

The Water Forum Past, Present, and Future

A Rationale and Roadmap for Updating the Water Forum Agreement:
What the Learning Sessions and Our Shared Experiences Tell Us About
Water Forum II Challenges and Opportunities

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Stakeholders in the Sacramento Region are working to update the historic Water Forum Agreement of 2000. The update, referred to as Water Forum II could represent renegotiation of some aspects of the agreement that seem out of date and would benefit from a fresh look in a 2020 context.

To support deliberations, a series of learning sessions were held in July and August 2020 to provide current and potential Water Forum signatories with information to promote a shared understanding of several cross-cutting topics: climate change, fisheries, habitat, groundwater management, and urban water management planning (including demand management, water use efficiency and conservation). This paper, drawn from these sessions, provides context and need for the Water Forum II negotiation, describes a vision for the Water Forum II negotiation, and lays out a roadmap for moving forward.

Summary

The Water Forum Agreement of 2000 has been highly effective in building a valuable coalition of water agencies, environmental NGOs, public entities, businesses and others committed to achieving the Water Forum's water supply and ecosystem objectives.

There has been much progress and stakeholders broadly support using a similar collaborative model in the decades ahead. But as the Water Forum looks to update its current agreement, there are emerging challenges and opportunities to consider in negotiating an updated agreement. Drawing on the recent learning sessions and staff observations, a few key needs emerge:

- **Climate Change:** The American River Basin Study identified several vulnerabilities. The most notable, anticipated climate impacts identified in the American River Basin Study are increases in dead pool conditions at Folsom which would cause catastrophic water shortages and river conditions devastating for fish. Water Forum II (WFII) offers an opportunity to consider adaptation strategies and principles that promote long-range planning, holistic thinking and greater integration that foster proactive groundwater and surface water management and environmental stewardship to meet reliable water supply needs.
- **Fisheries:** The most significant threats salmon and steelhead face on the lower American River (LAR) are inadequate flow and temperature conditions, and poor genetic diversity. In addition, it has been documented that ocean and Delta conditions have resulted in reduced salmonid population. WF II would be well served to keep up its current habitat restoration activities, continue to engage with the Bureau of Reclamation and fisheries agencies (including advocating for temperature management infrastructure at Folsom Reservoir), and consider more direct engagement on hatchery management impacts on the LAR.
- **Groundwater and Surface Water:** The region's subbasins are currently working to better understand basin conditions and to complete Groundwater Sustainability Plans (GSPs) by January 2022 as a part of implementation of the Sustainable Groundwater Management Act (SGMA) enacted in January 2015. The formation of a regional groundwater bank is in its beginning stages of development. WFII provides an opportunity to update the Water Forum Agreement's groundwater element and Purveyor Specific Agreements. A new groundwater element could provide a way to

integrate information from the GSPs as available and considering the implications of a regional groundwater bank. Groundwater banked through in-lieu recharge by several of the region's water suppliers has proven to be a vital source of water during drought and a means to reduce stress on the surface water system. In addition, projected climate change water supply impacts enhance the need for a regional water bank, and increased severe storm events present additional opportunities for excess storm water diversions to a regional water bank. Water suppliers wish to build a regional groundwater bank on this experience and take advantage of favorable geologic conditions to create more groundwater capacity with benefits to more parts of the region.

WFII provides participants with an opportunity to discuss water transfers and regional water bank issues related to governance, operations, environmental protection, and benefits distribution. The WFII process could prove a valuable forum to establish principles for water transfers and banking arrangements that could be incorporated into Purveyor Specific Agreements. Once in place, this framework would foster collaboration and support for operations from all Water Forum signatories.

Finally, WFII may benefit from adopting an agreement term with periodic check-ins consistent with SGMA's 50-year planning horizon and five-year GSP updates.

- **Water Use Efficiency and Conservation:** The region's water agencies have done a good job implementing 20x2020 requirements and are well-positioned to meet impending, new demand management requirements that will be time consuming and resource intensive. There may be an opportunity for the WFII to assist the region in meeting these requirements while leveraging member resources to promote programs and best practices that equitably address the region's unique challenges.

In addition, although per capita water use has dropped significantly in the Sacramento Region, it is recognized that some water suppliers' water demands will increase in the future. Projections of future water needs and expectations for dry year water reductions need to be updated based on more recent water demand data as part of WFII.

