State of California State Water Resources Control Board

DIVISION OF WATER RIGHTS

P.O. Box 2000, Sacramento, CA 95812-2000

Info: (916) 341-5300, FAX: (916) 341-5400, Web: http://www.waterboards.ca.gov/waterrights

PROTEST-PETITION

This form may used for objections to:

PETITION FOR TEMPORARY URGENT CHANGE
APPLICATION1 PERMIT1 LICENSE1 OF11
We, Tim Stroshane (Policy Analyst, Restore the Delta, 639 San Carlos Avenue, Albany, CA 94706; tim@restorethedelta.org) and Barbara Barrigan-Parrilla (Executive Director, Restore the Delta 10500 Trinity Parkway, Suite 100, Stockton, CA 95219; barbara@restorethedelta.org), have carefully read the Notice of Temporary Urgency Change Petition [TUCP] and Notice of Public Workshop, dated January 27, 2015, and the subsequent Order Approving in Part and Denying in Part a Petition for Temporary Urgency Changes to License and Permit Terms and Conditions Requiring Compliance with Delta Water Quality Objectives in Response to Drought Conditions. That Notice provided the public with opportunity to protest the TUCP by no later than noon on Friday, February 13, 2015, and indicates parties to which such protest must be provided at the State Water Resources Control Board, the Department of Water Resources and the US Bureau of Reclamation. We incorporate here by reference the protest filed jointly by California Water Impact Network, California Sportfishing Protection Alliance, and AquAlliance. Our comments herein also request specific topics where Restore the Delta wants the State Water Resources Control Board to reconsider its TUCP Order.
We further incorporate by reference the comments and protests of the California Sportfishing Protection Alliance submitted pursuant to the TUCP Order issued by the State Water Resources Control Board Executive Director on April 6, 2015. We also incorporate by reference Restore the Delta's previously submitted protests and comments submitted to the State Water Board on February 13, 2015, requesting reconsideration. We further incorporate by reference additional protest comments submitted by the California Sportfishing Protection Alliance, the California Water Impact Network, and AquAlliance. We again urge reconsideration of the Executive Director's action by the Board on the following grounds:
Protest based on ENVIRONMENTAL OR PUBLIC INTEREST CONSIDERATIONS:
✓ not best serve the public interest
✓ have an adverse environmental impact

¹ Latest temporary urgency change petition (TUCP) applies to Permits 16478, 16479, 16481, 16482 and 16483 (Applications 5630, 14443, 14445A, 17512 and 17514A, respectively) of the Department of Water Resources for the State Water Project; and License 1986 and Permits 11315, 11316, 11885, 11886, 11887, 11967, 11968, 11969, 11970, 11971, 11972, 11973, 12364, 12721, 12722, 12723, 12725, 12726, 12727, 12860, 15735, 16597, 20245, and 16600 (Applications 23, 234, 1465, 5638, 13370, 13371, 5628, 15374, 15375, 15376, 16767, 16768, 17374, 17376, 5626, 9363, 9364, 9366, 9367, 9368, 15764, 22316, 14858A, 14858B, and 19304, respectively) of the United States Bureau of Reclamation for the Central Valley Project.

State facts which support the foregoing allegations:

The Order does not best serve the public interest.

 The Order assumes the need for the urgency change is due strictly to natural conditions, when the role of recent management of water project operations is neither assessed nor evaluated in creating the alleged urgency.

The TUCP Order of April 6, 2015 (Order) cites Water Code Section 1435(c) in part defining "urgent need" as meaning "the existence of circumstances from which the board *may* in its judgment conclude that the proposed temporary change is necessary to further the constitutional policy that the water resources of the state be put to beneficial use to the fullest extent of which they are capable and that waste of water be prevented...." (Emphasis added.)

The "existence of circumstances" is in no way limited to identification of natural conditions that contribute to low water supplies in state and federal reservoirs as circumstances pointing to urgent need, but also the management decisions taken concerning the state and federal projects' operations in the last few years that have also contributed to the depletion of supplies as readily as have the lack of precipitation and record temperatures. The plain language of Water Code Section 1435(c) does not limit the State Water Board's authority for exercising its judgment to simply natural conditions, but may and should investigate the manner in which the state and federal water projects have operated since the start of Water Year 2012.

