



*To advance the economic, social and environmental sustainability of Northern California
by enhancing and preserving the water rights, supplies and water quality.*

A Water Resilience Portfolio for California

Summary: An Opportunity to Re-Imagine our Water System

October, 2019

The Northern California Water Association (NCWA) and water leaders in Northern California are pleased to join the Newsom Administration and our many partners to help develop and implement “a water resilience portfolio (portfolio) that meets the needs of California’s communities, economy, and environment through the 21st century.”

We offer the following ideas as a roadmap for resilience we believe will fully support the principles in the Governor’s Executive Order and most importantly advance the multiple benefits served by a modern 21st century water management system. Our ideas are described in three sections which detail: 1) a fresh approach for water management; 2) five recommended policy priorities; and 3) a new business model for California water that emphasizes partnerships and collaboration.

I. A Fresh Approach: Managing Water for Multiple Benefits

NCWA and other leaders in the region are advancing actions in the Sacramento River Basin consistent with the Executive Order’s principles to foster “regional approach among water users sharing watersheds” and prioritizing “multi-benefit water management approaches that meet multiple needs at once,” which includes cities, farms, fish, birds, other wildlife, hydropower and recreation.

II. Policy Priorities: A Roadmap for Resilience

- 1) *Ensure Access to Safe Drinking Water*
- 2) *Enhance and Expand Utilization of Natural Infrastructure for Multiple Benefits*
 - *This includes Reactivating our Floodplains, Forest Health and Groundwater Recharge*
- 3) *Advance 21st Century Water Infrastructure for Multiple Benefits*
 - *This includes Sites Reservoir, Delta Conveyance and New Technologies*
- 4) *Create Freshwater Ecosystem Budgets*
- 5) *Facilitate Water Transfers*

III. A New Business Model: Replacing Old Binaries with Partnerships and Collaboration to Fix Problems

- 1) *Fix rather than fight—The importance of voluntary agreements*
- 2) *Embrace a new culture of partnerships*
- 3) *Secure funding to advance the portfolio*

We would welcome any additional ideas or thoughts by calling us or by email at info@norcalwater.org



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A Water Resilience Portfolio for California ***An Opportunity to Re-Imagine our Water System*** **October, 2019**

The Northern California Water Association (NCWA) and water leaders in Northern California are pleased to join the Newsom Administration and our many partners to help develop and further implement “a water resilience portfolio (portfolio) that meets the needs of California’s communities, economy, and environment through the 21st century.”

We offer the following ideas as a roadmap for resilience we believe will fully support the principles in the Governor’s Executive Order and most importantly advance the multiple benefits served by a modern 21st century water management system. Our ideas are described in three sections which detail: 1) a fresh approach for water management; 2) five recommended policy priorities; and 3) a new business model for California water that emphasizes partnerships and collaboration.

I. A Fresh Approach: Managing Water for Multiple Benefits

Californians have built an amazing and highly managed water system. But this system is under strain and our values in California water continue to evolve. California’s current population of 40 million will grow to 50 million by 2050. We have the most abundant agricultural bounty in the world, we are graced with a stunning landscape and related natural infrastructure; we are the 5th largest economy in the world, and our citizens pursue endless recreational opportunities in every part of the state. Water is essential for all of these special features that define California and a fresh approach, as called for by Governor Newsom,¹ is welcome and needed for this great state to point forward.

The water resilience portfolio creates an opportunity to re-imagine our system by looking closely at our current system and then working hard to evolve this system to reflect California’s values for the future. We share the Governor’s belief that “the future prosperity of our communities and the health of our environment depend on tackling pressing current water challenges while positioning California to meet broad water needs through the 21st century.” NCWA and other leaders in the region are advancing two important tenets that guide our region and are consistent with the Executive Order’s principles:

¹ We appreciate Governor Newsom’s call in his 2019 State of the State for “a fresh approach when it comes to meeting California’s massive water challenges. We have a big state, diverse water needs, cities that need clean drinking water, farms that need irrigation to keep feeding the world, fragile ecosystems that must be protected. Our water supply is becoming less reliable because of climate change, and our population is growing because of a strong economy. That means a lot of demand on an unpredictable supply.”

