# Department of Conservation and Development

## Water Agency

30 Muir Road Martinez, CA 94553

Phone: 925-674-7824

September 23, 2015

Contra Costa County



Mr. Tom Howard Executive Director State Water Resources Control Board 1001 I Street Sacramento, California 95814

Sent via email: tom.howard@waterboards.ca.gov

Re: Petition for Change of Point of Diversion submitted by DWR and Reclamation for Cal. WaterFix

Dear Mr. Howard:

Contra Costa County has reviewed the Petition for a Change of Point of Diversion and of Rediversion submitted by the California Department of Water Resources (DWR) and U.S. Bureau of Reclamation (Reclamation) for the California WaterFix project. It is our understanding that the three new points of diversion would be at a different location than the existing Hood diversion point for the earlier Peripheral Canal project. The Petition seeks approval of the operation of three new large water export intakes on the Sacramento River in the vicinity of Clarksburg (Alternative 4A, the preferred alternative in the State's "California WaterFix" project.)

Contra Costa County is bounded on its western, northern and eastern sides by the San Francisco Bay and the Sacramento-San Joaquin Delta, and these natural features are the basis for not only the County's identity and quality of life but also our economic vitality. The availability of good quality water in the Delta is essential for municipal drinking water for the residents of Contra Costa County as well as agriculture, recreation, and industry in this region. As a local agency responsible for land use, flood protection, and other services vital for protecting the Delta, Contra Costa County has a direct interest in any proposed solution to the current problems afflicting the Delta.

Contra Costa County agrees with the detailed concerns regarding this premature and incomplete Petition raised in the letters sent to you by the Local Agencies of the North Delta and Central Delta Water Agency (dated August 31, 2015) and the City of Antioch (dated September 2, 2015).

## Petition misleads public and SWRCB

The Petition contains claims and statements that are incorrect, mislead the public and the State Water Resources Control Board (SWRCB), or are unrealistically optimistic. This proposed project will <u>not</u> put the State on a course to achieve the coequal goals (as claimed on page 2 of the submission letter). Instead, the Cal. WaterFix preferred alternative will hinder the State's statutory intent to enhance the Delta ecosystem, improve water quality in the Delta, and protect the Delta as a Place. It also fails to increase water supplies for California.

#### Project will not improve conditions in the Delta ecosystem

The WaterFix preferred alternative would <u>not</u> result in substantially improved conditions in the Delta for threatened and endangered species (bottom of page 2 of the submittal letter). It would continue use of the unscreened Clifton Court Forebay intake and the poorly screened Jones Pumping Plant for half of the future exports of water from the Delta, add new north Delta intakes directly along the migratory pathway of key anadromous fish species, would fail to sufficiently increase flows for fish, and would increase exports from the Delta in the driest months when Delta outflows are very low (i.e., up to 15,000 cfs). The WaterFix project will increase reverse flows in the Delta in some months relative to existing conditions, and OMR values will remain less than -2,000 cfs, 55% of the time (based on a detailed analysis of DWR's monthly CALSIM output data). Even during November-June, the period that the SWRCB's 2010 Delta Flow Criteria Report deemed more critical for regulating OMR, the WaterFix project would cause OMR values less than -2,000 cfs, 44% of the time. The worst OMR with the project is -13,800 cfs which is worse than under existing conditions. In addition, the November 2013 Draft BDCP Executive Summary acknowledged that the direct effect of the north Delta intakes would adversely impact many key fish species.

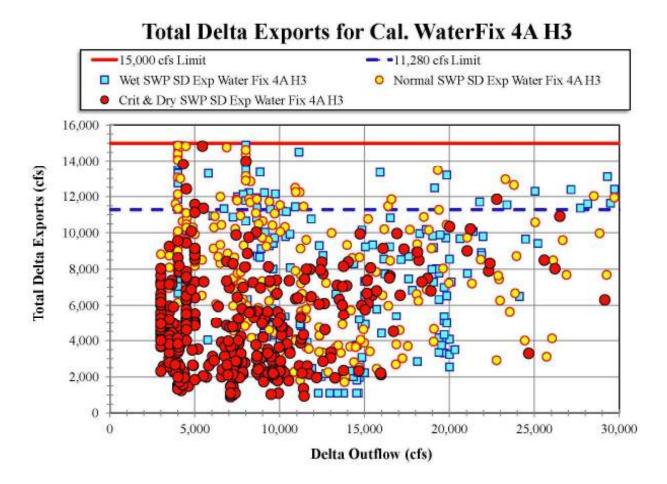
#### Unscreened Clifton Court Forebay still used to export 27% of total exports

