21 July 2015

Mr. Thomas Howard
Executive Director
Ms. Barbara L. Evoy
Deputy Director, Division of Water Rights
State Water Resources Control Board
1001 “I” Street, 24th Floor
Sacramento, CA 95814

VIA: Electronic Submission
Hardcopy if Requested
Barbara.Evoy@waterboards.ca.gov


Dear Mr. Howard and Ms. Evoy:

The California Sportfishing Protection Alliance (CSPA) hereby submits a complaint against the State Water Resources Control Board (SWRCB), United States Bureau of Reclamation (USBR) and California Department of Water Resources (DWR) for violations of the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Delta Estuary (Bay-Delta Plan) and violations of D-1641 implementing requirements of water quality standards, Clean Water Act (CWA), Endangered Species Act (ESA), Public Trust Doctrine and the California Constitution.

Specifically, CSPA alleges that the SWRCB’s sequential weakening of D-1641 requirements violates the federal CWA and represents a de facto change in the standards themselves, that the SWRCB has failed to enforce Bay-Delta water quality standards and has failed to enforce its 2010 Cease & Desist Order against USBR and DWR for violations of southern Delta salinity standards, that USBR and DWR are presently violating water quality standards protecting fish & wildlife and agricultural beneficial uses, and that USBR and DWR have failed to comply with the SWRCB 2010 Cease & Desist Order. CSPA additionally alleges that the SWRCB, USBR and DWR have failed to comply with their respective responsibilities and obligations under the ESA, Public Trust Doctrine and Article X of the California Constitution.

We incorporate by reference the protests, objections, exhibits and workshop comments and presentations that CSPA et al., the Bay Institute, Restore the Delta and Sequoia Forestkeeper et al. have previously made during the 2014 and 2015 SWRCB proceedings regarding USBR and DWR’s Temporary Urgency Change Petitions (TUCPs) for the operation of the State Water Project and Central Valley Project.
Given the impending extinction of Delta smelt and possibly several other species, we ask the SWRCB to act expeditiously in responding and requiring USBR and DWR to respond to the allegations herein and to immediately reestablish D-1641’s critical year requirements for the protection of fish and wildlife.

Dr. Peter Moyle has been publicly quoted as predicting the imminent demise of Delta smelt. Agency biologists have privately told us “they’re gone.” Should Delta smelt perish, it will not be the drought that sent them into extinction: it will be the failure of the SWRCB to comply with and enforce minimal standards for drought sequences that it adopted to prevent such catastrophe. Fallowed fields will be replanted when the drought is over; extinct species are forever lost. It would be tragic if the SWRCB’s legacy were that its failure to comply with the law sent species that evolved and prospered over millennia into extinction. And longfin smelt are next in line.

**Violations of Bay-Delta Standards & D-1641 Requirements**

The federal CWA requires the adoption of water quality standards consisting of the designated uses of navigable waters and the water quality criteria or objectives necessary to protect those designated uses. Antidegradation requirements are an integral part of water quality standards.

The current water quality objectives in the 2006 Bay-Delta Plan for the San Francisco Bay/Sacramento-San Delta Estuary are the same as those in the 1995 Water Quality Control Plan. Many of those objectives were also in the 1978 Bay-Delta Plan.

The SWRCB’s Decision 1641, issued in 2000, is the current implementation plan for Bay-Delta water quality standards. Implementation plans that do not protect the designated use of the waters do not comply with applicable water quality standards. D-1641 contains objectives to protect fish and wildlife, agricultural, municipal and recreational designated beneficial uses of the Bay-Delta estuary. Those objectives are expressed as narrative, concentration and or flow.

There is continuing disagreement between the SWRCB and U.S. Environmental Protection Agency (USEPA) concerning whether the CWA regulates the quantity of water or flow. However, flow and constituent concentration are flip sides of the same coin. Reductions in flow increase the concentration of pollutants. The U.S. Supreme Court observed that a lowering of quantity or flow could destroy all of the beneficial uses of a river, and specifically that “… there is recognition in the Clean Water Act itself that reduced stream flow, *i.e.*, diminishment of water quantity, can constitute water pollution.” *PUD No. 1 of Jefferson County v. Washington Department of Ecology*, (1994), 511 U.S. 700, 17.

This complaint addresses violations of agricultural objectives, expressed as concentration, and fish and wildlife objectives, expressed as both flow and concentration. For example, fish and wildlife objectives are expressed as both minimum Delta outflow and salinity concentration. However, the preferred habitat of estuarine species like Delta and longfin smelt is predicated on the concentration of salinity. A key to Delta smelt abundance, $X_2$, is determined by the concentration of salinity and not by flow.
In an effort to avoid having to secure USEPA approval, the SWRCB suggests that it only modified the implementation of water quality objectives and not the objectives themselves. However, the sequential or serial weakening of standards and refusal to enforce violations of standards constitutes a de facto change in the standards themselves, especially when the serial weakening of and failure to enforce standards is replicated over decades in similar situations.

In 2013, the SWRCB Executive Director allowed USBR and DWR to operate to critical year criteria, without being subject to enforcement, instead of to the prevailing dry year criteria. In 2014, the Executive Director issued a series of TUCP Orders substantially weakening and extending the modifications of water quality objectives and requirements on 31 January, 7 February, 14 February, 28 February, 18 March, 9 April, 11 April, 18 April, 2 May and 7 October. The SWRCB denied multiple objections and petitions for reconsideration of the TUCP Orders on 24 September 2014. So far in 2015, the Executive Director has issued a series of TUCP Orders modifying and weakening water quality objectives and requirements on 3 February, 5 March, 6 April and 3 July.