- Foster a “regional approach among water users sharing watersheds;” and
- Advancing “multi-benefit water management approaches that meet multiple needs at once,” which includes cities, farms, fish, birds, other wildlife, recreation, and hydropower. Multi-benefit water management is the hallmark of the Sacramento River Basin and this approach guides our thoughts on the proposed priorities below. See [Managing Water in the Sacramento Valley for Multiple Benefits](#).

II. Policy Priorities: A Roadmap for Resilience

NCWA supported the Brown Administration Water Action Plan by aligning our priorities with the previous administration. We fully support building on this plan with the Newsom Administration and suggest that the water resilience portfolio can be more precise in identifying a discrete set of priorities and then calling for an implementation plan with specific milestones to guide the Administration and implementing parties.

In this regard, we offer five priority areas from our vantage in the Sacramento River Basin. In arriving at these priorities, we focused on areas that show great promise for the future of California and can immediately add value to California’s current water system. As an example, there is already successful [comprehensive water management planning](#) by local water agencies in the Sacramento River Basin and other parts of the state that has prepared our region for this moment. To be sure, conservation is a way of life in the Sacramento River Basin and there are efforts throughout the region for efficient water management. These comprehensive efforts are already underway and should be acknowledged as part of the resilience portfolio. They can and will serve as a solid foundation for water resources managers to integrate these ideas and the modern priorities described below into their local and regional water management efforts.

The context for our proposed priorities is set in the Sacramento River Basin where we devote our time and energy. We recognize that California is a hydro-common and we offer these ideas to help address state-wide needs. We recognize there are issues, such as water recycling and desalination that are not currently being pursued in the Sacramento River Basin that are high priorities for other parts of the state; we fully support their implementation as part of a portfolio. We share the Governor’s goal of moving past the old binaries of the past, which is why we are actively working on these priorities with our diverse partners throughout the state.

Our priorities also support working landscapes throughout California, which provide essential benefits for our economy, health and quality of life—including clean water, nutritious food, outdoor recreation—and contribute to the state’s climate goals.

1) Ensure Access to Safe Drinking Water

Sacramento Valley leaders are committed to advancing a comprehensive approach to expand and ensure access to clean, safe and affordable drinking water for all communities. This comprehensive approach is

described in detail in [Ensuring Access to Safe Drinking Water for All California Communities](#). As Governor Newsom has emphasized, solving this problem will “demand political will from each and every one of us.”

All Californians have a right to safe, clean, affordable and accessible water under the “human right to water” established in state law in 2012. While significant progress has been made toward realizing this right during the 2019 legislative session, there is both an urgent need and an important opportunity to take additional long-term actions to ensure that all California communities have access to water that meets the health-based standards of the state and federal Safe Drinking Water Acts.

NCWA, through its Board of Directors representing local water agencies and counties, is committed to addressing drinking water problems in our local communities and continuing to advance the water quality protection programs underway to protect all beneficial uses of water in the region. This includes continued work within the Sacramento Valley to help ensure that water systems currently out of compliance can make progress toward meeting all relevant state and federal standards. With a sustained focus on entities that were in violation of one or more primary drinking water standards, the number of water systems listed by the State Water Resources Control Board (State Water Board) as out of compliance in the Sacramento Valley has been significantly reduced in the past several years. These efforts to return water systems to compliance through local actions under new and existing state programs will continue with a goal to have no systems out of compliance within the next several years.

Importantly, NCWA’s approach addresses the various challenges (i.e., technical, managerial and financial) that result in a lack of safe and reliable drinking water for communities in the Sacramento Valley and statewide. We look forward to working with the State Water Board and others as the state begins implementation of the Safe and Affordable Drinking Water Fund and further develops the human right to water needs assessment and high-risk area aquifer mapping.

