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Board Member California Water Impact Network

BEFORE THE

CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

HEARING IN THE MATTER OF CALIFORNIA DEPARTMENT OF WATER RESOURCES AND UNITED STATES BUREAU OF RECLAMATION REQUEST FOR A CHANGE IN POINT OF DIVERSION FOR CALIFORNIA WATER FIX	TESTIMONY OF THOMAS STOKELY ON PART 2 ISSUES: EFFECTS ON FISH AND WILDLIFE PUBLIC TRUST PUBLIC INTEREST

I, Thomas Stokely, do hereby declare:

I. INTRODUCTION

My name is Thomas Stokely. I am presenting this testimony on behalf of the California Sportfishing Protection Alliance in this evidentiary hearing before the State Water Resources Control Board (State Water Board) concerning the petition to change the point of diversion for the California WaterFix for the State Water Project (SWP) and federal Central Valley Project (CVP), as specified in the licenses and permits of the US Bureau of Reclamation (USBR) and the California Department of Water Resources (DWR).

I am a member of the Board of Directors of the California Water Impact Network (C-WIN). I have been a salmon and water policy analyst with the Pacific Coast Federation of Fishermen's Associations since 2016. I have been working on Trinity River and Central Valley Project issues for approximately 30 years. I spent 23 years as a planner with Trinity County. This included approximately ten years on the NEPA/CEQA Project Team that prepared the environmental documents for approval of the Trinity River Record of Decision as the CEQA

representative for Trinity County. On behalf of Trinity County, I participated in the hearings that resulted in SWRCB Water Quality Order 89-18 and Water Right Order 90-5 (SWRCB-24) regarding temperature management of the Sacramento and Trinity River, as well as the hearings on Decision 1641. I also served as an expert witness for the California Water Impact Network before the SWRCB regarding the 2009 petition by the Bureau of Reclamation and Department of Water Resources for a change in the Place of Use. I have made presentations to the State Board and North Coast Regional Water Quality Control Board six times each regarding the Trinity River and/or selenium issues (State Board only). I have made four presentations before the Central Valley Regional Water Quality Control Board regarding selenium issues and the Grasslands Bypass Project.

My statement of qualifications is CSPA-221.

My testimony will primarily focus on Key Issue 3(c) for this hearing, which asks:

Key Issue 3(c) If so for a and/or b above, what specific conditions, if any, should the State Water Board include in any approval of the Petition to avoid unreasonable effects to fish, wildlife, or recreational uses?

In my testimony for the Pacific Coast Federation of Fishermen's Associations and the Institute for Fisheries Resources (PCFFA-87) I discussed WaterFix and CVP impacts to the Trinity River and how they can be mitigated for the benefit of the Trinity River.

This testimony will describe why the damming of the Trinity River and diversion of a significant portion of the Trinity River's flow at Lewiston to the Sacramento River has not been good for salmon and other species in the Sacramento and San Joaquin rivers and the Bay-Delta. The additional impacts to the Central Valley aquatic species from the WaterFix can be partially mitigated by limiting exports of water from the Trinity River to the Sacramento River, which would benefit aquatic species in both the Trinity/Lower Klamath rivers and the Sacramento/San Joaquin and Bay-Delta systems.

II. TRINITY RIVER DIVISION AUTHORIZED TO IRRIGATE SAN LUIS UNIT OF CVP

The Trinity River Act of 1955 (PL 84-386, CSPA-350) authorized construction and operation of the Trinity River Division of the Central Valley Project. The House and Senate Committee Reports for the Trinity River Act (Pages 4, 7,15, 23 and 27, CSPA-351) specified that a significant portion of the diversions from the Trinity River were intended for the San Luis Unit.

Irrigation of the San Luis Unit of the CVP has increased the mobilization, storage and discharge of salt and selenium to the San Joaquin River, its tributaries and the Bay-Delta according to the Central Valley Regional Water Quality Control Board (Page 2, paragraph 2,[1], CSPA-352) and the U.S. Geological Survey's Report Open File Report-00-416[2] (Page 23, CSPA-353).