Beyond the SWRCB’s de facto weakening of Bay-Delta water quality objectives, the USBR and DWR have failed to comply with even the modified objectives. Violations of salinity standards at Threemile Slough and Jersey Point have occurred in 2015 and are continuing. Additionally, the sequential Cease & Desist Order compliance schedules adopted by the SWRCB in WR Orders 2006-0006 and 2010-0002 that allowed USBR and DWR to avoid actual compliance with southern Delta salinity objectives have expired and USBR and DWR are now in violation of WR Order 2010-0002 and the southern Delta salinity objectives at Old River Near Tracy, Old River near Middle River and San Joaquin River at Brandt Bridge. Further, the Vernalis salinity objective was violated on 5 days in July 2015.

This pattern and practice has replicated itself over decades. For example, during the 1987-1992 drought, D-1485 Bay-Delta standards were violated 246 times in the period from 1988 through 1991, and the SWRCB declined to take enforcement action. In 1992, the SWRCB, citing an effort to preserve sufficient cold water in Shasta Reservoir to meet temperature requirements for spawning salmon, weakened Suisun Marsh salinity and Rock Creek chloride requirements in WR Order 92-02. Of particular note, the SWRCB, referencing WR Order 90-05, stated in WR 92-02 at page 9:

> The State Water Board also has advised the USBR that decisions on water deliveries are subject to the availability of water, and that water should not be considered available for delivery if it is needed as carryover to maintain an adequate cold water pool for the fishery.

However, the USBR and DWR have ignored that advice and have continued to maximize water deliveries in the initial years of drought sequences and failed to maintain sufficient carryover storage to protect fisheries and public trust resources. The pattern and practice of delivering near normal water supplies in the early years of drought, depleting carryover storage and then relying on the SWRCB to weaken water quality standards has been extensively discussed and documented in previous protests, objections and SWRCB TUCP workshops and is incorporated by reference and need not be repeated here.
Violations of Bay-Delta Agricultural Salinity Objectives

Water quality objectives contained in the Bay-Delta Plan include salinity standards to protect agricultural beneficial uses. Table 2 objectives include electrical conductivity (EC) requirements of 2.78 mmhos/cm in the Sacramento River at Emmaton between 1 April and 15 August of critical dry years; EC requirements of 2.20 mmhos/cm in the San Joaquin River at Jersey Point between 1 April and 15 August of critical dry years and EC requirements of 0.7 mmhos/cm (April-August) and 1.0 mmhos/cm (September-March) at four locations in the South Delta (Vernalis, Brandt Bridge, Old River near Middle River and Old River at Tracy Road) in all years.

On 6 April 2015, the SWRCB Executive Director approved a Temporary Urgency Change Petition submitted by USBR and DWR to move the Emmaton EC compliance location to Threemile Slough from April through June. On 30 June 2015, the Executive Director provided interim approval of a subsequent TUCP, and, on 3 July he issued an order approving an extension of the relocated Emmaton objective to Threemile Slough until 15 August 2015. This action was similar to an action in the 2014 TUCP Order by the Executive Officer that moved the compliance point to Threemile Slough.

Had the SWRCB Executive Director not relocated the Emmaton compliance point, EC would have violated objectives on or about 1 May 2015, when the 14-day running average EC was 2.81 mmhos/cm, and would be ongoing in the present. As of 16 July 2015, 14-day running average EC at Emmaton was 5.26 mmhos/cm. During 2014, the Emmaton objective was exceeded on or about 26 May, and exceedances continued through 23 July.

Beginning on 7 July 2015, the EC objective of 2.78 mmhos/cm at the relocated Threemile Slough compliance point has been violated. The 14-day running average EC concentrations stated respectively for each day were 2.85, 2.94, 3.03, 3.09, 3.11, 3.15, 3.18, 3.20, 3.21, 3.18, 3.14, 3.01, 2.91 and 2.84 mmhos/cm from 7 through 21 July. The 15-minute EC data from the DWR gage at Threemile Slough is included in Attachment A. As of this writing, violations are continuing.

Beginning on 8 July 2015, the EC objective of 2.20 mmhos/cm at Jersey Point has been violated. The 14-day running average EC concentrations stated respectively for each day were 2.204, 2.234, 2.242, 2.233, 2.250, 2.239 and 2.238 and 2.231 and 2.219 and 2.207 mmhos/cm from 8 through 17 July. The 15-minute EC data from the USBR gage at Jersey Point is included in Attachment A.

USBR and DWR have not requested changes regarding salinity objectives at compliance stations in the South Delta in any of their 2014 and 2015 TUCPs and no changes or variances have been granted. D-1641 included a 5-year time schedule to meet the southern Delta 0.7 mmhos/cm EC objective. The objective became effective on 1 April 2005. Violations occurred. The SWRCB, in Order 2006-0006, issued a Cease & Desist Order that required USBR and DWR to take corrective actions in accordance with another time schedule in order to obviate violations of water quality objectives for EC by 1 July 2009. Violations continued. The SWRCB extended
the compliance deadline yet again in Order 2010-0002. CSPA and South Delta Water Agency petitioned for reconsideration of Order 2010-0002 but the SWRCB denied both petitions.