The Order omits the immediately following language of Section 1435(c) which states "except that the board *shall not find a petitioner's need to be urgent* if the board in its judgment concludes, if applicable, that the petitioner has not exercised due diligence either (1) in petitioning for a change pursuant to provisions of this division other than this chapter, or (2) in pursuing that petition for change." In this specific exception, the Water Code limits the Board's discretion for finding an urgent need in such cases that the applicant fails to exercise due diligence for a temporary urgency change petition (referring to Chapter 6.6 of Division 2 "Water") or any other temporary petition under this same Division 2.

While we concede that DWR and the Bureau have in the near term diligently petitioned for temporary urgency changes reasonably promptly given natural conditions of drought in California and the Central Valley watershed of the Delta, the Board's authority to evaluate the temporary urgency change petition, and the petitioners' exercise of due diligence with respect to the substance of the petition, does not stop with natural conditions. Instead, the California Constitution, Article X, Section 2, and the Public Trust Doctrine require the Board to find that the petitioners have also been duly diligent in reasonably using and diverting water, as well as protecting public trust resources. It is in light of these doctrines that the state and federal water project operations should be evaluated by the State Water Board in relation to Water Code Section 1435(c). To date, the Board has not done so in the context of the temporary urgency change petition and the Board's order on that petition.

The Board's discretion must include its continuing obligation to uphold and apply the reasonable use and public trust doctrines even in making temporary urgency change decisions. It has not in this instance, and for this reason Restore the Delta protests that the State Water Board has failed to actin the public interest. We request that the Board reconsider its temporary urgency change petition order, the sequence of which extends from February 5th through April 6th of this year, as of the date of this protest.

The Order argues that the basis for the urgency in 2015 lies in California "entering its fourth consecutive year of below-average rainfall and very low snowpack." The Order states too that "Water Year 2015 is also the eighth of nine years of below average runoff, which has resulted in chronic and significant shortages to municipal and industrial, agricultural, and refuge supplies and historically low groundwater levels." The Order goes on to recite as relevant facts nearly nonexistent snowpack, low precipitation and runoff leading to low storage levels in state and federal reservoirs and the consequences of these conditions for fish and wildlife beneficial uses. We too find it alarming when the Board writes that New Melones Reservoir on the Stanislaus River may reach dead pool this summer behind Old Melones dam, since releases from New Melones are vital to overall water quality in the Delta annually and seasonally. As a result of these conditions, the Order goes on, water allocations from the state and federal projects have been low, while senior water right holders have received most or all of their allocations in recent years.

Restore the Delta contends that this year's dire supply conditions are echoes of past water management and allocation decisions by state and federal water project operators and managers, not just artifacts of current natural conditions. Without wishing to cast aspersions on these agents' professional integrity, we submit to the State Water Resources Control Board that the projects could have been and should be managed better in the past and now going forward. The Board is also aware that California's climate is widely considered to be getting drier and warmer.

The Board should reconsider its Order and in so doing undertake to assess and evaluate the role of water project management decisions in contributing to water supply shortages in the Central Valley watershed of the Delta estuary.

 Past water management and allocation decisions by DWR and the Bureau have contributed to water supply shortages in historical drought experience. Similar practices and patterns can be observed in the 2012-2015 drought period. A hindcast should be performed on recent water project operations from the beginning of Water Year 2012 to assess and evaluate the roles of State Water Project, Central Valley Project, and State Water Resources Control Board actions in response to drought conditions.

The State Water Board wisely required a hindcast in the recent TUCP Order (Condition #6a) be performed by the US Bureau of Reclamation of temperature control problems on the upper Sacramento River in order to figure out what caused the loss of temperature control that cost California 95 percent of the 2014 brood year's winter-run Chinook salmon juveniles.

Restore the Delta has looked into various indicators of previous droughts (1976-1977, 1987-1994, 2007-2009, and 2012-2015) to discern patterns indicating how the state and federal water projects are operated during droughts.