A supposed benefit of the WaterFix project is that south Delta diversions would be replaced by north Delta diversions through state-of-the-art fish screens (page 3). However, the existing intake to Clifton Court Forebay, which would still be used to export 27% of the total south-of-Delta exports would remain unscreened (based on DWR's CALSIM modeling of Alternative 4A, Scenario H3, at Early Long Term). In fact, half of the total exports would still be diverted from the south Delta, including from the inadequately screened Jones Pumping Plant.

#### Project would increase rather than decrease exports during dry periods

The Cal. WaterFix would <u>not</u> advance the State's water supply goals by improving the ability to capture water during wet years ("Big Gulp") and store it for use during dry years. The key to improving California's water supply is to be able to opportunistically capture water when it is available, i.e., during periods of high, surplus flow in the Delta and upstream of the upstream reservoirs. The focus should be on weeks and months rather than years. Unfortunately, the proposed project fails to capture any significant surplus flow during wet months because it does not include any new storage. Instead it relies on increasing exports from the Delta during dry

months when Delta outflows are very low (Figure 1, below), i.e., by taking advantage of the increase in maximum export capacity from 11,280 cfs under typical flow conditions and the existing Delta infrastructure, to 15,000 cfs with the proposed 9,000 cfs twin tunnels. This is contrary to the 2009 Delta Reform Act (Water Code section 85021) and threatens already stressed fish species.



<u>Figure 1:</u> Monthly Total Delta exports (isolated facility and through-Delta) as a function of Delta outflow for outflows up to 30,000 cfs. These "sensitivity analysis" data for the California WaterFix Alternative 4A, Scenario H3, were provided to the County by DWR. The plotted data are categorized as (a) wet years, (b) above and below normal years, and (c) dry and critical water years. The Cal. WaterFix alternative 4A (9,000 cfs north Delta intakes plus through Delta) would allow exports up to 15,000 cfs. The existing limit on exports is typically 11,280 cfs. In drier periods (months) when Delta outflows are very low and the Delta ecosystem is stressed, the Cal. WaterFix alternative 4A would at times increase rather than reduce exports. This is the complete opposite of the Little Sip concept). These dry period increases occur in all water year types. Even in wet years there are months that can be considered dry, and vice versa. Unfortunately, the Cal. WaterFix preferred alternative also fails to capture much additional water (i.e., export more than existing exports) when Delta outflows are high (the opposite of the **Big Gulp** concept).

## Potentially more viable alternatives have not been considered

DWR and Reclamation have also failed to consider an adequate range of alternatives, as required under Water Code section 85320(b)(2). What California needs is a project that can capture large quantities of water when it is available and truly surplus to the needs of the Delta and Bay ecosystem and water quality. Seventeen of the eighteen BDCP and Cal. WaterFix alternatives are basically the same alternative – north Delta intakes linked to south Delta export pumps by isolated conveyance. There are no components for increasing regional self-reliance, conservation, desalination, and water use efficiency, and no infrastructure to capture and store "new" water during periods of high Delta flow. The South Delta export intakes are bad for the Delta ecosystem but so are north Delta intakes. The Cal. WaterFix project is inadequate because it has failed to seriously analyze the possibility of other locations for new intakes, e.g., in the western Delta.

#### SWRCB requested alternative not given serious consideration

According to the RDEIR/SDEIS (Appendix C), the State Water Board requested supplemental modeling related to increased Delta outflows (Alternative 4H3). Just because the WaterFix project infrastructure was not sufficient to achieve both coequal goals with these SWRCB-suggested Delta flow requirements does not mean the SWRCB was not on the right track. A new infrastructure alternative capable of capturing and storing water when there is surplus flow in the Delta would be able to support restoring higher flows for fish, improving water quality in the Delta and improving water supply reliability for California. Water Rights Decision 1641 is not sufficiently protective of fish and wildlife beneficial uses (despite the statement on page 11 of the supplemental information) because the populations of key fish species continue to dramatically decline. The statement on page 12 of the supplemental information that "(f)lows presented by Alternative 4A, beyond those required by D-1641, satisfy appropriate Delta flow criteria to be considered by the Board under 85086(c)(2)" is also incorrect. Alternative 4A is inconsistent with the urgent need to restore flows in the Delta to sustain the Delta ecosystem.

