# RIPPLE EFFECT INITIATIVE

KINGS WATER ALLIANCE

SIERRA SAN JOAQUIN JOBS

**FINAL REPORT | SEPTEMBER 2026**

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# PURPOSE OF THE RIPPLE EFFECT INITIATIVE

The Ripple Effect Initiative (REI) is a Kings Water Alliance (KWA) project that connects two challenges facing the Central Valley: the need for safe, reliable drinking water, and the need for a skilled workforce capable of building, operating, and sustaining the water systems that provide it. The initiative combines a first-of-its-kind inventory of public water systems in KWA's three-county service area with a parallel look at local water-sector jobs, training pathways, and workforce development. The goal is to give KWA and its regional partners a clear, shared picture of where infrastructure and workforce needs intersect, and to use that picture to build a more durable pipeline of people ready to do the work.

REI is a project of Sierra San Joaquin Jobs (S2J2), an initiative of Central Valley Community Foundation and funded by California Jobs First, chosen for its potential to drive equitable growth, economic mobility, and environmental stewardship across the region.

# ABOUT KINGS WATER ALLIANCE

Kings Water Alliance is a nonprofit public benefit organization formed in 2021 to serve as the governing body for the Kings Management Zone, which covers the Kings and Tulare Lake groundwater subbasins. KWA was established to help implement the State's Nitrate Control Program and works with residents, agriculture, cities, counties, community-based organizations, and groundwater sustainability agencies to address nitrate contamination, expand access to safe drinking water, and support long-term groundwater sustainability. In the near term, KWA connects eligible households to free nitrate testing for domestic wells and home bottled water delivery for impacted households, as well as free drinking water fill stations available for anyone to use. Its longer-term work focuses on coordinating permanent solutions, such as expanding or consolidating public water systems, based upon community input and feasibility.

KWA's service area spans 1.5 million acres across portions of Fresno, Kings, and Tulare Counties, reaching rural residents who depend on domestic wells for drinking water. An estimated 22,500 domestic wells are within this service area, and that is just one element of the critical water management picture in the Central Valley. It is this scale of need that led KWA to look beyond its domestic well-focused program to the wide range of water-focused organizations included in the Ripple Effect Initiative's local water workforce efforts.

# SUMMARY OF INITIATIVE COMPONENTS

The Ripple Effect Initiative brings together the following core components, each described in more detail later in this report:

- **Infrastructure mapping:** an inventory of public water systems across KWA's service area, including readiness for expansion or consolidation
- **Workforce/job opportunity mapping:** an inventory of water-sector jobs and hiring needs across public water systems, irrigation, flood control, conservation, community services districts, and wastewater treatment
- **Training/education provider mapping:** a survey of existing training and education pathways into water careers, and the gaps between them
- **Surveys:** of three audiences (water-sector employers, education/training providers, and job seekers)
- **Roundtables:** recruited and facilitated two sessions bringing together water sector, workforce, and education partners
- **Water Jobs Workshop:** convened water sector representatives to begin defining common, most critical job titles and descriptions
- **Implementation tools:** designed to help partners carry this work forward
  - » Water Resource Locator/Map
  - » Social Media Content - additional videos, photos, and quotes to be leveraged in future campaigns
  - » Videos/storytelling: interviews and short-form content highlighting water careers and the job seekers, conducted in partnership with Fresno State's California Water Institute
  - » Ripple Effect Initiative branding (look & feel, logo, messaging)
  - » "Lessons Learned" documentation for outreach and recruiting participation from water sector and education





# PROBLEM STATEMENT

Water is critical to the local economy, communities, and health of all residents who live in the Central Valley. The complexity of water issues, coupled with the complexity of workforce challenges, among other persistent challenges such as poverty and high unemployment, create a need for an innovative approach to both, and opportunities for collaboration and change.

Kings Water Alliance (KWA) was created in 2021 as a nonprofit public benefit organization and the governing body for the Kings Management Zone, which includes the Kings and Tulare Lake groundwater subbasins. Formed to help implement new State Nitrate Control Program water quality requirements, KWA works with residents, agriculture, cities, counties, community-based organizations, groundwater sustainability agencies, and other local partners to address nitrate impacts, improve access to safe drinking water, and support long-term groundwater sustainability. KWA serves a 1.5-million-acre area encompassing portions of Fresno, Kings, and Tulare Counties. Services are offered to rural residents in the Central Valley who rely on domestic wells for drinking water.

KWA helps connect eligible residents with short-term safe drinking water solutions by providing free domestic well testing for nitrate, free bottled water delivery to homes whose wells test above the safe limit of 10mg/L, free drinking water fill stations, outreach, and stakeholder engagement. KWA is beginning work on long-term drinking water solutions and seeks to serve as a facilitator or bridge between nitrate impacted communities identified through nitrate testing of domestic wells, and organizations with the authority and organizational infrastructure to offer permanent drinking water supply options. This work is very specific to each community and what could work best to meet their needs, and can include coordination of long-term solutions such as expanding or consolidating existing public water systems.

Through its responsibility to assess and address nitrate contamination in the estimated 22,500 domestic wells within its 1.5-million-acre service area, KWA saw the intersection between providing safe drinking water to rural communities and the long-term need to have enough qualified people performing critical water supply work.

