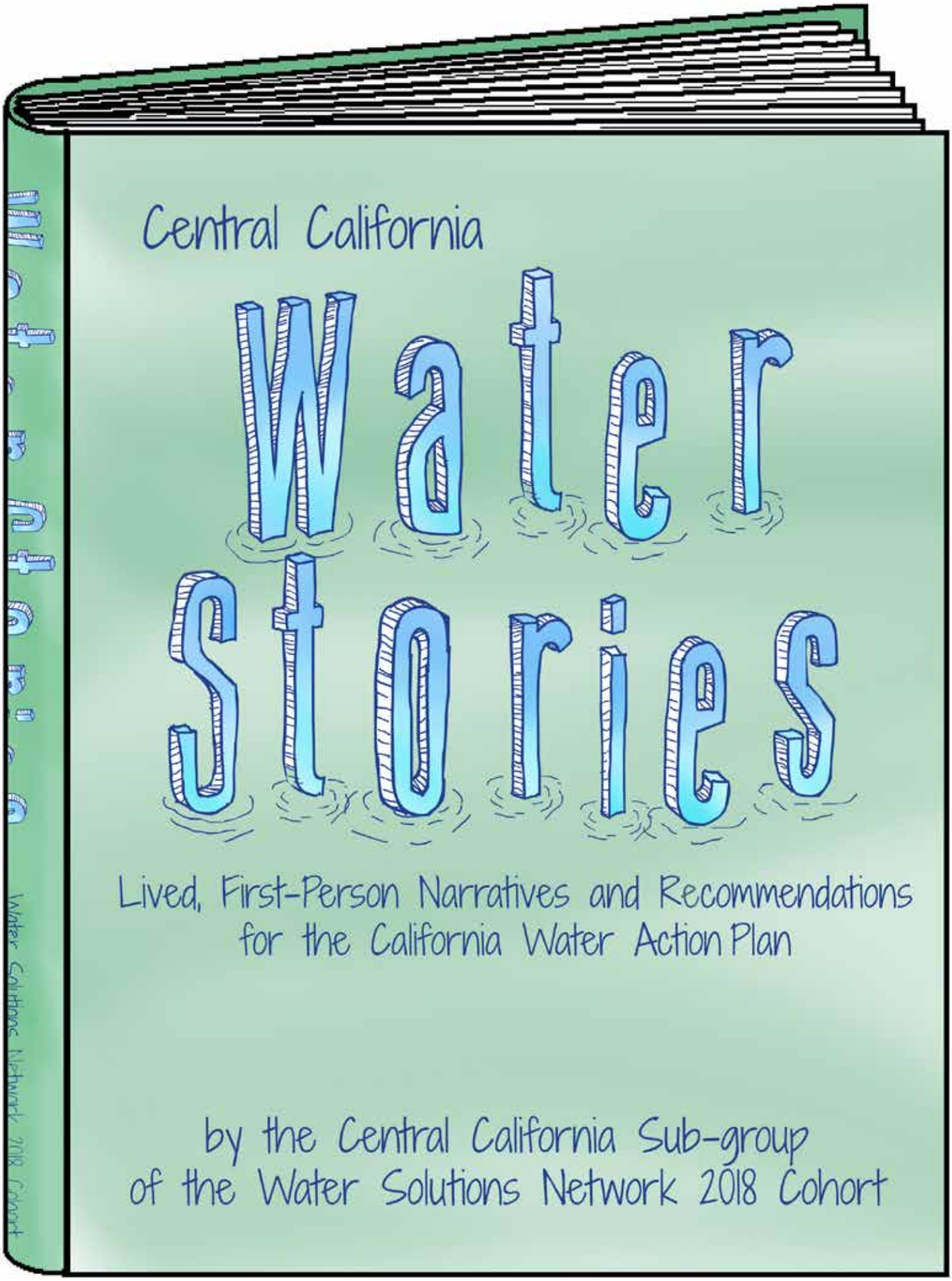
Central California
Water Stories
Lived, First-Person Narratives and Recommendations for the California Water Action Plan
by the Central California Sub-group of the Water Solutions Network 2018 Cohort
Water Solutions Network 2018 Cohort

Water Storage & Dist
Clear Lake
Klamath River
Shastina
Pit River
Trinity
Shasta
Trinity River
Trinity Tunnel
Whiskeytown
Ruth
Eel River
Almanor
Antelope
Davis
Frenchman
Jackson Meadows
Spaulding
French Meadows
Oroville
Sacramento River
Black Butte
Tehama-Colusa Canal
New Bullards Bar
Pillsbury
Potter Valley Project
Indian Valley
Mendocino
Englebright
Rollins
Stampede
Lake Tahoe
Cache Creek
Camp Far West
Hell Hole
Union Valley
Folsom
Warm Springs
Berryessa
Sacramento
Salt Springs
New Spicer Meadow
Donnells
Camanche
Pardee
North Bay Aqueduct
Beardsley
Bridgeport
New Melones
New Don Pedro
Contra Costa Canal
Mokelumne Aqueduct
New Hogan
Hetch Hetchy
San Francisco
New Exchequer
South Bay Aqueduct
Aqueduct
Crowley
Mammoth Pool
Eastman
Edison
Florence
Courtright
Wishon
Hetch Hetchy
San Jose
San Luis
Delta-Mendota Canal
Friant
Pine Flat
San Joaquin River
Owens River
Los Angeles Aqueduct
Salinas River
Friant-Kern Canal
California Aqueduct
Terminus
Success
San Antonio
Nacimiento
Isabella
Bakersfield
Twitchell
Cachuma
Pyramid
Castaic
Castaic
San Gabriel
Silverwood
Los Angeles
Prado
Mathews

Storytellers

The eight voices in this document are those of the 'Central California' sub-group of the 2018 Water Solutions Network cohort. We are a cross-sector collaboration of leaders focused on the future of water management in our state who value engaging all stakeholders and bridging differences to ensure sustainable and equitable water management in California. The WSN Advisory Council tasked us with developing recommendations for the incoming Governor and the California Water Action Plan. Our response to this task and the format of this document are expressions of our training and experiences as 'water leaders' in both form and content.

Marta Lugo is a Supervising Program Administrator for the Santa Clara Valley Water District. As part of the Office of Civic Engagement, Marta manages the Water Education & Volunteer Program which is responsible for overseeing education outreach to the public, youth, schools, nonprofits, community and civic groups.

Dr. Rene Henery is an Ecologist and Eco-geographer who holds a joint position as California Science Director for Trout Unlimited and part time research faculty with the University of Nevada, Reno, Global Water Center. Rene's work embraces water, diversity, connectivity and equity as pathways to resilient ecosystems and communities in his home state of California and beyond.

Abby Taylor-Silva is the Vice President of Policy and Communications at the Grower-Shipper Association of Central California, a 350 member-strong agricultural trade association spanning the coastal region encompassing Monterey, Santa Cruz, San Benito and Santa Clara counties. Abby is a native of Monterey and San Benito counties. Her family farmed in Monterey County for over 50 years.

Ann Hayden is the Senior Director of Western Water and Resilient Landscapes and leads Environmental Defense Fund's efforts to rebalance and build healthy land, water and wildlife systems across the western United States. Ann works to build broad coalitions to advance solutions that benefit both the environment and people.