The process of updating the Agreement will take time and energy. Our Public Caucus must be reinvigorated and expanded to be more inclusive and representative of our diverse communities. In some cases, this may necessitate considering a potentially expanded geographic reach. The process is vital to crafting a durable, flexible, and forward-looking agreement. Our experience with similar processes, including the original Water Forum, tells us that it is essential to take the time and effort to drill down on important issues to create a durable agreement.

Water Forum staff and facilitation consultants have designed a process for working through issues over the next year or so, including water conservation, habitat management, surface and groundwater use, water transfers, groundwater banking, and others. It is also expected that the negotiation will reexamine each Purveyor Specific Agreement and reconsider plans for water delivery and dry-year water cutbacks. Each of these issues will require a more integrative and holistic examination, with the overlay of the expected warmer climate.

The Past

The Water Forum Agreement was a grand experiment. People with vastly different views on the best uses of water agreed to work together to meet mutual objectives. Water agencies, environmental NGOs, business groups, and other organizations in the greater Sacramento Region negotiated a 30-year agreement on how water of the American River basin would be managed and protected.

One impetus for the agreement was a desire to reduce persistent resource-intensive conflicts over water. Before the Water Forum, the region had seen its share of lawsuits, demonstrations, and political maneuvering in response to planned water projects. Water agencies and business interests were concerned that opposition to water development would endanger their ability to serve their customers. Environmental advocates saw continued decline of water-based ecosystems.

Through seven years of negotiations, participants gained understanding of their counterpart's objectives, constraints, and values. Over time, opponents became respected colleagues who could channel each other's objectives. In 2000, the non-binding Water Forum Agreement was completed and promised benefits for each sector through the pursuit of two co-equal objectives:

- Provide a reliable and safe water supply for the region's economic health and planned development through to the year 2030; and
- Preserve the fishery, wildlife, recreational, and aesthetic values of the lower American River.

The agreement also contained commitments: financial and operational pledges on the part of water providers; and a promise from the environmental NGOs to defend the water providers if called upon.

After 20 years, most say the experiment has been successful and offers an important foundation to build upon. In addition to accomplishments in water management and river restoration, the region has also benefitted from strong collaborative relationships which have helped us survive severe drought and awarded us with a state-wide reputation as innovative stewards of our water resources.

The Present

Conditions have changed since 2000. State regulations related to water have ramped up which has led to reduced water use and increased spending on monitoring, reporting and management. Some of the new regulations seem to make portions of the Water Forum Agreement obsolete or at least worthy of a fresh look. External stressors have also increased, offsetting local gains in water supply reliability and ecosystem restoration. For example, required reservoir releases in the state and federal water systems appear to result in lower storage in Folsom Reservoir. In addition, it has been documented that ocean and Delta conditions have resulted in reduced salmonid population.

Specific ***Environmental Challenges*** include inadequate spawning and rearing habitat for salmon and steelhead, concerns with fish hatchery management, and continued conflicts over river flows and water temperature. In addition, environmental stakeholders have expressed their desire for a more holistic approach and greater geographic scope to our ecosystem restoration efforts to include the surface water and related environmental resources throughout the region.

There are also concerns that local environmental investments may be insignificant compared to other factors, including the ocean and bay-delta effects on migratory fish and the overwhelming impacts of climate change.

The Water Forum has made progress on developing an improved Flow Standard for the lower American River to provide better conditions for resident salmonids. Called the Modified FMS, this operations approach includes minimum flows, temperature management, and a form of storage protection called the Planning Minimum. Although the Modified FMS has been included in the most recent federal Biological Opinion under which Folsom Reservoir is operated, it has not been adopted by State water agencies leaving some stakeholders feeling that our work is incomplete.

In addition, stakeholders will have an interest in the work of local Groundwater Sustainability Agencies to map, monitor, and possibly restore groundwater dependent ecosystems. WFII could provide a useful clearinghouse for information on these and related activities.

In the **Water Supply** community, increasing resources must be dedicated to meeting changing and more stringent regulatory requirements. Regulatory cost and effort are many times that of the past two decades. These emerging and lasting requirements are related to groundwater management, surface water flows, water conservation, and water planning.

Water suppliers in the region are taking steps now to anticipate future supply challenges through management actions such as water transfers and groundwater banking. These projects come with even more regulatory hurdles which lead to increased costs. Water suppliers are eager to ensure any new agreement accounts for this stepped up regulatory regime.