## PROBLEM STATEMENT

The Ripple Effect Initiative was created with needed innovation in mind and brings together two components: **1) the mapping of public water systems in KWA's three-county area, selecting a subset of public water systems to gauge willingness to consider expansion or consolidation to extend service to nearby nitrate-impacted domestic well users;** and **2) a specific look at local water workforce needs and awareness in Fresno, Kings, and Tulare Counties, and the range of local training and education providers who can help prepare local people for a wide variety of jobs in the local water sector.** Because public water systems are just one of many types of water-focused organizations and because the functions of all are connected and pull from the same labor pool, KWA broadened its look at local water workforce issues to include the full range of water-focused organizations: Public water systems, irrigation, flood control, conservation, community services districts, and wastewater treatment are examples of the breadth of water-focused organizations that serve the area. All rely on qualified, dedicated people in the full range of necessary positions to perform their work and meet public needs.



KWA is stewarding The Ripple Effect Initiative because safe drinking water is not only a water quality issue; it is also a workforce, infrastructure, and community resilience issue. The initiative brings together water agencies, training and education institutions, nonprofits, employers, and workforce partners to map local water projects, jobs, and education pathways across Fresno, Kings, and Tulare Counties. The goal is to help future-proof the water sector workforce so local communities have the knowledge, skills, and capacity to manage their own water quality and supply for generations to come.



# DATA COLLECTION METHODS

To ensure the Ripple Effect Initiative was grounded in data that reflected the lived experiences and perspectives of stakeholders across the water industry, the education and workforce training sector, job seekers, and current college students, we employed a diverse range of data collection methods. These included surveys to capture broad, quantifiable input; roundtables and a dedicated workshop to facilitate in-depth, collaborative dialogue; one-on-one conversations to gather individual and nuanced perspectives; community events to engage a wider audience in informal settings; presentations to share information and solicit feedback; and inventory reports to assess existing resources and gaps. Together, these methods provided a comprehensive and multi-dimensional understanding of the needs, priorities, and opportunities within our initiative. The following is a closer examination of each individual method.

# CALIFORNIA WATER INSTITUTE SURVEYS

The Ripple Effect Initiative worked in partnership with Fresno State's California Water Institute to conduct surveys in hopes of collecting insight into the structure and skillset required to future-proof the water sector workforce. Survey #1 was intended for two audiences- water sector organizations and training/education providers. The Ripple Effect Initiative reasoned the more data and information we collected from both groups, the better we could inform career pathways into water that meet the needs of a changing industry and workforce. Survey #2 was aimed specifically at Job Seekers, which could mean people in the workforce, soon to be entering the workforce, or looking for a new career. We hoped to learn from them what they already knew - or didn't know - about water as a professional career path. The final survey report showed us both data we anticipated, as well as a few things that surprised us.

## AUDIENCE: WATER SECTOR

- **86%** of industry respondents are not currently partnering with workforce agencies or educational institutions.
- **78%** of respondents are "very" or "somewhat" concerned about the loss of institutional knowledge.
- **68%** of respondents sometimes have difficulty filling mission-critical positions.
- **59%** of respondents are upskilling existing employees.

## AUDIENCE: EDUCATION & TRAINING SECTOR

- **69%** of educators report that students are definitely or probably not aware of careers in the water workforce.
- **61%** of educators rely on word-of-mouth to stay informed of current job needs.
- **57%** of educators reported that students think water sector jobs are low paying.
- **46%** of educators and trainers report having no contact with water utilities or employers about changing job requirements.

## AUDIENCE: JOB SEEKERS

- **~80%** of respondents were not aware of water sector jobs in their town or city.
- **57%** of respondents expressed interest in learning more about careers in water.
- **Internships** rated "most helpful" when making career decisions.
- **Online Job Sites, Career Centers, & Career Advisors** most cited resources to search for a job.

## DATA COLLECTION METHODS

The results of these surveys were shared with the partners who attended REI-specific events such as the roundtables, workshop, and presentations listed below:

**ADDITIONAL PARTNERS:**

- Kings Basin Water Authority board, members, and interested parties
- Association of California Water Agencies (ACWA) Communications Committee
- CV-SALTS Public Education and Outreach Committee
- California Department of Education
- California Farm Water Coalition
- Central Valley Community Foundation

