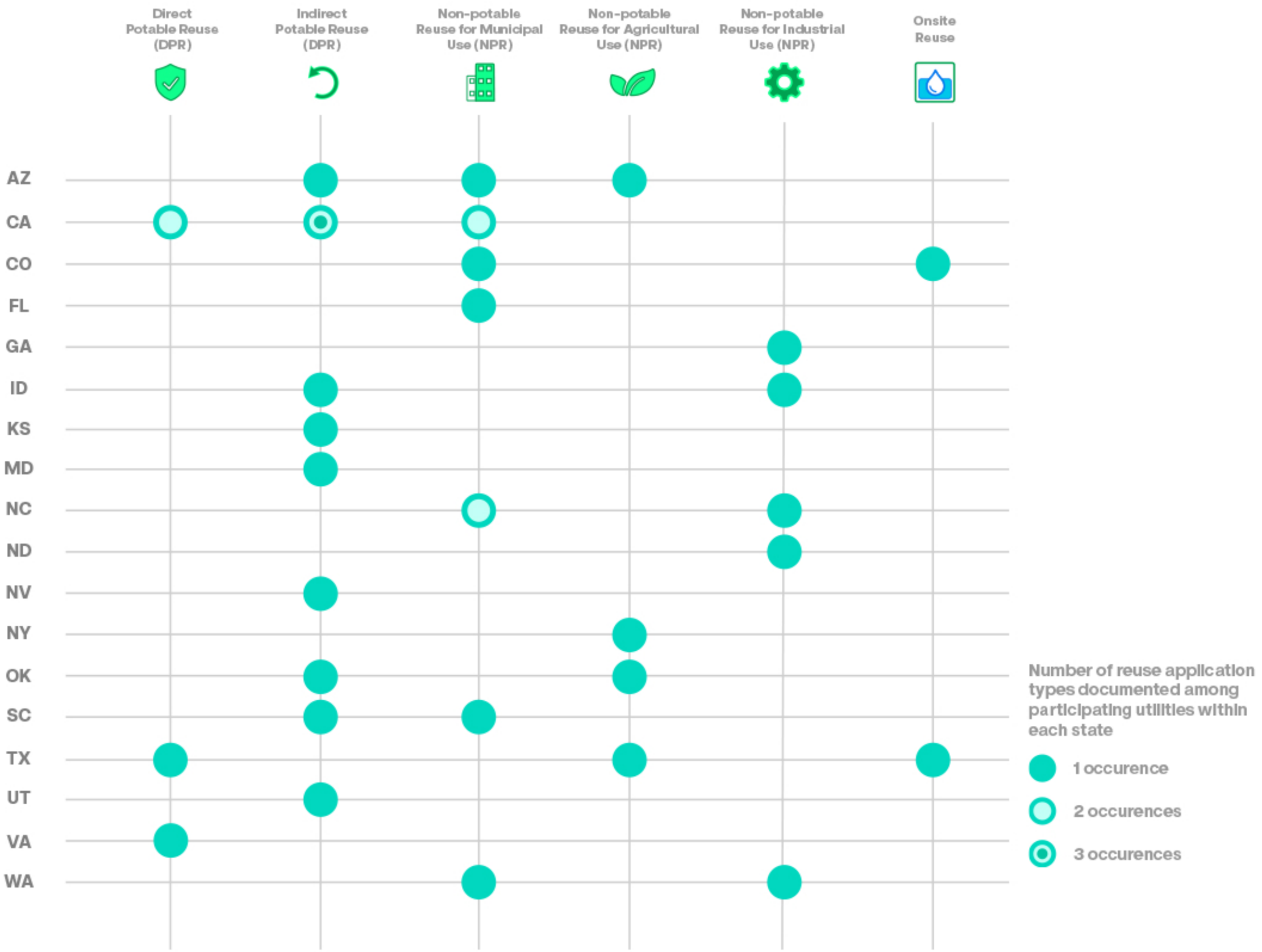


Figure 1. Distribution of participants across the United States

Table 1. Frequency and types of reuse applications and geographic locations of projects that are reflected in this guide. Definitions for the types of reuse applications can be found on page 9.



Section

02

INTRODUCTION TO WATER REUSE AND THE IMPORTANCE OF ENGAGEMENT



Communities across the United States (US) have been exploring ways to diversify their water supply and strengthen environmental sustainability through recycled water. Drivers range from increasing the amount of water available, to meeting nutrient management requirements, reducing land subsidence, supplementing potable water supplies for irrigation, and in some cases, reducing sewer infrastructure volume during wet weather events. Water reuse is the process of collecting and treating used water so it can be safely utilized for a range of beneficial end uses. Water reuse can be tailored for different levels of treatment depending on the intended use, ensuring safety and sustainability. This approach supports environmental protection, climate resilience, and long-term water security for communities.

Types of water reuse

A variety of source waters can be treated to produce water suitable for specific applications. Depending on program goals, utilities may recycle wastewater, graywater, stormwater, or other impaired sources for uses ranging from potable supply to agricultural, industrial, municipal, and onsite non-potable needs. The table below defines the major types of reuse based on common source-water and end-use combinations.

Direct potable reuse (DPR).[1] DPR refers to the introduction of purified water for drinking water, using water derived from municipal wastewater after extensive treatment and monitoring.

Indirect potable reuse (IPR).[1] IPR refers to the planned addition of treated wastewater into water bodies, as environmental buffers, that are used as sources of drinking water upon additional treatment.

Non-potable reuse for municipal use. Non-potable Reuse for Municipal Use involves treating wastewater to a quality suitable for non-drinking applications in urban settings.

Non-potable reuse for agricultural use. Non-potable reuse for agricultural use refers to treating and using non-potable water generated on the farm or from a local wastewater treatment plant to assist with the production of crops, both commercial and non-commercial.

Industrial reuse. This refers to the use of recycled water for industrial applications. Industries often require large volumes of water for cooling, processing, cleaning, and boiler makeup, so instead of using fresh drinking water, an industrial reuse project treats and recycles water to meet those specific needs. In some cases, industrial wastewater is also treated and recycled for other end uses.

Onsite and distributed reuse. This refers to water collected from onsite sources, such as greywater collected from a sink, appropriately treated, and used for non-potable applications at the single-building or water district scale to mitigate the demand on freshwater supplies.

