May 27, 2011

Ms. Jane Farwell
Division of Water Rights
State Water Resources Control Board
P.O. Box 2000
Sacramento, CA 95812-2000

Re: April 2011 2nd Revised Draft Environmental Impact Report for
Consideration of Modifications to U.S. Bureau of Reclamation’s
Water Right Permits 11308 and 11310 (Applications 11331 and 11332)
to Protect Public Trust and Downstream Water Rights on the Santa
Ynez River – Bradbury Dam (Cachuma Reservoir)

Dear Ms. Farwell:

The Environmental Defense Center (EDC) submits these comments regarding the
State Water Resources Control Board (SWRCB) April 2011 2nd Revised Draft
Environmental Impact Report (“2011 RDEIR” or “RDEIR”) evaluating potential
modifications to the U.S. Bureau of Reclamation’s (BOR) water rights permits to protect
the public trust and downstream water rights on the Santa Ynez River on behalf of our
client, California Trout (CalTrout). CalTrout is a non-profit river conservation
organization with a substantial interest in the public trust resources of the Santa Ynez
River, including the endangered southern California steelhead.

We reiterate our October 4, 2010 request that the SWRCB hold any further action
on this EIR pending completion by the National Marine Fisheries Service (NMFS) of 1)
its Southern California Steelhead Recovery Plan; and 2) a reinitiated Section 7
consultation with the Bureau of Reclamation regarding the Cachuma Project. Both items
will identify significant new information critical to the SWRCB’s public trust decision in
this matter. As you know, we have been quite anxious about the lengthy delay in these
proceedings. However, since we now find ourselves at the point where this important
information should soon be available to inform the Board’s final decision, we believe it is
worth waiting the extra time. We prefer that the SWRCB take more time now to avail
itself of the best available science and resources rather than dealing with the uncertainty
and disruption that will certainly be associated with the reconsideration or reopening of a
decision that fails to deal with all relevant information.
Notwithstanding that general point, we are now submitting our comments on the 2011 RDEIR, and with respect to that document are troubled that it perpetuates the prior revised draft EIRs’ method of understating water supply, overstating demand, and simply ignoring feasible mitigation measures. In multiple instances, the RDEIR relies on outdated and incomplete information, failing to fulfill the SWB’s responsibility to engage in “a reasoned and good faith effort to inform decision makers and the public” about the true scope of potential impacts from the project Alternatives. In addition, the 2011 RDEIR continues to narrowly focus and mischaracterize the project’s public trust objective. It is unclear how this EIR will serve as evidence for the SWRCB’s ultimate hearing decision if it is inconsistent with the SWRCB’s overall public trust responsibility for the Bureau of Reclamation’s water rights permits.

As requested by the SWRCB, our specific comments on the 2011 RDEIR pertain to information that is new or has been changed from the 2007 RDEIR in Section 4.3 (Water Supply) and Section 6.0 (Comparison of Alternatives). We have also provided comments on Section 4.12 (Climate Change Impacts) and Section 7.0 (Cumulative Impacts) because significant new information regarding these impact areas also requires recirculation of the EIR. In addition, because the 2011 RDEIR does not provide responses to our prior comments, we presume our prior comments are not addressed and incorporate them herein by reference.

I. The 2011 RDEIR Overstates Potential for Water Supply Impacts (Section 4.3)

The 2011 RDEIR continues to understate supply, overstate demand, and ignore feasible mitigation measures. As a result it erroneously identifies potential Class I water supply impacts and fails to meet CEQA’s requirement of good-faith disclosure of environmental impacts to decision makers and the public. We incorporate our previous comments regarding water supply impacts on the 2003 and 2007 draft EIRs here by reference and, in addition, have the following comments:

a. The RDEIR improperly omits desalinated water for critical drought years

The RDEIR allocates 0 AFY desalinated water during critical droughts, stating that the desalination plant is “reserved for emergency use only . . . [c]urrently in storage

1 Berkeley Keep Jets Over the Bay Committee v. Board of Port Commissioners (1st Dist. 2001) 91 Cal. App. 4th 1344, 1367.
3 CEQA Guidelines § 15002(a)(1).
mode.” (2011 RDEIR Table 4-12 at 4.3-5.) This zero allocation during critical drought years is inexplicable, as this is precisely the purpose for which the desalination plant was built.