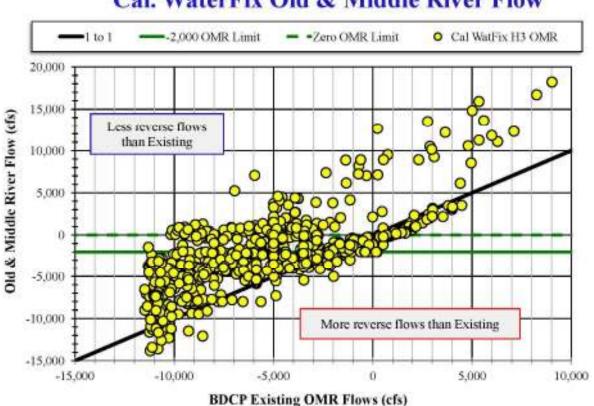
## Project fails to support State's comprehensive vision for the Delta

DWR and Reclamation attempt to justify their WaterFix preferred alternative as an integral part of the state's comprehensive vision for the Delta (e.g., pages 2 - 4 of the supplemental material). However, the legislation and reports they cite in support of this all call for new storage. The WaterFix preferred alternative does not include any new storage so is unable to capture surplus flows when they are available during wet months. Without additional storage and a conveyance infrastructure to divert and convey the water to new storage within or close to the Delta and then to increased groundwater and surface storage south of the Delta, the WaterFix proposal cannot help achieve either of the coequal goals and will fail to improve water quality in the Delta.

#### Project fails to minimize, and sometimes increases, reverse flows in the south Delta

DWR and Reclamation suggest that their proposal "*would minimize environmental impacts commonly associated with the SWP and CVP*" by addressing the real problem of reverse flows in the south Delta (pages 4 and 5 of the supplemental information). However, the operating rules of

the WaterFix preferred alternative and continued use of the south Delta export intakes for half of the SWP and CVP alternatives does not minimize reverse flows in the south Delta (see Figure 2 below). Fish are resident in the Delta year round. Salvage of other species such as Striped bass, largemouth bass, white cat fish and Mississippi silversides are already large under existing conditions (see Grimaldo et al., "Factors affecting fish entrainment"). This is also likely to be a problem for sturgeon<sup>1</sup>. The WaterFix project sets OMR limits for some of the year and will redirect impacts to July, August, September and October. Fish that are resident in the Delta vear round may not be declining now, but they will if that period is subjected to increased reverse flows because of the WaterFix project.



Cal. WaterFix Old & Middle River Flow

Figure 2: Old and Middle River (OMR) monthly flows for Cal. WaterFix Alternative 4A, Scenario H3, compared to monthly OMR data from the BDCP Existing Basecase. A stated benefit of the Cal. WaterFix project is to minimize reverse flows in the south Delta. With the *Cal. WaterFix, reverse flows will remain in many months and in some cases get even worse.* Even though there are specific months of the year when minimizing OMR is more crucial, there are resident fish in the Delta year round. Unless reverse flows are minimized in all months, the impacts of reverse flows will be redirected to other periods of the year and other Delta fish.

<sup>1</sup> 

http://swrcb2.swrcb.ca.gov/waterrights/water issues/programs/bay delta/deltaflow/docs/exhibits /sfwc/spprt docs/sfwc exh3 grimaldo.pdf

#### SWRCB should encourage achievement of the State's coequal goals

The County encourages the SWRCB to use this opportunity and responsibly contribute to the **achievement** of the coequals goals. In the past, the SWRCB has considered that its role is to **balance** competing beneficial uses. However, this merely perpetuates a lose-lose situation. There is no incentive for DWR to develop projects that create new water if the SWRCB approves projects that merely compete for our existing, limited water supplies. Reclamation is also required to contribute to achieving the State's coequal goals (Public Law 112-74, December 2011).