Michelle Reimers is the Assistant General Manager of External Affairs for Turlock Irrigation District. She is responsible for managing the strategic planning and development for the District's communications, outreach, electric rebates and programs, education and government affairs programs and initiatives.

Paul Robins is the Executive Director for the Resource Conservation District (RCD) of Monterey County and has worked for RCDs since 1995, helping farmers and agencies bridge gaps of understanding for achieving mutually-desired agriculture, water, and wildlife conservation values.

Alesandra Nájera is a Program Officer at the Water Foundation, where she supports efforts to provide safe, affordable and reliable water for communities. Prior to joining the Water Foundation, she was a Legislative Assistant to U.S. Senator Barbara Boxer, where she handled natural resources policy in Washington, D.C.

Ellen Wehr is the general counsel for Grassland Water District, which serves water to the Grasslands Ecological Area, the largest remaining freshwater wetland complex in the western United States. She has practiced water law in Sacramento for a decade, finding a professional niche in Central Valley Project water issues.

Towards a Healthy and Resilient Water System in California

The California Water Action Plan is a roadmap designed to put management of the state's water resources on a safer, more sustainable path in the face of climate change, population growth, and crumbling infrastructure. The plan, published in 2014, was an important commitment for the state to move forward and address our significant water challenges, particularly during the recent severe statewide drought. However, throughout its implementation, water experts acknowledged that the plan could better recognize the inherent connectivity of the system and the role that individuals and communities can and must play both in implementing the plan and sustainable management of the resource.

Here, we share our lived, personal stories and the lessons we have learned as water professionals in California. We believe these stories can and should inform the next iteration of the *California Water Action Plan* and provide guidance to state agencies in their interactions with interests in Central California and beyond. In combination, our experiences illustrate an opportunity for the *California Water Action Plan* to evolve into an emergent expression of the values, perspectives and needs of California's diverse populace. We hope our stories highlight the critical importance of engaging neglected constituencies, fostering creative partnerships, and developing innovative funding mechanisms as we create an integrated, workable plan for a healthy water system.

Through our collaborative Water Solutions Network process, our regional group identified ***Integration, Equity, Resilience,*** and ***Health*** as desired outcomes for effective water stewardship in California and thus the true measures of success for any associated action plan. Common to all of these outcomes is that they are qualities of a functional system.

- ***Equity*** includes social justice in water governance, access, and quality, without disparities for groups that experience systematic social or economic disadvantages. Equity necessitates: a) sufficient awareness of self and awareness of others to allow for common interests to be revealed , as well as b) sufficient trust in the value of others, as core components of the system that we are able to be open to, educate ourselves about, and ultimately support critical interest that may not initially appear aligned with our own interests or values.
- ***Integration*** is the outcome of parts of a system acknowledging connections to one another and functioning as though they are connected, as opposed to isolated.

- **Resilience** is the measure of a system's ability to recover dynamic equilibrium after a disturbance, and the diversity and connectivity of a system are its cornerstone. Systems that lack diversity are inherently vulnerable. Systems that are diverse, but lack connectivity, cannot draw on their diversity. Diverse, connected systems can leverage the contributions of all of the parts and distribute the load across the breadth of the network.

In combination, the attributes above support system **Health.**

In order for the *California Water Action Plan* to advance these outcomes, it must be founded on an overt strategy that specifically targets them. Like the current *California Water Action Plan* and the related *California Water Plan*, any such strategy must recognize the connected nature of the components of the hydrologic cycle and include the sometimes physically and geographically disparate places where ecosystems and human communities interface with and rely on that cycle. Equally important is that it rest upon a vision for an equitable, integrated, resilient, and healthier California.

As a means to inform the transition to a new administration, we assembled guidance for the evolution of the *California Water Action Plan* in the form of a suite of ***Water Stories***. These *Water Stories* serve as case studies drawn from lived experience, selected because they highlight specific successes, insights, opportunities and lessons for achieving greater equity, integration, resilience and health in the California water system. These case studies are shared from the perspective and in the voice of the Water Solutions Network member that brought them forward. In this way they are also designed to illustrate that the current condition of the water system and the potential for it to heal are an expression of the personal experiences, backgrounds and perspectives of the diverse people it connects.

Throughout this presentation, we identify Themes that emerge as core to the challenges we face today, the places where we are seeing progress, and the opportunities to build on that progress as we move forward; as well as Tools that we can bring to bear in the process. We call out and articulate each of these *Themes* (Trust, Multiple Benefits, Collaboration, and Transparency) and ***Tools*** (Education, Incentives, Science, and Financing) in text boxes in context with stories that uniquely highlight them. These text boxes were written by our group as a whole, and some themes and tools may be broader than their accompanying story. Regardless, each story inevitably touches on multiple themes, tools and outcomes, as none exist in isolation and all bear natural linkages with others.

We believe these experience-based *Water Stories*, alone and in combination, offer valuable insights into both the challenges and opportunities for more effective water stewardship in California. To that end, we developed a suite of selected ***Recommendations*** organized by most relevant Tool or Theme to follow the stories section, which have immediate relevance to the update of the *California Water Action Plan* and, more broadly, the growth and evolution of a collective approach to a healthier water system in California.

Water Stories

- ***Demystifying Water*** by Marta Lugo, Santa Clara Valley Water District
- ***Putting the Pieces Back Together: The Challenge and Opportunity of Reconciliation*** by Rene Henery, Trout Unlimited
- ***Building an Inclusive SGMA Agency*** by Abby Taylor-Silva, Grower-Shipper Association of Central California
- ***The Sacramento Valley: A Model for Partnerships and Multi-Benefit Management*** by Ann Hayden, Environmental Defense Fund
- ***California Water Policy Should Be Guided by Transparent, Collaborative, Site-Specific Science*** by Michelle Reimers, Turlock Irrigation District
- ***Salinas Valley…Underway*** by Paul Robins, Resource Conservation District of Monterey County
- ***Local Leadership for Safe Water*** by Alesandra Najera, The Water Foundation
- ***Financial Partnership Model: Farms and Wetlands on the Westside*** by Ellen Wehr, Grassland Water District

Demystifying Water

Marta Lugo, Santa Clara Valley Water District

Critical Tool: Education

Education can raise awareness and build public support for water issues. As water professionals, we must do a better job of informing, educating, engaging and fostering better understanding of key water resource issues and solutions with the general public.

It was Summer 2016, and I was having dinner at the home of one of my good friends who is originally from Czechoslovakia. As we were catching up on life, we eventually started talking about work. My friend suddenly looked at me and said, "Hey, you work for the Water District, right? So… can you tell me why the heck my water bill is suddenly hundreds of dollars higher? Every time I open it the bill keeps going up! It's ridiculous—we haven't even been using more water, if anything, we've been saving water. What's up with your company?!" Caught off guard, I replied, "Actually, I work for a special water district that is a wholesaler, and not your direct water company who sent the bill, but I understand it's confusing and frustrating when you are doing your part and the bill keeps going up."