# LUHDORFF & SCALMANINI COUNSULTING ENGINEERS (LSCE) WATER SYSTEMS INVENTORY

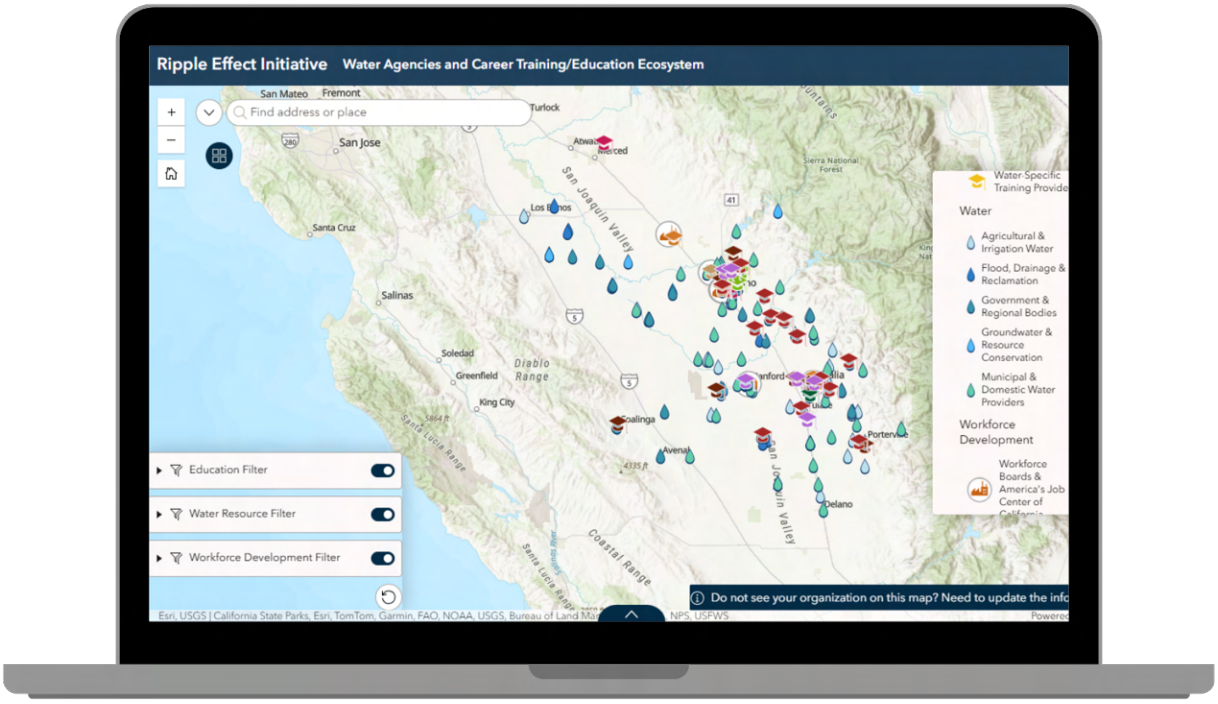
To assist our Ripple Effect Intiative goals, LSCE undertook the following activities to better understand how Public Water Systems (PWS) fit into the picture. Their role was to:

- Investigate the electronic Annual Reports and Sanitary Surveys submitted by each Public Water System to the CA Division of Drinking Water (DDW) to identify existing projects.
- Send an eight-question survey to each PWS to gain insight into projects and the system workforce.

The results of these efforts can be seen in the Public Water System Inventory Report.

# WATER RESOURCE LOCATOR MAP

An interactive map was created to show water-related resources in the Central San Joaquin Valley. Clicking on a data point will open a pop-up that contains the contact information for that feature. This information is also available in table view using the button on the bottom center of the page. Information shown represents the best currently available information as of July 2026. Information can be updated as needed or requested.There is a call to action/form for any organization that wishes to be added or to update the information that is displayed currently. This map can be used as a promotional item and part of outreach to get more water agencies, training and education providers, and workforce development agencies added into the ecosystem, strengthening the value and utility of this tool.



# ROUNDTABLES

The Ripple Effect Initiative hosted two roundtables with 40 individuals from 27 agencies*, including water industry professionals from large metro districts and small, rural communities; workforce training partners; and education representatives. The first roundtable was held at the Workforce Investment Board of Tulare County and focused primarily on what education and workforce partners need from water industry partners in order to train for and market water jobs effectively. The second roundtable was held three weeks later at the Central Valley Community Foundation. This time, water sector partners were brought into the conversation and invited to share their specific needs.

**R1: 20 individuals from 14 orgs, R2: 32 individuals from 23 organizations*

"I truly enjoyed participating in the first roundtable and left feeling energized by the experience. It was inspiring to see the level of collaboration and engagement among the partners at the table and to recognize the potential impact this project can have as additional stakeholders become involved."

-Trinidad Rodriguez

*Senior Planner, Proteus, Inc.*

"We found the discussions to be both insightful and valuable, and we sincerely appreciate the opportunity to contribute. Thank you for incorporating and considering our feedback as part of this important initiative."

-Veronica Venegas

*Human Resource Analyst, Westlands Water District*

"There is an amazing momentum that I am sensing here. If we can drive this all the way through, I think what we are going to end up with is a much stronger water community in the Central Valley."

-September Singh

*Assistant General Manager-Administration, Fresno Irrigation District*

"We as support partners [to industry/employers] really have to be open to hearing some of the challenges that they are experiencing and helping them make the connections to different solutions that we can pull together if we partner with one another."

-Jennie Bautista

*Executive Director, Workforce Invetment Board of Tulare County*

# WATER JOBS WORKSHOP

On August 13th, The Ripple Effect Initiative held an in-person workshop at Kings River Conservation District with 17 individuals from 13 organizations. These participants work either in the water industry or in roles where they could potentially help showcase water jobs to career seekers. The primary purpose of the Water Jobs Workshop was to bring water-sector employers and workforce partners together to better define what it actually takes to enter and advance in water careers across the Central Valley. The discussion focused on clarifying job roles, education and certification requirements, practical skills, training needs, and the workforce challenges agencies are experiencing, with the goal of turning that information into clearer, more accessible career pathways that better connect jobseekers, educators, training providers, and water employers.