The plant is currently in long-term storage, but awaiting the next drought when it will be needed and utilized. According to the City of Santa Barbara:

The facility has since been incorporated into the City's long-term supply plan as a way of reducing shortages due to depleted surface supplies during drought.4

The facility is normally in long-term storage mode and is expected to be recommissioned when the demand (less a maximum acceptable shortage of 10%) cannot be met using all of the other available supplies.5

The desalination plant has all necessary permits, including permits from the U.S. Army Corps of Engineers, City of Santa Barbara and California Coastal Commission (CCC).6 The State Lands Commission (SLC) determined the project does not require a SLC permit.7 The Regional Water Quality Control Board (RWQCB) issued Waste Discharge Requirements Order No. 99-40 to approve and regulate discharges the desalination plant and other sources.8 An EIR was certified by the City and project approvals complied with CEQA.9

The desalination plant is not intended to be operated continuously.10 The vast majority of the infrastructure including intake facility and pipelines, the discharge pipeline, the actual desalination plant site and foundation, and about half the reverse osmosis treatment modules were specifically retained to be ready for the next significant drought. City water supply modeling assumed the desalination plant would be needed during water shortages in 6 out of 75 years.11

Thus, there is no reasonable basis for the RDEIR to identify a 0 AFY allocation for the City of Santa Barbara’s desalination plant during critical drought years, especially

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4 Santa Barbara City Public Works Department.  

5 City of Santa Barbara Public Works Department.  


7 Id.

8 Regional Water Quality Control Board. 1999. Waste Discharge Requirements Order No. 99-40; NPDES No. CA004814. (hereafter “Waste Discharge Order 99-40”) [Attached]; See also, Regional Water Quality Control Board. 1999a. Staff Report For Regular Meeting of July 9, 1999. (discussing Item 8, Reissuance of Waste Discharge Requirements, NPDES Permit No. CA 0048143, for the City of Santa Barbara’s Waste Discharge Requirements Order No. 99-40) [Attached]

9 CCC 1996 at 1 and 11.

10 Waste Discharge Order at 2.

11 CCC 1996 at 8.
multiple drought years. The desalination plant is able to be operational within 6 to 12 months of a decision to reinitiate production. (2011 RDEIR at 4.3-28.) The very purpose of the desalination plant is to offset water supply shortfalls during those years. This zero allocation is also undercut by the fact that the RDEIR otherwise assumes the plant will be operated during droughts and will cause indirect environmental impacts discussed in detail in the RDEIR. (2011 RDEIR at 4.3-28 – 4.3-29.) These assumptions are inconsistent and mutually exclusive of each other. The RDEIR must identify, consistent with the City of Santa Barbara’s own statements, that the desalination plant will be made available in critical drought years.

Table 4-12 of the RDEIR states that the desalination plant has an “assumed capacity” of 3,125 AFY. (2011 RDEIR Table 4-12.) The RDEIR subsequently states that the plant has a 3,000 AFY capacity. (2011 RDEIR at 4.3-28.) The City’s website indicates the plant has a current capacity of 3,125 AFY: “A portion of the reverse osmosis filtration capacity was subsequently sold, leaving a current capacity of 3,125 AF.”12 However, this is the lowest production scenario identified by the City of Santa Barbara. The City identified 4 scenarios for operation of the desalination plant which range from 3,125 to 10,000 AFY.13 The desalination facility, when operational, has a capacity of 7,500 acre feet per year and an infrastructure sufficient to allow production of up to 10,000 acre feet per year on the site.14 To reinitiate operation at the fully permitted rate of 10,000 AFY, the City would need to purchase and install just over half the reverse osmosis treatment modules, but there is no evidence to suggest this is infeasible. (2011 RDEIR at 4.3-28.)