Water affordability is an increasing issue with local water providers. On one end of the water supply process, costs are rising due to increased regulation, rehabilitation and replacement or aging infrastructure, and growing energy and chemical costs. On the other end, water agency revenues may have been reduced due to reduced water demand and customers are resisting increased rates for a product that from their perspective has changed only in that others are telling them to use less of it. This puts financial pressure on water providers and increases their desire to be seen by the public as the honest and responsive public servants that they strive to be.

Some Water Suppliers also feel squeezed by the expectations of different segments of the public. Those that represent economic growth look to water providers to provide increased water for new houses and businesses, while water conservation advocates expect water providers to continue the recent trend of reduction in per capita water use.

We also face **Shared Challenges** around the scope of the Water Forum.

The Water Forum stakeholders desire to take overt steps to include members of disadvantaged communities and other under-represented individuals in the Water Forum Process. People of color and those with fewer economic means have faced greater impacts from pollution and environmental degradation and disproportionate levels of service than other members of our community. These inequities may seem small when compared to ongoing systemic racism and violence, but they must still be identified and addressed. This will take time and concerted effort from all segments of our society.

There is also an interest among some Water Forum stakeholders to increase the geographic scope of our ecosystem restoration efforts. The existing habitat and flow enhancement work of the Water Forum is limited to the lower American River. Our ecosystem efforts could be more robust and far reaching if focused more broadly. Possible increased focus could include local creeks and the Cosumnes River. The existing Water Forum Agreement includes groundwater management of the subbasins adjacent to the Cosumnes River, and some have noted that a more consistent program would also address Cosumnes River ecological issues.

The Sacramento Region continues to face the possibility that its keystone water storage feature, Folsom Reservoir, will be drained due to multi-year drought – creating a condition known as dead pool. During dead pool conditions, water supply would be significantly curtailed for over one million residents, with

about half of those with virtually no water supply; and the conditions in the LAR would become lethal for many aquatic species as a result of low flows and high water temperatures. During the most recent 2013-2015 drought, Folsom came alarmingly close to hitting dead pool conditions. Although the Planning Minimum (storage protection), part of the Modified FMS described above, is intended to reduce the risk of low reservoir storage, we still live with the possibility of hitting dead pool in a situation of multiple drought years.

The Future

Climate change is expected to create major disruptions in water-related systems within the next century. Prevailing climate science says that our region will be warmer in the future. This will result in vastly reduced snowpack, an earlier runoff season with higher volume in the spring and significantly reduced run-off in the fall, as well as increased risk for high-intensity climate extremes, such as long-term droughts and floods. The resulting effects on the water supply and environmental sectors will be severe.

Water suppliers will be expected to help meet increased outdoor watering demands induced by rising evapotranspiration rates. Fish will experience more stress through drought-induced low flows and higher water temperatures. Water utilities will need additional capital to invest in resiliency actions, such as water banking and inter-system water connections. The local and migratory environmental system will be subjected to more stressors overall as conditions become harsher for all parts of the food web.

As discussed earlier, the Sacramento Region will face higher probability that Folsom Reservoir will hit dead pool, a condition that would bring loss of water supply to over a million residents and cause significant harm to fisheries.

Unmanaged and unmitigated, these outcomes will result in reduced reliability, costlier water, eroded customer trust, less sustainable ecosystems, and more uncertainty in water planning and operations. WFII can serve as a launch point to begin building the public and private support for the actions and investments needed to prepare the region for a sustainable, cost effective, resilient water supply system that is capable of meeting the challenge of our changing climate.

More uncertainty seems inevitable given the effects of climate change and recent trends in regulations and economic conditions. Since the Water Forum Agreement was signed, we have experienced two record-breaking economic recessions. In addition, the timing and magnitude of the challenges discussed here are impossible to predict reliably. This could result in intense competition – for water, funding, and public support – among water providers and between water providers and environmental interests.

Added to this uncertainty are the inherent unknowns of our collaboration process. Interest-based negotiations defy predictions of duration, cost, and outcomes. Descriptions of these processes and their risk/reward balance are very difficult to communicate to colleagues and policy makers. Our experience in the past tells us these dialogues are well worth it.