# 1:1 OUTREACH/CONVERSATIONS

One-on-one conversations with stakeholders often led to other meetings. For instance, talking with Jennie Bautista, Executive Director of the Workforce Investment Board of Tulare County, led us to meeting John Gonzalez, her Business Services Manager. He introduced us to Lex Carlsson at Capitol Impact, who let us know that the California Department of Education was accepting public comments on its update of the statewide 2013 Career Technical Education Model Curriculum Standards and invited us to participate. That connection, in turn, led to an inquiry from the California Workforce Development Board and a request to meet. Because of this network chain, we were able to meet with Department of Education leaders and ensure that real-world local water workforce data will be considered in updated statewide standards.

Other valuable one-on-one conversations happened with people such as Sarge Green of Center for Irrigation Technology at Fresno State, Fresno Metropolitan Flood Control District Board, and Public Policy Institute of California's Research Network; as well as leadership at Fresno Irrigation District, James Irrigation District, Tulare Irrigation District, Biola Community Services District, South Fork Kings GSA, North Kings GSA ,Tranquillity Resource Conservation District, Career Nexus, Fresno Regional Workforce Development Board, County of Tulare Resource Management Agency, San Joaquin Valley Collaborative Action Program, Youth Leadership Institute, California Farm Water Coalition, and more.



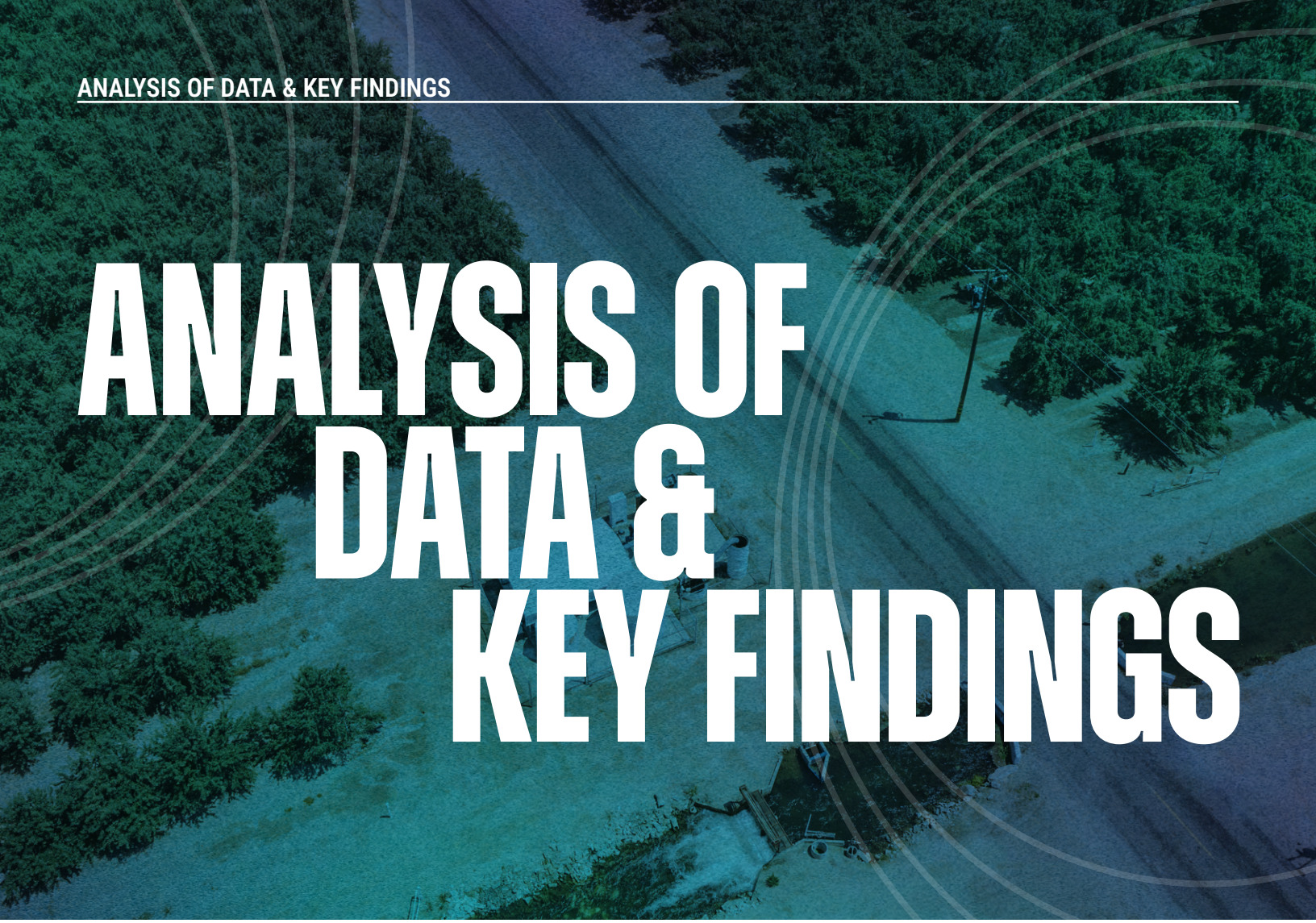
# PRESENTATIONS

The following is a non-exhaustive list of some of the presentations that have been given by Kings Water Alliance or fellow Ripple Effect Initative participants:

