

Water Blueprint

for the San Joaquin Valley

Blueprint Paper¹ #11

THE WATER BLUEPRINT AND THE GOVERNOR'S WATER RESILIENCE PORTFOLIO

On July 28th, 2020, Governor Gavin Newsom released a final version of the [Water Resilience Portfolio](#), the Administration's blueprint for equipping California to cope with more extreme droughts and floods, rising temperatures, declining fish populations, over-reliance on groundwater, and other challenges.

"The portfolio outlines 142 state actions to help build a climate-resilient water system in the face of climate change. The actions tie directly to Administration efforts to carry out recent laws regarding safe and affordable drinking water, groundwater sustainability and water-use efficiency. They also elevate priorities to secure voluntary agreements in key watersheds to improve flows and conditions for fish, address air quality and habitat challenges around the Salton Sea and protect the long-term functionality of the State Water Project and other conveyance infrastructure."²

"California faces a range of water challenges, from severely depleted groundwater basins to vulnerable infrastructure to unsafe drinking water in many communities to uncertain water supplies for its cities and agriculture. Climate change magnifies the risk. There is widespread agreement that a coordinated portfolio of complementary actions is needed to build water resilience, ensure healthy waterways and meet long-term water needs."³

Governor Gavin Newsom signed an executive order on April 29, 2019, directing three state agencies to develop a comprehensive strategy to build a climate resilient water system and ensure healthy waterways through the 21st century. On July 28, 2020, the Governor released a final version of the Water Resilience Portfolio, the administration's blueprint to meet the water needs of California's communities, economy, and environment as the climate changes.

The need for a thoughtful, coordinated portfolio of complementary action was the genesis of the Water Blueprint for the San Joaquin Valley (the Blueprint). The desires and

¹Blueprint Papers summarize topic-specific information – typically a potential component of a water solution for California. It is hoped that these papers stimulate discussion and lead to new ideas and better solutions. Correspondence and questions concerning this paper may be directed to Scott Hamilton, Scott@ResourceEconomics.net (661) 303 1540.

² [Governor Newsom Releases Final Water Resilience Portfolio | California Governor](#)

³ Frequently Asked Questions About the Water Resilience Portfolio July 2020
https://waterresilience.ca.gov/wp-content/uploads/2020/07/WaterResiliencePortfolio_Factsheet_July2020.pdf

objectives embodied in California's Water Resilience Portfolio, unsurprisingly, align almost exactly with the ambitions of the Blueprint. With its large but vulnerable agricultural industry, disadvantaged communities, depleted ecosystems, and restricted flood management opportunities, the Valley's future depends in large part on its water supply future and its ability to cope with climate change. The concerns and challenges for future water management for the state are exemplified in the San Joaquin Valley. To illustrate the similarities between initiatives, the objectives of the two efforts are compared below, and illustrate how the principles underlying the Resilience Portfolio are being implemented in the Blueprint.

The Blueprint is still a process, not a plan. The goals of the Blueprint will bend and adapt as more information is obtained, more studies conducted, and as public outreach and collaboration continues. Therefore, what is presented below reflects the Blueprint's objectives as they exist currently, although these are expected to change over time.

California's Water Resilience Portfolio, together with the Water Blueprint for the San Joaquin Valley, represents critical thinking leading to common purposes.

	State Objectives	Blueprint Objectives:
1	<p>Maintain and diversify water supplies: State government will continue to help regions reduce reliance on any one water source and diversify supplies to enable flexibility as conditions change. Diversification will look different in each region based on available water resources, but it will strengthen water security and reduce pressure on river systems across the state.</p>	<ul style="list-style-type: none"> • maximize use of local supplies • greatly expand groundwater recharge to help reduce damaging flood flows, enhance drought protection, and achieve groundwater sustainability utilizing the state’s biggest reservoir - the SJV groundwater basin • use a small percentage of surplus high flows from the Delta at times that will not harm the already stressed Delta ecosystem
2	<p>Protect and enhance natural ecosystems: State leadership is essential to restore the environmental health of many of our river systems in order to sustain fish and wildlife. This entails effective standard setting, continued investments, and more adaptive, holistic environmental management.</p>	<ul style="list-style-type: none"> • implement an environmental vision that protects and enhances wetlands, upland, and riparian habitats through a system of core wildlife areas and connecting corridors • implement multi-benefit projects such as development of seasonal wetlands that provide waterfowl habitat, groundwater recharge and water supply supplementation for DACs • restore floodplain habitat to reduce flood damage and restore ecosystem processes, including food generation and rearing habitat for native fish • deliver over 200,000 acre feet into the San Joaquin Valley for environmental purposes
3	<p>Build connections: The state aims to improve physical infrastructure to store, move, and share water more flexibly and integrate water management through shared use of science, data, and technology.</p>	<ul style="list-style-type: none"> • recognizing that California has always had regional imbalances between water supplies and beneficial uses, develop the most extensive conveyance system in the last 60 years, leveraging capacity in existing, but seasonally under-utilized, conveyance facilities • by connecting multiple sources of water, deliver water from areas with surplus to areas with critical demand: existing and new wildlife areas, DAC's and highly productive farmland
4	<p>Be prepared: Each region must prepare for new threats, including flashier floods, deeper droughts, and hotter temperatures. State guidance will enable preparation, protective actions, and adaptive management to weather these stresses.</p>	<ul style="list-style-type: none"> • protect against longer and more severe droughts by building groundwater supplies through increased recharge • protect against flooding by increasing recharge capacity and restoring floodplains • build partnerships with state and federal agencies and other stakeholders to achieve the above goals

	Principle	Examples of how the principles are being implemented in the Blueprint:
1	Prioritize multi-benefit approaches that meet several needs at once	<ul style="list-style-type: none"> • development of multi-benefit wetlands that provide habitat, groundwater recharge, water supplies for DACs and flood protection
2	Utilize natural infrastructure such as forests and floodplains	<ul style="list-style-type: none"> • recharge in existing dry stream beds to recharge aquifers and restore riparian habitat • restore floodplains in key areas to mitigate floods and provide food for native fish
3	Embrace innovation and new technologies	<ul style="list-style-type: none"> • new environmentally friendly diversions in the Delta that allow diversions while protecting endangered fish • new recharge technology including flood managed aquifer recharge (Flood MAR) and aquifer storage & recovery (ASR) • electromagnetic surveys to identify the best places for groundwater recharge
4	Encourage regional approaches among water users sharing watersheds	<ul style="list-style-type: none"> • the Blueprint covers a dozen groundwater subbasins, is regionally cooperative, has inter-basin coordination to develop diversion and conveyance facilities, and manage floods
5	Incorporate successful approaches from other parts of the world	<ul style="list-style-type: none"> • environmentally friendly water diversions
6	Integrate investments, policies, and programs across state government	<p>To achieve state and Blueprint goals, the Blueprint would like to partner with:</p> <ul style="list-style-type: none"> • SWRCB on water rights • DWR on conveyance and flood management, implementation of the Resilience Portfolio and SGMA • DSC on new Delta solutions • ACOE on flood protection • CDFW on development of new wildlife areas and associated water supplies, and wildlife protections • The Central Valley Flood Protection Board on flood protection • The Water Commission on funding • The Department of Conservation on habitat conservation and wildlife management

7	Strengthen partnerships with local, federal and tribal governments, water agencies and irrigation districts, and other stakeholders.	The Blueprint is a coalition of more than 60 willing participants that include: grower organizations, county governments, landowners, water districts, county farm bureaus and the USBR. Over the next year the Blueprint would like to extend its outreach to DACs and NGOs to obtain their input and advice to further the Blueprints goals.
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