1. Note: Past work with potable reuse projects has shown greater acceptance with the term "purified water" rather than "DPR" or "IPR.



Photo by Jopwell

Community engagement and water reuse

Water reuse projects require long timelines to plan, construct, and bring online, making consistent and effective community engagement essential throughout the process. Public perception can shift significantly over these extended periods, depending on how well residents are informed and involved. Levels of awareness, the clarity and relevance of messaging, and the community's broader understanding of water, environmental, and infrastructure systems all shape where attitudes fall on the spectrum, from strong support to staunch opposition. In the best-case scenario, the public develops a clear understanding of the project's purpose, recognizes the need for water reuse, and gains trust in the treatment processes through transparent communication and validation. Without sufficient demonstration and understanding of the safety of the purification process, communities may be wary of the public health implications of recycled water. Negative perceptions can also result from strained relationships between the utility and the community, a lack of clarity around the utility's role, or communication that is not tailored to local values and needs.

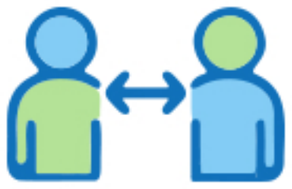
These dynamics contribute to a broader challenge in the water reuse sector: despite strong scientific evidence demonstrating the safety of reuse, many communities remain cautious. Proactive, context-sensitive engagement is therefore critical to building trust and ensuring successful implementation of water reuse projects.

At the same time, these projects raise important questions about safety, trust, equity, and environmental justice, making meaningful public participation essential from early planning through long-term operations. Lessons from past projects show that strong community engagement can reduce opposition, strengthen project design, and build lasting support.

Engaging community members early and often creates opportunities to address concerns, build trust, and align project decisions with local priorities. Public participation helps ensure that the benefits and burdens of water reuse are shared fairly and that underrepresented voices have influence in shaping project outcomes. When communities are actively involved, these projects are more likely to achieve results that are technically effective, socially equitable, and broadly supported.

Terms to know






Outreach



Activities related to sharing information with specific groups.

Communication



The messaging that supports outreach and engagement.

Engagement



Activities related to interacting with specific groups. Engagement is different than outreach in the sense that activities are designed to facilitate participation rather than just sharing information.

Participation



The active involvement of specific groups in engagement and outreach activities, where participants contribute input, share perspectives, or help shape decisions and outcomes.

Section

03

COMMUNITY ENGAGEMENT STRATEGIES

Community engagement strategies

Community engagement is the intentional effort to involve the public in the planning, design, and decision-making of projects that affect their lives. Public participation recognizes that communities bring valuable local knowledge, lived experiences, and priorities that can strengthen outcomes for water reuse projects. Rather than treating community members as passive recipients of information, engagement in water reuse emphasizes collaboration and community empowerment to shape the direction and success of reuse initiatives.

In this guide, 'community' generally refers to residents living in areas where a water reuse project is being implemented, while 'stakeholders' typically include community groups such as businesses, utilities, regulators, and other interest-based groups.

In practice, the boundaries between community and stakeholders are often unclear, and their involvement in reuse projects can vary over the course of a project. For example, stakeholders may be more engaged during the early planning stages, while community residents may become more engaged during the implementation and monitoring phases. Community engagement efforts in water reuse projects have primarily focused on outreach and education, including information on the benefits, safety, and technical aspects of reuse. However, to create opportunities for participation, this guide uses the spectrum of public participation to help users actively involve community members in planning and decision-making.

The spectrum of engagement

Community engagement efforts in water reuse projects have primarily focused on outreach and education, including information on the benefits, safety, and technical aspects of reuse. However, to create opportunities for participation, this guide uses the spectrum of public participation to help users actively involve community members in planning and decision-making. To better understand these levels of engagement, this guide uses the International Association of Public Participation (IAP2) Spectrum, which describes five modes of public participation in democratic decision-making on a continuum of increasing community engagement: inform, consult, involve, collaborate, and empower. The sections below provide additional information about each of these levels of engagement based on the IAP2 framework, supported by what was heard in conversations with water professionals involved with water reuse projects.