The 2009 Delta Reform Act has set a new standard for all state agencies to follow to help achieve both co-equal goals, including the inherent objectives of improving water in the Delta. The SWRCB's 2010 Delta Flow Criteria Report established the kind of flow increases and reverse flow reductions that will be necessary to achieve the ecosystem goal. The January 2014 California Water Action Plan, which the SWRCB helped develop, sets out the approach that needs to be taken to develop a sustainable solution to California's water and Bay-Delta ecosystem problems. This approach requires water use efficiency and other demand reduction actions, strengthening Delta levees, as well as new storage to capture and store "new" water, all of which will help to achieve the goal of water supply reliability.

Creating "new" water allows water to be used to increase flows and reduce Delta exports in drier months, while providing more stored water for municipal and industrial and agricultural use, especially during periods of drought. Part of this solution should also be actions to recharge depleted groundwater basins throughout the state, including rerouting flood waters to recharge areas.

The bottom line is that this WaterFix proposal does none of this, and represents a significant step backwards. It will harm the Delta ecosystem, degrade Delta water quality, impact the Delta as a Place and provide very little benefit to California's water supply reliability. It will eventually lead to a very expensive stranded asset, and hinder California's ability to develop a real, sustainable, solution to California's water issues and the effects of climate change.

Contra Costa County asks that the SWRCB take a leadership role in addressing California's water and ecosystem issues. The 9-year WaterFix process has been funded by, and, therefore, led (astray) by the export water contractors, with the lead agencies taking a subservient role.

The Petition that is being considered by the SWRCB should be sent back to DWR and Reclamation with a request that new alternatives be developed and analyzed that can capture new water and get it to new surface and groundwater storage be studied (consistent with Water Code Section 1701.3). These new alternatives need to be compatible with increased flow requirements in the Delta, consistent with the 2010 Delta Flow Criteria and the 2009 Delta Reform Act (Water Code Section 85086(c)(2)). The new alternatives must of course help achieve both coequal goals, while improving water quality in the Delta and protecting the Delta as a Place.

The SWRCB should also request that any new petition be supported by actual modeling of the proposed project, and not "sensitivity analyses" based on the flawed modeling for the BDCP Draft environmental documents. The modeling data also need to be presented as time series of monthly flows and exports and daily water quality data, and correlations between such parameters as total monthly exports and monthly-averaged Delta outflows so that the SWRCB and other regulators can fully understand how the proposed project would actually operate. For example, the Cal. WaterFix preferred alternative:

- increases exports when Delta outflows are lowest,
- assumes the Army Corps limits on inflows to Clifton Court Forebay no longer apply,
- exports more water by redefining the SWRCB's D-1641 export/inflow limits (allowing more than 90% of total Delta inflow to be exported in many months), and
- makes reverse flows worse (more negative OMR) rather than better in some months.

None of these major flaws with the preferred alternative are easily discernible from the RDEIR/SDEIS or the modeling data presentations in the RDEIR/SDEIS.

If the SWRCB does decide to continue with the petition process, noticing of the petition and the deadline for submitting protests should be postponed until after detailed modeling of the preferred alternative has been completed and disclosed. We understand that this will not occur until a final, or preferable another revised Draft EIR/EIS, is released.

If you have any questions regarding this letter please contact me at (925) 674-7824.

Sincerely,

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Ryan Hernandez Manager Contra Costa County Water Agency

Cc: Michael Lauffer, Chief Counsel, State Water Resources Control Board

Sally Jewell, Secretary of Interior Estevan López, Commissioner, U.S. Bureau of Reclamation Dan Ashe, Director, U.S. Fish and Wildlife Service Dr. Kathryn D. Sullivan, NOAA Administrator Gina McCarthy, Administrator, U.S. Environmental Protection Agency John Laird, Secretary, California Natural Resources Agency Mark Cowin, Director, California Department of Water Resources David Murillo, Regional Director, U.S. Bureau of Reclamation

Senator Diane Feinstein Senator Barbara Boxer Congressman Mark DeSaulnier Congressman Mike Thompson Congressman Eric Swalwell Congressman John Garamendi Congressman Jerry McNerney Congressman Jared Huffman Congresswoman Nancy Pelosi Contra Costa County Board of Supervisors John Kopchik, Director, Department of Conservation and Development