

CLOSING THE 2.5 MILLION ACRE FEET GAP

The projects proposed below seek to provide an increased ability to convey and capture water supplies when they are available while contributing to improved ecosystem conditions. The portfolio includes modification to existing conveyance facilities to correct subsidence and the construction of new facilities to provide new opportunities to move water to where it is needed most. It includes increased abilities to capture and store high flow water from rivers and streams and keep that water in the local watershed. It includes a suite of demand management options, and opportunities to increase water transfers and exchanges throughout the Valley. And finally, it includes improvements to existing regulations to facilitate the creation of both seasonal and permanent habitat in a manner that benefits native species and promotes good resource management. It is important to note that accomplishing the full 2.5 million acre-feet of water supply improvement will require improvements in Delta Conveyance that includes new or expanded infrastructure. This could be accomplished in part through construction of a new single tunnel, as supported in the Governor’s Executive Order, and/or other improvements to increase fish friendly diversions in the Delta or through other means yet to be identified. Without such improvements, closing the water supply gap would need to include a significantly higher amount of land retirement.

Figure 1. POSSIBLE ELEMENTS OF A VALLEY WATER PORTFOLIO

Figure 1. POSSIBLE ELEMENTS OF A VALLEY WATER PORTFOLIO		AVERAGE YIELD (taf/yr)
RESTORATION OF ESSENTIAL CONVEYANCE CAPACITY		
Friant-Kern Canal Capacity Restoration	Necessary for maintenance of existing supplies, allows for additional recharge opportunities and increased yield of new facilities	
Delta-Mendota Canal Capacity Restoration		
Friant-Kern Canal Reverse Flow & Recirculation		
Calloway Canal Improvements		
California Aqueduct Capacity Restoration		
NEW INFRASTRUCTURE		
Mid-Valley Conveyance	Up to 2,000 TAF	
Trans-Valley Conveyance		
Groundwater Recharge Facilities		
Delta Conveyance Improvements		
Enlarge Existing Regional Conveyances		
ENHANCED WATER MANAGEMENT		
Coordinated Operations between SWP, CVP, and Friant	Up to 80 TAF	
Enhanced Water Transfers and Exchanges		
Strategic, Multi-benefit Land Conversion	Up to 200 TAF	
Incentivized Land Retirement	0 to 500 TAF	
Non-Farm Conservation	Up to 10 TAF	
Advanced Runoff Forecasting & Monitoring	Up to 100 TAF	
POLICY AND REGULATORY CHANGES TO EXPEDITE PROCESSES		
Reconsultation on Delta Operations	Included in infrastructure estimates above	
Voluntary Agreements		
Expedited Safe Harbor Permits		
Expedited Permitting for Ecosystem Restoration		
Place of use Adjustments to Maximize Recharge		
Expedited Permitting for Water Markets		
WATER QUALITY		
Safe and affordable water for Disadvantaged Communities		
TOTAL		Up to 2.5 MAF



INTRODUCTION & BACKGROUND

Governor Gavin Newsom signed Executive Order N-19-10 on April 29, 2019. The Executive Order directed several State agencies to prepare a water resilience portfolio that meets the needs of California’s communities, economy and environment through the 21st century. This effort will require a collaborative approach that includes input from a broad range of stakeholders to improve infrastructure, including improving Delta conveyance consistent with the Executive Order and increasing water storage, and to make necessary policy changes that build a resilient water future for all regions of California.

Following the 2012-2016 drought, and as part of SGMA implementation, it became critical to take leadership of the issue of the water imbalance in the San Joaquin Valley (Valley). Who better to define the problem and help develop solutions than the users and stakeholders who live, work and own farms and businesses in the Valley? The Water Blueprint for the San Joaquin Valley is comprised of a broad coalition of Valley water users representing water districts, agriculture, commodity groups, cities, academia and disadvantaged communities.

It is an undisputed fact that there is a water supply shortfall in the Valley. Under the current infrastructure, regulatory, and water project operations, the Valley is in crisis.

The Public Policy Institute of California (PPIC) and others have demonstrated a historical, average annual water imbalance of 1.5-2.5 million acre feet. However, this problem has been accelerating at the same time that SGMA implementation seeks to eliminate historic patterns of overdraft. The imbalance is growing due to significant changes such as recent reductions in Delta exports that are below prior historical levels, increased outflows for the San Joaquin River Settlement that have yet to mature, and future climate changes that are anticipated to reduce capture of local supplies and further reduce Delta exports. As a result of these ongoing changes, the future of the Valley’s communities, environment, and largest business sector, (agriculture) is facing a growing risk.

SUMMARY OF ASKS



POLICY AND REGULATORY CHANGES TO EXPEDITE PROCESSES

There are a number of actions that can be taken at the local and regional level to take advantage of excess flows during high precipitation years. However, burdensome and sometimes outdated regulations do not allow for approval to occur in a timely manner. Regulatory and administrative agencies must have a clear understanding of the Governor’s vision for resiliency. Our recommendations include:

- 1

Establish a Task Force to manage policy and regulatory recommendations. This Task Force should help with:
- Ensuring Regulatory Agencies are incorporating the best available science and adaptive management to inform water management decisions, maximize the capture and beneficial use of available water supplies and protect species and the environment

• Proactive engagement with the SWRCB

• Expediting grant funding

• Navigating consolidated place of use issues for the State Water Project and CVP

• Approving SWP Water Management Provisions

• Expediting groundwater banking and water rights permitting for GSA-sponsored groundwater recharge programs
- 2

Support and participate in local efforts to refine the understanding of overdraft and related socioeconomic impacts
- 3

Continue the Voluntary Agreement process to seek ways to recover fish populations and the Delta ecosystem while avoiding large water supply losses.