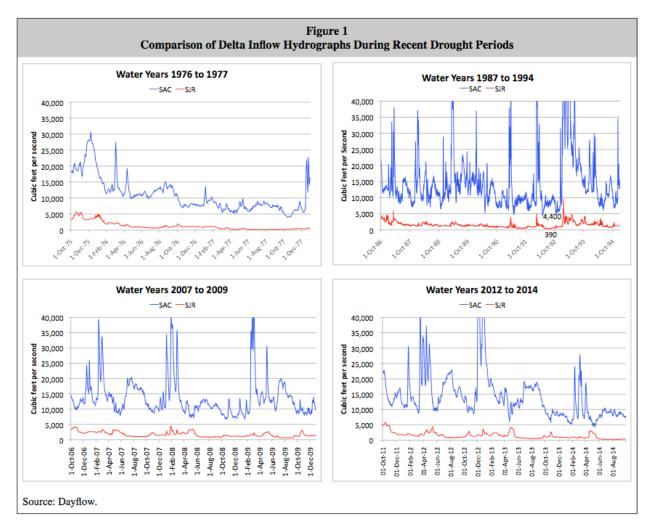
Figure 1 indicates the degree to which natural conditions played a role in reducing Delta inflow via the Sacramento and San Joaquin Rivers during each of four major drought periods since

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² State Water Resources Control Board, *In the Matter of Specified Licenses and Permits of the Department of Water Resources and U.S. Bureau of Reclamation for the State Water Project and Central Valley Project, April 6, 2015 Order Modifying an Order that Approved in Part and Denied in Part a Petition for Temporary Urgency Changes to License and Permit Terms and Conditions Requiring Compliance with Water Quality Objectives in Response to Drought Conditions*, Section 2.2, p. 9. Hereinafter cited, *Order.*

³ Order, p. 10.

1976. With Figure 1 we wish to illustrate that the current drought of 2012-2014 is similar to that of the 1970s, particularly with how low flows have become on the San Joaquin as of the end of water year 2014. Flows on the San Joaquin were similarly low near the end of water year (i.e., about September) of 1992.



The behavior pattern by state and federal water project operators in the data we will show exhibit an overall management strategy first articulated in a DWR drought report from May 1976:

The usual strategy described in discussions with Central Valley surface water project operators who are experiencing a below-normal supply is to serve all the water possible on demand of the users, carrying little or no water over to guard against a dry 1977 except in the Central Valley Project, the State Water Project, New Don Pedro Reservoir, and Lake McClure. This strategy is based on the belief that a good crop this year is desirable, since next year will probably be a near-normal or better water supply. In some areas, was needed and served early in the season to make up for the subnormal precipitation on nuts, fruit, and vineyards. In some instances, where the surface water shortage will be offset by pumping

more ground water, surface water is being held for delivery during the peak months of water demand, July and August.⁴

While this early drought report exempted the CVP and SWP initially from "water use now" behavior, unfortunately, there is indication in these data that beginning with the 1976-1977 drought, holding carryover storage for the potential for subsequent dry years was not seriously practiced by DWR and the Bureau.

Figure 2, below, shows the water year designations the state has applied to the water years involved in the last four major drought periods, inclusive of the immediately previous wet year that led to reservoir conditions being full or nearly full in the state and federal reservoirs upstream of the Delta.

Designations of Water Years Leading Up to and During Recent Drought Periods								
Water Year Type				Water Y	Water Year Type			
Water Year	Sacramento River Basin	San Joaquin River Basin	Water Year	Sacramento River Basin	San Joaquin River Basin			
1975	Wet	Wet	2006	Wet	Wet			
1976	Critical	Critical	2007	Dry	Critical			
1977	Critical	Critical	2008	Critical	Critical			
1986	Wet	Wet	2009	Dry	Below Normal			
1987	Dry	Critical	2011	Wet	Wet			
1988	Critical	Critical	2012	Below Normal	Dry			
1989	Dry	Critical	2013	Dry	Critical			
1990	Critical	Critical	2014	Critical	Critical			
1991	Critical	Critical	Notes: Only one "Above Normal" year, just two "Below Normal" years, and just six "Dry" years in these drought periods. Each drought was preceded by a "Wet" year in both the San Joaquin and Sacramento River basins. The Sacramento River Basin saw nine "Critical" years and the San Joaquin River Basin saw 13 "Critical" years during these drought periods.					
1992	Critical	Critical						
1993	Above Normal	Wet						
1994	Critical	Critical						