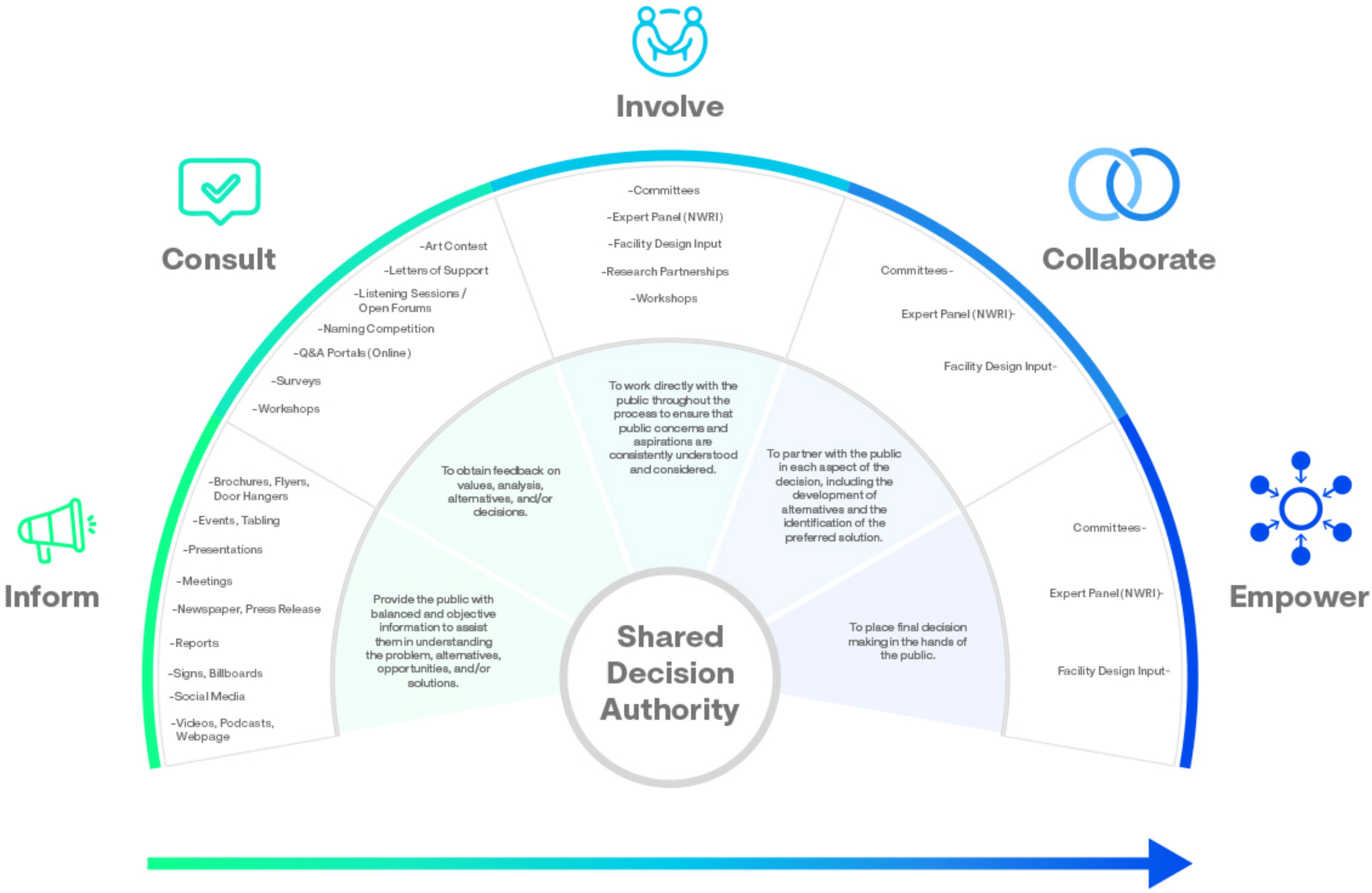


Figure 2. Spectrum of engagement for both stakeholders and the public in water reuse projects. Adapted with permission from the IAP2 Spectrum of Public Participation. Source: Federation of International Association for Public Participation 2024. All rights reserved. This work was created with contributions from Lewis Michaelson, Martha Rozelle, and Doug Sarno. www.iap2.org.

Types of engagement activities

Each of the different types of engagement function to help the project team meet certain goals through tailored activities. In this section, we provide an overview of each of the five levels of engagement, along with examples. It should be noted that depending on how these activities are implemented, they may cross between different levels of engagement. For example, a committee might range from consult to empower depending on the level of decision-making that is built into its function.

Engagement characteristics

Each engagement level is defined using a consistent set of characteristics that explain its purpose, approach, and the role of stakeholders and/or the public. This framework clarifies when each level is appropriate, what activities it involves, and what participants can expect, supporting transparent and effective community engagement across the project lifecycle.

Purpose

Engagement Approach

Stakeholders' Role

Appropriate Use

Example Activities

Pg. 14

Inform

Purpose

To share information with stakeholders so they understand the project, the problem being addressed, and relevant facts about water reuse. This may be information about the project itself or specific project updates as the work progresses.

What the public can expect

The public can expect clear, accurate, and timely information. They should not expect opportunities to influence decisions with these types of activities.

What it looks like in practice

One-way communication that focuses on education and transparency. Information is provided in accessible formats to build awareness and understanding but does not seek input.

When to use this level

- Early in a project to build awareness
- When the primary goal is education or transparency
- When decisions are already made or constrained by compliance-based activities

Examples of activities

- Brochures, Flyers and Door Hangers
- Events or Tabling
- Newspaper Articles and Press Releases
- Social Media
- Presentations and Briefings
- Signs and Billboards
- Videos and Podcasts
- Project Webpages

Consult

Purpose

To gather feedback from stakeholders to better understand perspectives, preferences, and concerns related to the project, while retaining decision-making authority within the sponsoring organization.

What the public can expect

Although participation does not directly change decisions being made, the public can expect that their input will be collected, documented, and considered.

What it looks like in practice

Opportunities for stakeholders to provide input on defined topics, options, or proposed approaches. Engagement is typically time‑bound and focused on specific questions rather than open‑ended decision-making. Participants should be told how their responses will be used in making decisions for the project (e.g. “your answers tell the project team what the community values.”).

When to use this level

- When project options or approaches have been identified and feedback is needed
- When seeking to understand community concerns, priorities, or preferences
- When decisions are constrained but can be informed by public input
- compliance-based activities

Examples of activities

- Art Contests
- Letters of Support
- Naming Competitions
- Surveys
- Listening Sessions and Open Forums
- Online Q&A Portals
- Workshops

Purpose

To work directly with stakeholders throughout the project to ensure that community perspectives, concerns, and aspirations are consistently understood and reflected in key decisions.

What the public can expect

The public can expect that their input will meaningfully influence project decisions and that they will receive feedback on how their input was used.

What it looks like in practice

Ongoing, two-way engagement that allows stakeholders to help shape project elements, approaches, or communication strategies over time.

When to use this level

- When decisions are still flexible as the project evolves
- When understanding and responding to community perspectives is critical
- When stakeholder insight can improve project outcomes or implementation

Involve

Examples of activities

- Committees or advisory groups
- Facility design input sessions
- Research partnerships
- Expert panels (e.g., NWR expert panels)
- workshops
- Project/program branding

Purpose

To partner with stakeholders and potentially members of the public in key aspects of decision-making, including developing alternatives and identifying preferred solutions.

What the public can expect

The public can expect a high level of influence and shared responsibility for outcomes through these types of activities.

What it looks like in practice

Shared planning and problem-solving where stakeholders and project teams work together as partners to embed input into major decisions.

When to use this level

- When decisions are complex or high-stakes
- When long-term community support is essential
- When stakeholder expertise or perspectives are critical to success compliance-based activities

Collaborate

Examples of activities

- Committees or Advisory Groups
- Co-Design Workshops (e.g. Facility/Site Plan Design)
- Independent expert advisory panels

Empower

Purpose

To place final decision-making authority in the hands of stakeholders and/or community members.

What the public can expect

The public can expect that decisions made through these activities will be implemented as agreed.

What it looks like in practice

Activities to place final decision-making authority in the hands of the public.

When to use this level

- When community-led decision-making is appropriate and feasible
- When decisions have significant local or community impacts
- When stakeholders have the capacity and interest to take on decision authority

Examples of activities

- Committees with final decision-making authority
- Stakeholder-led facility design decisions

What ‘decisions’ are being made by the public?

A common theme that emerged in conversations with water professionals is the desire to meaningfully engage the public while also recognizing that water reuse systems are technically complex and designed and operated by licensed professionals. When considering approaches that empower community members, it is important for project teams to clearly define which decisions are appropriate and most valuable for public participation.