Order 2010-0002 required USBR and DWR to implement measures to obviate the threat of non-compliance with South Delta EC objectives and to submit a detailed plan and completion dates for actions that would ensure compliance. Order 2010-0002 extended the timeline for compliance to allow the SWRCB time to consider the possibility of modifying the responsibilities of USBR and DWR for meeting the objective, as part of its 2006 review of the 2006 Bay-Delta Plan. However, Order 2010-0002 explicitly states that “the pending proceeding to consider changes to the interior southern Delta salinity objectives and associated program of implementation and any subsequent water right proceeding shall be deemed to have been completed if the State Water Board has not issued a final order in the water right proceeding by January 1, 2013, unless the Deputy Director for Water Rights determines that the water right proceeding has been initiated, is proceeding as expeditiously as reasonably possible, and will be completed no later than October 1, 2014.” Emphasis added.

After three consecutive compliance deadlines have expired, violations of southern Delta EC objectives continue. Pursuant to the 2010-0002 Cease & Desist Order, the “compliance schedule” concluded on 1 January 2013 because a 2006 Bay-Delta Plan water rights proceeding was not underway and could not be successfully concluded by October 2014. The USBR and DWR have failed to provide a detailed plan and completion date for coming into compliance with salinity objectives and are presently violating those objectives. We have documented more than 1,400 days of violations of the 1.0 or 0.7 mmhos/cm EC objective at the Old River at Tracy Road compliance site alone since April of 2007, including every day this year. In fact, between 10 June and 15 July 2015, all three southern Delta locations have violated the 30-day running average EC objective everyday and the EC objective at Vernalis was violated 7-9 July.

In summary, from 1 January through the end of 14 July 2015, legally promulgated water quality criteria in Table 2 of the Bay-Delta Plan to protect agricultural beneficial uses was exceeded numerous times: specifically, Emmaton salinity criterion was exceeded at least 79 days; Old River Near Tracy salinity criterion was exceeded at least 199 days; San Joaquin River at Brandt Bridge salinity criterion was exceeded at least 96; days and Old River near Middle River salinity criterion was exceeded at least 40 days. In July 2015, the modified 14-day running average salinity criterion at Threemile Slough was exceeded 7 July and continues to be exceeded, the 14-day salinity criterion at Jersey Point was exceeded 8 July through 17 July and the 30-day salinity criterion at Vernalis on the San Joaquin River was exceeded 7 - 11 July. The USBR and DWR have failed to provide a plan and date for achieving compliance with southern Delta salinity criteria and, consequently, have been violating the SWRCB’s Cease & Desist Order since 1 January 2013 (566 days, as of 20 July 2015).

Violations of Bay-Delta Fish and Wildlife Salinity Objectives

Table 3 of the Bay-Delta Plan contains Delta outflow requirements, several of which are also expressed as salinity concentration. For critically dry years, the requirements mandate a minimum monthly average Net Delta Outflow Index (NDOI) of 7,100 cubic feet per second (cfs) or a daily average or 14-day running average of EC less or equal to 2.64 mmhos/cm at
Collinsville. For July, August, September and October of critically dry years, the requirements are an NDOI of 4,000, 3,000, 4,000 and 3,000 cfs, respectively. During dry years, the July, August, September and October requirements are 5,000, 3,500, 4,000 and 4,500 cfs, respectively.

As noted above, so far in 2015, the Executive Director has issued a series of TUCP Orders modifying and weakening water quality objectives and requirements on 3 February, 5 March, 6 April and 3 July. The 2 February TUCP Order reduced NDOI requirements and salinity objectives from 7,100 cfs/2.64 mmhos/cm requirements to 4,000 cfs, increased allowable exports when the 7,100 cfs objective wasn’t being met, allowed the Delta Cross Channel Gates to be opened under certain circumstances and reduce San Joaquin River flow requirements from 710/1,140 to 500 cfs.

The 5 March TUCP Order exempted water transfers from export provisions and increased exports when outflow was between 5,500 and 7,100 cfs. The 6 April extended outflow/salinity and export requirements through June, shifted the time period and reduced the volume of the San Joaquin pulse flow from 3,110 to 710 cfs, reduced minimum San Joaquin River outflow requirements to 300 cfs in May and 200 cfs in June and moved the Western Delta salinity compliance point on the Sacramento River at Emmaton to Threemile Slough.

The 3 July TUCP Order reduced Delta outflow requirements in July from 4,000 to 3,000 cfs, with a 7-day running average of no less than 2,000 cfs, reduced the minimum Sacramento River flow requirements at Rio Vista from 3,000 cfs (September, October) and 3,500 cfs in November to a monthly average of no less than 2,500 cfs, with a 7-day average of no less than 2,000 cfs and extended the change in the salinity compliance point from Emmaton to Threemile Slough on the Sacramento River through 15 August.

From 1 January through the end of June 2015, legally promulgated water quality criteria in Table 3 of the Bay-Delta Plan to protect fish and wildlife beneficial uses were exceeded numerous times. Specifically, Delta outflow criterion was exceeded approximately 124 days, Collinsville salinity criterion was exceeded at least 146 days and San Joaquin River flow criterion was exceeded approximately 112 days.

**Violations of the Public Trust and Article X of the California Constitution**

Article X, Section 2 of the California Constitution provides that:

> The right to water or to the use of the flow of water in or from any natural stream or water course in this state is and shall be limited to such water as shall be reasonably required for the beneficial use to be served, and such right does not and shall not extend to the waste or unreasonable use or unreasonable method of use or unreasonable method of diversion of water.