This was not the first time I had been hit over the head with this type of angry questioning by a friend or a local resident. Although I tried to calmly explain that it was more costly during times of drought to secure and pay for water and the role of my water district as a government agency and wholesaler, it did not subdue the anger in my friend's voice. As I got further into the machinations of what my agency does versus private water retailers, municipalities, and sewage agencies, how water rates are set, and the role of the state regulators, the more confused and irate she became. "What does your water agency do as a government agency then—who do I need to complain to? This does not make any sense, the way everything here in California is so overly-complicated!" I realized that to a certain extent I had to agree, and the more I tried to explain the complexities, the sillier it all sounded.

How can we demystify water? The antennas were up for many Californians during the historic 2012-2016 California drought. Water was one of the main issues, if not the most pressing one, in many public opinion polls. Water conservation campaigns took off around the state, urging the public to save water and memorializing slogans such as "Brown is the New Green," making it instantly hip for residents to let their lawns die over the summer. But the opportunity for a much larger water conversation was lost altogether. Any real discussion about climate change played second fiddle, and people became angry about being forced to do their part to save water but still seeing their bills skyrocket.

While a good majority of the public responded to the calls for conservation, when rain finally poured down during the 2017 wet season, flooding became the new threat, but business as usual

resumed in terms of water use for many. People still do not understand how water is interconnected in California. Mass confusion exists about how water is secured, cleaned, transported and paid for. The divisions between drinking water and wastewater, and all the institutions in between, only further complicate the issue. As a community outreach and communications professional, it is frustrating to hit the same wall of water repeatedly.

Many are still unaware that most of California's water supply comes from the Sierra Nevada, including Bay Area residents who mistakenly believe that only southern California drinks up "northern California" water. There is a reluctance to talk openly about how climate change and severe weather patterns affect our water reliability and will significantly change the way we manage water in the future. Water scarcity and unreliability have significant impacts and implications across a variety of sectors, from business to food, energy, public health, housing, urban planning, and more. Yet many local leaders and the public at large are generally reluctant to pay for large infrastructure projects, new technologies such as recycled/purified water, or ensuring equitable water access across all communities.

How do we simultaneously get the public's attention while overhauling or simplifying the water system in California? There is no single silver-bullet answer, but some ideas include looking at a broader statewide public education campaign around climate change impacts on water reliability, intersections with other sectors like energy, housing, food, etc., and the need to plan for a new water future for California, as a start.

For my part, I help my agency further the mission of civic engagement with our community. This includes developing partnerships with school districts, local health departments, nonprofit organizations, even the arts community, and planning new educational exhibits and citizen advocacy programs to educate our community leaders and help develop new ones. I promote the "one water" concept as an emerging idea that would simplify how we view our water services. I promote the message about climate change, not as a doom-and-gloom narrative but as a catalyst for local change and collaboration. I try my best in continuing to educate and inform local residents and friends alike, not only on water problems, but on how they can become part of the solution by engaging locally, such as volunteering in our programs and participating in board and advisory meetings. On the larger community scale, I continue to look for new innovative and local partners to further the water dialogue.

Putting the Pieces Back Together:

The Challenge and Opportunity of Reconciliation

Rene Henery, Trout Unlimited

One of the primary challenges to recovering salmon in the Central Valley is the loss of approximately 90% of the historic rearing habitat on fertile floodplains and seasonal wetlands. Because a portion of that historic habitat has been converted to agricultural land, there is a misperception of inherent conflict between salmon recovery and the future of agriculture and food production in the Central Valley. However, recent efforts like the Nigiri project where juvenile salmon have been successfully reared on seasonal rice fields, exhibiting growth rates seldom seen elsewhere in the Central Valley, reveal a middle path in which the working agricultural landscape can also be operated to support critical ecosystem function. Often termed "Reconciliation," this concept of operating the landscape for multiple benefits and outcomes offers a promising pathway toward an integrated and resilient water future in California.

Theme: The Need for Trust

Trust is a key component of resilient and equitable relationships and it must be cultivated in personal, interpersonal, and systemic forms. The trust of another is difficult to cultivate when one does not trust themselves; similarly, even when individuals are inclined to trust each other, if they are operating in a community or system (e.g. regulatory, legal) they do not trust, the extent of the trust they experience may be limited in areas where they perceive that the system affects their relationship. Factors supporting the cultivation of trust in any form include vulnerability, courage, transparency and authenticity. When an individual is vulnerable, it communicates a willingness to risk their feelings of safety in favor of connection. Transparency provides information about the context in which trust is being extended, and authenticity clarifies the motivations of the other. A violation of trust or neglect to tend it may result in wounding and make its repair difficult. In these cases, courage, forgiveness and accountability are critical for establishing a new foundation upon which trust can once again be built.

Perhaps as a function of my diverse ethnic lineage – South American, European, African and Asian – or my vantage as a systems scientist, my experience of myself and the world is often through the lens of systems. In systems, diverse parts function as a unified whole. The nature and capacity of that whole and the extent of its functionality hinges on the functionality of those parts and the connections and relationships between them. Whether within myself, among people in my family or community, or across a landscape, when

connections have been damaged or cut off, a reconciliation needs to occur in order for the connection to be repaired and the system to regain its capacity and functionality.

Looking down the dry sandy channel of the San Joaquin River's Eastside Bypass, it is sometimes hard for me to imagine that one of the state's longest rivers will be flowing through this arid expanse in a few short years. Born of an agreement between the federal government, environmental interests, and the Friant Water Authority, the San Joaquin River Restoration Program (SJRRP) is perhaps the state's largest multi-benefit project. Partnering with Kramer Fish Sciences, the Merced National Wildlife Refuge, and landowners Bill Grissam and Don Turner to examine the potential for managed wetlands in the San Joaquin basin to support restored juvenile salmon as well as waterfowl, deepened my sense of both the opportunity and the near-term challenges to reconciliation within California's working lands, ecosystems, and human communities.

To an urban-born ecologist, the valley was initially an intimidating place. It's hard to ignore the local billboards and newspaper headlines recycling accusatory memes about fish and environmentalists hurting farmers. But on the ground the experience was different. Bill Grissam grew up in the valley hunting ducks most of his life and still remembered the time before the river was dried up and the salmon collapsed. Don Turner appreciated duck hunting as a way to connect with his family and still made a regular practice of heading over to the Golden Gate to salmon fish every year (or at least when the fishing was good). Cattle still ran seasonally on the managed wetlands of Bill Grissam's Ranch, and the presence of tules and songbirds provided a glimpse into the history of this wedge of land nestled between two valley watercourses. Both landowners were interested in exploring how their land could support the restoration program and vice-versa. Knowing that we shared these interests made our first meeting less intimidating. We were all connected by water.

At the 30,000-foot level, the concept behind our research seemed pretty simple: reconnect historic wetlands currently being managed as such to the soon-to-be-restored San Joaquin River, and provide salmon access to rearing habitat through a levee setback or some type of operable gate. The SJRRP would save money from not having to go through fee title acquisition and

construct new wetland/floodplain habitat from scratch. The land could remain as a working private ranch or wildlife refuge, and the landowners and the region could benefit from their wetlands being flooded up by SJRRP water as opposed to groundwater purchased or pumped from a depleted aquifer under rapidly subsiding lands at a great and mounting expense.

