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TESTIMONY OF DAVID BITTS

I, DAVID BITTS, do hereby declare:

#### I. INTRODUCTION

**BUREAU OF RECLAMATION REOUEST** FOR A CHANGE IN POINT OF DIVERSION

FOR CALIFORNIA WATER FIX

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My name is David Bitts. I am presenting this testimony on behalf of the Pacific Coast Federation of Fishermen's Associations (PCFFA) and the Institute for Fisheries Resources (IFR) 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 U.S. Bureau of Reclamation (USBR) and the California Department of Water Resources (DWR).

I am 69 years of age and a commercial fisherman based in my home port of Eureka, CA. I captain my own commercial fishing boat, the F/V Elmarue, which is a 45-foot salmon troller built in 1946. *Elmarue* is a planked wooden boat powered by a 471 Detroit Diesel, with hydraulic steering, autopilot, radar, depth finder, and several GPS units and two-way radios. I also fish for crabs with her in the winter. My long-term average gross incomes from salmon and

Testimony of David Bitts for Part 2 WaterFix Change in Point of Diversion Water Right Hearing PCFFA-86, Page 1

crab fishing are roughly equal, but salmon fishing has a higher net income: the gear is much less expensive, and by fishing alone I don't have to pay crew shares as I do in crab fishing.

I fish for salmon by trolling an array of six 1/16" stainless cables, each with a 20 to 50 pound lead, and each carrying four to eight leaders, each with one lure and one barbless hook. The cables go up and down by means of hydraulically powered winches called gurdies; the leaders I coil by hand. When a leader has a fish on it, I pull the fish to the boat hand over hand, stun it in the water, lift it onto the deck, bleed it, remove the gills and viscera, bleed it again, and chill it in slush within one hour of capture. I store the chilled fish in ice, with belly ice, in the fish hold for a trip which may last up to four days before they are delivered to a processor in port.

I have owned *Elmarue* since 1985, and have been fishing for salmon with her ever since. Before that I crewed on other people's boats, including crabbing and tuna and salmon fishing on the *Silver Spray* with Jim Battle beginning in 1975. I bought my first boat, the 26-foot *Pelican*, in 1976 and fished salmon with it until I got *Elmarue*, crabbing with Battle or others most winters. When I got *Elmarue* I fished crabs with her for three years, then went back to crewing for other people in the crab fishery, mainly Phil Glenn on the *Celtic* and Tommy Wallace on the *Laura Lee*. By the time I started crabbing with *Elmarue* again in 2004, I had crewed on about ten different crab boats. Altogether I have made my living almost entirely from commercial fishing since 1975, except for three years of substitute teaching in the early 1980s. Salmon fishing has been a major component of my income, and often the majority of it, for all of that time. Owing mostly to seasonal restrictions imposed due to Klamath fall chinook escapement goals and allocation decisions, most of my salmon fishing with *Elmarue* has been in the Fort Bragg and San Francisco management areas, with occasional forays into Monterey Bay and points south.

I have also served within the fishing industry in several capacities and with various organizations that advise federal and state fishery managers. Among other positions, I served as elected President of the Humboldt Fishermen's Marketing Association from 1988 to 1992, served as the Governor-appointed representative of California salmon trollers on the Klamath Fishery Management Council from 1992 to 2006, and also served as the Governor-appointed

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determining annual harvest rates in the KMZ and northward. Testimony of David Bitts for Part 2 WaterFix

Change in Point of Diversion Water Right Hearing

California Commercial Fishing Industry Representative on the Klamath River Basin Fisheries Task Force from around 1998 until 2006 when it ceased operations for lack of continued federal funding. In those official capacities I became quite familiar with state and federal management of salmon fisheries both within the Klamath Management Zone (KMZ)<sup>2</sup> and beyond, including management issues in the California Central Valley. I have also been the California troll salmon advisor to the PFMC for the past three years, and in that capacity have learned more than I wanted to know about the effects of Sacramento winter run scarcity on ocean salmon fisheries south of Point Arena.

I also served as Vice-President of the Pacific Coast Federation of Fishermen's Associations (PCFFA) for several years until 2008, and as its President from 2008 to the present, and continue to serve in that capacity. I often represent PCFFA before the Pacific Fishery Management Council and other fishery management bodies. PCFFA is the largest trade association on the west coast representing commercial fishing families and their family fishing businesses. All of PCFFA's member associations are themselves commercial fishing-based organizations, and most of their individual members are engaged in some capacity (either as owner/operators of commercial fishing boats or crew) in the commercial fishing industry, including the U.S. west coast's ocean commercial salmon fishery, which (until recent declines) has traditionally been the financial mainstay of our industry.