Because of this Constitutional requirement, the SWRCB must consider the reasonableness of a particular method of diversion of water when evaluating (or reevaluating) all permitted uses of water and the requirements controlling those uses. “The limitations of Art. X, Section 2 … apply to all water users of the state and serve as a limitation on every water right and method of
diversion.” See *Yuba River D-1644* at p. 29. Both USBR and DWR are water users subject to Article X, Section 2 in the operation of their respective projects in the Central Valley.

Considering the conditions of drought which are described in the “drought emergency” declared by Governor Brown - the curtailments of water rights, the waiver of D-1641 standards to protect fish and wildlife and water quality in the Delta watershed - it is time for the SWRCB to declare flood irrigation by agriculture during the drought emergency a waste and unreasonable use until the emergency is over.

If the SWRCB can require urban conservation, it can also require conservation in agriculture. Flood irrigation in the Sacramento Valley in particular is unreasonable when the endangered salmon are facing extirpation. Increased evaporation from spreading water on the ground alone likely uses more stored water than that needed to save the fishery.

Alfalfa and irrigated pasture alone consumes 8.6 MAF of water in California and provides low net revenue and few jobs. The SWRCB can and must reduce the quantity of water allocated to irrigated pasture and low-value crops like alfalfa that use prodigious amounts of water during the drought emergency. To continue this use is unreasonable and a waste of water and must be stopped or reduced until the drought emergency is declared over.

The continued killing of threatened and endangered species by obsolete and non-protective export pumping facilities simply because the state and federal water contractors refuse to pay for new state-of-the-art fish screens is an unreasonable method of diversion. This is especially true when water diverted through those facilities deprives listed species of water and primary production necessary for survival. The SWRCB can and must curtail south Delta exports during the drought emergency until D-1641 water quality standards are met.

The SWRCB must also consider public trust issues in proceedings that concern water rights and water quality based on reserved jurisdiction or under the doctrine of reasonable use. The SWRCB may also modify permits of “the projects” that require the appropriator to reduce the quantity of exports. *United States v. SWRCB* (1986) 182 Cal.App. 3d 82, 124-131. The SWRCB has a complaint procedure that can exercise authority over both federal and state water projects by virtue of having state water rights permits issued by the Board.

The State’s management responsibilities include broad discretion to promote trust uses, such as the continued survival of the Bay/Delta estuary and dependent endangered species, provided the discretion is exercised consistent with constitutional and statutory constraints. *People v. California Fish Co.* (1913) 166 Cal. 576, 597. While the State has discretion to promote trust issues, the SWRCB has “an affirmative duty” to protect trust resources. See *Illinois Central Railroad v. Illinois*, 146 U.S. 387; and *National Audubon Society v. Superior Court* (1983) 33 Cal.3d 419 (The state may not abdicate its supervisory role any more than the state may abdicate its police power); see also Stevens, The Public Trust: *A Sovereign’s Ancient Prerogative Becomes the People’s Environmental Right*, 14 U.C. Davis Law Review 195, 223.

Fish and wildlife are natural resources unequivocally protected by state sovereignty, whereby ownership of the resource is reserved to the states. *Geer v. Connecticut*, (1896) 161 U.S. 519.
The court in *Audubon v. Superior Court*, (1983) 33 Cal.3d. 419 held that “no one may obtain a vested right to undertake an act that is harmful to the trust.” See also *SWRCB D-1644* (Yuba River) at page 29. The supremacy of the public trust over private individuals is reflected in a “judicial presumption against state or legislative alienation of trust resources.” *People v. California Fish*; see also *Illinois Central v. Illinois* (1892) 146 U.S. 387; *Montana v. U.S.*, (1981) 450 U.S.544. Historically, state sovereign ownership was limited to “the traditional triad of uses” – commerce, navigation, and fishing.

However, in 1971 the California Supreme Court expanded the protected uses to cover the environment generally. *Marks v. Whitney* (1971) 6 Cal 3d. 251, 259-260. State sovereign ownership imposes restraints on the state’s discretion regarding the use of navigable waters. The use of trust resources must be consistent with the general trust purposes or it is invalid. *State of California v. Superior Court* (Lyon) (1981) 29 Cal 3d. 210, 220-230; *Marks v. Whitney*, supra; *City of Long Beach v. Mansell*, (1970) 3 Cal 3d. 462, 482-485. Preservation of a public trust resource such as the San Francisco Bay/Delta estuary is a legitimate disposition of the public trust resource, and is consistent with general trust purposes. Thus, tidelands and water may be burdened with a negative easement against any active use or disposition of the trust reserve. Id; *National Audubon*, supra; *State of California v. Superior Court* (Fogerty), (1981) 29 Cal 3d. 240, 249-250.

Consequently, the SWRCB has both the authority and responsibility under its reserved jurisdiction in the permits and licenses of the USBR and DWR, and under its continuing authority and responsibilities pursuant to the public trust and reasonableness doctrine to protect fisheries, public trust resources and beneficial uses. To protect those resources and uses, it established minimum water quality objectives and requirements for critical dry years in the Bay-Delta Plan and D-1641.

USBR and DWR’s pattern and practice of delivering near normal water supplies in the early years of drought, depleting carryover storage and then relying on the SWRCB to weaken water quality standards established to protect public trust resources as successive dry years occur has been amply documented in multiple documents and TUCP proceedings over the last several years. The SWRCB has failed to establish minimum reservoir storage levels that ensure compliance with water quality standards protective of public trust resources. When successive dry years occur, it then routinely weakens those standards, with little regard to its public trust and constitutional obligations.