- Kings Basin Water Authority (4)
- Kings River Conservation District Board (3)
- Association of California Water Agencies (ACWA) Foundation Board of Directors (Lisa Mealoy)
- Association of California Water Agencies (ACWA) Board of Directors
- ACWA Communications Committee
- ACWA planning committee for potential inclusion as case study - Executive Edge professional development course in September 2026
- CV-SALTS (Central Valley Salinity Alternatives) Public Education and Outreach Committee
- Fresno State student volunteer presentation to class (Kevin O'Neill)
- Mention/survey promotion by Fresno State University Maddy Institute's Executive Director Blake Zante during the 11th annual Rural West Conference: People and Places - Unlocking the Central Valley's Potential in California's Climate Future
- Jennie Bautista from Workforce Investment Board of Tulare County presented at the California Workforce Development board meeting in Sacramento on July 8, 2026 where she shared date from the survey report and made reference to the Ripple Effect Initiative.
- Brandy Swisher, of Kings River Conservation District and Kings Water Alliance, presented at ACWA Foundation's "Pathways to Water Careers in the Central Valley" event on Thursday, September 24, 2026, where she presented the findings and results of the Ripple Effect Initiative with high school career counselors.
- Brandy Swisher, of Kings River Conservation District and Kings Water Alliance, to present about the Ripple Effect Initiative at the Association of California Water Agencies (ACWA) 2026 Fall Conference in Anaheim, CA, taking place in December 2026.

**Laura Ramos was on a panel during the Valley Veterans Water Forum (Connecting Veterans to Careers in the Water Industry while Advancing Solutions for California's Water Future). As part of her panel discussion Laura spoke to her and her team's support of the Ripple Effect Initiative.**





# ANALYSIS OF DATA & KEY FINDINGS

The Ripple Effect Initiative substantially advanced its core project goals and generated both planned deliverables and additional opportunities for action.

A central project goal was to analyze findings from three inventories and identify gaps in training and education based on current and projected water jobs. Work completed includes the public water system inventory and analysis, water workforce survey and analysis, jobs assessment and workshop, education and training information, roundtable analysis, stakeholder engagement, and development of recommendations and next steps.

One important lesson from implementation was the complexity and fragmentation of the water workforce ecosystem. Reaching employers, education and training institutions, workforce partners, and other stakeholders required a broad outreach strategy that included direct emails and phone calls, presentations, events, social media, partner networks, and one-on-one relationship building. That level of outreach also demonstrated why continued regional coordination is needed.

One hope and arguable challenge is that the Ripple Effect Initiative would benefit from a Phase 2 of the Water Jobs geographical map. This would add additional job training information like organizational profiles and direct water job training sign ups for a seamless link for job seekers to directly access water job training.

# METRICS & EVALUATION

**118** **Number of public water systems identified and contacted for survey participation**
*93 community public water systems and 25 school public water systems*

**4** **Number of public water systems identified with capital improvement projects**
*City of Dinuba, City of San Joaquin, Easton Estates, and Hardwick Water Company*

**21** **Number of employers/agencies/coalitions engaged**
*Biola Community Services District, City of Clovis Public Utilities, City of Fresno Department of Public Utilities, Fresno Irrigation District, Fresno Metropolitan Flood Control District, James Irrigation District, Kings River Conservation District, Luhdorff & Scalmanini Consulting Engineers, South Fork Kings GSA, Tranquility RCD/Tulare Basin Watershed Partners, Tulare Irrigation District, Westlands Water District, Kings Basin Water Authority, Valley Water Collaborative, Association of California Water Agencies (ACWA), Region 6/7 (Madera, Fresno, Kings, Tulare, and Kern Counties), Association of California Water Agencies (ACWA) Communications Committee, ACWA Foundation board, CV-SALTS Public Education and Outreach Committee, California Department of Education, Self-Help Enterprise, California Farm Water Coalition, and Central Valley Community Foundation*

**144** **Individuals took the survey**
*63 completed the survey in its entirety*

**15** **Training & eductaion partners engaged**
*ACWA Foundation, Fresno State, Fresno EOC, Fresno Regional Workforce Development Board, Fresno-Madera K-16 Collaborative, Kings County Job Training Office, Porterville College, Proteus, INC., Reedley College, Self-Help Enterprises, Sequoias Adult Education Consortium, Valley ROP, Workforce Development Board of Madera County, The Workforce Investment Board of Tulare*



## ANALYSIS OF DATA & KEY FINDINGS

Sharing some relevant and related data figures from our partner, and fellow CVCF Catalyst grantee, Youth Leadership Institute's, project findings.

**2,300**

**Approximate youth (ages 14-17) and young adults (ages 18-24) engaged by Youth Leadership Institute**

**50% of youth and young adults say it is very important that local jobs are environmentally friendly and aware.**

**Young people show strong interest in jobs, career pathways, and opportunities connected to their communities (water jobs/careers are very connected to local communities, especially in rural areas).**

**Most youth report only moderate access to job training, with limited high-access opportunities.**

**Career preparation that is hands on and reflective of careers in the job market is a necessity.**

In addition to the above findings, we interviewed twenty-one REI participants about their work, organizational needs, and personal perspectives on the job pipeline in California's water industry. One of the videos we created from those interviews focused around stressing the importance of getting other water industry professionals to the table. We used this video to ask water sector partners to attend the second roundtable. Another gave an overview about why the Ripple Effect Initiative is important and timely.