Nearly all commercial fisheries are managed on a state-by-state basis. This means that if one does not own a fishing vessel permit to catch fish in a particular state's fisheries, it is illegal to do so. I currently own a California ocean salmon troll fishing permit and a California

Salmon stocks originating from the California Central Valley, which are mostly north-migrating, also greatly influence all KMZ-area fisheries, and are thus analyzed as part of the process of

restricted by the Pacific Fishery Management Council under the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. § 1801 et seq. ("Magnuson Act"). The PFMC was advised by the Klamath Fishery Management Council on salmon management issues.

<sup>1</sup> The Klamath Fishery Management Council and the Klamath River Basin Fisheries Task Force were created by Congress to advise the federal government on fisheries management issues and

salmon habitat and watershed restoration issues, respectively. See P.L. 99-552; 16 U.S.C. § 460ss-460ss-6. <sup>2</sup> The KMZ is the ocean area in which Klamath-origin fall-run Chinook are most densely encountered by ocean fisheries, and in which ocean salmon fishing was first and most drastically

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Dungeness crab permit with a 250 trap limit. I also own a salmon fishing permit issued by the State of Oregon, and thus am able to legally fish in Oregon's state waters and land salmon in its ports. However, because of the nature of the salmon stocks and fisheries in California and southern Oregon, I depend chiefly on the salmon spawned and reared in California river systems. In short, my livelihood as a commercial fisherman is dependent on whatever fishery restrictions are imposed in the State of California, including those imposed to protect California Central Valley stocks when those California Central Valley stocks become the "weak stock" limiting factor on other intermingling fisheries.

I am currently unmarried and have no children; furthermore, my boat, truck, and house are paid for. It would be very difficult to support a family with children on what a fisherman like myself makes, especially in recent years in which more and more fishery restrictions have been imposed.

### LOW CENTRAL VALLEY-ORIGIN SALMON STOCKS CONSTRAIN II. WEST COAST OCEAN SALMON FISHERIES IN CALIFORNIA AND OREGON

Like all west coast salmon fisheries in which many different stocks from different river systems intermingle at sea, the salmon fisheries I and other PCFFA member fishermen participate in are often severely constrained under the principle of "weak stock management." This is the biological requirement that whenever several stocks intermingle at sea, the weakest stock (i.e., the salmon run with the lowest population numbers relative to its potential abundance) becomes the limiting factor for ocean commercial salmon fisheries, even when other stocks are much more abundant. In other words, if the projected minimum spawner goal on a certain intermingling weak stock cannot be met, all fishing that might affect that weak stock must be limited or significantly curtailed – otherwise, incidental catch of the weak stock would become too great and it might not be able replace itself in the next generation. This is a biological principle as well as a management principle required by law.

California Central Valley-origin Chinook salmon stocks, normally the bread and butter of California and Oregon fisheries, have at times been very weak, and the winter-run Chinook, a unique salmon run found only in the upper California Central Valley, has been particularly weak

in many years, which is why it is listed under the Endangered Species Act (ESA). The Sacramento River spring-run Chinook salmon is also ESA listed. Weak California Central Valley Chinook stocks have triggered significant California salmon fishery restrictions in recent years.

California and Oregon salmon fishing was closed completely in 2008 and 2009, with a devastating impact on the salmon fishing industry. 2010 saw a highly limited commercial fishery, mostly above Pt. Arena, due to Sacramento fall run stock concerns.

In 2016 and 2017, concern for the status of winter run, for reasons described below, led CDFW to prescribe constraints on salmon fisheries below Pt. Arena beyond those called for in the 2010 NMFS Biological Opinion: commercial fishing was closed from mid-July on south of Pigeon Point all the way to the border with Mexico. While salmon trollers did not like these restrictions, we found them difficult to argue against given the need to preserve future year classes of listed fish as well as our livelihoods in future seasons.



Figure 1: Alana Semuels / Los Angeles Times, Dec 2009. Abandoned salmon fishing boats

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## are collected in Bruce Abernathy's yard in Fort Bragg.<sup>3</sup>

California salmon fishery failures and fishery resource disasters driven by exceptionally weakened California Central Valley-origin Chinook stocks were officially declared by then-Secretary of Commerce Carlos M. Gutierrez on May 1, 2008, and then extended to the 2009 season on April 30, 2009 by later Secretary of Commerce Gary Locke as authorized by the Magnuson-Stevens Fishery Conservation and Management Act and the Interjurisdictional Fisheries Act. One of the identified causes of these Central Valley Chinook population collapses was lack of sufficient water left in the rivers to support these fish.

