



January 13, 2020

Nancy Vogel
Director, Governor's Water Portfolio Program
California Natural Resources Agency
1416 Ninth Street
Sacramento, CA 95814

Re: Sierra Club California Comments on Draft Water Resilience Portfolio

Dear Ms. Vogel:

On behalf of Sierra Club California and our more than half a million members and supporters statewide, we write to offer our comments on the draft water resilience portfolio ("draft portfolio") recommendations released on January 3, 2020 in furtherance of Executive Order N-10-19. We appreciate the Administration's robust public engagement and stakeholder process in formulating the draft portfolio. Our organization participated by meeting with administration officials to discuss our view of California water policy, submitting written recommendations and comments, and encouraging our members to attend listening sessions across the state.

For years we have advocated for California to develop and implement a diverse water portfolio that includes firm commitments of water for the environment and promotes regional resilience. We believe California can meet its water needs and provide the flows necessary to restore the state's ecosystems, including the San Francisco Bay-Delta, by pursuing a myriad of projects that combine increased agricultural and urban conservation, sustainable groundwater storage and management, increased water reuse and recycling, and stormwater capture.

So, we appreciate that the draft portfolio recognizes that local and regional entities should reduce reliance on any one source of water, and that it urges locales to diversify their water supplies. We welcome the draft portfolio's recommendation that the state aid this endeavor by prioritizing regional, cost-effective, and environmentally beneficial ways to stretch current water supplies - whether by supporting cities and towns to build water use recycling projects that ensure a sustainable, drought-proof supply; working with regions to ensure better management of groundwater basins through the responsible implementation of the Sustainable Groundwater Management Act; and promoting stormwater capture that reduces the reliance on potable water for landscaping needs and provides a recharge benefit to underlying groundwater aquifers.

However, the draft portfolio falls short in several areas and with the comments below, we detail those deficiencies. Overall, the draft report suffers from an unprioritized list of actions and paradoxical inclusion of projects that would be unnecessary if the state truly encourages regions to be self-sufficient and less dependent on water from other areas of the state. Unfortunately, it is ultimately a restatement of water policy pursued by previous administrations, depending heavily

on a few large scale and outdated water fixes that distract from the need to rapidly shift the system to accommodate known climate change impacts.

Specifically:

1. The Draft Water Portfolio does not set priorities for selecting actions that achieve the goals and targets articulated.
2. The Draft Water Portfolio prioritizes agricultural water needs that have been shaped by unsustainable industry decisions to plant permanent crops over the public's and the environment's water needs.
3. The Draft Water Portfolio does not advocate for acceleration of the Sustainable Groundwater Management Act.
4. The Draft Water Portfolio relies upon – and proposes more – voluntary agreements that sidestep implementation and enforceability of state and federal environmental and conservation laws that have long protected the most vulnerable species, including keystone species.
5. The Draft Water Portfolio proposes construction of large-scale, water conveyance projects that divert fresh water from the Delta, despite a clear need and state policy requiring reduced reliance on the Delta.
6. The Draft Water Portfolio proposes actions inconsistent with regional resilience and environmental and economic sustainability by weakening evaluation and oversight of transfers and surface storage projects that will significantly impact the state's aquatic and riparian ecosystems, fish and wildlife, and water quality.
7. The Draft Water Portfolio considers ocean desalination projects as efficient water conservation projects despite their large energy footprint, high cost, and harm to coastal ecosystems.

Below we recommend ways to improve the water portfolio as it is finalized.

I. The Draft Portfolio needs a framework for implementation that articulates priorities and communicates how the State will meet its goals.

The draft portfolio does not provide a framework for how the state will execute the recommendations set out, or how the state prioritizes those actions. It currently reads as both a report of what the state is presently doing and a list of actions the state wishes it could do, never stating what the state actually plans to do. We recommend the water portfolio clearly set out which actions the state will implement to achieve regional resilience and give a detailed explanation of how the state is prioritizing those actions. In short, it is not sufficient to say that the state has an “all of the above” strategy. The state must set priorities.

While there is a section discussing execution of actions on page 26, that section does not detail how the state will execute or prioritize the actions, or show any progress. It merely lists ways the state plans to coordinate and build partnerships. While coordination among state agencies and stakeholders is necessary and useful, it is not evidence that projects are getting done.

The portfolio should prioritize actions that can be implemented quickly, serve multiple benefits, address more than one portfolio goal, and reduce California's energy footprint for water management. The portfolio needs to emphasize the importance of decreasing California's energy use in the water sector; a strategy for climate adaptation that does not incorporate reducing greenhouse gas emissions is fundamentally flawed. Implementing more sustainable priorities will make other less sustainable recommendations - conveyance projects, surface storage projects, and ocean desalination projects - less admirable and even unnecessary.