The desalination plant is intended to serve water to, and will mitigate water supply impacts in, the City of Santa Barbara and other local water districts.15 This means that the desalination plant can offset water shortages that may occur in the City of Santa Barbara and shortages in other local districts. The RDEIR must acknowledge this important drought-time water supply and evaluate the degree to which 7,500 – 10,000 AFY of desalinated water offsets any critical drought period water supply shortages identified in the RDEIR.

b. Other available sources of water are ignored or undervalued

The 2011 RDEIR identifies the Goleta Water District (GWD) pumping 3,600 AFY groundwater during a critical drought. (2011 RDEIR at Table 4-13, 4.3-6.) However, GWD now has more water banked in the ground and is extracting less than the safe yield (2,350 versus 3,410). (2011 RDEIR at 4.3-4.) During droughts, the GWD has identified use of groundwater as a first priority to increase reliability of supplies.16 The

13 CCC 1996 at 7.
15 CCC 1996 at 7.
GWD seeks to maintain its groundwater above 1972 levels as a supplemental supply but may pump groundwater to below those levels during a drought. As of 2009, GWD had banked 43,253 AF. The GWD has the right to pump this entire amount. Under the terms of the Wright Settlement, the GWD has rights to 2,350 AFY of groundwater, but as noted above the GWD can and has also stored additional water underground for later use. The GWD groundwater use is limited by the SAFE Ordinance; however, these restrictions do not apply when there are reduced deliveries from Cachuma. Thus, the District could theoretically pump 6,000 AFY of stored water for seven years. This would offset the GWD’s projected 5,968 AFY shortfall in a single critical drought year (and in seven consecutive drought years with the same annual shortfall of 5,968 AF). In one drought scenario modeled by the GWD, it pumped 4,500 AFY for 6 consecutive years without using the entire drought buffer, and the GWD believes this modeling overestimated effects of drought-time pumping on the groundwater basin. Current pumping capacity is physically limited by well infrastructure to 300 AFY per month or 3,600 AFY (assuming 75% well efficiency at Airport, San Antonio, San Marcos, El Camino and university wells based on 2008 well use). (2011 RDEIR at 4.3-6.) However, there is no evidence that it is infeasible to increase this capacity by adding new wells to mitigate water supply impacts during droughts. Indeed, the GWD analyzed scenarios in which it increased groundwater pumping to 900 AF per month (10,800 AFY) and this pumping increased drought-time water supply reliability.

Thus, it may be possible that GWD’s banked groundwater could help offset GWD’s and other agencies’ projected shortfalls, mitigating some or all of the water supply effects identified in the 2011 RDEIR for Alternatives 5B/5C.

As noted in our comments on the 2007 RDEIR, the GWD has other secondary water supplies, including El Capitan Mutual Water Company, stored injection wells, and a bedrock well. These sources remain unaccounted for in the 2011 RDEIR.

Similarly, the 2011 RDEIR still does not identify the Cold Springs Tunnel for the City of Santa Barbara supply; up to 500 AFY from the Bureau’s Glen Annie Reservoir (part of the Cachuma Project located in Goleta); or 500 AFY from Laurel Canyon Reservoir (in the City of Santa Barbara). While the RDEIR identifies that Mission Tunnel infiltration averages 1,125 AFY, the report understates the infiltration rate during a

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17 Id. at 17.
18 Id. at 33.
19 Id. at 34.
20 Id. at 33.
21 Id. at 33.
22 Id. at 34.
23 Id. at 33.
24 Id. at 45.
25 See EDC September 2007 Comment Letter at 11-12.
26 Ferguson, Bill (City of Santa Barbara Public Works). 2007. Email to Das Williams (Santa Barbara City Councilmember). Sep14. (Stating that the City owns the Cold Spring Tunnel and the rights to a portion of the Tunnel’s 60 gpm of water.) (Attached to EDC September 2007 Comment Letter.)
critical three-year drought. Even with a 500 AFY minimum during critical droughts, this pumping could provide more than 1,577 AFY during a three year drought (i.e. it would not infiltrate at its minimum of 500 AFY for each of the three years but would start off higher (closer to the 1,100 average) and would drop off until it hit a low of 500 AFY, e.g., yr 1: 1,100 AF, yr 2: 700 AF, yr 3: 500 AF = 2300 AF).27