STATE ECONOMIC INVESTMENTS

For over 100 years, farms and communities in the San Joaquin Valley have relied upon groundwater to balance water supply needs. The implementation of SGMA will require over drafting of groundwater to cease without a clear understanding or plan of how the future water balance will occur. State investments in Blueprint recommended infrastructure projects will provide many broad public benefits such as improving recharge of groundwater aquifers relied upon by disadvantaged communities whose primary source of drinking water is located in critically over drafted groundwater basins, improved flood control, and improved wildlife habitat. An initial estimate of \$1.7 billion in State investment would be justified for the following:



- 1

Continuation of funds for programs that supply disadvantaged communities with safe, clean drinking water.
- 2

Thoughtful, incentivized land conversion to maximize recharge and ecosystem benefits, coupled with efficiency improvements and establishing a response to manage the environmental and humanitarian consequences of such land conversion.
- 3

Multi-purpose use of existing canals.
- 4

Facilitation of local and regional water markets.
- 5

Wildlife Refuge funding.
- 6

Continuation of support and cost-share for Integrated Regional Water Management and GSA Plans that enable development of the highest priority local projects.
- 7

Redirect available State funding for the San Joaquin Valley to the Blueprint priorities.
- 8

Partnership in seeking State and Federal cost share to supplement local investments.
- 9

Investment in NASA Airborne Snow Observatory.
- 10

Research and Development of watershed management and forest health best practices.

INFRASTRUCTURE NEEDS

Infrastructure will be needed at a local level and we assume that local agencies will direct and develop these improvements on their own, along with water markets and conservation actions. However, even after fully implementing these options, a significant imbalance will remain across the San Joaquin Valley. More water will be needed, and it will be needed in the short term to be responsive to SGMA implementation, which is gathering momentum.

Surplus supplies can come through a variety of sources as purchased water from willing sellers or from excess supplies available in the Delta and elsewhere at times of oversupply. These surpluses can be used to close the gap between surface and groundwater supplies in the San Joaquin Valley which are necessary to bring the region into balance. These sources, however require infrastructure developments that involve regional and state endorsements.

The Blueprint focuses on a portfolio of strategic infrastructure projects that are relatively low cost, can be completed in the timeframe needed for SGMA implementation, and have the ability to curtail significant near-term land retirement. The highest priority of these would:

- Protect and maintain historically major conveyances from the effects of regional subsidence,
- Improve the ability to enhance the delivery of surface water to lands that can best recharge the groundwater, and
- Provide stability to the delivery of existing contracts for Delta Supplies, with reliable windows for capturing water for recharge when abundant.



- 1

Subsidence Correction — repairing critical regional infrastructure will be a key step in moving supplies to where they can be recharged. Major infrastructure that has been damaged by subsidence includes:
- Friant-Kern Canal (60% conveyance loss)

• Delta-Mendota Canal (15% conveyance loss)

• California Aqueduct (19% conveyance loss)

• Statewide Flood Control Infrastructure (30-70% capacity loss)
- 2

Stability for Delta Supplies — in addition to several policies that seek to stabilize water supplies in the Delta, a number of DWR projects could further enhance the ability to divert water supplies when safe for fisheries, including:
- Delta Conveyance Improvements
- 3

Improved Valley Arterials — solving the Valley’s overdraft will require additional in-Valley connections. These could be made possible with additional conveyances such as two that have long been contemplated, including:
- Trans-Valley Canal

• Mid-Valley Canal
- 4

Recharge and Managed Wetland and Upland Habitat



September 27, 2019

Nancy Vogel
Director of the Governor's Water Portfolio Program, State of California
California Natural Resources Agency
1416 9th St., Suite 1311
Sacramento, CA 95814

Dear Ms. Vogel:

Thank you for your tireless efforts on the Water Resilience Portfolio (WRP). The purpose of this letter is to provide a brief overview of the Water Blueprint for the San Joaquin Valley initiative (Blueprint) to and submit our collective comments for the WRP in response to Governor Newsom's Executive Order (EO) N-10-19. The Blueprint effort continues to strive for additional outreach and engagement beyond those provided in our participant list, so we can work to properly address and include all stakeholders affected. We must try to solve the water crisis together.

The San Joaquin Valley's water crisis threatens the economic, social, and environmental health of the entire region; it is both unprecedented and continues to worsen. Included in our submittal, as referenced, is an evolving participant list of organizations and individuals throughout the region that are collaborating to develop the Blueprint as a deliberate, thoughtful plan to sustain and improve the communities, habitats, working landscapes, and economy of the San Joaquin Valley. This coalition was formed based on shared goals for groundwater sustainability, clean and reliable drinking water, and economic growth in the San Joaquin Valley.

We are writing to state our strong support for such an investment and involvement by the State of California. Thank you for your consideration. Please feel free to contact any member of the Water Blueprint for the San Joaquin Valley group, should you need any additional information on this initiative.

Respectfully,

A handwritten signature in blue ink, appearing to read 'A. Ewell', with a stylized, cursive script.

Austin Ewell,
Interim Executive Director
Water Blueprint for the San Joaquin Valley

CC:

Ana Matosantos, Cabinet Secretary, Office of the Governor
Wade Crowfoot, Secretary, California Natural Resources Agency
Bill Lyons, Agricultural Liaison, Office of the Governor
Karla Nemeth, Director, California Department of Water Resources
Cindy Messer, Chief Deputy Director, California Department of Water Resources