# FROM RESEARCH TO ACTION: THE RIPPLE EFFECT ALREADY UNDERWAY

The Ripple Effect Initiative was designed to do more than document a workforce challenge. It was created to connect people, uncover opportunities, and establish the building blocks for a stronger Central Valley water workforce. During the initiative, research and convening began translating into tangible action across education, workforce development, water agencies, and the broader community.

### 1. Creating Earlier Pathways Into Water Careers

**Bringing water careers to high school counselors.**
The ACWA Foundation hosted a September 24 event in Fresno focused on high school guidance counselors, using Ripple Effect Initiative survey findings to help build awareness of water careers among the professionals helping students make decisions about their futures.

**Creating new high school internship opportunities.**
The work has helped catalyze the ACWA Foundation's Tomorrow's Water High School Internships, extending workforce awareness into direct career exposure and experience for students.

**Bringing water careers into statewide education conversations.**
When the California Department of Education began updating statewide Career Technical Education standards, the REI team joined a public comment work group reviewing the Energy, Water and Natural Resources section. REI research and project materials were shared with the group, while water HR professionals and educators were invited to review and provide input on the draft standards.

**Supporting hands-on career exploration.**
KWA supported outreach for the Workforce Investment Board of Tulare County's Agriculture Careers Exploration (ACE) Day event, helping secure speakers for the water policy segment and expanding water-sector participation through information and exhibitor booths aimed at high school students exploring agriculture and water careers.

### 2. Connecting Water Employers With the Workforce System

**Building relationships that did not previously exist.**
Two regional roundtables (Roundtable 1 and Roundtable 2 key findings) brought water employers, workforce investment organizations, educators, training providers, and other stakeholders into the same conversation around workforce needs, available resources, and opportunities for collaboration.

**Identifying a potential workforce development model.**
Through the initiative, Talent Pipeline Management (TPM) training and education emerged as a potential framework for incorporating water careers more intentionally into Workforce Investment Board processes and programs.

**Defining the jobs the region needs most.**
An August 13 workshop brought together HR and hiring decision makers from several local water organizations to examine critical positions, job titles, job descriptions, and shared workforce needs, helping move the conversation from general workforce shortages toward specific occupational priorities.

**Creating a regional network.**
A contact directory and stakeholder database now provide the foundation for continued communication among water agencies, educators, training providers, workforce organizations, and other partners beyond the initial initiative.

### 3. Turning Research Into Shared Regional Intelligence

**Establishing a Central Valley water workforce baseline.**
The KWA Water Workforce Survey Report provides research and findings that regional partners can now use to understand workforce conditions, identify gaps, and support future workforce planning. For example, the survey is being used by the four county regions workforce development partners as a springboard for a grant application from the U.S. Environmental Protection Agency, the "Innovative Water Infrastructure Workforce Development Program grant.

**Capturing what employers and partners said matters most.**
Findings, themes, takeaways, and recommendations from the two regional roundtables have created an additional body of qualitative insight into the barriers, opportunities, and priorities facing the water workforce.

**Mapping regional water systems and opportunities.**
Public water systems within the KWA service area were mapped, including identification of systems with current projects and those interested in exploring expansion or consolidation as part of long-term drinking water solutions.

### 4. Building Infrastructure for Continued Collaboration

**Laying the groundwork for ValleyWaterWorks.org.**
The initiative has moved beyond the concept stage toward a cloud-based regional resource designed to make workforce and water-system information easier to find, share, and maintain.

**A domain name has been purchased for one year as a placehholder for a furture site, and a 'wireframe' of a potential website design has been created as an easy how-to guide for organization and content strategy.**

- ArcGIS mapping
- Searchable and filterable inventories
- A regional contact directory
- Training and education resources
- Information submission and request forms
- Frequently asked questions
- Ongoing information and resource updates

Potential development partners have also been identified, including Digital Foundry and Baunfire.

### 5. Extending the Reach and Life of the Initiative

**Creating tools for continued awareness and storytelling.**
A video series and social media content were developed to continue communicating the water workforce story and keep career awareness efforts moving beyond the formal project period.

**Expanding regional visibility.**
The Ripple Effect Initiative will be featured in Fresno Metropolitan Flood Control District's Flood Line newsletter in Fall 2026, and will be featured in the October blog of the Water Blueprint for the San Joaquin Valley, a collaborative regional effort involving the California Water Institute at Fresno State and regional water agencies. Both extend awareness of the work to additional regional aduiences and beyond As of this writing, REI is also a finalist for the statewide innovation award offered by the Association of California Water Agencies (ACWA) at the ACWA Fall Conference in December 2026.

**Identifying pathways for continued funding.**
At least two potential state and federal funding opportunities have been identified to continue or expand the work:

1. U.S. EPA Office of Water Innovative Water Infrastructure Workforce Development Grant
2. California State Water Resources Control Board Technical Assistance Funding Program

**The Larger Outcome**
The most significant result of the Ripple Effect Initiative is the network and momentum that these efforts have created.