To weaken those water quality objectives and requirements simply because USBR and DWR recklessly delivered water that was otherwise necessary to maintain sufficient carryover storage to comply with water quality objectives and to protect public trust resources and agricultural beneficial uses in the Delta is a violation of Public Trust Doctrine and the California Constitution. To send fisheries into extinction while continuing to supply water for low value crops like pasture and alfalfa is an unreasonable use of water.

It is not the SWRCB’s responsibility or legal right to sacrifice public trust resources and Delta beneficial uses in order to absolve USBR and DWR of the consequences of their egregious mismanagement. If customers of water contractors are now suffering because USBR and DWR
failed to exercise prudence and due diligence in water management and rashly delivered near normal water supplies in initial drought years with little thought that another dry year might occur, it is USBR and DWR and not the SWRCB that have the responsibility to alleviate the suffering they caused.

The SWRCB has failed to balance the public trust. The California Legislature, in the Sacramento-San Joaquin Delta Reform Act of 2009, mandated the SWRCB to develop new flow criteria for the Delta ecosystem that are necessary to protect public trust resources. Following an extensive public proceeding, the SWRCB prepared a report titled “Development of Flow Criteria for the Sacramento-San Joaquin Delta Ecosystem.” The SWRCB’s 2010 Report stated: “Recent Delta flows are insufficient to support native Delta fishes for today’s habitats” and recommended 75% of unimpaired Delta outflow from January through June, 75% of unimpaired Sacramento River inflow from November through June and 60% of unimpaired San Joaquin River inflow from February through June as necessary to protect public trust resources. While the flow report did not balance the public trust against other beneficial uses or consider economics, it did conclusively establish that present flows are seriously insufficient to protect public trust resources.

The Legislature also mandated the California Department of Fish and Wildlife (DFW) to develop Quantifiable Biological Objectives and Flow Criteria for Aquatic and Terrestrial Species of Concern Dependent on the Delta. Following an extensive public proceedings throughout 2010, the DFW’s report mirrored the conclusions and recommendations contained in the SWRCB flow report.

Five years after those reports were issued, the SWRCB has not begun to balance the public trust. It has, however, significantly weakened water quality standards and Delta flows. Fisheries have continued to decline and we are now faced with the imminent likelihood that one or more native species will become extinct.

An example of the SWRCB’s egregious failure to even attempt to balance the public trust is demonstrated in the paucity of flows allocated to protect water quality and fisheries in July 2015. Releases from upstream-of-Delta rim reservoirs (Keswick, Whiskey Town, Oroville, Bullards Bar, Folsom, Camanche, New Hogan, New Melones, Don Pedro, New Exchequer and Friant) averaged 22,039 cfs or 43,703 AF daily 1 July through 19 July. Delta outflow for the same period averaged 2,990 cfs or 5,928 AF, most of which was necessary to allow operation of the state and federal project export pumps. In other words, under the most favorable light, only 13.6% of reservoir releases were allocated to protect fish and wildlife and Delta agricultural beneficial uses. The situation is even more bizarre on the San Joaquin River. Between 1 and 19 July, only 2.9% of flows released from New Melones, Don Pedro, New Exchequer and Friant reached the Delta. Whatever represents a reasonable public trust balancing, it is not 2.9% or 13.6% of flow, as water quality standards are violated and listed fish species plunge toward extinction.

Another example of the disregard for the public trust was provided in SWRCB staff’s presentation on Sacramento-San Joaquin Watershed Use at the SWRCB 20 May 2015 Workshop on the TUCP, Emergency Drought Barrier, and Water Right Curtailments. Staff revealed that
the 2015 TUCP Orders had reduced regulatory outflow by 78% to allow export pumping to increase by 46%. Increasing water exports is apparently a higher priority to the SWRCB than protecting water quality, critical habitat for listed species and public trust resources.

Violations Are Likely to Cause or Contribute to Extinction of Species

Since DWR’s State Water Project began exporting water from the Delta, the DFW Fall Midwater Trawl indices for striped bass, Delta smelt, longfin smelt, American shad, splittail and threadfin shad have declined by 99.7, 97.8, 99.9, 91.9, 98.5 and 97.8 percent, respectively. The U.S. Fish & Wildlife Service’s (USFWS) Anadromous Fisheries Restoration Program (AFRP) documents that, since 1967, in-river natural production of Sacramento winter-run Chinook salmon and spring-run Chinook salmon have decline by 98.2 and 99.3 percent, respectively, and are only at 5.5 and 1.2 percent, respectively, of doubling levels mandated by the Central Valley Project Improvement Act, California Water Code and California Fish & Game Code. Numerous species have been listed pursuant to state and federal endangered species acts.1

Populations of Bay-Delta fisheries plummeted during the 1987-1992 period and have never recovered from the impacts resulting from the serial violations of water quality objectives. Winter-run Chinook salmon were listed as threatened under the federal ESA emergency interim rule and endangered under the California Endangered Species Act (CESA) in 1989. Delta smelt were listed as threatened under both state and federal endangered species in 1993. Many of the noxious invasive species that have been identified as adversely impacting native fisheries became established and/or entrenched during that period.

The estuary’s pelagic and anadromous fisheries have continued to decline since the 1987-1992 period. And now, the further weakening of water quality standards in 2013-2015 threatens to catapult several species into extinction.