It is also unknown how much the RDEIR reduced Tecolote Tunnel supplies during critical droughts. Tecolote Tunnel infiltration averages 2,000 AFY (2011 RDEIR at Table 4-16) and was modeled to average 1,620 AFY in 1947-1951, about a 20% reduction. (2011 RDEIR Hydrologic Modeling Technical Memorandum #1. Stetson Engineers. December 22, 2000. Revised December 22, 2001. “Impacts of EIR Alternatives Using the Santa Ynez River Hydrology Model.” Table 8B: “Surface Water Budget for Cachuma Reservoir.”) Tecolote Tunnel’s 2,000 AFY is included in the average annual Cachuma Yield 25,115 AFY in 2011 RDEIR Table 4-16. During critical drought years the RDEIR reports a shortage of Cachuma water for all alternatives ranging from 8,835 AFY under Alt 2 to 11,533 under Alt 5B. (2011 RDEIR at Table 4-17.) It is not clear, however, if the 2011 RDEIR uses 1,620 AFY for Tecolote Tunnel infiltration, if it excludes Tecolote Tunnel infiltration, or if it reduces it by more than 20% - e.g., proportionally to the critical drought reduction in Cachuma yield. If one of the latter two options were followed, this would further understate supplies and overstate impacts.

Lastly, the GWD’s reclaimed water plant’s capacity is apparently at least 1,500 AFY. (2011 RDEIR at 4.3-4.)28 According to the GWD, there is currently about 2,000 AFY of unused recycled water production capacity, but infrastructure and a current lack of customers limits utilization of full capacity.29 However, the RDEIR identifies only a maximum of 1,060 and an average of 1,000 AFY. (2011 RDEIR at 4.3-4 – 4.3-6.) The RDEIR should clarify (1) the correct maximum capacity of the plant, and (2) why the reclaimed water plant’s full capacity is not utilized in the analysis. The RDEIR should identify feasible actions (e.g., infrastructure improvements, customer identification) that would enable full use of Goleta’s reclaimed water plant capacity to mitigate project impacts.

Similarly, Table 4-12 of the RDEIR identifies the City of Santa Barbara’s reclaimed water capacity as 800 AFY based on “current connected demand.” However, the NPDES Permit for the City’s El Estero wastewater treatment plant authorizes 1,793 AFY.30 The RDEIR does not provide any basis to assume less than full production of these recycled water plant facilities. If there is a reasonable basis to do so, it should be disclosed in the RDEIR. For example, is additional infrastructure, or additional customers, necessary to distribute reclaimed water in Goleta and Santa Barbara? If so, the RDEIR should require that Members build the infrastructure to take full advantage of

27 See EDC September 2007 Comment Letter at 10-11.
28 See also, Cooley, Heather et al. 2011. Comments on the 2nd Revised Draft EIR for the Cachuma Water Rights Hearing. May 12. (pp. 11-12.) [Attached]
30 Waste Discharge Order 99-40 at para. 7 (identifying Recycled Water Production Capacity of 1.6 MGD, which equals 1,793 AFY).
existing plant capacities to offset drought time reductions in Cachuma supply as a feasible mitigation measure. If not, the RDEIR should use the full capacity AFY and clarify that this reclaimed water can offset reductions in potable supplies used for irrigation in GWD.

c. The RDEIR relies on unreasonably speculative assumptions and cherry-picks data for State Water Project deliveries

Only by cherry picking data and assuming conditions far worse than have ever been recorded does the RDEIR find significant water supply impacts during critical drought periods. Specifically, the RDEIR assumption that the one-in-one hundred year worst-case “Minimum” State Water Project (“SWP”) water supply scenario (1977) will coincide with the worst water supply conditions ever modeled for the Cachuma Project (1951) substantially inflates actual water supply impacts. This is an unreasonable worse than worst-case scenario that misinforms the public and decision-makers and runs afoul of CEQA’s requirements for impact assessment and disclosure.