Water agencies are talking directly with educators and workforce organizations. Career counselors are becoming part of the conversation, which will allow high school students to gain new opportunities for exposure to water careers. College students and job seekers are gaining new opportunities for exposure to water careers. Regional workforce needs are being documented more clearly. Water professionals are contributing to statewide education standards. And the tools, relationships, and potential funding pathways now exist to continue the work.

**Research became conversation, conversation created connection, and those connections are already producing action.**



# LESSONS LEARNED

The Ripple Effect Initiative changed how regional partners understand and approach the relationship between water infrastructure, workforce development, education, and community resilience. Rather than treating water workforce needs as the responsibility of individual employers, the initiative brought water organizations, workforce partners, and education and training institutions into shared conversations about the regional talent pipeline and water as a defined employment sector. Through this process, it surfaced structural barriers that had long gone unaddressed: inconsistent job titles, limited career awareness, gaps in training access, and disconnects between employers and education providers as well as disconnects between employers and potential future employees.

Perhaps most importantly, the project helped shift the underlying mental model from viewing safe drinking water solely as a water-quality or infrastructure challenge, to recognizing that long-term water resilience also depends on people: the workers, operators, technicians, managers, educators, and future workforce needed to sustain these systems.

REI's findings began to influence systems well beyond KWA itself. Project information was shared as part of the State of California Department of Education"s update to its Career Technical Education (CTE) standards, and the project's survey results are now informing ongoing conversations among water-sector organizations, workforce partners, educators, and career counselors. The initiative shared its work products as part of the public comment process for the update and engaged water HR professionals and educators in reviewing the emerging energy/water/natural resources standards.

Notably, outreach to Workforce Investment Board of Tulare County led to a cascade of additional connections — with other workforce and education stakeholders, and ultimately with the California Department of Education's CTE standards update itself. This is one of the clearest illustrations of a broader pattern: the research and outreach process did not just gather information, it actively created new relationships and opportunities. Other ripple effects that emerged include the August Water Jobs Workshop, growing attention to aligning water-sector job titles and requirements, exploration of Talent Pipeline Management, water career outreach tied to ACE Day, development of a video series for expanded reach, and the ACWA Foundation's work on high school internships and a September event for career counselors. In addition work in the Ripple Effect Initiative led to a suggestion to the Association of California Water Agencies (ACWA) communications team to start a simple social media effort among its 450 member organizations to help draw attention to the water sector as a major employment sector. The proposal to promote members' use of a shared term (such as #waterjob #thisisawaterjob) is under consideration.

These outcomes reinforce one of the project's central findings, that relationship building is itself a critical piece of water workforce infrastructure. Networking and one-on-one stakeholder outreach needs to be treated as a core project activity. The water sector is broad and decentralized, spanning public water systems, irrigation, wastewater, flood control, conservation, community services districts, education and training providers, workforce organizations, agriculture, government, and other partners. Reaching these audiences required significant, sustained one-on-one relationship development.

Anyone who takes this work into the next phase needs to continue relying on cross-sector stakeholders and growing participation in further surveys, roundtables, workshops, and more. Defining and aligning on shared terminology, particularly around water job titles and career requirements, will also strengthen data collection and analysis. The project will need investment in an expanded long-term data management structure. While what we have created is sufficient for Phase 1 of this project, there will be larger inventories to track in the long run. These lessons point toward areas of opportunity for our partners who will be carrying this work forward, which we will cover in the next chapter.



# NEXT STEPS

The next phase is to move from research, mapping, and relationship building into an ongoing regional water workforce and infrastructure strategy.

Priority next steps identified through the project include continuing efforts to clarify and align water job titles and requirements; and identifying additional funding for implementation, maintaining and updating the inventories; building the coalition of water employers, education providers, workforce organizations, and other partners; expanding career awareness activities; developing clearer water career and interest pathways from multiple angles (high school/CTE programs, ROP programs, community colleges, adult education, online operator trainings, etc.); advancing internships and work-based learning.

The project has also begun conceptualizing a website as a longer-term platform for maintaining and sharing the information developed through the initiative. Potential functions include searchable ArcGIS inventory layers, a regional contact directory, training and certification information, forms for submitting updates and requesting information, FAQs, referral information, regular regional updates, and profiles for educators and industry/employers.

Talent Pipeline Management has also emerged as a potential framework for sustaining employer-driven workforce planning. One proposed next step is building internal/regional capacity to facilitate that process with Central Valley water employers.

KWA has been focused on moving the Ripple Effect Initiative from research and relationship building into sustained regional implementation. Toward that end, KWA is currently supporting a warm handoff of REI with the ACWA Foundation, alongside local Workforce Investment Boards as we work to pursue additional funding.



# CLOSING

The Ripple Effect Initiative was designed around the recognition that environmental stewardship, infrastructure, workforce development, and economic opportunity in water are interconnected.

Kings Water Alliance serves rural Central Valley communities' households that rely on domestic wells and may be affected by nitrate contamination. Through its work assessing and addressing nitrate contamination, KWA recognized that implementing long-term drinking water solutions also requires a strong pipeline of qualified people who can operate, maintain, expand, and improve the region's water infrastructure.

