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March 31, 2021

Via email

Jelena Hartman
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State Water Resources Control Board
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Re: Water Rights Response to Climate Change

Dear. Ms. Hartman,

Please accept these comments on the Water Board's *Recommendations for an Effective Water Rights Response to Climate Change: Identification of Data Needs and Recommendations to Incorporate Climate Change into Water Rights Permitting Policies, Procedures, and Methodologies* ("Recommendations.")

We commend the Water Rights Division staff for an excellent discussion of climate change impacts on streamflows and on better estimations of unimpaired flows in the *Recommendations*. However, we have some concerns about the framework in the *Recommendations* for consideration of impacts of climate change on aquatic ecosystems.



The *Recommendations* quote Moyle et. al., stating, "changes in precipitation and runoff patterns will likely modify seasonal availability of spawning and rearing habitat for some native fish (e.g., Chinook salmon) and favor fishes that can persevere when stream flows are low and intermittent for extended periods." (p. 15.)

The Water Rights Division needs to explicitly consider how permitted diversions are drying up streams in the state. During the 2012-2016 drought, the Water Board temporarily suspended at least

35 minimum instream flow standards.¹ By August 2015, the Department of Fish and Wildlife reported that there had been 783 fish rescues in 52 different watersheds, comprising 51 species, and more than 264,000 fish.² Six hundred wild McCloud River redband trout were captured and held in nine holding tanks in the Shasta River fish hatchery until stream conditions improved.³ In the Scott River, an estimated 116,000 endangered Coho salmon were rescued and relocated in 2014.⁴ This was crisis management.

The *Recommendations* also state, “Recent research suggests that changing climate has magnified stress on California’s freshwater ecosystems.” The Water Rights Division needs to explicitly consider the role of diversions in stressing freshwater ecosystems. In reviewing the effects of the 2012-2016 drought, Lund et. al. noted that “many of California’s aquatic ecosystems remain chronically starved for habitat and water in all years,” and that as a result, “native species enter droughts with diminished and geographically limited populations, only to encounter greater stresses during drought.”⁵ In the Delta, critically endangered Delta smelt populations were likely driven too low to recover^{6,7} from relaxation of minimum Delta flow standards.

Unless the Water Board does a better job of keeping water in our rivers and streams, California’s native aquatic and stream-dependent species *will not survive* climate change.

Instream flow standards

The *Recommendations* state on page 10, “Only limited areas of California have a set of site-specific instream flow standards for the protection of instream beneficial uses. As a consequence, most watersheds in California have no established metrics that the cumulative impacts of diversions can be measured against.” The Water Rights Division needs to more explicitly consider the decades of delays and inaction on determining instream flow needs.

During the 1976-77 drought, Governor Brown created a Commission to Review California Water Rights Law. The blue-ribbon panel was charged with reviewing the Water Code in light of the drought and Article X, Section 2 of the California Constitution on “Reasonable Use” of water. The Commission’s 1978 Final Report⁸ recommended increased protection for instream flows and providing for better management of groundwater.

For instream flows, the Commission proposed:

1. That comprehensive instream flow standards be set on a stream-by-stream basis by the State Water Resources Control Board and that the Board comply with these standards in its administrative and adjudicatory decision making; that instream flow standards be expressed in terms of certain quantities or flows of water which are required to be present at certain points along the stream at certain times of the year to protect fishery, wildlife, recreational, aesthetic, scenic and other beneficial instream uses; and
2. That compliance programs be developed where it is determined that the limitations on administrative actions imposed by the instream flow standards are inadequate to secure the beneficial instream uses of water envisioned by the standards. (p. 129.)

For aquatic ecosystems to survive, the Water Board *must* implement the protections for instream flows called for in the Commission’s 1978 Final Report.

In 1982, the legislature passed a law requiring the Department of Fish and Wildlife to “identify and list those streams and watercourses throughout the State for which minimum flow levels needed to be established in order to assure the continued viability” of fish and stream-dependent wildlife. DFW was then required to prepare proposed “streamflow requirements” for each stream not later than July 1, 1989 (Pub. Res. Code §§ 10001-2.) DFW did not even transmit the identification list to the Water Board until 2008. The transmittal identified 20 priority streams and was accompanied by obsolete and incomplete streamflow studies done over the previous 20 years.⁹ DFW has since proposed only two actual streamflow requirements for the identified streams, for the Big Sur River and Butte Creek.¹⁰

The Water Board and DFW have been participating in the development of the California Environmental Flows Framework, but it is only a framework, not actual streamflow requirements.¹¹ The Water Board must not postpone further consideration of instream flow needs due to the failure of DFW to do the studies mandated in Pub. Res. Code §§ 10001-2.