The National Marine Fisheries Service ("NMFS") produced a technical memo in 2009 on contributing factors to the low salmon returns in 2007 and the collapse of the West Coast salmon fishery in 2008, entitled, "What Caused the Sacramento River Fall Chinook Stock Collapse?" (Exhibit PCFFA-132.) In the memo, NMFS found that the degradation of freshwater habitat and reduction in diversity of life-histories of Sacramento River Chinook were major contributing factors:

The long-standing and ongoing degradation of freshwater and estuarine habitats and the subsequent heavy reliance on hatchery production were also likely contributors to the collapse of the stock. Degradation and simplification of freshwater and estuary habitats over a century and a half of development have changed the Central Valley Chinook salmon complex from a highly diverse collection of numerous wild populations to one dominated by fall Chinook salmon from four large hatcheries. Naturally-spawning populations of fall Chinook salmon are now genetically homogeneous in the Central Valley, and their population dynamics have been synchronous over the past few decades. (p. 5.)

Reducing life history diversity also makes Sacramento River Chinook more vulnerable to climate change. As NMFS noted in 2009:

We have observed a trend of increasing variability over the past several decades in climate indices related to salmon survival. This is a coast-wide pattern, but may be particularly important in California, where salmon are near the southern end of their range. These more extreme climate fluctuations put additional strain on salmon populations that are at low abundance have little life-history or habitat diversity. If the trend of increasing climate variability continues, then we can expect to see more extreme variation in the abundance of SRFC and salmon stocks coast wide. (p. 5.)

<sup>&</sup>lt;sup>3</sup> Alana Semuels, LA Times, North Coast towns dealt a double economic blow as salmon fishing ban continues. Exhibit PCFFA-131. Obtained from http://latimesblogs.latimes.com/money\_co/2009/12/salmon-fishing.html

This is precisely what happened in the 2013-2016 drought, with catastrophic impacts on the salmon fishery. The winter-run Chinook population was further weakened in 2014 and 2015 with the loss of an estimated 95% of the 2014 winter-run brood of juvenile salmon, and an estimated 97.9% of the 2015 winter-run brood of juvenile salmon, which NMFS attributed to freshwater temperature-associated mortality. The increasing precariousness of the winter-run and spring-run Chinook populations further constrains commercial salmon harvests, which in turn further threatens my and other fishing men's and women's livelihoods.

California Central Valley-origin fall Chinook are highly migratory, and once the juvenile salmon reach the ocean in any year, many of them travel north in the ocean in search of colder water upwelling, which stimulates the primary production in the ocean that drives the marine food web. Ocean salmon harvests on the Central Oregon coast are normally at least 50 percent composed of California-origin fall Chinook, most originally from the California Central Valley. Hence, whatever the strength (or lack of numbers) of the highly migratory California Central Valley fall Chinook, this factor greatly influences ocean commercial salmon seasons in Oregon as far north as Cape Falcon, about 30 miles below the mouth of the Columbia River. Thus 2008 and 2009 Central Valley salmon-run collapses also triggered state fishery disaster declarations in the State of Oregon.

Of the roughly 1000 licensed salmon troll vessels in California, in 2016 only a little over 400 landed salmon; few of their owners are able to earn a living solely from salmon fishing anymore. Unless the State Water Resources Control Board acts now to require adequate flows and adequate carryover storage to maintain all Sacramento River Chinook salmon runs and all life histories, the salmon fishing industry in California and Oregon could disappear. To the extent that the changes in point of diversion that are the subject of this hearing adversely affect the in-river flow levels that support salmon fisheries, those changes threaten the livelihoods of myself and every other California and Oregon salmon fisherman.

Based on these observations, it is clear that my own livelihood, as well as the livelihoods of many other commercial ocean salmon fishermen in both California and Oregon, many of which are PCFFA members or belong to a PCFFA-affiliated local fishermen's port association,

are directly affected by water flows and water temperature in the California Central Valley irrigation system, which in turn are determined in large part by water diversions in the Sacramento River.

### III. CONCLUSION

Based this testionny, it is clear that the Water Board must rule against the change in point of diversion in order to protect the beneficial use of commercial salmon fishing, preserve the public trust, and minimize unreasonable impacts to fish and wildlife.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct, and that I executed this declaration November 30, 2017 in MCKINLEYVILLE, California.

David Bitts