2) Enhance and Expand Utilization of Natural Infrastructure for Multiple Benefits

There are unique opportunities in the Sacramento River Basin to “utilize natural infrastructure such as forests and floodplains,” as well as advancing “groundwater recharge” to help with sustainable groundwater management.

a. Reactivating our Floodplains

The Sacramento River Basin is fertile ground for developing a new path to [reactivate our floodplains](#) as a new way forward. This approach will protect public safety and integrate best available science about how river ecosystem's function with the practical know-how of farm, flood and wildlife refuge managers. Implementing these dynamic conservation strategies will build resiliency in California’s ecosystems and water systems by sustaining the abundant return of migratory birds along the Pacific Flyway; revitalizing river food webs and supporting the recovery of salmon and other fish populations; recharging groundwater aquifers; and improving flood protection in an era of increasing storm severity and a

changing climate. To further advance these efforts, we are developing a detailed Implementation Plan with our various partners to reactivating the floodplain in the Sacramento River Basin.

b. Forest Health

The forests and meadows of the Sierra Nevada, Coast Range and Cascade Mountains are the source waters for much of the Sacramento River Basin and the State of California. Healthy headwaters ensure increased water supply reliability, improved water quality, reduced impacts from catastrophic wildfires, increased renewable energy supplies, enhanced habitat and improved response to climate change and extreme weather. Responsible and active forest management is a foundational element for these efforts. Examples of these management activities we can build upon include the Placer County Water Agency's [French Meadows Forest Restoration Program](#) in the American River watershed and the Yuba Water Agency's pioneering efforts to finance [watershed restoration activities](#) through Forest Resilience Bonds. These programs are leading examples of innovative, collaborative, and replicable models for improving forest health.

c. Groundwater Recharge

The Sacramento Valley is generally in balance with respect to its surface and groundwater resources. This is a result of a concerted, long-term effort by local agencies working with landowners and state and federal agencies to promote sustainable water management in the region. The active and conjunctive management of surface and groundwater has played an important role in this balance and will continue to play an increasingly important role as groundwater use expands and intensifies in certain parts of the Sacramento Valley. This dynamic is described in [Fact Sheet: The State of Sacramento Valley Groundwater](#) and a [2014 Sacramento Valley Groundwater Assessment](#). Active groundwater and aquifer recharge utilizing the region's natural infrastructure will be important in many parts of the Sacramento Valley to maintain and help achieve sustainability, particularly around the small pockets where groundwater levels may be declining or not recovering during wet periods as quickly as they have in the past. While the Sustainable Groundwater Management Act (SGMA) is a high priority for California, we believe that the state can best add value, while plans are forthcoming over the next several years, to help local agencies advance groundwater recharge to help achieve balance under SGMA. An Executive Order would be helpful to advance this effort.

3) Advance 21st Century Water Infrastructure for Multiple Benefits

In addition to natural infrastructure, there are opportunities in the Sacramento River Basin to add value to the existing water system with modern, 21st century infrastructure. This new style of infrastructure is very different than the last century and is particularly important to provide climate resiliency and water management flexibility for the region and the state as a whole by enhancing capabilities to serve water for multiple benefits during drier years.

a. Sites Reservoir

As Sacramento Valley water resources managers look to serve multiple benefits in the future, the importance and need for Sites Reservoir becomes clear. Sites Reservoir is an innovative 21st century water project: an off-stream regulating reservoir on the west-side of the Sacramento Valley that can store water for the future by capturing it during high runoff periods, and then releasing it for various beneficial uses at a later time. With its location upstream of the Delta and near the Sacramento River, water in Sites reservoir would serve multiple benefits in the Sacramento Valley, as well as the Delta and the rest of the state.

California has other striking examples of off-stream reservoirs that have added value to their region and the state. Examples include Diamond Valley Lake in Southern California and Los Vaqueros Reservoir in the Bay Area. The recent dry years have shown the value off-stream storage provides California communities and regional water management.