A Positive Vision for the Future

While the challenges described here are significant, Water Forum stakeholders envision a positive future based on mutual gain enabled by a renewed Water Forum Agreement. In this potential future, our water-based ecosystems and regional economy are sustainable, and citizens enjoy safe, sufficient, and

reliable water supplies. We hope to have the ability to withstand multi-year droughts without sacrificing our planted landscapes.

Our future will include a collaborative and inclusive process that will result in increased **mutual understanding and support**. This in turn will lead to greater support from the public, local NGOs, outside NGOs, and regulators. Added local support will buoy local investments in resiliency programs. Supportive local NGOs will communicate our progress and stewardship to outside NGOs and regulators. This will bolster the region’s reputation and make us more competitive for water management and ecosystem grants. It could potentially reduce the need for further regulatory action and over time reduce local resources required to meet new regulations. If successful, WFII would be a model for collaborative stewardship.

Greater support from stakeholders will help **stretch local investments** and steer us toward more efficient and effective programs because we will see less litigation and conflict around water issues, freeing resources for implementation. We will leverage our relationships and previous investments to create less costly projects and avoid duplication of effort. This efficiency will lead to lower overall water rates and a more satisfied rate-paying public.

Our new projects are expected to be more creative and designed to achieve **multiple benefits**. Water resources projects should have lower environmental impacts. Ecosystem projects will take advantage of mitigation opportunities and be more adaptive. Some examples of these projects could include water transfers, groundwater banking, stormwater capture, and habitat enhancement. The region will have the ability to speak as one voice and continue to advocate for Folsom Reservoir operations that protect local resources and reduce the risk of dead pool.

Finally, we see these approaches and the resultant **deep body of knowledge** and skills will combine to make us more adaptive as a region – a vital component in climate resiliency. We expect to respond more nimbly to droughts through a coalition-driven drought conference process and with our new resiliency projects. Other local governing bodies, including land-use authorities, should be able to make informed decisions with better information on water availability and use. We also hope to respond more effectively to perceived external threats to our natural resources and our water rights.

Our Plan for Moving Forward

The process of updating the Agreement will require an investment of time and energy from all potential signatories. Our current negotiating process calls for regular meetings over the next year or so to cover the many topic areas that are of interest to participants. We will be using a series of topic-specific working groups, guided by a stakeholder-driven Negotiating Steering Committee, for deliberation on the issues and for drafting of proposals for inclusion in the agreement.

Principles for Moving Forward

Discussions to-date suggest a few core principles that can serve as guideposts as we work to shape the next phase of the Water Forum Agreement.

- The Water Forum’s diversity is its strength. The Water Forum provides a venue to leverage capacities, maintain connections, reduce conflict, and share tools and best practices.
- Water Forum members acknowledge that managing water is primarily the work of water agencies, counties, and cities. The Water Forum assists the region in understanding its unique challenges and pursuing opportunities to meet and solve them in ways most fitting to the region.
- Robust, regional planning provides the best preparation to face the challenges of a warming climate and to move towards achieving climate resiliency. The Water Forum supports taking as long a view for planning as the best available information allows.

Proposals for the updated agreement will be brought to each caucus and ultimately to the Plenary for adoption.

We also are in the process of reinvigorating and expanding our Public Caucus to be more inclusive and representative of our communities. In addition, our Environmental Caucus member organizations have several new representatives who have a keen interest in water and environmental issues. New stakeholders understandably desire to consider the full suite of issues related to water use and water resource planning so they may understand our current and future ability to meet water-related challenges.

This process will include the development of a new funding strategy for Water Forum II activities. Previously the County of Sacramento and the City of Sacramento funded the majority of the Water Forum Successor Effort and Habitat Management Element efforts. Sacramento County's Zone 13 Water and Drainage Planning Fund is not able to continue the current level of support. Therefore, alternative funding will be identified to support the work moving forward.

Experience with similar processes, including the existing Water Forum Agreement, tells us that stakeholders will insist on reaching deep understanding of one another's conditions, plans, and objectives to reach agreement. This will require information sharing and, in some cases, "deep dives" into issues, data and analyses. Without this intensive process, it is unlikely that a consensus can be reached on a future approach.

Water Forum staff looks forward to working with existing and potentially new signatories over the next 16 months to help craft an agreement that draws on our shared learning and experience, builds on our strong partnerships, and positions the region to continue to serve as an example of how different interests, working together, can achieve important shared goals.