Our research project successfully demonstrated the potential for salmon to grow and survive on managed wetlands. In the process we also observed that different approaches to water management affected the condition and survival of the fish. A blueprint for a more reconciled and cost-effective approach to water and land management was emerging. As it came into focus, however, so too did some of the obstacles: The SJRRP had defined its boundary based on the levees and was not comfortable with habitat solutions that included lands outside the levees; the Restoration settlement was not designed to allow for the use and potential loss of restoration flows to inundate private lands; the linking of the wildlife refuge to a navigable waterway would put many of the refuge's sensitive species at risk; there was no good example of an operable gate in a levee that met flood protection standards and also allowed for fish passage, and on and on. As the obstacles revealed themselves, I could feel the tension increasing on the cultural and emotional stretch already required for the different parties with different values to come together. Among the unspoken questions that hung smoke-like in the air: How can we trust the collaboration and work we do together in the context of a system that has institutionalized our separation in physical, economic, regulatory, and legal structures?

We are all connected by water. Across the Central Valley, many historic floodplains and wetlands continue to hold water for large portions of the year for rice cultivation, wildlife refuges, duck clubs, and other wetlands focused on conservation and mitigation. A recent study estimates that were these still-wetted lands re-operated to also provide seasonal fish habitat, those lands alone would recover close to 40% of the historic wetland and floodplain habitat in the Central Valley; enough to support adult salmon populations larger by hundreds of thousands than California rivers currently support. Reconciliation is possible. Improving California's capacity and functionality requires a common vision and the investment of the time and energy necessary to reconnect estranged parts and repair relationships. In order to be successful, however, the tasks of reconciliation and repair must proceed simultaneously at multiple scales, between and among individuals and communities, within the legal and regulatory context, and physically on the landscape.

Building an Inclusive SGMA Agency

Abby Taylor-Silva, Grower-Shipper Association of Central California

Abby Taylor-Silva, her grandparents and her little brother, circa 1986

Over 60 years ago, farmers, including my Grandpa Frank, came together to address solutions for a long-term water supply in the Salinas Valley. They envisioned two dams, one situated in another County but drawing water from a Monterey County watershed, and the other fully situated in Monterey County, as our solution to providing essential storage and flood protection for our valley. The Nacimiento and San Antonio Reservoirs today have a combined maximum storage capacity of 712,900 acre-feet and in normal years bring a substantial amount of groundwater recharge into the Salinas Valley. Releases are timed to benefit steelhead trout runs while also recharging our four major groundwater sub-basin areas.

In September 2014 Governor Brown signed the Sustainable Groundwater Management Act (SGMA). The Act established a definition of sustainable groundwater management to achieve sustainable yield, or water balance. Of the 515 groundwater basins in California, 127 were considered high or medium priority and were required to form a Groundwater Sustainability Agency (GSA) by mid-2017.

In 2015, Monterey County identified the Monterey County Water Resources Agency to be the GSA for the Salinas Valley Groundwater Basin. Some in the community took exception to that proposed appointment, and my agricultural organization as well as partners in the County Water Resources Agency, the

Theme: Multiple Benefits

Multiple benefits are the happy result when actions benefit more than a single resource or community. Multiple benefits create an enhanced efficiency because they render broader positive outcomes from a given process, and ensure the process will enjoy enhanced support from the multiple communities and interest groups who desire those multiple benefits. The reality is that no action ever realistically takes place without impacting multiple systems directly or indirectly. Anticipating and acknowledging those impacts, and working to avoid (or mitigate) those that are negative, while actively seeking mutually beneficial outcomes is a key to good planning and successful, durable projects.

County of Monterey, the City of Salinas and other partners in agriculture came together to find another solution.

Realizing that in order to identify an agency that could bring our basin into sustainable yield, we needed to build more trust in the community, these four entities decided to fund and hire a facilitator. Gina Bartlett of the Consensus Building Institute (CBI) brought an objectivity to discussing longstanding challenges among stakeholders. It became apparent that although our organizations were funding the effort, in order for the outcome to be credible to the community as a whole, we needed to let CBI identify which stakeholders should be at the table, and not try to control the process. We recognized that although this process was critically important to us, we needed to trust that it would be conducted in a way we were comfortable with, and give other stakeholders the opportunity for the same.

The final group of 22 people participating in the process represented various forms of agriculture as well as environmental organizations, disadvantaged community representatives, cities, the County, and water purveyors. Major areas of discussion centered around whether an agency already in existence should be used, how a new agency might be formed, the makeup of the board, and the rules used to govern the agency.

At the end of a 15-month process we created a Joint Powers Authority and a board of 11 members that included four agricultural seats, an environmental seat and a disadvantaged community/small water system seat, as well as municipal seats and a water purveyor seat. The successes of the process came down to a willingness to communicate despite the fact that our stakeholder groups were vastly different and throughout the years at times had been at odds. It came from organizing grassroots community meetings through a regional group named Communities Organized for Relational Power in Action (COPA), coffee shop talks with people who have different ideas, and a willingness to trust in a process.

Our SGMA agency is unique compared to others in California. We also have major hurdles before us: will land fallowing be part of the plan? Who will pay for the projects that will get us to sustainable yield? Which activities have multiple benefits and which don't? Having so many stakeholder groups represented on one board, as well as an agency that represents almost all of the county, means that we are better situated than many other GSAs as we build our plan. It means we will have a strong foundation for working out our issues and making decisions that

will have 50-year consequences, and we will follow a well-defined process that's consistent, where all voices are heard. When that happens, trust follows, and I believe that sustainable yield, for the good of our community and future generations, will be the ultimate result.

The Sacramento Valley:

A Model for Partnerships and Multi-Benefit Management

Ann Hayden, Environmental Defense Fund

Over the past 16 years I've worked on California water issues and during that time I've seen my fair share of distrust and conflict among stakeholders, as well as a lack of innovation, resulting in a lack of progress. Fortunately, the tide is turning and today we are seeing more collaborative approaches that can solve problems to achieve a range of benefits. One place that has proved this approach is possible is the Sacramento Valley.

This region is a special place that supports rich biodiversity and a thriving agricultural sector, and is home to communities strongly committed to a sustainable future for the region's natural resources, communities and economy.

The centerpiece is the Sacramento River, which historically meandered across the valley floor. System-wide construction of dams, levees, and weirs began in the early 1900's in order to keep communities safe from flooding and ensure a functioning water delivery system. While critical to public safety, these actions also significantly constrained the natural movement of the river and impacted an array of species dependent on floodplain habitat.

Like all things in nature, levees degrade over time, and need constant upkeep. The Department of Water Resources (DWR), along with its local partners, is tasked with maintaining 1,600 miles

Tool: Incentives as Motivators

Incentives are a positive motivator for desirable actions that have the secondary benefit of recognizing someone when they do something good. Whether this appeals to financial, personal, are 'hassle-avoidance' goals, positive incentives are valuable whether aside from or within regulation, whether they be in the form of financial rewards, public recognition, personal satisfaction, or regulatory relief.

of levees across the Central Valley annually. Maintaining this infrastructure means negative impacts to imperiled species such as the threatened giant garter snake, which is endemic to California and lives in wetlands and managed waterways. When DWR maintains a levee, its activities often impact the snake. Preventing and addressing these impacts has been both difficult and expensive.