The Ripple Effect Initiative brought these issues together. The project mapped public water systems within KWA's service area and examined opportunities for expansion or consolidation that could potentially support long-term drinking water solutions. At the same time, it examined workforce needs across the broader water sector and the education and training pathways available to prepare local residents for those careers.

Through surveys, inventories, roundtables, direct outreach, video interviews, and a water jobs workshop, the initiative also began connecting water employers, workforce partners, education and training providers, and community partners that had not always been working together around a shared workforce strategy.

The result is a stronger foundation for simultaneously addressing environmental stewardship and access to good local jobs: identifying infrastructure needs, understanding the workforce required to meet those needs, making water careers more visible, and identifying ways local residents can access the education, training, certifications, and work-based learning necessary to enter those careers

The Ripple Effect Initiative began with a recognition that the Central Valley's water challenges cannot be separated from the people and systems needed to address them.

The project has helped create a clearer picture of public water infrastructure, water-sector workforce needs, and the education and training resources available across the region. Just as importantly, it has brought together people and organizations that approach water from different perspectives but share a stake in the region's future.

## CLOSING

The catalytic value of this investment is visible in what has already begun to grow from the project: new relationships, new conversations, career awareness efforts, employer and education partnerships, workforce strategies, and opportunities to influence larger systems. The next opportunity is to sustain that momentum and convert the information and relationships developed through the Ripple Effect Initiative into a durable regional infrastructure and workforce ecosystem.

# THE RIPPLE EFFECT HAS BEGUN.






The following links are provided in the chronological order in which they appear in the final report. Duplicate links are retained where they appear more than once in the report.

1. Kings Water Alliance — Ripple Effect Initiative
https://kingswateralliance.org/ripple-effect/

2. KWA Water Workforce Survey Report
https://kingswateralliance.org/wp-content/uploads/2026/06/KWA-Survey-Report-Final.pdf

3. Public Water System Inventory Report — LSCE
https://kingswateralliance.org/wp-content/uploads/2026/09/Public-Water-System-Inventory-Report-LSCE-September2026_final.pdf

4. Water Resource Locator Map — ArcGIS
https://experience.arcgis.com/experience/6def6cf1443944cb8a67edf40a734772

5. Roundtable Roster & Contacts
https://kingswateralliance.org/wp-content/uploads/2026/09/Roundtable_Roster_Contacts.pdf

6. Instagram — Roundtable 1
https://www.instagram.com/p/DZa37aoNWqb/

7. Ripple Effect Initiative — Roundtable 1 Summary
https://kingswateralliance.org/wp-content/uploads/2026/09/REI_Roundtable1_Summary.pdf

8. Ripple Effect Initiative — Roundtable 2 Summary
https://kingswateralliance.org/wp-content/uploads/2026/09/REI_Roundtable2_Summary.pdf

9. Ripple Effect Initiative — Water Jobs Workshop Summary
https://kingswateralliance.org/wp-content/uploads/2026/09/REI_WorkshopSummary_8.13.26.pdf

10. Kings Water Alliance — Volunteering
https://kingswateralliance.org/volunteering-with-kings-water-alliance/

11. Youth Leadership Institute — Data / Supporting Material
https://drive.google.com/file/d/1Lp7lP52DSpRfnc7o_DBGU4K9tm3XAX_i/view?usp=sharing

12. Ripple Effect Initiative — Video
https://www.youtube.com/watch?v=uYpSeUx-bRg

## APPENDIX

13. ACWA Foundation Links

ACWA Foundation — Water Careers Event
https://www.acwa.com/news/acwa-foundation-event-to-strengthen-link-between-students-and-water-careers/

ACWA Foundation —Event Program
https://kingswateralliance.org/wp-content/uploads/2026/09/ACWA_Event_Program_PathwaytoWaterCareers.pdf

ACWA Foundation — Tomorrow's Water High School Internships
https://www.acwa-foundation.org/tomorrow-s-water-high-school-internships

16. Ripple Effect Initiative — Roundtable 2 Summary
https://kingswateralliance.org/wp-content/uploads/2026/09/REI_Roundtable2_Summary.pdf

17. KWA Water Workforce Survey Report — supporting file
https://krcd1-my.sharepoint.com/:b:/g/personal/jjensen_krcd_org/IQDCM1p5vvx7Q4ChEsUUD7jmARpmEJg-mQoWUX6blN-wYJcs?e=jZCBfw

18. ValleyWaterWorks.org
http://ValleyWaterWorks.org

19. ValleyWaterWorks.org — Wireframe & Content Strategy
https://kingswateralliance.org/wp-content/uploads/2026/09/KWA_REI_ValleyWaterWorksWireframe.pdf

20. Digital Foundry — Outcomes
https://digitalfoundry.com/outcomes

21. Baunfire
https://www.baunfire.com/

22. U.S. EPA — Innovative Water Infrastructure Workforce Development Grant
https://files.simpler.grants.gov/opportunities/334a82d8-874c-410e-97c4-c4971d65abc2/attachments/2f-0204ba-c1ed-4a89-aa63-8926c6bf1e39/EPA-OW-OWM-26-03_-Innovative_Water_Workforce__Final_2.pdf

23. California State Water Resources Control Board — Technical Assistance Funding Program —
https://www.waterboards.ca.gov/water_issues/programs/grants_loans/tech_asst_funding.html

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