II. The Draft Portfolio should not prioritize the agricultural industry's water needs over the demands of California's environment and communities.

The draft portfolio is framed around an unfortunate premise: because the agricultural industry is the state's largest water consumer and needs a minimum level of water to thrive, the state must 1) safeguard that industry's water supplies by any means (ease water transfers, build a single tunnel and surface storage, etc.), and 2) use that minimum as a reference point when determining what is "adequate" water for the environment and communities. We recommend framing the water portfolio around a simple fact: California's ecosystems, communities, and industries all depend on water to survive.

California water should be a common resource, not a commodity. By elevating a single industry's need of water over that of community and environmental needs, the draft portfolio is placating an industry that has long-exploited California water policy for profit and positions all others to receive a low and harmful amount of water. Notably, the agricultural industry has increasingly shifted towards permanent crops that reduce flexibility during drought periods. The portfolio implies that the state's decisions about water allocation should rightly be driven by irresponsible planting choices.

The draft portfolio notes that "California's world-renowned biodiversity relies on healthy river systems. Our river systems provide habitat for abundant fish and wildlife and have sustained human populations for thousands of years." But reduced stream flows, diversions and exports - often severely skewed to benefit the agricultural industry - and climate change have detrimentally impacted the amount of water that flows through the river systems in their entirety, resulting in polluted water communities and ecosystem collapse in some parts of the state.

Most of the proposed new infrastructure (reservoirs, conveyance, repair and maintenance of existing) would primarily benefit agriculture, such as the restoration of Friant-Kern Canal. Building and maintaining this infrastructure with public funds effectively subsidizes a federal project that encourages increased, not decreased, water use. It is very important to follow the "beneficiary pays" principle so that all users pay the true cost of water. The water portfolio should discourage, not subsidize, unwise uses of water.

If the state is truly invested in building a healthy and sustainable water system that works for all California residents, fish, wildlife, birds, and industries, the state needs to be equitable when developing a water portfolio.

III. The Water Portfolio should advocate for acceleration of the Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act ("SGMA") requires local and regional authorities in medium and high priority basins to achieve sustainability by 2040. Until then, pumping may continue and the potential exists for more and more irreversible damage. Unfortunately, the draft portfolio does nothing to remedy this far too long deadline. We strongly recommend that the water portfolio accelerate implementation.

Both the passage of SGMA and the Governor's issuance of Executive Order N-10-19 are based on the fact that climate change has drastically changed our understanding of groundwater sustainability and California's water management and water use must change to adapt. Rapid restoration of groundwater reserves, which are the largest reservoirs by far in California and day-to-day water sources for many communities, especially disadvantaged Central Valley communities, must be a primary goal of the state and explicitly stated as such in the water portfolio.

Without sustainable pumping limits until 2040, the agricultural industry will continue to plant acres of new, permanent tree crops that rely on groundwater from over drafted basins, causing decreased stream flows, saltwater intrusion, land subsidence, dry wells in disadvantaged communities, and permanent damage to the storage capacity of these basins.

IV. The Water Portfolio should not promote voluntary agreements, but should instead encourage strong enforcement and rapid implementation of existing environmental and conservation laws and regulations.

We take issue with the draft portfolio repeatedly advocating for current and future voluntary agreements (VAs) as a mechanism to establish flow and habitat requirements for California ecosystems. VAs are not effective measures to develop and/or implement water quality or flow standards or habitat requirements. To date, only legal and regulatory action under long-time state and federal environmental and conservation laws have provided enforceable standards and protected California's fish and wildlife, public health, and other public trust resources. We recommend the water portfolio encourage strong enforcement and implementation of these laws.

The draft portfolio highlights one VA process in particular, the Bay-Delta voluntary agreement process commenced under Governor Brown, even deeming it a "current water priority" on page 16. Though endorsed by the state, letters and statements from NGOs participating in the process and preliminary reports from the state strongly suggest that the current VA package proposal is inadequate and incompatible with the Phase 1 standards of the 2018 Update to the Bay-Delta Water Quality Control Plan. Additionally, the approach taken for Phase II requirements will, in some cases, result in further degradation of the Bay-Delta ecosystem. Unfortunately, the state backing the VA process has only caused delayed implementation of Phase I standards and

development of Phase II standards, both of which are crucial in protecting the Bay-Delta estuary.