Figure 2

As dry conditions unfolded in the years subsequent to 1986, 2006, and 2011, Figure 3 reveals the downward trend in state and federal water project allocations that ensued. (No water allocation data for the Central Valley Project in 1976 and 1977 were available for this analysis.) Senior water right holders (i.e., the San Joaquin River Exchange Contractors and the Sacramento River Settlement Contractors) received 100 percent or near 100 percent allocations in each drought period, in accord with governing water right priorities, as well as by contractual

⁴ California Department of Water Resources, *The California Drought—1976*, May 1976. Accessible online at http://www.water.ca.gov/waterconditions/docs/11_drought-1976.pdf.

obligations of the Bureau of Reclamation to provide water service to these entities during dry periods. Only in 1991, 1992, 1994, 2014, and 2015 did these senior water right holders receive less than 100 percent allocations from the Central Valley Project.

Junior water contractors of the CVP experienced these drought periods very differently, but it is important to note that in the first year of each drought period (and in the 1987-1989 period) these junior water contractors received full allocations. Only in subsequent years were they cut back. Only in 2007 and 2012 were south of Delta CVP contractors cut back to less than 100% allocations in first years of drought periods. It is not clear how much of that cutback was due to climatic conditions, greater north of Delta development (combined with their contractual seniority over south-of-Delta contractors), and material effects of biological opinion restrictions on Delta exports. The pattern of practice by the Bureau of Reclamation was to provide full allocations in the first year in hopes that next year would as likely as not be a normal to wet year that would provide full supplies. When those years (and other years following) were not, allocations were cut back, and most recently in 2014 and again this year, allocations by the Bureau for the CVP junior water contractors north and south of the Delta are zero.

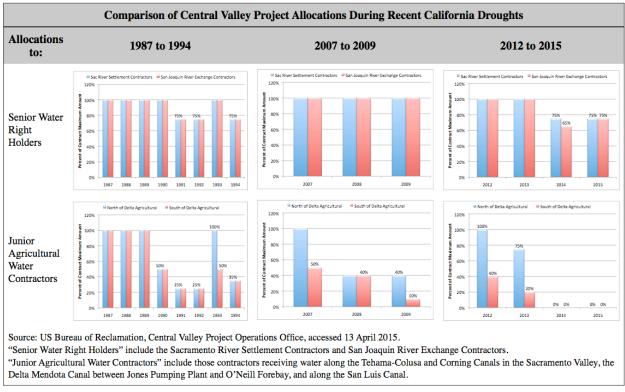


Figure 3

For the State Water Project, less historical allocation data are available, but what is available shows a similar pattern (Figure 4). Wet years in 2006 and 2011 are followed by only moderate cutbacks in the next year to 60 to 65 percent of total Table A amounts. Successive dry years are followed by deeper cuts in allocation amounts, to the point where in 2014 State Water Project contractors received just 5 percent of their Table A amounts. This year, SWP contractors are scheduled to receive 20 percent after only modest rainfall and despite the worst Sierra snowpack on record.

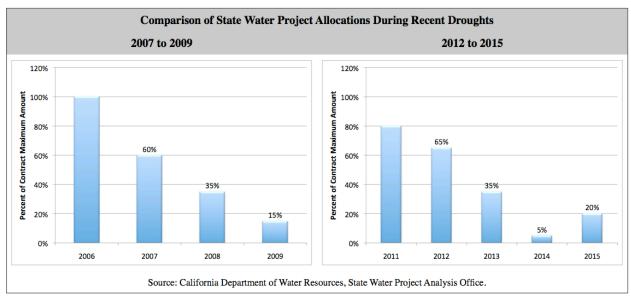


Figure 4

Figures 5 and 6 below indicate that, rather than take steps to preserve reservoir storage over time during droughts, the state and federal reservoirs are managed in such a way that storage decreases over time during droughts. Figure 5 shows that the upstream-of-Delta reservoirs of the state and federal projects tend to be managed to lower storage conditions during drought periods, while southern California storage is only the whole preserved over the course of the drought periods for the 1970s and 1990s.