For example, the 2014 Fall Midwater Trawl, 2015 Spring Kodiak Trawl and Summer Townet Delta smelt indices were the lowest in history. The Summer Townet index for Delta smelt was 0.0. Trawl #8 of the 20-mm Survey, conducted in late June, found only a single Delta smelt in Sacramento River at Threemile Slough, no longfin smelt and few striped bass. Compared to 2012, the 2015 trawl #8 of the 20-mm Survey catch-per-unit-effort of Delta smelt, striped bass and longfin smelt were down 98.9, 98.0 and 100 percent, respectively. Perhaps most alarmingly, the Survey identified no Delta smelt in Cache Slough and the Sacramento Deep-Water Ship

1 Southern DPS green sturgeon (Acipenser medirostris), federal threatened, candidate for federal endangered; Delta smelt (Hypomesus transpacificus), state endangered, federal threatened; Longfin smelt (Spirinchus thaleichthys), state threatened; Central Valley steelhead (Oncorhynchus mykiss), federal threatened; Sacramento winter-run Chinook salmon (Oncorhynchus tshawytscha), state endangered, federal endangered; Central Valley spring-run Chinook salmon (Oncorhynchus tshawytscha), state threatened, federal threatened; Central Valley fall/late-fall-run Chinook salmon (Oncorhynchus tshawytscha), federal species of concern, state species of special concern; Sacramento splittail (Pogonichthys macrolepidotus), state species of special concern; Pacific lamprey (Entosphenus tridentate), federal species of concern and river lamprey (Lampetra ayresi), state species of special concern. The state and federal Project also have the potential to adversely affect Killer whales or Orcas (Southern Resident DPS) (Orcinus orca), federally listed as endangered because they are dependent upon Chinook salmon for 70% of diet and reduced quantity and quality of diet is one of the major identified causes of their decline.
Channel and trawl #9 found only one. The northern population of Delta smelt seems to have, as expected, succumbed to excessive temperature.

Delta smelt are at extreme risk of imminent extinction. There are multiple threats to the Delta Smelt population that contribute to its vulnerability and risk of extinction. Chief among these threats are reductions in freshwater inflow to the estuary; loss of larval, juvenile and adult fish at the state and federal Delta export facilities and urban and agricultural water diversions; direct and indirect impacts of the Delta Smelt’s planktonic food supply and habitat; and lethal and sub-lethal effects of warm water and toxic chemicals in Delta open-water habitats.

Weakened water quality objectives and failure to enforce objectives have significantly reduced Delta outflow, increased Delta salinity and moved the Low Salinity Zone further upstream (eastward) into the Delta, thereby increasing the degree of each of these threats. Presently, remnants of the population are confined to a small area of the Low Salinity Zone where water temperatures have been significantly above levels identified in the literature as highly stressful and barely below the lethal endpoint.

The continued violations of Bay-Delta Plan and D-1641 objectives and requirements are an obvious and direct threat to the remnants of Delta smelt living in the Low Salinity Zone. Allowing these “weakened standards” to be violated is a direct disregard for the remaining population, placing them under extraordinary risk by bringing them further into the zone of water diversions, degrading their habitat into the lethal range of water temperature, further degrading their already depleted food supply, and increasing the concentrations of toxic chemicals being discharged into the Delta.

The various Biological Reviews, agency concurrence letters and the SWRCB’s TUCP Orders acknowledge the manifold threats to Delta smelt and other estuarine species but dismiss them and disregard the consequences of further weakening of already inadequate standards.

USBR’s March Biological Review for Endangered Species Act Compliance with the WY 2015 Drought Contingency Plan April through September, submitted to the SWRCB and fish agencies, acknowledged that the Delta smelt population had plunged to an all time low. It observed that drought impacts Delta smelt by reducing the area of low salinity habitat and food availability, impacting reproductive potential impairing fecundity, and reducing turbidity, thereby limiting predator avoidance. It pointed out that warm, slow-moving water promotes conditions in which parasites and toxic *Microcystis* blooms thrive, and that non-native Delta smelt predators, like black bass, and food competitors, like *Corbicula*, have increased during the present drought. It admitted that Delta smelt have a strong positive association with the position of X2 and that under the TUCP Delta smelt would not be in areas optimal for growth and survival because X2 would move further upstream.

With respect to longfin smelt, the USBR biological review observed that the TUCP will reduce outflow and that increased outflow is one of the best predictors of longfin smelt year class strength. Consequently, it is likely that the TUCP will exacerbate poor longfin smelt recruitment and survival and that longfin smelt larvae will have an increased risk of entrainment into the south Delta where they are not expected to survive warming water temperatures.
Despite knowing that smelt were already at historically low abundances, that the drought had increased already deleterious conditions, and that further reductions in outflow would exacerbate impacts, the USBR and DWR proposed the TUCP on 24 March 2015 and requested agency concurrence. Incredibly and inexplicably, the USFWS and CDFW, acutely aware that subsequent fish surveys had revealed a catastrophic collapse in population abundance and knowing that the Biological Opinions assumed compliance with D-1641 criteria and that there were significant “uncertainties” in the conclusions of the Biological Review, issued brief, cursory three-page concurrence letters three days latter, on 27 March, that claimed that reducing Delta outflow by 25 to 40% below D-1641 critical dry year criteria would not jeopardize the continued existence of smelt.

Of course, senior agency supervisors made these decisions. And we know, from private discussions with fishery agency staff, that the senior agency supervisors, many of whom participate in the secret weekly meetings of the Real-Time Drought Operations Management Team (RTDOT), ignored and rejected the recommendations and pleas from biological and technical staff that the TUCPs posed a threat to the continued existence of these species. Over the last several years, we have consistently told the SWRCB what would occur should they approve the various TUCPs. Sadly, the results from subsequent fish surveys and trawls establish that we were right and the SWRCB, USBR, DWR and fishery agencies were wrong!