The increased irrigation of seleniferous soils in the San Luis Unit can be seen in the map showing expansion of the CVP Place of Use as a result of adding the Trinity River Division (CSPA-354). The map is melded based on Figure 7 on page of USGS Water Resources Investigation 88-4001, 1988[3] (CSPA-355) and Reclamation Map No. 416-208-341 (CSPA-356). The melded map (CSPA-354) clearly shows that damming the Trinity River allowed irrigation of the most seleniferous soils in the San Luis Unit and therefore harming the aquifers and aquatic resources of the San Joaquin River, its tributaries and the Bay-Delta.

[1] See Region 5 WQCB Staff report for public workshop on salt, accessed at https://www.waterboards.ca.gov/rwqcb5/water_issues/basin_plans/cvwb_jt_pub_wkshp/salt_staff_rpt.pdf

[2] https://pubs.usgs.gov/of/2000/ofr00-416/pdf/OFR-00-416.pdf

[3] See "Reconnaissance Investigation of Water Quality, Bottom Sediment, And Biota Associated with Irrigation Drainage in The Tulare Lake Bed Area, Southern San Joaquin Valley, California," 1986-87, By Roy A. Schroeder U.S. Geological Survey and Donald U. Palawski and Joseph P. Skorupa U.S. Fish and Wildlife Service U.S. Geological Survey Water-Resources Investigations Report 88-4001, Accessed at https://pubs.usgs.gov/wri/1988/4001/report.pdf

III. TRINITY RIVER DIVERSIONS TO THE CVP INCREASED DELTA FISH MORTALITY FROM DELTA PUMPING

The diversions of water from the Trinity River have allowed increased Delta pumping, thereby increasing the entrainment and mortality of Delta salmon (Figure 10, Page 19, Kimmerer, 2008[4], CSPA-357). Therefore, diversions of Trinity River water that are exported from the Delta are not good for salmon in the Delta.

IV. TRINITY RIVER DIVERSIONS TO THE SACRAMENTO RIVER HARM SACRAMENTO RIVER SALMON

Trinity River Diversions to the Sacramento River discharging from the Spring Creek Powerplant into Keswick Reservoir are usually much warmer than discharges from Shasta Dam into Keswick Reservoir during hot summer months (CSPA-358)[5].

As I discussed in my testimony for PCFFA and IFR (PCFFA-87), those diversions from the Trinity River to the Sacramento River at Keswick can be both helpful for the Trinity River by keeping Trinity temperatures low with short residence time in Lewiston Reservoir, and harmful through exhaustion of Trinity Reservoir cold water supplies resulting in violation of North Coast Basin Plan Temperature Objectives for the Trinity River.

It is clear that minimizing Trinity River diversions to the Sacramento River during hotter months should be limited to the extent necessary to keep Trinity River release temperatures at Lewiston Dam within acceptable levels without significantly warming the Sacramento River.

V. CONCLUSION AND RECOMMENDATIONS

Damming of the Trinity River and diverting its waters to the Sacramento River and subsequent export from the Delta has not been a good thing for fish and other aquatic life in the Sacramento River, Bay-Delta Estuary and the San Joaquin River. This is the result of warm water discharges into the Sacramento River during hotter times of the year when salmon are reproducing, increased Delta pumping with associated increased fish mortality, as well as

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[4] See https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/docs/cmnt081712/srcsd/kimmerer2008.pdf

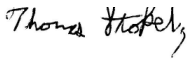
[5] Data from http://cdec.water.ca.gov/cgi-progs/queryF?SPP and http://cdec.water.ca.gov/cgi-progs/queryF?SHD

selenium and salt mobilization, storage and discharge into the San Joaquin, its tributaries and Bay-Delta estuary from increased irrigation of saline/seleniferous soils in the San Luis Unit.

I recommend that in order to minimize any environmental impacts to aquatic resources from construction and operation of the WaterFix, the following mitigation measures should be adopted:

1. Minimize Trinity River diversions to the Sacramento River to the extent necessary to keep Trinity River release temperatures at Lewiston Dam within acceptable levels without significantly warming the Sacramento River,
2. Limit CVP Delta exports to minimize fish mortality, and
3. Minimize irrigation of saline, seleniferous soils within the San Luis Unit and other areas of the San Joaquin and Tulare basins to reduce groundwater and surface water contamination with salt and selenium.

Executed this 29th day of November, 2017 at Mount Shasta, California.



Thomas Stokely