Figure 6 reveals that over time in recent drought (2007-2009 and the current drought) has led to decreased storage in both the upstream-of-Delta reservoirs of the state and federal projects as well as the southern California reservoirs included in our analysis. In the 2007-2009 period, upstream Central Valley reservoir depletions over approximately three years come to nearly 7 million acre-feet (MAF) after peaking at 12 MAF around April 2007. In the same period, southern California storage peaked in August 2007 peaked at over 1.4 MAF.

In our current drought period (2012-2015), upstream Central Valley storage peaked at over 13 MAF in April 2012, but has seen cumulative depletions of about 9.5 MAF by about November 2014, before December 2014 storms raised storage levels to back about 7 MAF upstream of the Delta. Southern California storage in the current drought peaked also in the spring of 2012 at about 1.4 MAF but has seen depletions since then of nearly 0.6 MAF by March 2015.

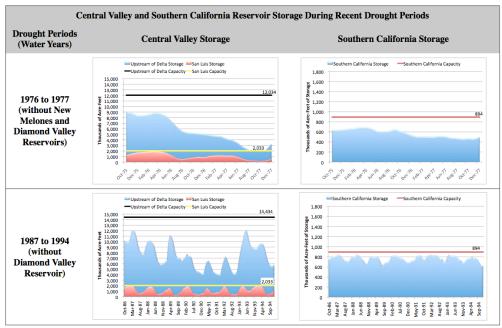


Figure 5

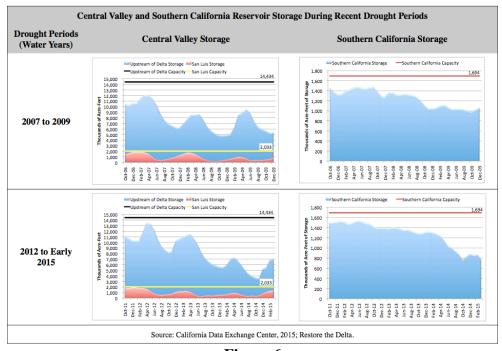


Figure 6

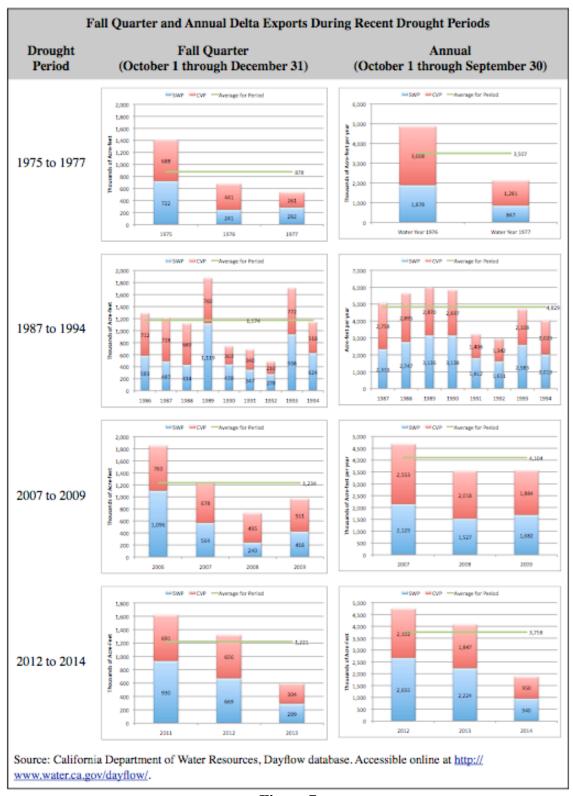


Figure 7

Figure 7 compares fall quarter (October 1 through December 31) exports with annual water year exports (October 1 through September 30) for the state and water projects during drought periods. These charts reveal that the pattern of export behavior is to maximize Delta exports early in the dry period, apparently on the assumption that wet conditions will materialize in the next water year. Yet the longer the dry period goes, the lower fall and annual exports become. The pattern and practice is to divert and export water as much as possible, with little apparent heed for the possibility—even likelihood—that the following year could continue dry or dryer.