The SWRCB was acutely aware of the adverse consequences of approving the recent TUCP. The 3 July 2015 TUCP Order acknowledges on pages 12 and 13:

“The extreme drought conditions that have been occurring for the last four years are having significant impacts on fish and wildlife,” Delta smelt indices “…are at record low numbers,” “Delta smelt have a strong positive relationship with a specific location in the low salinity zone (LSZ) referred to as X2…” and “…habitat quality and quantity diminish the more frequently and further the LSZ movers upstream…” It points out that “…there are likely to be few adult Delta smelt that live through the summer…” and “…it appears fish density has become so low that the SKT (Spring Kodiak Trawl) has reached or gone below its minimum effective detection ability,” and that in supplemental USFWS in sampling in the lower San Joaquin River “catch of adult Delta smelt declined precipitously to zero in the final month of sampling.” Emphasis added.

The 3 July 2015 TUCP Order, discussing the biological reviews, observes on page 14:

The proposed TUCP changes will have effects on physical habitat and water quality which may affect Delta smelt. The changes will add to the already unfavorable conditions related to the dry conditions. The Biological Review finds that reductions in inflows and outflows associated with the changes to Delta outflow, Western Delta agricultural salinity and Sacramento River flows may reduce the general quality of habitat conditions throughout the Delta. Further, survival of Delta smelt that are currently in the interior and North Delta may be reduced through increased exposure to degraded habitat and predators and increased travel time for migrating fish. In the lower San Joaquin River, the upstream relocation of X2 may result in a greater proportion of the
available habitat encompassing areas of high semi-aquatic vegetation and associated low turbidities. This could result in lower prey availability and higher predation rates on juvenile Delta smelt. Further constraining Delta Smelt closer to the upstream spawning areas in the lower Sacramento River, San Joaquin River, and the Cache Slough Complex/SDWSC will increase Delta smelt exposure to less favorable conditions. Conditions in these regions are generally warmer in the summer than locations further west due to prolonged heat waves and less marine influence. Juvenile Delta smelt may be able to reside in thermal refugia to reduce these effects, but it is not clear how long that cool water refugia will be available this summer. In addition, due to the more upstream location of X2, it is also likely that summer Delta smelt distributions will not be in areas for optimal growth and survival further west in Suisun Bay. Reduced inflows and outflows may also affect Delta smelt’s ability to move downstream to cooler habitats with more food resources. These effects could pose additional risks to the persistence of local populations. Emphasis added.

With respect to estuarine habitat and species, the 3 July 2015 TUCP Order on page 15 observed:

The Biological Review focused on species listed under ESA and CESA, but the proposed action is also likely to have adverse effects on other beneficial uses protected under D-1641,” “Since most of these species are not afforded the protections of ESA and CESA, many have undergone population declines over the history of water development in the Bay-Delta” and “...decreasing Delta out flow constrains habitat by moving X2 and the LSZ inland from the shallow, more favorable habitats of Suisun Bay to the deeper, channelized, and less hospitable habitats of the lower Sacramento and San Joaquin Rivers and their confluence. This reduction in habitat quantity and quality will also likely result in lower survival and recruitment of several other estuarine dependent species. Emphasis added.

Despite the serious risks of extinction of Delta smelt and other estuarine species, the SWRCB issued the TUCP Order on 3 July 2015. Apparently, the determination to deliver large quantities of water to Sacramento Settlement Contractors similar to the quantities they received over the last several years outweighs the potential extinction of species. In other words, the irrigation of vast tracts of pasture, alfalfa and other low value crops in the Sacramento Valley is more important than the continued existence of species that evolved and prospered over millennia.

**Violations of the Federal Clean Water Act**

The Code of Federal Regulations, at 40 CFR §131.20 states that the “State shall from time to time, but at least once every three years, hold public hearings for the purpose of reviewing applicable water quality standards and, as appropriate, modifying and adopting standards.” The State is required to submit the results of the review to USEPA for review and approval.

Over the last 20 years since adoption of the present standards in 1995, the SWRCB has reviewed the water quality standards pertaining to the Delta only once, in 2006. In the 2006 review, no changes were made in the 1995 standards despite the continued decline of the estuary’s pelagic
and anadromous fisheries. The present proceeding to review Bay-Delta standards is years away from completion. The SWRCB is in violation of the federal CWA.

Following disapproval of the results from the state’s 1991 proceeding to revise the 1978 Water Quality Control Plan, USEPA promulgated specific water quality standards for the Delta. The federal standards are significantly more protective of the ecosystem than present state standards. Even though the SWRCB subsequently issued its present standards in late 1995, the federal standards remain at 40 CFR §131.37. The SWRCB has refused to acknowledge or comply with the federal standards. Consequently, the SWRCB is in violation of the federal CWA.

The SWRCB has failed to comply with state and federal antidegradation requirements in lowering water quality. At a minimum, antidegradation requirements require that water quality standards must protect “fishable” beneficial uses. The SWRCB has undertaken no analysis of the impacts to beneficial uses and the trade-offs or costs between a temporary loss of water to state and federal water contractors to irrigate low value crops like pasture and alfalfa and the decline of fisheries and likely extinction of species. Nor is there any analysis of the relative benefits of weakening water quality standards in order to provide water to state and federal water contractors at the cost of depriving Delta farmers of water and water quality.