The water portfolio should not campaign for a misguided process – even going as far as proposing more opportunities for VAs processes – to drive California’s ecosystem protections. It is unclear VAs are legally and regulatorily enforceable, and they are not necessary to ensure sustainable management of water systems when environmental and conservation laws and regulations are properly implemented and enforced, whether that be to protect single species or full ecosystems.

To that point, the draft portfolio decries current environmental and conservation laws protecting single species and recommends that the state deploy an ecosystem-wide approach with inclusion of VAs as a tool for success. The water portfolio should not echo and endorse untrue talking points to bolster VAs.

The assertion that current environmental and conservation laws have been erroneously used to protect single species, and that use of those laws is inconsistent with the intent of those laws, is unsubstantiated and has been propaganda talking point by agribusiness and water agency interests working for decades to weaken both federal and state Endangered Species Acts, the federal Clean Water Act, and California’s Porter-Cologne Water Quality Control Act. Protection of single species is not contradictory to the intent of these laws; the population size of a single keystone species - a species on which other species in an ecosystem largely depend - often indicates the health of a whole ecosystem.

And state agencies already consider the entirety of ecosystems when developing and adopting strong, protective criteria pursuant to the very laws these entities criticize. For example, when developing flow standards for the Bay-Delta Water Quality Control Plan pursuant to the federal Clean Water Act and state Porter-Cologne Act, the Water Board considered the entire ecosystem and not just protections for endangered species, water quality, or human uses in the Delta to set flows. This included the consideration of actions *outside* the Delta to improve water supplies and reduce reliance on the Delta. The Board ensured baseline minimums and assurances that would actually occur, resulting in increased fresh water flowing through the ecosystem. And these assurances are undoubtedly enforceable since the Board was statutorily authorized to adopt the plan and enforce requirements as necessary. Despite this, water agencies for agriculture pressed the Brown administration and then-Lt. Gov. Gavin Newsom to intervene and allow an end-run around regulatory action to implement the flow standards.

It is clear VAs are not a necessity for innovative, sustainable water management. Their legality and enforceability are questionable and, in some cases, such as the Bay-Delta VA process, VAs result in less protective proposals that can delay implementation of legal, more protective regulations.

V. The Water Portfolio should not include construction of a single tunnel conveyance project in the Delta as a portfolio project.

The draft portfolio declares that due to threats from “flood, subsidence, earthquakes, and climate change,” the state is prioritizing construction of Delta conveyance projects to “facilitate water transfers.” In doing so, the draft portfolio states that the Administration is advancing a costly single tunnel project, regardless of whether it is needed once a portfolio of projects that could reduce reliance on the Delta is put into place.

Though different from the Brown Administration's proposal to build two tunnels, a single tunnel has the potential to cause just as much, even more, devastating impacts to the environment depending on where/how it is built and operated. Additionally, it will not produce new water, not lead to increased water efficiency or water conservation, and not be economically rational. The project draws resources away that could otherwise make the state's regions more self-sufficient.

We are resolute in our recommendation that the water portfolio reject large-scale, environmentally destructive projects that are inconsistent with the Delta Reform Act's state policy of “reduc[ing] reliance on the Delta [to meet] California's future water supply needs through a statewide strategy of investing in improved regional supplies, conservation, and water use efficiency.”

This project will surely result in increased diversions from the Delta due to various actions underway by water users, state agencies, and the federal administration. As noted earlier, the Bay-Delta VAs have yielded fewer protective requirements for the Delta than the Water Board's adopted regulations that have not been fully implemented or developed. The state's operation proposal for the State Water Project would allow more water to be pumped from the already water-deprived Delta by increasing diversions and exports and weakening protections for salmon and other imperiled fish in the Delta, similar to recent federal rules that would allow increased diversions from the Delta though the federal Central Valley Project for the benefit of the Central Valley agricultural industry. Additionally, the single tunnel project is costly, an expense that will inevitably fall on ratepayers living in areas outside the Delta that rely on exported water from the Delta.

The draft portfolio assumes the need for a single tunnel, arguing that it is necessary for protecting the region and water supplies from saltwater intrusion as the sea level rises and Delta levee collapse due to seismic activity. We would note that one form of protection from these threats is state investment in regional, smart, sustainable, and resilient projects that do not require or encourage transferring water out of the Delta.

In any case, we do not refute that sea-level rise will cause saltwater intrusion in the Delta. And we are uncertain how the state should respond, mitigate, or adapt to this obstacle. But we are certain that diverting water from the Delta through the proposed tunnel will exacerbate saltwater intrusion. No freshwater will flow through the Delta system. The state resources currently directed to advancing the single tunnel would be better spent on developing a “loading order” among water portfolio projects that will reduce reliance on the Delta.