The Board should require a hindcast of water project operations dating to October 2011 that takes into account project water allocations, reservoir releases, and Delta export patterns.

 Restore the Delta urges the State Water Resources Control Board to take a lead role in revising how water project operations are managed so that the greater likelihood of dry to drought conditions are factored into water project allocation decisions.

The way to best serve the public interest through this drought and future droughts is to require state and federal water project operations and management to place a greater weight in annual decision making on allocations, reservoir storage, and Delta exports on the likelihood of drought every year, not just in the second or third consecutive dry year unlike what has occurred with this and previous droughts.

Figures 1 through 7 strongly suggest that operation of state and federal water projects have been handled as though the probability of dry years are random events, equivalent to coin tosses. Increasingly scientists and other climate professionals warn society that climate change is instead upon us, and that dryer and warmer years are more likely over time than are wet years; this means that 50-50 odds, which hold with coin tosses, do not reasonably apply with California's climate.⁵ Instead, we are in a "new normal," to which state and federal water system operators have yet to adapt.

The TUCP Order fails to best serve the public interest because it places the blame for drought conditions solely on the absence of rainfall and snowpack and ignores the possibility that water operations and management behavior may play a substantial role in creation of the temporary urgency need. The SWRCB should reconsider its TUCP order to incorporate such an analysis.

The Order is contrary to law.

We incorporate by reference from our February 13, 2015, protest letter that in our opinion, the Order is contrary to several laws, including the constitutional principles of reasonable use and protection of the public trust. Again, while we recognize that the State Water Board uses this Order to make the best of a bad situation, partly of its own making, and that of the state and federal projects, we contend that the Order is contrary to the reasonable use doctrine, the public trust doctrine, the state and federal legislative goals to double salmon populations and keep fish populations in good condition below dams owned by the federal and state governments, the federal Clean Water Act, and the Delta Protection Act of 1959.

The Order continues to be contrary to the federal Clean Water Act.

⁵ P. C. D. Milly, Julio Betancourt, Malin Falkenmark, Robert M. Hirsch, Zbigniew W. Kundzewicz, Dennis P. Lettenmaier, Ronald J. Stouffer, "Stationarity is Dead: Whither Water Management?" *Science* 319 (2008): 573-574, February 1. Accessible online at http://www.paztcn.wr.usgs.gov/julio pdf/milly et al.pdf; and Noah S. Diffenbaugh, Daniel L. Swain, and Danielle Touma, "Anthropogenic warming has increased drought risk in California," *Proceedings of the National Academy of Sciences*, accessible online at http://www.pnas.org/content/112/13/3931.full.pdf.

The federal Clean Water Act allows no emergency exceptions to the administration of water quality standards adopted by the states. The Governor, as best we can tell, has no legal authority to suspend an EPA-approved water quality objective on the grounds that he has declared an emergency water shortage. Water quality objectives and standards under this law *must protect the most sensitive beneficial uses* for which objectives and standards have been applied. In this case, the particular objectives in question are *the fish and wildlife objectives for Delta outflow, operation of the Delta Cross Channel, San Joaquin River flow, and Delta exports*.

The Governor's emergency drought proclamations of January and December 2014 suspended Water Code Section 13247, says the Order, "to the extent that it otherwise would have applied to specified activities, including action on the TUCP." In the absence of its suspension, says the Order, "Section 13247 requires state agencies, including the State Water Board, to comply with water quality control plans unless otherwise directed or authorized by statute." We maintain that the act of suspension on grounds of emergency is not permitted under the federal Clean Water Act and therefore the Governor's suspension of Water Code Section 13247 should be null and void.

The Order continues to be contrary to the Delta Protection Act of 1959.