USBR and DWR’s pattern and practice of delivering near normal water supplies in the early years of drought, depleting carryover storage and then relying on the SWRCB to weaken water quality standards as successive dry years occur has been amply documented in multiple documents and TUCP proceedings over the last several years. The SWRCB has failed to establish minimum reservoir storage levels that ensure compliance with water quality standards in the event of successive dry years and then routinely weakens those standards when droughts occur.

The numerous violations of water quality criteria enumerated above, the serial weakening of water quality criteria and implementation requirements, the refusal to enforce violations of water quality criteria, the failure to timely review water quality criteria and the approval of the pattern and practice of creating conditions that prevent water quality criteria from being met in sequential dry years constitute violations of the CWA. Consequently, the SWRCB, USBR and DWR have violated the CWA.

**Violations of the Endangered Species Act**

In enacting ESA, Congress stated that the purpose of the ESA is “to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved.” 16 U.S.C. § 1531(b). As part of conserving endangered or threatened species, ESA prohibits the “taking” of any such listed species. 16 U.S.C. § 1538(a)(1)(B). A “take” is defined as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” 16 U.S.C. § 1532(9). To “harm” a listed species in the context of a “take” includes “[any] act which actually kills or injures wildlife. Such act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering.” 50 C.F.R. § 17.3 (1994). An indirect injury to a listed species through habitat modification also
constitutes a “take.” *Babbitt v. Sweet Home Chapter of Communities for A Great Oregon*, 515 U.S. 687 (1995). The 9th Circuit Court of Appeals ruled that “under Sweet Home, a habitat modification which significantly impairs the breeding and sheltering of a protected species amounts to ‘harm’ under the ESA.” *Marbled Murrelet v Pacific Lumber Company*, 83 F.3d 1060 (9th Cir. 1996).

USBR and DWR have operated to a pattern and practice of delivering near normal water supplies in the early years of drought, depleting carryover storage and then relying on the SWRCB to weaken water quality standards. The SWRCB has operated to a pattern and practice of weakening water quality standards and thereby significantly degrading the habitat and impairing essential behavioral patterns, breeding, feeding, or sheltering of listed species. The SWRCB, USBR and DWR are in violation of the ESA.

Delta smelt and other estuarine species’ abundances have plummeted over the last few years to the point where they are facing the likelihood of imminent extinction. Over this period, the SWRCB has acceded to multiple requests by USBR and DWR to weaken basic minimum standards adopted to protect listed species and their habitats. These serial actions by the SWRCB have seriously modified and degraded the habitat and impaired the breeding and sheltering of listed species to the point of impending extinction.

The fact that USFWS, NMFS and CDFW have routinely issued concurrence letters in response to the TUCPs, frequently within hours or several days of receiving Reinitiation of Consultation requests, cannot be a valid excuse or defense. Since initial listings under EWA or CESA, abundances of listed species have continued to plummet. USFWS, NMFS and CDFW have essentially defined themselves as “capture agencies” and chaperoned listed species on their road to extinction.

Notwithstanding the letters of concurrence from USFWS, NMFS and CDFW that claim these actions are consistent with existing Biological Opinions, nothing in the ESA legally allows or justifies the SWRCB, USBR or DWR to further degrade the habitats of species lingering on the precipice of extinction. Collectively, the excuses, justifications and serial weakening of water quality criteria emanating from the secret RTDOT meetings while the fishery agencies remain embraced in denial as fisheries plummet toward extinction, surely constitute one of the saddest and most wretched spectacles we’ve ever witnessed and could be easily construed as an illegal conspiracy to defraud the public of public trust resources to the benefit of special interests.

**A Final Thought**

It is not simply water quality, fisheries and public trust resources that have been sent to the scaffold: it is also the public’s security. With the exception of Shasta, water storage in all of the rim reservoirs is significantly below this time last year. Several are already below 1976-1977 levels and others are headed toward historic lows. As of 20 July, storage in the rim reservoirs totaled 5,632,522 AF and was being depleted by 43,703 AF daily or 1,354,796 AF monthly.

Historically, El Nino years have had an equal chance of being dry or wet. Should California experience another dry year, the impacts will be far greater than those endured this year. The
SWRCB’s failure to establish minimum reservoir storage levels and its inability to protect the public and public trust resources by saying no to special interests in sequential dry years has placed the state in grave jeopardy. California deserves better.

In Conclusion

We request that the SWRCB immediately use its public trust, constitutional and water rights authorities to require USBR and DWR to comply with D-1641 critically dry year water quality objectives, reduce water deliveries to low value crops in order to meet Bay-Delta objectives and to ensure sufficient reservoir storage to comply with temperature and other water quality objectives, and issue sanctions against USBR and DWR for their willful disregard for public trust resources and Delta beneficial uses. We also request that the SWRCB accelerate the present review of Bay-Delta standards, including a comprehensive balancing of the public trust with competing uses, and provide us a response to our 13 August 2014 complaint regarding illegal diversion by DWR and USBR and petition to adjudicate Central Valley waters.

Thank you for considering these comments and responding to this complaint. If you have questions or require clarification, please don’t hesitate to contact us.

Sincerely,

Bill Jennings, Executive Director
California Sportfishing Protection Alliance

Attachment
Cc: Felicia Marcus, Steven Moore
    Frances Spivy-Weber, Dorene D’Adamo
    Tam M. Doduc, Michael George