The “Minimum” possible SWP deliveries identified are 7% (not 6% as reported in the RDEIR). More importantly, when the Cachuma conditions were modeled to be at their worst in 1951, modeled SWP deliveries were 65% – not 6% or even 7%. The analysis of water supply impacts during the critical three-year drought period (1949-1951) assumed SWP deliveries averaged 32% for those three years. However, modeled SWP deliveries for those three years ranged from 59% in 1949 to 54% in 1950 to 65% in 1951 – not 32%. Assuming occurrence of the worst case scenario for Cachuma water supplies coinciding with the SWP “Minimum” delivery assumes a statistically remote and unlikely event with a return interval of one in several hundred years to as much as one in several thousand years: beyond the expected life of Cachuma Reservoir. While the RDEIR notes the discrepancy as “conservative,” it fails to provide any basis for using such a speculative, remote scenario to analyze potential impacts.


31 State of California (The State Water Project Delivery Reliability Report 2007, pp. 44, Table 6.4 noting a “Minimum” 6% SWP delivery figure; and The State Water Project Delivery Reliability Report 2009, pp. 43, Table 6.3 noting a “Minimum” 7% SWP delivery, and Figure 6.1 showing 7% delivery a is one-in-one hundred year event). It is unclear why the 2011 RDEIR refers to both the 2007 and 2009 Reliability Reports. The 2009 Report is the most current information and should be used instead of the 2007 Report. We refer to the 2009 Report in this comment letter.
32 The State Water Project Delivery Reliability Report 2009, pp. 86, Table B-3.
33 The return interval for the water shortage conditions assumed in the RDEIR is estimated as one in 8,000 years as follows: The 7% delivery figure is a 1 in a hundred event. The worst case Cachuma water supply scenario used is 1949-1951, the worst conditions modeled during the 80-year record. The chance of these two events coinciding is estimated as one in a hundred multiplied by one in 80, or one in 8,000.
speculation to the impact analysis and results in an unreasonable overstatement of water supply impacts.

d. Water demand projections are overestimated

As with prior iterations, the 2011 RDEIR continues to overstate demand. The Pacific Institute has reviewed the water supply impact analysis in the 2011 RDEIR, including the demand projections, and that assessment is attached and incorporated by reference in its entirety. These comments are also referenced throughout this letter.

First, the RDEIR still fails to incorporate Pacific Institute’s assessment that 5,000-7,000 AFY could be conserved cost-effectively, allowing the Cachuma contractors to reduce water demand without loss of service or quality of life. Technological advancements that have occurred since this analysis was done indicate that the conservation potential is now even greater.

The RDEIR states that Pacific Institute’s assessment was disputed by the Member Units, but fails to acknowledge or refute Pacific Institute’s detailed response to the Member Units’ testimony. Notably, the Member Units’ testimony contains numerous factual errors and omissions explicitly identified in the Pacific Institute’s 2007 analysis, and it fails to identify any technical basis to discount the Pacific Institute’s conclusions regarding water savings. If the SWRCB does not incorporate these savings into the RDEIR’s demand projections, then the measures identified by Pacific Institute should be imposed as mitigation, as discussed below.

Second, the 2011 RDEIR demand projections are outdated and fail to include new State-mandated water conservation and efficiency requirements. These requirements include: 1) The Water Conservation Act of 2009 (SBx7-7), requiring all water suppliers to reduce per capita water demand by 20% by the end of the year 2020; and 2) SB 407, requiring replacement of old plumbing fixtures when alterations or improvements are made to single family homes beginning in 2014. These mandatory requirements will necessarily result in reduced per capita demand and must be reflected in the RDEIR’s demand projections. For example, as discussed by the Pacific Institute, other demand projections developed by two of the Cachuma contractors (Goleta Water District and City of Santa Barbara) do factor in the SBx7-7 20% mandate reduction and collectively estimate 2,100 AFY less in demand than the demand projections identified by those same contractors in the 2011 RDEIR.