Sites Reservoir would be a dramatic enhancement to California's water system and the first storage project in California with a dedicated supply for the environment. This facility would provide multiple benefits to improve [aquatic habitat conditions](#) and [withstand dry year conditions](#). This reservoir would be operated to accommodate and address the uncertainties created by a changing climate and improve environmental and water supply system resilience. Sites Reservoir can provide a freshwater ecosystem water budget (described below) that would help provide flexibility and make water available during drier years--which would help ensure water availability for the ecosystem. Most importantly, Sites Reservoir would significantly improve the state's water management system in drier periods and restore much needed flexibility and reliability that has been lost in the system. Sites is one of the best opportunities to re-imagine our water system in the 21st century and add value to our current water system by providing high-quality water to enhance natural infrastructure, the environment, public safety, the economy and quality of life for Californians.

b. Delta Conveyance

Improved and modern Delta conveyance is needed for California. Sacramento River Basin water resources managers welcome the opportunity to work with the Administration and project proponents on modern Delta conveyance that does not redirect impacts (water supply, environmental and financial) to the Sacramento River Basin, thus avoiding impacts to the region's special mosaic of farms, cities and rural communities, fish, birds, and recreation. Clearly, there are ways the Central Valley Project (CVP) and State Water Project (SWP) can be operated to support modern Delta conveyance, the co-equal goals, and protecting the Delta as a place--while continuing to serve multiple beneficial uses in the Sacramento River Basin and promote regional water sustainability for all of these beneficial purposes. Success in this effort will be a large step forward to break down the old binaries of north versus south.

c. New Technologies and Data Collection

Using new technology (with its supporting infrastructure) within our highly managed water system will be essential to integrating California's human dimension with our natural water cycle. Enhancing water resources managers' capacity to collect and use data is also essential to further develop, refine, and implement multi-benefit water management approaches. California has an opportunity to build on the open data platform envisioned in AB 1755 (2016) with modern information infrastructure to help water resources managers and other stakeholders develop innovative new approaches and make better informed decisions.

Robust and reliable sources of data are foundational to these efforts. To this end, we support state funding for programs that include modernization of the state's stream gauge network (e.g., SB 19 (Dodd, 2019)), enhancing the accuracy of snow surveys through aerial surveys (e.g., SB 487 (Caballero, 2019)), and supporting DWR's Atmospheric Rivers Research, Mitigation, and Climate Forecasting Program.

In addition, innovation benefits from a culture where technology is allowed an opportunity to be tested. As an example, some of the most promising recent salmon recovery efforts have been initiated by the private sector because of its tolerance of risk and willingness to implement trial projects outside of the lab environment. State agencies can support these efforts with timely permitting, access to experimental hatchery fish and funding to assist innovative pilot efforts as we describe more fully below in section III.

4) Create Freshwater Ecosystem Budgets

Local and regional water agencies in California will continue to undertake programs and actions to help prepare for extreme weather and the inevitable dry periods. In the Sacramento River Basin, we have learned from recent experience (see [Planning for a Dry Year](#)) that planning in advance to further develop and refine freshwater ecosystem budgets will be essential to serving water for multiple beneficial uses, particularly during drier years. Freshwater ecosystem budgets offer a new approach to integrate environmental water management into our water system to provide specific, targeted benefits rather than the old model of constraining water rights during critical periods with the hope that this action alone will save species. This approach, in turn, will allow us to work collaboratively to evolve from reactive efforts to prevent species decline into a more proactive program to actively promote species recovery in a more comprehensive manner. Advancing the California Natural Resources Agency's [Sacramento Valley Salmon Resiliency Strategy](#) and [Delta Smelt Resiliency Strategy](#) will also be helpful in these efforts. More detail is described in [Freshwater Ecosystem Budgets in the Sacramento River Basin](#).