Currently, flood agencies often have to purchase habitat credits from local mitigation banks, but these credits can be expensive and result in less-than-optimal postage stamp habitat areas disparately located across the landscape. How could flood agencies have more flexibility in managing the system to both deliver flood control and deliver measurable improvements in habitat conditions for key species of the region?

I grew up in a rural part of the Central Valley and experienced first-hand the extremes of our state's variable climate, including wet periods that would flood our roads and neighbors' homes. Over the years, attempts would be made to improve the flood system but stakeholders were often stymied by the immense challenge. So, I was really encouraged to see local flood control leaders in the Sacramento Valley step up and meet the challenge head on. Folks like Lewis Bair from Reclamation District 108, Mike Inamine from the Sutter Butte Flood Control Agency, and Scott Deal from DWR were willing to sit down with nonprofit organizations, regulators, and local landowners to explore a new approach to meet the needs of stakeholders across sectors.

This resulting approach, the Regional Conservation Investment Strategies (RCIS) program, legislation for which passed with broad support in 2016, allows stakeholders to develop a common vision and identify conservation and enhancement opportunities in a region to help vulnerable species by protecting, restoring, and reconnecting habitat which could contribute to species recovery. The RCIS program has opened the door to compensate landowners for creating large areas of connected habitat that would not only be more beneficial to the environment and create a more resilient system; it could also provide a new way to support the local agricultural economy by allowing farmers to be compensated for the habitat they provided on their land. It has also created an opportunity for regulators to test out and build confidence in new approaches, the importance of which cannot be overstated given a frequent reluctance of these agencies to veer from the status quo. Now there's a growing team of people

at the California Department of Fish and Wildlife willing to think outside of the box and explore new tools to more effectively meet conservation goals.

Through education and trust building, local stakeholders have embraced the opportunity to develop a solution to allow flood maintenance and operations to continue by leveraging the excellent habitat provided on local working lands. Today, eight landowners are positioned to provide habitat credits from their land once the RCIS plan is approved by CDFW. By next fall, over 1,000 acres of high-quality habitat will be created and protected across the landscape.

I'm optimistic that the RCIS approach is setting the stage for a new way to manage our natural and built systems that is based on a common vision and efficient, locally-driven actions that provide measurable environmental benefits and support a healthy agricultural economy. I'm especially hopeful that the RCIS approach is one that the broader Central Valley adopts to create more resilient land and water systems and rural communities as was face inevitable impacts from stressors like climate change.

California Water Policy Should Be Guided by Transparent, Collaborative, Site-Specific Science

Michelle Reimers, Turlock Irrigation District

My roots in agriculture led me to work at Turlock Irrigation District 12 years ago. My grandfather planted 18 acres of almonds in the 1960's, and in the 1990's Blue Diamond Almonds created a public campaign incentivizing people to eat more almonds. My sister and I were both included in one of those "A can a week, that's all we ask" commercials. I guess that was my first gig promoting agriculture. Little did I know that it would be the main focus of my career. Most of my childhood memories were in the orchard working with my grandfather, and the work we did defined my core values and transformed me into the person I am today. More importantly, I learned the value of water. It's a precious resource that should be respected. Today, I am truly blessed to be able to farm that same orchard with my husband and two boys.

Tool: Science

Science offers transparent, replicable language and methods for communicating personal experience of the external world, given some level of uncertainty. Because all experiences of the world are subjective, science offers a process for building common understanding among individuals with diverse experiences, backgrounds, values, or perspectives. It is a method more than an outcome; a means more than an end. Science is often misperceived as a process for generating universal truth, with emphasis placed on the outcome rather than the process itself, or it is misused as an obfuscatory language that prevents and erodes understanding rather than building it. A shared commitment to trust in the scientific process and method, however, can connect and unify as opposed to disconnect and divide. Unless an individual or group is so attached to a specific outcome that any degree of uncertainty creates too much perceived risk or discomfort, in most cases, science that is performed transparently, with an emphasis on process and method and the intention of greater understanding, can strengthen connection in diverse human systems and support equity, resilience, integration and health.

Located in the heart of the Central Valley you will find the Turlock Irrigation District (TID), a publicly owned utility that provides irrigation water to farmers and generates energy directly delivered to the homes, farms, and businesses within its 662 square-mile service territory. The source of surface water comes from the Tuolumne River that originates within Yosemite National Park. It is one of three major tributaries to the San Joaquin River. Just below the Sierra Nevada foothills the Tuolumne

River enters the Don Pedro Project, which consists of a 2 million-acre-foot reservoir, dam, and powerhouse. That is the start of nearly 250 miles of gravity-fed canal systems that deliver water to over 150,000 acres of farmland, in addition to being an alternate water source to municipal users.

I was about three years into the job when the TID embarked on the relicensing process of the Don Pedro Project via the Federal Energy Regulatory Commission. I remember thinking this would be a long, detailed process that was going to cost our customers a lot of money, but the end result would leave us with a plan that was based on science and would provide multiple benefits to fish, farms and people.

The District selected the integrated licensing process which meant it was to be transparent, open and collaborative. All interested stakeholders were invited to participate in the study planning process to gather their recommendations and feedback. The process delivered over three dozen studies costing about $30 million. Because TID is publicly owned, all costs are passed through to our customers. Rates increased to cover costs, but the message I kept telling many skeptics was simple: trust the process. Although it was a lengthy, costly investment, I believed that the science would guide us to develop a plan that can balance our goals of providing a reliable water supply for our community, and also providing a healthy ecosystem. I was the young professional who had a dream that we could be the example of how people, farms and fish can coexist, and how changes can be made as long as they are based on relevant, transparent science.

After eight years, the Tuolumne River Management Plan was fully developed by the District. The plan, if implemented, would provide $160 million of benefits to the river to help enhance the fall-run Chinook salmon and native trout populations through management of habitat, predators, increased river flows, construction of a salmon conservation hatchery, and the use of creative water diversion options.

I hoped to see stakeholders excited to see the plan developed and embrace it, but instead what I found is that we were still so far apart. Some criticized the way the science was conducted, that we didn't do enough. Others ignored the science and simply demanded more water. We noticed philosophical differences between what TID alone should have to do to "fix" the river, versus what we believed should be done financially and collaboratively through a partnership with a

number of agencies. At home, farmers were forming conspiracy theories regarding the State's Bay-Delta Water Quality Control Plan that demanded large volumes of additional water from the Tuolumne River. They were equating that amount of water with what the controversial WaterFix project needed to move forward. I realized that what I had hoped for was lost. The collaboration that I anticipated didn't happen because of a lack of trust. Trust was never built because of a lack of transparency in the discussions and alternative proposals following the release of our plan.

This isn't a success story. It's just a water story, similar to what we have all heard from the past. The old adage, "whiskey is for drinking and water is for fighting," proves to be true again, unless there is a way to base water policy in California on transparent, collaborative, site-specific science that everyone has access to.

Salinas Valley...Underway

Paul Robins, Resource Conservation District of Monterey County

The Salinas River runs through a long valley from south to north along the inside of the Coast Range through the length of Monterey County to the Monterey Bay. The landscape through which the Salinas weaves is dominated by rangeland in the south, shifting to vineyards and productive row crops along the river's northward course. How the river is managed to reduce flooding on those farmlands and adjacent cities is also a hub of conflict between traditionally-opposed urban, shoreline communities and the people who have lived along, loved, and struggled with the river for generations, with growing public interest in how that management affects fish, wildlife and water quality.