Protection of High Flows and Refined Definition of “Water Available for Appropriation”

Changing runoff patterns under a changing climate make it critically important to preserve variability in instream flow. Recommendation 7-10 (“Prepare for and Capitalize on Capturing Flood Flows and Storing them Underground”) must be accompanied by rules to protect variability of flows that are greater than required minimum flows. In particular, the Water Board must not consider all water over and above existing diversion allocations and required minimums to be available for appropriation. In short, the Water Board should establish both defaults and site-specific rules that define water available for groundwater storage, particularly in new water rights. For further elaboration, we attach CSPA’s comments on DWR’s 2017 Discussion Draft of the White Paper entitled *Flood MAR – Using Flood Water for Managed Aquifer Recharge to Support Sustainable Water Resources*.

Reasonable Use and the Public Trust Doctrine

In 1983, the California Supreme Court found that “[t]he state has an affirmative duty to take the public trust into account in the planning and allocation of water resources, and to protect public trust uses whenever feasible.” (*National Audubon Society v. Superior Court* (1983) 33 Cal.3d 319, 446.)

In the 2009 Delta Reform Act (Wat. Code § 85023) the legislature mandated that “The longstanding constitutional principle of reasonable use and the public trust doctrine shall be the foundation of state water management policy and are particularly important and applicable to the Delta.”¹²

The constitutional principle of reasonable use and the public trust doctrine *must* be the foundation of all water rights permitting decisions by the Water Board.

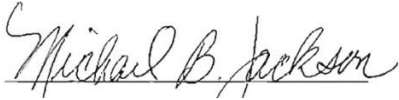
Thank you for your consideration of these comments,



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Attachment: CSPA's comments on DWR's 2017 Discussion Draft of the White Paper entitled *Flood MAR – Using Flood Water for Managed Aquifer Recharge to Support Sustainable Water Resources*.

References

¹ Hanak, E., J. Mount, C. Chappelle, J. Lund, J. Medellín-Azuara, P. Moyle, and N. Seavy. *What if California's drought continues?* PPIC Water Policy Center, 2015.

<https://www.ppic.org/publication/what-if-californias-drought-continues/>.

² Lehr, S. Chief, Fisheries Branch, California Department of Fish and Wildlife, *2014-2015 Drought Response*. Briefing to PSFMC, 8-21-2015. http://www.psmfc.org/wp-content/uploads/2015/09/8-PSMFC-Drought-Briefing-8-21-2015_compressed.pdf

³ Moyle, P. *McCloud River Redband Trout*, CalTrout, 2017. http://caltrout.org/wp-content/uploads/2017/05/MCCLOUD_RIVER_REDBAND-final.pdf

⁴ California Dept. of Fish & Wildlife, NOAA Fisheries, Scott River Water Trust, Siskiyou Resource Conservation District, U.S. Forest Service – Klamath National Forest, *Cooperative Report of the Scott River Coho Salmon Rescue and Relocation Effort: 2014 Drought Emergency, Final Report*, August 2015.

https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprd3850544.pdf

⁵ Lund, J., Medellin-Azuara, J., Durand, J., Stone, K. “Lessons from California’s 2012–2016 Drought” 2018. *Journal of Water Resources Planning and Management*, 2018, 144(10): 04018067. <https://ascelibrary.org/doi/full/10.1061/%28ASCE%29WR.1943-5452.0000984>

⁶ Cannon, T. “Delta Smelt Population Dynamics” California Fisheries Blog, October 19, 2017. <http://calsport.org/fisheriesblog/?p=1858>

⁷ Moyle, P., Börk, K. Durand, J., Hung, T-C, and Rypel, A. “2021: Is this the year that wild delta smelt become extinct?” California WaterBlog, January 10, 2021.

<https://californiawaterblog.com/2021/01/10/2021-is-this-the-year-that-wild-delta-smelt-become-extinct/>

⁸ Governor’s Commission to Review California Water Rights Law, *Final Report*, December 1978. https://digitalcommons.law.ggu.edu/caldocs_agencies/426/

⁹ California Department of Fish and Wildlife, “Flow Recommendations to the State Water Resources Control Board.”

https://www.waterboards.ca.gov/waterrights/water_issues/programs/instream_recommendations/docs/dfw_ifr.pdf.

¹⁰ Department of Fish and Wildlife (CDFW) “Instream Flow Recommendations: CDFW Instream Flow Program,” web page.

https://www.waterboards.ca.gov/waterrights/water_issues/programs/instream_recommendations/index.html.

¹¹ California Environmental Flows Working Group (CEFWG). 2020. *California Environmental Flows Framework*. California Water Quality Monitoring Council Technical Report.

¹² Ibid.