Empowerment does not require transferring responsibility for technical or regulatory decisions. Rather, it involves thoughtfully identifying decision spaces where community input can be both influential and appropriate. These may include choices that shape how a project is experienced, understood, or integrated into the surrounding community.

For example, public decision-making may focus on what values are important when evaluating alternatives during the feasibility planning (e.g. returning the water the local aquifer or repurposing for municipal water supply). Other examples have included how the project is promoted (e.g. branding design, mascot selection, naming conventions) or how the recycled water facility fits into the local community (e.g. landscaping features, community access or frontage improvement design elements). These types of decisions allow the public to play an active role in shaping outcomes while ensuring that technical, safety and compliance requirements remain under professional oversight.

Section

04

ALIGNING ENGAGEMENT WITH THE WATER REUSE PROJECT LIFECYCLE

Water reuse project lifecycle

Public engagement in water reuse projects works best when it evolves along with the project itself. As the work moves forward, the opportunities for public involvement shift, the kinds of conversations that are possible change, and the degree to which community input can influence decisions varies. Aligning engagement strategies with the project lifecycle helps set clear expectations, strengthens trust, and ensures that input is sought when it can genuinely shape outcomes. When engagement levels do not match the level of decisions to be made, this can lead to confusion and erode trust with the utility.

This section describes ways to tailor engagement to the realities of each project phase (see Figure 4.), drawing on examples provided by water professionals who have navigated these stages themselves. It's important to recognize, however, that projects rarely move through the lifecycle in a straight line. Phases may run concurrently, repeat, or blend together. For example, depending on the project delivery model, design activities may still be underway while construction is beginning in the field. The guidance here is intended to be useful regardless of whether you are working squarely within one phase or managing an overlap between them.



Figure 3. General phases of a water reuse project. Note that these might not follow the linear sequencing shown here and may go by other, related terms. Reuse projects also include other major milestones, such as funding decisions and regulatory approvals that impact engagement.

Goals for engagement

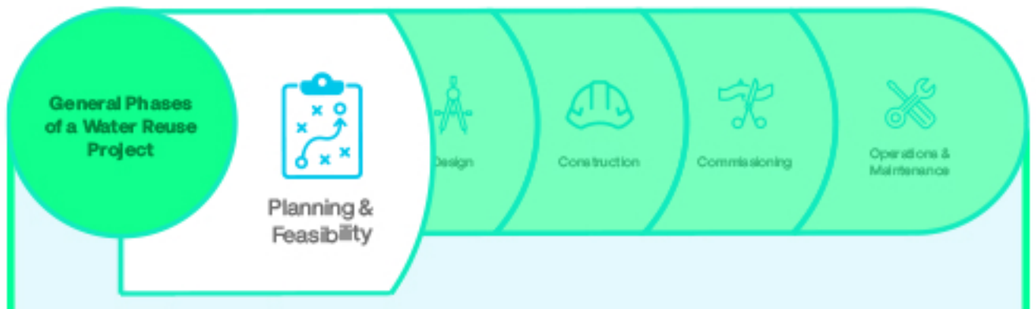
Emphasize the why behind the project. Messaging and activities can help the public understand who the utility is, what their mission and values are, and how decisions are being made, which might include water reuse.

What to focus on

If the public is not already familiar with the utility or organization, this is a critical time to build that awareness before introducing the specific water reuse project.

However, there are opportunities for greater levels of engagement, including:

- Heavier use of inform and consult, with opportunities to involve early advisory groups
- Clear explanations of purpose, benefits, risks, and alternatives
- Emphasis on transparency about feasibility, constraints, and timelines
- Deeper levels of engagement may be beneficial in understanding community values related to water infrastructure and the environment.



What to prioritize

- Clear communication about the "why" for this project and the anticipated benefits to the public.
- Identify key stakeholder groups and communities that are involved or impacted.
- Building opportunities to hear from stakeholders and the public about what they value and how this aligns with the project.
- Develop a plan for communication, outreach, and engagement over the project lifecycle.

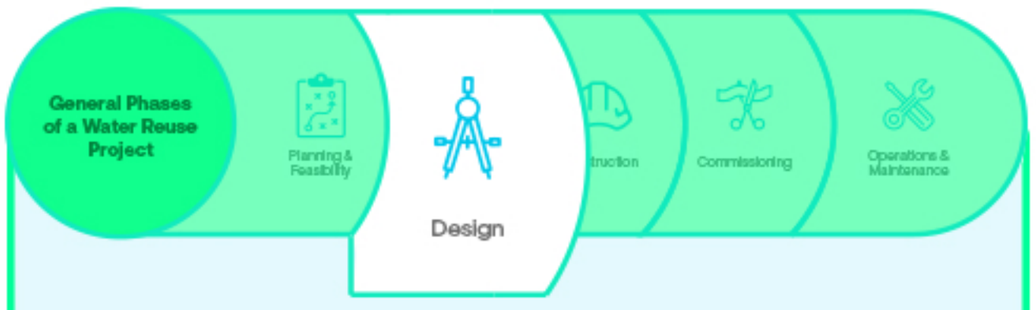
Goals for engagement

Help communities understand what the project will be, how reuse works, and why chosen approaches support the organization's mission and community priorities. Engagement becomes more detailed and interactive.

What to focus on

During the design phase, potential facility siting is evaluated, treatment facilities and mechanisms are designed, and funding mechanisms are confirmed. It will be important to identify groups of the public that are potentially impacted by the project. You most likely will be focusing on the following levels of engagement:

- Continued inform and consult to clarify technical elements, such as water quality and end use.
- More robust involve and collaborate opportunities (e.g., co-design workshops, advisory groups)
- Opportunities for community input on design features, facility appearance, traffic impacts, or local benefits



What to prioritize

- Clear communication about how decisions have been made and their connection to the utility's values.
- Identify decisions that can be influenced by key groups and develop opportunities for input.
- Building in opportunities to show how design decisions align with input (values) provided during earlier phases.
- Planning for potential impacts from construction and starting to coordinate with these groups.

Goals for engagement

Promote proactive communication about what the community can expect and minimize negative impacts through transparency and responsiveness.

What to focus on

Engagement becomes frequent, practical, and operationally focused. The public should know about potential disruptions, timeline, who to contact with issues arise and the long-term plans for the reuse project.