I came to work here 10 years ago, when the Salinas River channel maintenance program was halted by regulators concerned that it did not fairly protect the river's resources, most notably steelhead trout that historically ran in the river. River landowners and farmers were incensed that their stewardship was called into question for doing what they needed to maintain their lives and livelihoods, especially in the face of dramatic floods and losses that much of Monterey County experienced in 1995. Most environmental groups were unconvinced of the value of river flood management or the contributions of the region's agricultural industry. It looked like a standoff.

Theme: Collaboration

In complex systems such as those involving water, multiple parties working together for shared interests are critical for overcoming challenging issues that cannot be resolved with an antagonistic 'winners versus losers' approach. Collaboration allows for shared power and potentially broader public support for an action. Shared power and engagement require more energy and time upfront, but make possible more creative solutions and a greater variety of benefits, while laying the groundwork for future collaborations.

That same year, the county Agricultural Commissioner requested that my Resource Conservation District help lead its new arundo control program. Arundo is a tall, bamboo-like weed that grows rapidly to dominate miles of riverside lands. Agencies and farmers initially planted it for bank protection in the mid-20th century, from which it expanded to infest over 1,500 acres and become a major stressor on the Salinas River. Massive arundo stands exacerbate flooding and bank erosion, suppress native vegetation and wildlife habitat, and consume much more water than native vegetation. By removing arundo we could provide multiple benefits to the community in a way that resource agencies would not only permit, but also fund. This kind of work was a natural fit for me with my background in community watershed planning and what I call 'farmscape architecture'. It also appeared to be a work-around for the standoff on the river, which would ultimately be resolved by a concurrent, visionary collaboration between local agricultural leaders, scientists, and environmentalists.

We all recognized there could not be a viable program on the Salinas without compromise informed by sound science. The Nature Conservancy offered ecological and analytical resources to help find a solution. Visionary agricultural leaders took risks with their Salinas Valley neighbors by promoting a collaborative program with this unlikely new ally. Together, they mobilized resource agencies and enough river landowners to craft a vision for realistically managing the river's multiple resources.

The vision is to recreate the historically braided multiple river channels in the adjacent floodplains while minimizing impacts on the main low-flow channel itself where fish and wildlife resources are most sensitive. Arundo stands are removed by both contractors and by landowners meeting mitigation requirements in the recreated overflow channels. Carefully-monitored work under the linked programs began along 10 -15 miles of river in the fall of 2014. Since then, the Stream Maintenance Program moved from 'proof of concept' to large-scale implementation but with adaptive management in mind, knowing that there are more landowners to bring on board and agencies wanting future confirmation that the program has merit.

Today, many of those engaged in the new Groundwater Sustainability Plan process see the arundo control and stream maintenance programs as linked models for how collaboration can guide us to unexpected, positive outcomes. River management directly affects groundwater recharge, so there are lessons we can draw from one program to serve the other. The arundo control program is one action that provides collateral benefits, as arundo removal enhances groundwater recharge potential along the river. As such, it is valued not only by the program partners but also by the nascent Groundwater Sustainability Agency.

This is only the beginning of our story. There is excitement that our discovery of collaborative potential has fostered—excitement blended with hope that we can resolve an intractable situation if we leave our various trenches and meet in the middle. While there will be a lot of wrangling yet in the Salinas Valley as we evaluate and plan for a balanced water future, this experience gives me hope for getting there in a meaningful way, to a community where we grow safe, healthy food and people and wildlife thrive in balance with our lands, air, and waters.

Local Leadership for Safe Water

Alesandra Najera, The Water Foundation

We all know California is a place of paradox. It endures both severe flooding and severe drought, yet is known for its moderate climate. Boasting the world's fifth-largest economy, it is home to some of the most profitable and innovative companies in history.

Only a few hundred miles from those company headquarters, there are communities that have gone decades without safe water to drink. The United Nations special rapporteur described drinking water conditions for these communities as "akin to those typically seen in a developing country." In a state famous for its stringent environmental regulations, one million Californians in more than 300 communities are exposed to unsafe drinking water in their homes and schools each year.

Tool: Creative & Innovative Financing

Traditional financing tools for water improvements and environmental enhancements have significant limitations. Federal funding must often be reimbursed by water users, state grants are difficult and cumbersome to access and do not cover ongoing project needs, and local fees are subject to legal and constitutional requirements. Emerging financial partnerships among diverse public, private, and non-profit entities require new ways of thinking about water and infrastructure, more flexible approaches to water policy, and synergistic support from regulators and traditional funders. The future of water and conservation financing should include more regional markets and tradable credits, pay-for-performance financing that focuses on achieving outcomes, collaborations to develop projects that are resilient to climate change, and creative ideas to help focus our financial resources on those most in need.

Many of these communities are located in central California, although small systems across the state struggle to deliver safe water, in both rural and urban areas. Common contaminants include nitrates, industrial contaminants, and naturally-occurring arsenic. Other communities struggle with secondary contaminants due to old pipes or fixtures, creating distrust of water systems and the water they provide. Though California passed a law guaranteeing a Human Right to Water in 2012, little progress has been made to make that right a reality.

Through my work at the Water Foundation, I have had the opportunity to learn from environmental justice groups and community advocates across the state fighting for their right to safe, clean water. In fact, this work motivated me to leave Washington, D.C., where I was a natural resources legislative staffer, and return to California to join the Water Foundation. As I

followed the fight to ensure a Human Right to Water, I felt limited in my ability to support the effort beyond appropriating funding and tinkering with federal authorizations.

Now, I listen as parents describe the fear they experience as they bathe their children in water known to be carcinogenic. I heard several people describe the paradox of boiling their drinking water to kill bacteria, only to learn that this has the side effect of super-concentrating nitrates. I am haunted by one Southern California man's description of throwing chlorine tablets into the community water tank in hopes of sterilizing the water. I stand and listen as residents with dark, smelly water coming from their taps express their fear and distrust of water officials, and I know that we are failing them.

This is not the California we are proud to call our home.

But there are signs of hope, and ideas for the future. One well-known example is that of East Porterville, in Tulare County. Residents there relied on shallow groundwater wells for their drinking water. When the drought struck, their wells went dry, forcing residents to buy bottled water or rely on water delivered by truck. State officials worked overtime in partnership with community groups to add additional well capacity. Eventually, through tremendous local advocacy and state engagement, state agencies connected East Porterville's water system to that of the neighboring community of Porterville, providing reliable water to the residents of East Porterville. The question for the next State Water Action Plan is: what will it take to prevent this from happening again, when the drought is not the center of worldwide media attention?

While each small or failing system has its own unique challenges, there are a few common solutions that could help provide clean drinking water across the state.

Consolidation is an important tool to provide safe, reliable and affordable water. A recent study by UC Davis found that, of the many small systems serving disadvantaged communities in the Central Valley, 67% of communities are less than 500 feet from a system that provides safe water. East Porterville was able to consolidate, but that took the combination of a major drought, intense media and public scrutiny on water, and herculean advocacy from local groups. Other systems may continue in obscurity, delivering unsafe water without the finality

of a dramatic water shortage. The Legislature has since passed several laws allowing the state to mandate consolidations for disadvantaged communities, and preventing the creation of new small water systems without the resources to provide safe water. However, these consolidation processes require more funding and staff to be effective.