The Delta Protection Act of 1959 commits the State Water Project to the provision of salinity control "and an adequate water supply for the users of water in the Sacramento-San Joaquin Delta." It also declares as state policy that no one, including the state or federal governments "should divert water from the channels of the...Delta to which the users within said Delta are entitled" and that "in determining the availability of water for export from the...Delta no water shall be exported which is necessary" to meet these requirements. These requirements are premised on the Legislature finding in the Act that maintaining "an adequate water supply in the Delta sufficient to maintain and expand agriculture, industry, urban, and recreational development in the Delta area" as well as to "provide a common source of fresh water for export to areas of water deficiency is necessary to the peace, health, safety and welfare of the people of the State," subject to watershed and area of origins statutes on behalf of the Delta. The Legislature further recognized that the state water plan was supposed to bring surplus waters from the Sacramento Valley and "the north coastal area" to be gathered in the Delta for export. Much of those surplus waters did not materialize, yet the state's management of the Delta has exported water as if they had, and to the detriment of Delta ecosystems, agriculture, recreation, and industry.

The Order is contrary to the Delta Protection Act for failing to make findings that no water would be exported from the Delta to which Delta users are entitled. We are aware that the Board's subsequently-issued "Drought Information Order" requires Delta as well as Sacramento-San Joaquin watershed water right holders to provide information on their water rights and usage. We respectfully remind the Board, by protesting this temporary urgency change petition, that the the language of the Delta Protection Act of 1959 places the burden of proof on junior water rights holders to show what the reasonable area of origin water rights of Delta water rights holders are.

Water rights, whether held by private or public entities, have community importance as reflected in area of origin rights recognition of the Delta Protection Act of 1959.

It remains true that the Board's act of unilaterally reducing both Delta outflow and San Joaquin River flow objectives imposes a direct injury on Delta water right holders under guise of its water

quality authority and alleged emergency powers. Water rights in the Delta are a function of water quality of flows available for diversion. This is water rights allocation by other means, without due process, and without extending equal protection to all Delta water rights holders. We urgently request that the Board reconsider its Order given this plain injury to the Delta's area of origin water rights under the Delta Protection Act of 1959 and the water rights priority system of the state of California.

The Order would have significant adverse environmental effects which are also contrary to law and do not best serve the public interest.

Restore the Delta incorporates by reference its previous February 13, 2015, analysis of fish and wildlife concerns, and incorporates all analyses and findings of the California Sportfishing Protection Alliance lodging this element of protest against the most recent version of the Board's TUCP order as concerns the upstream relocation of the Emmaton salinity compliance point to Three-Mile Slough and the relaxation of San Joaquin River flow standards, and any other substantive protest points they have made pursuant to the State Water Resources Control Board's April 6th order.

Under what conditions may this protest be disregarded and dismissed? (Conditions should be of a nature that the petitioner can address and may include mitigation measures.)

We incorporate by reference from our February 13, 2015, protest letter the conditions under which this protest may be be dismissed, and supplement those conditions with the condition that the State Water Resources Control Board require the Department of Water Resources and the Bureau of Reclamation to perform a hindcast and make recommendations to the State Water Resources Control Board on how they plan to re-operate the Central Valley Project and the State Water Project to begin managing for multi-year droughts.

We thank you for the opportunity to submit these protest remarks. Signed by the protestant or authorized representative:

Baland Janigan Gandla	Date: 5 May 2015
Signed:	_
Executive Director, Restore the Delta	
Jim Attosham	Date: 5 May 2015
Signed:	_
Policy Analyst, Restore the Delta	

All protests must be served on the petitioner. Provide the date served and method of service used:

Served Party	Address	Email Address (service method employed)	Date Served
Rich Satkowski State Water Board	P.O. Box 2000 Sacramento, CA 95812	Rich.Satkowski@waterboards.ca.gov	<u>5 May 2015</u>
James Mizell Department of Water Resources	P.O. Box 942836 Sacramento, CA 94236	James.Mizell@water.ca.gov	<u>5 May 2015</u>
Amy Aufdemberge Regional Solicitor's Office	2800 Cottage Way, Room E-1712, Sacramento, CA 95825	Amy.Aufdemberge@sol.doi.gov	<u>5 May 2015</u>