- Heavy emphasis on inform (e.g. alerts, updates, construction notices)
- Consult and involve for issue resolution and mitigation (e.g. feedback lines, HOA meetings)
- High responsiveness to concerns about noise, traffic, detours, or nighttime work



What to prioritize

- Clear communication and consultation with communities impacted by construction activities.
- Highlighting how input has been used in decisions made about the program.
- Showing progress on the project (e.g. social media, highlights, etc).
- Transparent communication about cost and temporary construction impacts become key in this phase.

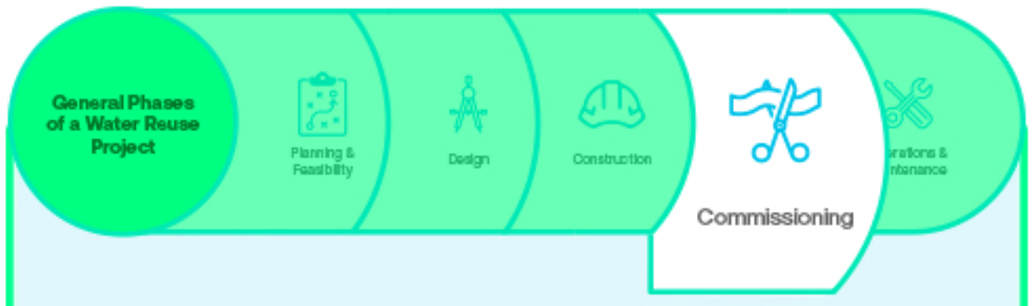
Goals for engagement

Celebrate progress, mark "firsts," and help communities recognize the value and safety of the new system.

What to focus on

Engagement shifts toward milestones, celebration, demonstration of safety and performance, and reinforcing community partnerships.

- Inform: performance dashboards, tours, ribbon cuttings
- Consult: taste tests, surveys, community feedback on early user experiences
- Opportunities to involve or empower communities in milestone celebrations or communications



What to prioritize

- Celebrating project milestones with the public.
- Showing the history of the work, along with how the public has been involved throughout.

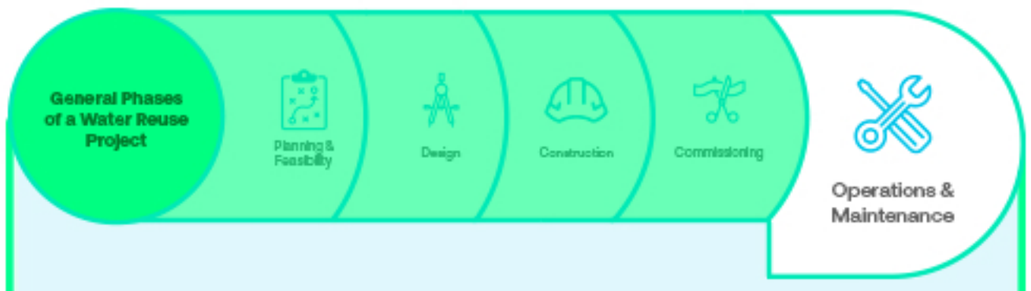
Goals for engagement

Demonstrate ongoing reliability, share monitoring data, and continue building trust through long-term transparency and relationship-building.

What to focus on

Engagement becomes sustained and relationship-oriented. The public expects clear communication about system performance and safety and may participate in long-term partnerships or ambassador programs.

- Inform: regular performance reporting, tours, dashboards
- Consult: surveys, public feedback on customer experience
- Involve/Collaborate: community partnerships, educational programming
- Strategic empowerment: ambassador programs, community-led initiatives where appropriate



What to prioritize

- Celebrating major milestones and "firsts" for the project.
- Encouraging the public to experience or engage with the new facility through tours or events.
- Working with the public to show the impacts from the project.
- Providing major updates from compliance activities (e.g. monitoring).