Other communities are without safe water despite significant progress. Lanare, a small agricultural town in Fresno County, has delivered water contaminated with naturally occurring arsenic to its approximately 600 residents for many years. In 2007, Lanare received funding to build a treatment plant, and construction began. But after only six months of delivering treated water, the local Community Services District closed the plant. Filtering the water and maintaining the system was incredibly expensive, and the town's coffers were sinking deeply into debt.

Such a small rate base could not afford to pay the increasing water rates required to run the system. While the town received capital funding to build the plant, no assistance programs exist to subsidize the costs of operating and maintaining the system. The town of Lanare again has arsenic-laced water running through its pipes, and a mothballed treatment plant. A fund to defray operations and maintenance costs for small and disadvantaged communities would enable Lanare to finally provide safe water to its residents.

While each community with unsafe water in the Central Coast and Central Valley has its own unique makeup, with varying sources of water, population, and proximity to other water systems, they also share important characteristics. These systems are generally small and disadvantaged, with a ratepayer base unable to cover the cost of treatment. They are disproportionately made up of communities of color, and may have limited access to the levers of power that would create a groundswell of change.

But several solutions exist that could remedy these challenges. First, the creation of a fund to provide money for operations and maintenance should be a top priority. Second, the state should prioritize consolidations of small systems that have recurring violations and limited capacity for improvement. The first such involuntary consolidation under SB 88 recently occurred in Los Angeles County, but each consolidation requires tremendous time and resources from states, local governments, and community groups. Finally, small systems could combine managerial services, such as information technology and managerial capacity, to create economies of scale while maintaining their independent operational capacity. This is particularly beneficial in remote regions where physical consolidation is not feasible.

Funding and improved governance go hand in hand to provide safe drinking water. Many of these solutions will work in urban parts of the state, as well as in the central regions of California.

Financial Partnership Model:

Farms and Wetlands on the Westside

Ellen Wehr, Grassland Water District

Some of the oldest and most productive water rights in California were developed on the westside of the San Joaquin Valley, where the San Joaquin River converges with tributaries and turns northward toward the Delta. Imagine vast marshes of cattail and tule, and ribbons of waterways full of fish, birds, elk and antelope. The area was home to the Yokuts, then Spanish missionaries, and was later settled by immigrants from around the world. Seasonal floodwaters fed grasslands that supported the sprawling Miller & Lux cattle company in the nineteenth century, who developed irrigation canals that supplied California's early croplands.

Theme: Transparency

The word "transparency" has origins that mean "shining through." Understanding each other's overarching goals helps foster trust, creating stronger partnerships and longer-lasting successes. Transparency requires open communication, decision-making based on full information, and accountability.

Stewarded by ranchers and waterfowl enthusiasts, the lowest lying lands were left unplowed, prone to flooding and unsuitable for crops. Millions of birds continued to flock to the marsh along their annual migration routes. In 1929 the state's first wildlife area was established near Los Banos. Today, public and private protected lands in the Grasslands Ecological Area form the largest remaining freshwater wetland in California. I came to work for the Grasslands as a water lawyer with a background in environmental science, intrigued by the area's history, politics, and abundant wildlife.

The water that supports the westside underwent profound changes over 65 years. In the 1940's the Bureau of Reclamation dammed and diverted the entire San Joaquin River, and built the Delta-Mendota Canal to provide a substitute supply of water from the Delta to farms and wetlands. The Grasslands no longer received river overflow, and relied instead on agricultural drainage and Delta deliveries. In the 1980's, selenium contamination cut off the supply of agricultural drain water to the wetlands, and a drought drastically reduced Delta deliveries. As wildlife populations plummeted, Congress acted to require water for fish and wildlife to prevent ecological collapse.

Bitter feuds over water as a result of these changes define the recent history and culture on the westside of the San Joaquin Valley. Competing water users are central players in lawsuits, political battles, and power struggles over water. Deliveries to wetlands, though successful

in preventing ecological decline, are resented by many farmers struggling with low water allocations. The water needs of wetlands are deprioritized in agency budgets and policies, and threatened by legislative proposals and court filings.

Several westside water districts chose new leaders as a multi-year drought hit California. Ricardo Ortega, a wildlife biologist from the town of Dos Palos, became the manager of Grassland Water District in 2011, a unique district that delivers water to the Grasslands Ecological Area. I became the district's full-time counsel to help resolve conflicts and implement new ideas. Anthea Hansen, a farmer from the town of Patterson, assumed the role of manager at the Del Puerto Water District, and Lon Martin, an engineer, took the lead at San Luis Water District.

Just when the scarcity of drought was pulling many districts apart from each other, we were drawn together. Having observed water battles of the past, Ricardo, Lon and Anthea were eager for new solutions. At first, I simply wanted to strike beneficial deals and improve wetland water supplies, but it became much more than that, for all of us. With backgrounds in science, farming, law, and engineering, we learned to listen to each other. Over the course of many long meetings and discussions, we developed a unique approach that is elegant in its simplicity: An agricultural water district invests in a project that will improve the water supply for wetlands. The wetland beneficiary agrees to repay the district, not with money, but with a portion of the developed water. The investment is recovered, and water supplies are increased for both farms and wetlands.

I was initially intimidated because I was an outsider and had not worked closely with agricultural districts on water projects. But I was quickly impressed by their creativity and insightfulness. I drafted agreements based on our new model, and sought grant funding to complement the local investments. Despite the fact that our partnerships were very new, we strove to keep the agreements simple and straightforward, with an essential component of flexibility built in.

Within only a few years' time we had developed sustainable groundwater resources for the wetlands, reoperated a local flood-control reservoir to better use water releases, started construction on a wetland water recirculation project, and begun receiving deliveries from a large urban recycled water program. Together these projects are expected to produce more than 40,000 acre-feet of locally sourced wetland water supplies per year. With the help of agriculture, the Grasslands Ecological Area can now better meet its habitat needs with diverse

water sources that will keep wildlife thriving in the San Joaquin Valley.

Getting to this point required a lot of time, trust, and collaborative work to overcome our competitive backgrounds and work together. Our long-term success still remains to be seen, in part because water regulators must continue to approve and facilitate the transfer of water from new wetland projects to farms, which is essential for our joint success and the recovery of financial investments. For our part, we must continue to build the friendships upon which our collaboration depends. Farmers must remain willing to invest funding to enhance the environment in exchange for a water supply benefit, wetland managers must recognize the critical importance of our agricultural neighbors, and when dry years occur, we must all remember the value of long-term partnerships in the face of temptation toward short-term conflicts.

A new dialogue has begun to emerge on the westside, one of regional reliability and cooperative efforts toward continued prosperity.

Recommendations

Trust

The Water Action Plan should emphasize the importance of building trust between state agencies, and between state agencies and stakeholder groups. Trust is foundational to all policy accomplishments the Administration may seek to achieve, and is fundamentally necessary to implementing the following recommendations proposed by our group. While we acknowledge the process of building trust can be challenging for various stakeholder groups, the state must lead the way in building trust for lasting policy change to occur.