Additionally, we do not refute that there is a need to update and restore certain Delta flood and levee infrastructure. In its present condition much of that infrastructure may be vulnerable to failure during large earthquakes. But recent studies have shown that Delta regional geology

would attenuate effects of seismic activity, and that seismic risk is not a key justification of a single-tunnel in the Delta.

The single tunnel project is a high-risk, expensive project built on a dream developed more than half a century ago, before we understood environmental impacts and the effects of climate change. It makes no logical sense to entertain the antiquated notion of a tunnel today. The water portfolio should consist of actions that discourage large conveyance projects and foster local and regional self-sufficiency.

VI. The Water Portfolio should not further water transfers or surface storage that will deteriorate the state's aquatic and riparian ecosystems and endanger species.

The draft portfolio recommends a suite of actions that contradict regional resilience altogether, one of which is simplifying the water transfer process and accelerating permitting for individual projects that expand surface water storage and dam California's rivers, such as Sites Reservoir.

Simplifying and encouraging water transfers from surface storage projects across the state is in direction opposition to promoting regional resilience. Water transfers expend large amounts of energy that are costly for the state and ratepayers. The water portfolio should instead encourage development of local water supplies where both the water and energy costs are the least expensive for beneficiaries.

To that end, the state should not invest in constructing new surface storage projects that encourage water transfers and exports, such as Sites Reservoir. Sites Reservoir would be filled by significant water diversions from the Sacramento River, which would harm the river's dynamic flow-based ecosystems. The reservoir would drown up to 15,000 acres of existing oak woodlands, grasslands, wetlands, and agricultural land in the western Sacramento Valley, impacting the federally protected bald eagle and a host of other sensitive wildlife species, several rare plants, and significant historical and cultural resources.

Of particular concern, the draft portfolio singles out Sites Reservoir as a priority for investment and funding from Prop 1. The final water portfolio should not consider projects in isolation. California's water system is a convoluted, integrated system. The state would do well to maximize resources by considering effects that independent projects will have on water systems as a whole and the species that depend on it.

VII. The Water Portfolio should not propose new coastal ocean desalination projects.

The draft portfolio calls for consideration of desalination of both brackish water and ocean water to meet increasing water demands. We recommend that the draft portfolio consider brackish water desalination only *after* considering other less expensive and less energy-intensive water conservation, water recycling, and water use efficiency practices. Moreover, we strongly discourage new ocean desalination projects altogether.

Brackish water desalination has benefits. It can be used to help relieve drought conditions and replace water lost from other sources. However, the water desalination process uses massive

amounts of energy resulting in increased greenhouse gas emissions that intensify climate change impacts. According to studies provided by the Pacific Institute, the energy intensity for brackish water desalination can range from 1,500 to 8,500 kilowatt-hours (kWh) per million gallons depending on the water's salinity levels. In comparison, the most advanced recycled water treatment can average about 5,300 kWh per million gallons, and the use of local sources of groundwater and surface water averages less than 3,000 kWh per million gallons. Ocean desalination plants, often located along coastal areas due to the accessibility of seawater, use more energy per gallon than brackish water desalination and all other water supply and treatment options, averaging about 15,000 kWh per million gallons.

High energy-intensive brackish water desalination should be a last resort for water needs especially when you consider California's current water management system is already very energy-intensive. The State Water Project uses an average around 11,000 kWh per million gallon conveying water from the Delta to Southern California, and the Colorado River Aqueduct averages 6,100 kWh per million gallons to transfer water to Los Angeles.

Even if the state powered ocean desalination plants with renewable energy, the siting of these plants remains an issue. Coastal areas have a diverse ecosystem of marine and terrestrial species, and these plants have significant negative impacts on these species. Also, these areas are increasingly vulnerable to climate change impacts. In California alone, the U.S. Geological Survey has found that coastal erosion due to sea level rise could double by 2100. While the state, in recent years, has added more siting considerations when permitting these plants, the state should stop permitting coastal desalination plants altogether given sea-level rise, the decrease of undisturbed coastal lands, and their overall environmental impact, including brine disposal requirements.

The water portfolio needs to ensure investment in sustainable practices to meet water supply needs before considering brackish water desalination, and should discourage coastally-located, seawater desalination.

Conclusion

In summary, the draft portfolio needs much work. We look forward to reviewing the next draft and anticipate that these comments will be reflected in that draft.

Sincerely,



Kathryn Phillips
Director



Brandon Dawson
Policy Advocate

CC: Governor Gavin Newsom
Secretary Wade Crowfoot – California Natural Resources Agency
Secretary Jared Blumenfeld – California Environmental Protection Agency
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