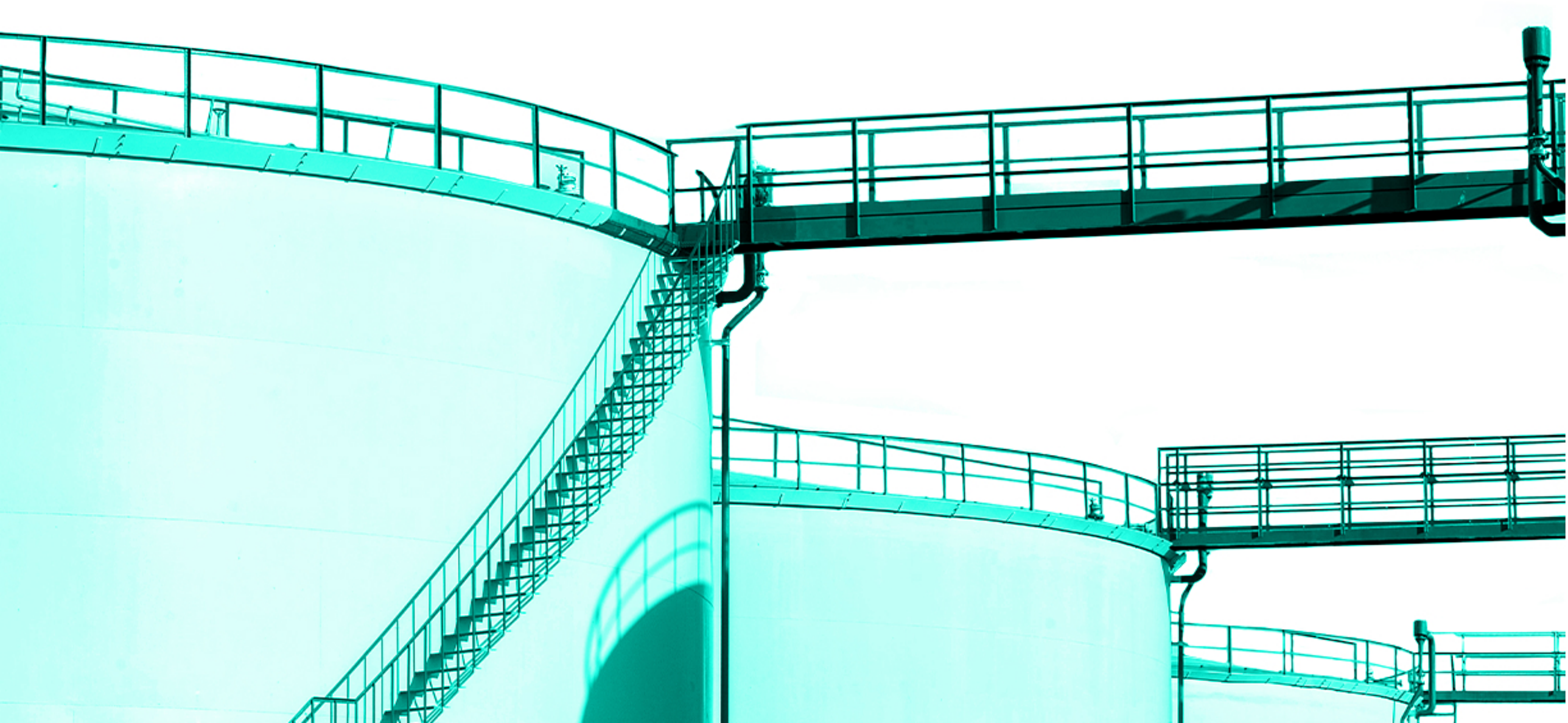


Table 2. Examples of engagement activities across the lifecycle of a water reuse project.

	Planning / Feasibility	Design	Construction	Commissioning	Operations & Monitoring
Inform	- Launch a project website and distribute informational publications. - Present project information at technical conferences and develop lessons learned documents. - Organize facility tours and field trips to increase understanding of reuse systems. - Publish outreach materials and share updates through social media. - Deliver informal meetings and presentations, including council meetings.	- Develop stakeholder engagement and communications plans. - Send notices and outreach letters, especially to those living near proposed facilities. - Use mailers and public meetings to share project updates.	- Provide construction notices via social media, mailers, and door hangers. - Share updates through news releases, podcasts, local media, and HOA emails. - Hold pre-construction meetings and maintain a consistent schedule.	- Announce ribbon cuttings, groundbreaking events, and public hearings. - Use advertising, videos, and dashboards to share project performance and progress. - Continue providing updates through social media and council meetings.	- Maintain project websites and distribute educational materials and lesson plans. - Provide updates via social media and public meetings. - Offer plant tours to maintain transparency.
Consult	- Conduct surveys and interviews with both stakeholders and regulators and consult with regulators to identify concerns. - Facilitate public scoping sessions and gather feedback via resource toolkits. - Offer bill credits or compensation to encourage participation in sampling surveys.	- Hold HOA meetings to gather neighborhood feedback and engage in local permitting processes. - Gather input from medical associations and environmental groups. - Conduct demand inventories for wastewater projects, incorporating input from potential users and stakeholders	- Address community concerns through direct engagement, such as one-to-one meetings or feedback channels. - Organize tours with CBOs and local organizations. - Use call centers and websites for public inquiries.	- Maintain active social media engagement to solicit feedback. - Gather feedback at public-private outreach events and with local leaders.	- Conduct surveys and water taste tests. - Gather feedback through social media and collect letters of support from the community.
Involve	- Host public meetings and establish advisory committees to involve community into planning decisions. - Engage with colleges, universities, and elected officials through workshops. - Identify and involve all relevant stakeholders, focusing on the equity of project impact.	- Solicit public input on site aesthetics and negotiate easements. - Continue working groups and advisory committees. - Partner with seniors and other trusted community organizations. - Continue to hold public meetings.	- Design marketing materials directly addressing community concerns related to construction impacts. - Facilitate tour groups for students, water agencies, CBOs, and regulators. - Host stakeholder field trips to peer facilities.	- Host outreach events and college student groups through project-based challenges. - From public-private outreach events with local leaders.	- Use social media to host public surveys. - Collect letters of support and facilitate ongoing engagement activities.

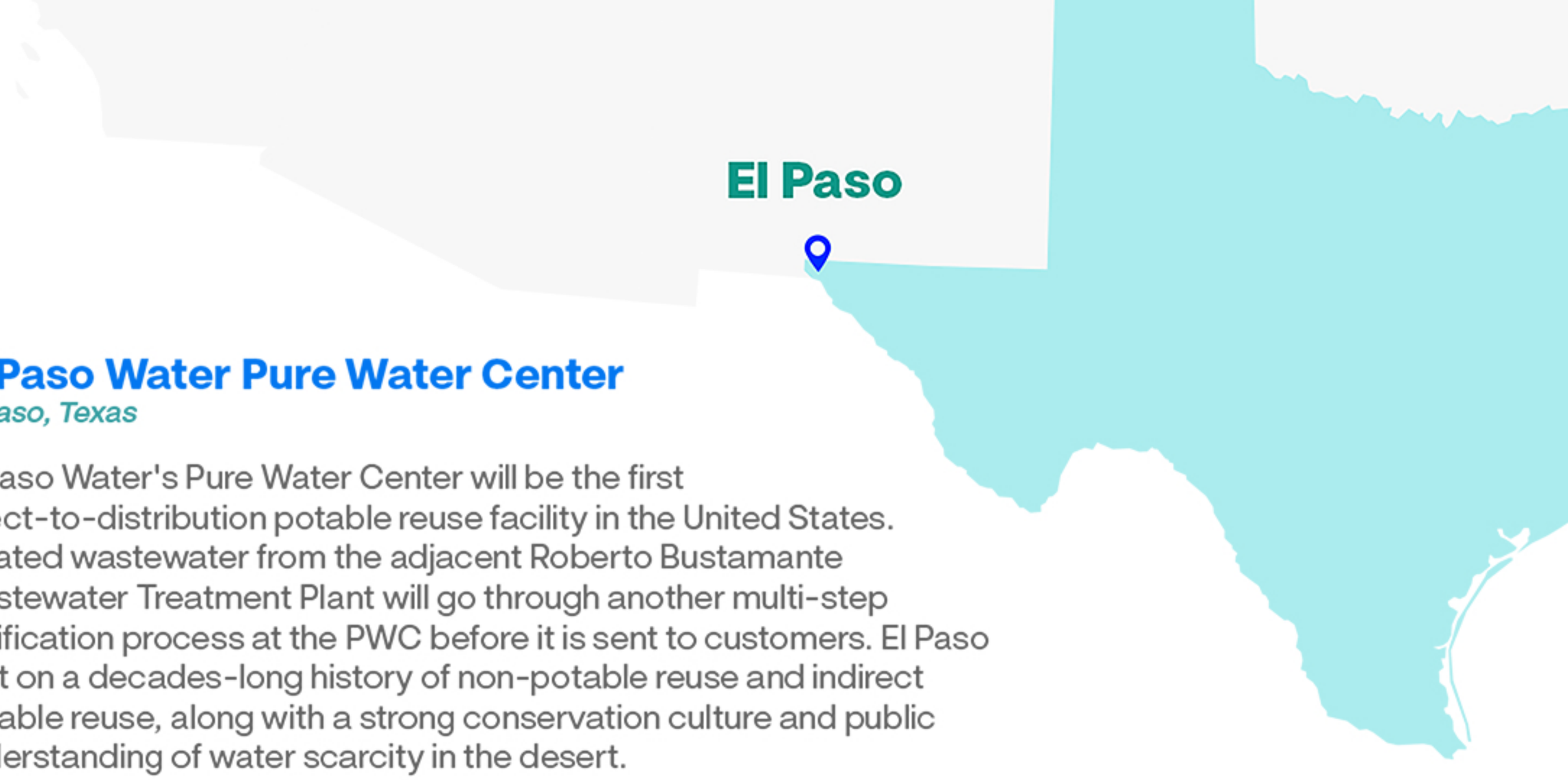
Table 2 Cont. Examples of engagement activities across the lifecycle of a water reuse project.