- Build trust by working to understand different priorities, expectations and needs. This can be achieved by acknowledging the history of mistrust around both real and perceived differences in culture, value and experience.
- Acknowledge the importance of agriculture to our economy and to our plentiful and healthy food supply.
- Engage with ranchers, farmers and other stakeholder groups to build and incentivize multi-benefit solutions.
- Address the core needs of disadvantaged communities so that they have the capacity to engage, and an incentive to trust.
- Ensure permitting and grant-management staff have extensive on-the-ground training or project implementation experience relevant to the work and actions they are permitting or funding to better understand the impacts of permitting/administrative actions on the work, landscape and people.
- Provide funding for appropriate facilitation and support necessary to cultivate an equitable and inclusive process.

Transparency, Science & Data

Trust cannot be established without a certain level of transparency regarding goals, reliable data and science, and intended outcomes. Transparency in process can create more buy-in for the final outcome of regulatory and management proceedings. Our recommendations prioritize transparency and trust-building in the process of development and sharing of science and data related to water management. We recognize that some data sets represent sensitive information, including but not limited to trade secrets or proprietary business information, personally identifiable information, and critical infrastructure information, and therefore might need to have protections applied to ensure trust is maintained such as aggregation of data or similar. As highlighted in our stories, developing

and sharing data, when done with an emphasis on trust, process and the intention of greater understanding, can be foundational to collaborative policy.

- Develop a landscape-level planning process amongst stakeholders to serve as a framework for land-use management, promote hydrologic balance and resilience, and prevent unnecessary conflict between disparate projects (e.g., between the San Joaquin River Restoration Project and local duck clubs).
- Develop an open database that houses transparent, collaborative, site-specific science and allows all to contribute and engage in the development and interpretation of scientific studies and supporting documents.
- Ensure integration and availability of data sets generated through implementation of SGMA, water efficiency regulations, the Human Right to Water Portal, and other legislative efforts, to improve planning and collaboration with all stakeholder groups, while addressing sensitive information concerns as identified above.
- Prioritize and fund regular needs assessments of small or struggling public water systems, state small water systems, and public wells, to identify systems unable to provide adequate water access due to unaffordability, contamination or shortage.
- Research ongoing data gaps surrounding communities without access to basic water and sanitation, such as those experiencing homelessness and isolated rural communities.

Collaboration

With a foundation of trust and transparency, collaborative solutions become possible. An updated California Water Action Plan should develop a collaborative vision to guide integrated land and water management to support the multi-scale reconciliation of California's landscape and communities. The extent of the collaborative vision should be determined by the extent and scope of common and compatible interests of the participating parties. As was highlighted in many of these stories, the benefits of collaboration are community buy-in, engagement and long-term commitments to change.

- Develop a vision that is equitable, inclusive and outcomes-based.
- Facilitate interagency coordination by setting timelines, expectations and milestones for agencies to coordinate and develop the strategies described in the Water Action Plan.
- Direct agency leaders to prioritize collaboration, and set regular interagency coordination meetings to align budget requests, project management, and better integrate data and planning.
- Establish collaborative efforts to leverage existing structures and processes designed for integrated water management, such as SGMA and IRWM.

Recognize and actively promote the role of local resource managers, landowners, and non-profit organizations in solving environmental problems addressed in the Water Action Plan.

Incentives

- Enable staff at regulatory and funding agencies to participate in a process for program and project development, creation and negotiation in order to incentivize collaborative, local public/private partnerships that address resource issues in creative ways.
- Expand the use of programs such as the Regional Conservation Investment Strategy Program, a multi-stakeholder process, to create a incentives for landowners to help achieve multi-benefit solutions to water and land use management.

Education

For the water sector to create lasting change, the general public must understand and support innovative partnerships and new management models. Furthermore, struggling water systems need support to manage water successfully in a changing water sector. State agencies should partner with stakeholders to support and develop new narratives of water management. The next Administration will set the tone for Californians' support for future investments in our water system.

- Change the doom-and-gloom narrative of climate change as a global problem, and transform it into a catalyst for local change and collaboration across other sectors by promoting sustainable solutions like water reuse, water conservation, flood control, pollution prevention, and ecosystem restoration.
- Develop a statewide "one-water" public education campaign that brings awareness to water challenges and presents a holistic picture of multi-benefit water uses across many sectors. To break down silos between raw water, drinking water, and wastewater, the state should explore the idea of creating a simplified single-payer system much like the concept of universal healthcare.
- Develop an advocacy program and leadership academy for citizens to learn about water issues, uses, and solutions so that they can work to inform and educate other leaders within their own communities.
- Develop partnerships with other stakeholders such as school districts, youth organizations, local health departments, nonprofits, museums, farmers and environmental and open space organizations to ensure environmental literacy starts at a young age in school and with families.

Financing & Governance

The increasing demands of delivering water in the 21st century – climate change impacts, growing population and technological developments – mean that our water and natural resource agencies must continue to grow and adapt. Many California water agencies lead the world in innovation, technology and community assistance. However, some small water agencies with a limited rate base may struggle to keep up. The state must prioritize support for these systems through financing and, where needed, improving governance and management structures to achieve measurable outcomes.

- Secure permanent, reliable funding for operations and maintenance of water treatment in small, disadvantaged communities.
- Prioritize funding and staff time to ensure needed consolidations occur, while ensuring local communities have opportunities for input throughout the process.
- Ensure that affordability programs exist for low-income households across the state, similar to programs that ensure affordable electricity for all Californians.
- Prioritize the allocation and delivery of public conservation funding to those projects that can achieve measurable improvements in outcomes.

Multiple Benefits

A key theme across our varied stories is the importance of prioritizing projects that provide a variety of benefits for varied stakeholders. The state is responsible for setting a vision for the Central Valley that supports recreation, agriculture, the environment, and local communities. Through the tools we have outlined in these recommendations, state agencies should strive to develop projects that generate buy-in from these sectors.

- Prioritize projects that develop habitat connectivity while also supporting a vibrant agricultural sector and rural economy.
- Encourage regulatory staff, with the use of incentives and other mechanisms, to experiment with new and innovative approaches to achieve outcomes with multiple benefits.

Moving Forward

- Improve the efficiency of regulatory structures to support and incentivize the advancement and implementation of a collaborative vision and to promote integration among compatible efforts (e.g. programmatic permitting for multi-benefit projects).

Share Your Water Story With Us

We know there are many stories about how water is managed in our state. We believe that speaking and hearing and understanding those stories is essential to the success of meaningful water planning efforts. Now that we've told you what shapes our thinking, we invite you to share your stories with us, as we work together to create a water future that serves us all..

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The two documents discussed in *Central California Water Stories* are available at the links below:

The California Water Plan https://water.ca.gov/Programs/California-Water-Plan
The California Water Action Plan http://resources.ca.gov/california_water_action_plan/

To share *Central Califfornia Water Stories* with others, go to:

https://www.rcdmonterey.org/images/Central_CA_Water Stories_and_Recommendations_2018.pdf

You'll find a pdf document available for download, and a form to submit comments or suggestions to expand and deepen this project.

Thank you for reading our stories, and for participating in this important process!