5) Facilitate Water Transfers

Water transfers are an important tool that provide California's water system with water management flexibility and resilience, and can optimize our existing and planned water infrastructure. Many of the first actions past Governors have taken at the beginning of dry periods were designed to help facilitate and streamline transfers. Water transfers—both intra- and inter-basin—are a basic and yet important element of a water resilience portfolio aimed at meeting the needs of California's communities, economy, and environment through the 21st century. The transfers allow water resources managers to work

collaboratively to address water needs on a regional and/or statewide basis, especially during dry periods. Although transfers generally work well in California and do not need any major changes, we recommend three actions: 1) continue to encourage both the Department of Water Resources and the State Water Board to expedite their water transfer processes to prepare for critical times; 2) allow local agencies to develop water trading programs under SGMA that may be helpful for the successful implementation of sustainable groundwater management; and 3) help advance water acquisitions, including funding and expedited permitting, for freshwater ecosystem water budgets.

III. A New Business Model: Replacing Old Binaries with Partnerships and Collaboration to Fix Problems

To help advance these policy priorities, we think there are opportunities to build upon knowledge gained from recent experiences and pursue a different business model to help California advance a water resilience portfolio. This includes the following ideas:

1) Fix rather than fight—The importance of voluntary agreements.

Sacramento Valley leaders are committed to fixing problems rather than fighting over them. In this spirit, we support the Governor’s vision to create a collective effort “to cross the finish line on real agreements to save the Sacramento-San Joaquin Bay-Delta. We must get this done for the resilience of our mighty rivers, for the stability of our agricultural sector, and for the millions and millions of people that depend on this water every day.” See [Voluntary Agreements: The New Way Forward](#). Prolonged litigation over an adversarial, regulatory approach to updating the Bay-Delta Water Quality Control Plan will only delay and misdirect valuable resources away from collaborative and innovative salmon recovery and ecosystem enhancements. The Voluntary Agreements provide a framework that will allow priority habitat and flow actions to be actively implemented to advance species recovery.

2) Embrace a new culture of partnerships.

We appreciate the call in the Executive Order to “strengthen partnerships with local, federal and tribal governments, water agencies and irrigation districts, and other stakeholders” as part of the water resilience portfolio. In our view, there is a new model for success in California that has emerged over the past decade, with state agencies encouraging, facilitating and supporting regional and local agencies with the capability, expertise and local knowledge to design and implement the essential elements of a resilience portfolio. Every policy priority described above would benefit from an approach where state agencies support local agencies or joint powers authorities. This support can include financial and technical investments, expedited permitting, and contractual relationships to advance priorities.

To accelerate this effort, we recommend the state form an Office of Partnerships, led by a senior partnership coordinator in the Natural Resources Agency. This Office could help coordinate the various partnerships necessary to implement these actions and could also have an exchange program for employees to work in different offices as part of the effort to better understand each agencies functions

and culture. This new culture will also benefit from “integrating investments, policies and programs across state government.”

3) *Secure funding to advance the portfolio*

We believe the water resilience portfolio can provide a solid foundation for the Administration to work with the Legislature to develop reliable funding to support these priorities, including general fund opportunities and the next generation general obligation water bond that will unify parties and provide a catalyst for local, regional and state agencies to implement the actions necessary to support the portfolio. The water resilience portfolio will benefit from a coordinated state strategy on both available and needed funding. Additionally, landscape-scale initiatives such as future work to expand the use of natural infrastructure through reactivated floodplains and forest health initiatives must include related investments necessary to ensure protection of public safety. Examples of such investments include additional funding for the Department of Water Resources’ Small Communities Flood Risk Reduction Program. Helping local agencies navigate and secure funding under Propositions 218 and 26 to advance these measures would also be helpful.

We appreciate Governor Newsom’s Executive Order and his call for a water resilience portfolio to meet the needs of California’s communities, economy, and environment through the 21st century. We look forward to working with the Administration, the Legislature and our various partners to advance these efforts. We would welcome any additional ideas or thoughts by calling us or by email at info@norcalwater.org.