	Planning / Feasibility	Design	Construction	Commissioning	Operations & Monitoring
Collaborate	- Establish technical advisory committees and partner with community-based organizations (CBOs). - Collaborate with teachers to provide early classroom resources that introduce water reuse concepts. - Form working groups and host partnering sessions with key stakeholders.	- Co-host community media events with project partners. - Offer compensation for community input and time. - Host partnering sessions and public meetings to address design challenges.	- Partner with CBOs to integrate facilities into community spaces. - Engage in collaborative decision-making on reuse connections in local ordinances.	- Work with landscaping and irrigation professionals to optimize water reuse. - Seek community endorsements of the water reuse project.	- Encourage endorsements and program partnerships. - Hold board meetings and creative community initiatives (e.g., murals, art competitions).
Empower	- Seek formal support from elected officials and hold public referendums. - Develop water ambassador programs and celebrate project milestones. - Enable community sign-up for reusing water at home, supporting long-term community capacity development.	- Let the community decide how they want to be kept informed. - Recognize community contributions through events. - Use referendums and public comment at board meetings to inform key decisions, such as major project features.	- Enable community participation in making decisions about ordinance adoption or inclusion - Incorporate public input into permitting decisions.	- Provide community decisions on reuse connections. - Use education as a form of empowerment, ensuring only feasible decisions are presented.	- Involve community partners in decision-making and celebrate achievements

Section

05

CASE STUDIES



El Paso Water Pure Water Center

El Paso, Texas

El Paso Water's Pure Water Center will be the first direct-to-distribution potable reuse facility in the United States. Treated wastewater from the adjacent Roberto Bustamante Wastewater Treatment Plant will go through another multi-step purification process at the PWC before it is sent to customers. El Paso built on a decades-long history of non-potable reuse and indirect potable reuse, along with a strong conservation culture and public understanding of water scarcity in the desert.

Engagement goals

- Build awareness of drought resilience and the need for local water supply diversification
- Build public confidence in first direct-to-distribution DPR in the nation
- Demonstrate the technology's safety and viability
- Address community misconceptions about source water quality and affordability of project.
- Maintain public trust throughout a 10-year regulatory approval process

Key engagement activities

- Emphasize drought resilience and regional water scarcity in shared messaging to build public understanding.
- Use consistent messaging about DPR as the "ultimate" form of water recycling.
- Provide clear public education materials explaining the purification process and addressing misconceptions.
- Offer pilot plant tours for both the public and technical audiences to ask questions and observe treatment steps.
- Engage regulatory partners (e.g., TCEQ) through long-term collaboration to meet safety expectations.
- Use treatment demonstrations and transparent communication to dispel myths about source water quality.
- Host industry forums to showcase DPR technology and gather input from water professionals and regulators.
- Proactive media relations approach to ensure favorable coverage
- Engage NWRI panel to formally endorse the project

How the utility incentivized connections

- Understanding public concerns and providing clarification (e.g., source water quality)
- Encouraging participation in pilot tours with the public
- How technology viability was communicated through forums and tours
- Used a Speakers Bureau made up of employee ambassadors for in-person engagement and education
- Used videos on social media to engage with broader audiences
- Formed partnerships with educational institutions and organizations to maximize reach of messages

Outcomes & impact

- Final design approval from TCEQ in late 2024
- Elevated public trust due to decade‑long transparency and demonstration activities
- Facility positioned to supply nine percent of city water demand by 2029
- Model for cities seeking drought‑proof supply options amid climate‑driven flow reductions in the Rio Grande

Key takeaways for others

- Invest in pilot tours or demonstration facilities to gain understanding of safe technology; equipment can be sued for operator training as well
- Pair regulatory work with public messaging early
- Leverage expertise and input from water sector forums to strengthen the credibility of technology selection and design
- Frame DPR as a resilience strategy, not just a reuse technology
- Invest in strategic communications planning using either in-house resources, consultant, or both

Resources, tools, or artifacts used

- Pilot plant tours
- Large-scale industry forums
- Public education center (planned) with interactive displays and visuals
- Customer surveys and focus groups throughout project
- Employee Speakers Bureau
- Fact sheets, videos, branding throughout project life

WRD Albert Robles Center for Water Recycling and Environmental Learning

Los Angeles County, California

The Albert Robles Center (ARC), operated by the Water Replenishment District (WRD), is a major indirect potable reuse (IPR) facility supporting southern Los Angeles County. It uses advanced wastewater purification technologies to recharge groundwater, supporting 4 million residents across 43 cities through the region's Groundwater Reliability Improvement Program (GRIP). The facility opened in 2019 as part of a decades-long regional strategy to reduce reliance on imported water.



Engagement goals

- Build community understanding of groundwater recharge
- Continue long-term public education begun in the 1960s
- Reduce skepticism and controversy through transparency and early involvement
- Demonstrate reliability through operational stability and interactive learning

Key engagement activities

- Emphasize drought resilience and regional ARC Learning Center: digital exhibits, hands-on simulations, plant observation deck
- Surveys used to understand public awareness and inform outreach direction
- Facility tours inviting residents to learn the treatment process
- Public events where community members could interact with WRD staff
- Residents provided input on site design elements (pathways, landscaping, fountains, green infrastructure)
- Long-term governance partnerships through GRIP

How the utility incentivized connections

The community was involved in providing input for:

- Pathways and public-facing landscaping
- Fountains and green-infrastructure elements
- Site aesthetics and user experience of ARC

Outcomes & impact

- Region-wide acceptance built over decades
- Stable institutions supporting long-term groundwater management since the 1960s
- ARC strengthened public trust by emphasizing transparency and learning experiences
- Demonstrated that IPR success depends on governance maturity and public awareness of groundwater systems

Key takeaways for others

- Use multi-modal learning centers as engagement hubs
- Combine facility tours with design input opportunities
- Build institutional trust through consistent and long-term engagement
- Position reuse as a sustainability solution, not a controversy

Resources, tools, or artifacts used

- Educational materials on groundwater, purification, and conservation
- Public surveys explaining reuse processes
- User-experience design materials, concept boards to obtain input

Section

06

ADDITIONAL RESOURCES

THE FOLLOWING RESOURCES PROVIDE ADDITIONAL INFORMATION AND EXAMPLES ABOUT COMMUNITY ENGAGEMENT AND EDUCATIONAL STRATEGIES USED IN WATER REUSE PROJECTS.

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3. “Groundwater Reliability Improvement Program - This Is GRIP.” YouTube, 3 Apr. 2014, www.youtube.com/watch?v=niCY3FWi8NI . Accessed 16 Jan. 2026.

4. “WRD’s Outreach Efforts & Community Involvement.” YouTube, 14 Feb. 2018, www.youtube.com/watch?v=hO5CEjprB8k. Accessed 16 Jan. 2026.

5. El Paso Water. “Advanced Water Purification Facility.” July 2022, https://watereuse.org/wp-content/uploads/gravity_forms/107-0a90f7ed44c06b0bcf76c6271c9a07e4/2022/08/AWPF-fact-sheet-2022.pdf

6. “El Paso Water Utilities.” Water Reuse Association, 2022, https://watereuse.org/wp-content/uploads/gravity_forms/107-0a90f7ed44c06b0bcf76c6271c9a07e4/2022/08/el-paso-water-utilities-advanced-purified-carollo.pdf

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8. Water Reuse Communications Library. https://watereuse.org/educate/fact-sheets/water-reuse-communication-materials-library/

9. "One glass at a time... helping people understand potable reuse." WateReuse Association and the Water Research Foundation, 2015. https://www.datainstincts.com/images/pdf/Helping-People-Understand-Potable-Reuse-June-2015.pdf

Appendix A.

COMPREHENSIVE LIST OF ENGAGEMENT ACTIVITIES

A comprehensive reference list of community and stakeholder engagement activities used across U.S. water reuse projects. This list is organized by categorical themes for water professionals to browse and tailor for their specific goals and context.

1. Meetings & dialogue-based engagement

Activities that rely on interpersonal connection, conversation, or direct exchange.

- Public/community meetings
- HOA meetings for neighborhood input or permitting concerns
- Town halls with residents and contractors
- Listening sessions and open forums
- One-on-one meetings with residents, businesses, or concerned individuals
- Community leaders' roundtables
- Small group dialogues
- Public scoping sessions
- Pre-construction meetings to set expectations and share timelines

2. Outreach & educational materials

Materials and communication tools used to inform and educate broad audiences.

- Brochures, flyers, fact sheets, and informational publications
- Door hangers
- Signs and billboards at construction sites or community entry points
- Reports, white papers, and lessons-learned documents
- Newspaper articles and press releases to shape public awareness
- Educational booklets for children or the general public
- Performance dashboards (online or in facilities)
- Construction notices via mail, email, or physical posting
- Project or program websites with updates, FAQs, videos

3.
Experiential engagement activities

Hands-on or place-based activities that help community members see, touch, or experience water reuse in action.

- Facility tours (general public, school groups, regulators, media)
- Pilot plant tours
- Demonstration projects in public spaces
- Educational centers or visitor learning centers
- Pop-up displays or mobile education units
- Observation windows or viewing galleries into treatment processes
- Taste-testing of purified water (e.g. bottled water, popsicles, coffee, beer, etc.)

4.
Digital engagement

Tools that enable scalable outreach and two-way communication online.

- Social media campaigns and updates
- Online Q&A portals or comment forms for public input
- Podcasts featuring utility leaders or project stories
- Explainer videos / animations about treatment processes or project phases
- Digital performance dashboards (e.g., real-time water quality metrics)
- Community feedback through social media polls, comment monitoring

5.
Creative & cultural engagement activities

Approaches that use art, community identity, and cultural expression to deepen connection and trust.

- Community naming contests (for mascots, programs, or facilities)
- Artist partnerships (murals, installations, interpretive art)
- Program/mascot creation (used by multiple utilities for youth engagement)
- Storytelling about local water history or cultural values tied to water
- Community-designed aesthetic elements (e.g., landscaping, frontage, pathways)

6.

Educational & school-based programs

School-based and youth-led activities widely used across reuse projects.

- Classroom presentations
- Curriculum and lesson plan development with teachers and districts
- University partnerships and internship programs
- Project-based learning challenges or competitions for students
- Tours designed specifically for students or youth groups
- Youth ambassador or leadership programs

7.

Partnership & governance activities

Inter-organizational collaboration efforts that extend beyond public-facing outreach.

- Partnerships with community-based organizations to co-host events
- Collaboration with environmental groups and nonprofits
- Engaging chambers of commerce and business groups
- Collaboration with regulatory agencies for co-development of rules
- Working with elected officials (e.g., education, briefings, advocacy)
- Public referendums or formal endorsements where applicable

8.

Creative & cultural engagement activities

Structures for long-term, shared participation in project decisions.

- Community advisory committees
- Technical advisory committees
- Stakeholder working groups
- Shared decision-making committees
- Committees with final decision-making authority on select aspects

9.
Incentives & community-led activities

Tools that shift participation from input to ownership.

- Bill credits or incentives for sampling participation
- Community-led project grants
- Home water reuse sign-ups / participation programs (e.g., onsite reuse, retrofits, non-potable connections)
- Water ambassador programs (community leaders trained as messengers)