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35 Cooley et al 2011 at 6-7.
36 Cooley et al 2011 at 7.
38 Id. See also Cooley et al 2011 at 7.
39 Cooley et al 2011 at 4-6.
40 Cooley et al 2011 at 6 (see also, Table 1).
e. Identification of Class I water supply impacts are incorrect as RDEIR assumes mitigation will eliminate impacts

Despite concluding that there are significant, unmitigated impacts for Alternatives 5B/5C, the RDEIR states that:

[A]s a mitigation measure, any drought contingency measures identified in the Member Units’ urban water management plans shall be implemented to the extent necessary to make up for a shortage in water supply in a critical drought year.

(2011 RDEIR at 4.3-31.) Accordingly, the RDEIR itself assumes that drought-related impacts will be mitigated.

However, the identification of mitigation measures is lacking because the formulation of mitigation measures should not, and need not, be deferred until the future. The statement that “any drought contingency measure shall be implemented to the extent necessary to make up for a shortage in water supply in a critical drought year” is too vague and open-ended to satisfy CEQA’s criteria for specifying performance standards. (2011 RDEIR at 4.3-31.) The RDEIR should identify the specific contingency measures, the minimum amounts to be conserved, when the measures must be implemented, and by which agencies.

f. The RDEIR fails to include other feasible mitigation measures

An EIR must describe feasible measures which could minimize significant adverse impacts. The Pacific Institute has assessed the potential among all the Member Units for improving water use efficiency and concluded that 5,000 to 7,000 AFY could be cost-effectively conserved. The Pacific Institute has recently affirmed that these conclusions remain valid, pertinent, and that the potential for conservation likely exceeds 5,000 to 7,000 AFY due to technological improvements since 2003.

Pacific Institute also has stated that during a critical drought “it is not uncommon for communities to cut water use by 10-20% through behavioral measures, such as reducing or even eliminating outdoor irrigation and taking shorter showers.” Notably, these types of measures were not included in the measures that comprise the 5,000 to 7,000 AFY, but they could also help reduce the severity of future water shortages.

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41 CEQA Guidelines § 15126.4(a)(B).
42 CEQA Guidelines § 15126.4(a)(1).
44 Cooley et al 2011 at 7.
45 Cooley et al 2011 at 7.
46 Id.
The 2011 RDEIR fails to discuss the measures identified by Pacific Institute, stating only that the feasibility of “fully mitigating” all impacts is uncertain because the information provided by the Pacific Institute was disputed by the Member Units. (2011 RDEIR at 4.3-29.) However, feasible measures must be considered even if they will not fully eliminate impacts.\textsuperscript{47} Moreover, the RDEIR fails to acknowledge or refute Pacific Institute’s detailed response to the Member Units’ testimony.\textsuperscript{48} The Member Units’ testimony contains numerous factual errors and omissions and fails to identify any technical basis to discount the Pacific Institute’s conclusions regarding water savings.\textsuperscript{49}

Thus, to the extent water supply impacts remain as identified, or similar to those, in the 2011 RDEIR, the 2011 RDEIR must identify as mitigation the 5,000 to 7,000 AFY in conservation measures. The GWD, for example, intends to increase conservation measures beginning next year, corroborating that such conservation is feasible to mitigate identified impacts.\textsuperscript{50}

In addition, the following mitigation strategies have also been overlooked in the RDEIR:

\begin{enumerate}
  \item The RDEIR erroneously presumes members’ water rates are sufficiently strong incentive to conserve water
  \item The RDEIR fails to consider the potential for reducing agricultural water use as a feasible mitigation strategy
\end{enumerate}

The RDEIR states that the Member Units water rates “are some of the highest in the state and constitute a strong incentive to conserve water.” (2011 RDEIR at 4.3-30.) However, the Pacific Institute clarifies that, while some of the Members’ rates are high, they do not “consistently include designs that encourage efficiency improvements.”\textsuperscript{51} The majority of the Member Units could significantly improve their rate structures and thus greatly improve incentives to conserve water.\textsuperscript{52} The RDEIR should identify the modification of rate structures as a feasible mitigation strategy.

Although urban water use is the majority of total water demand for the Member Units, agricultural use is still a significant portion of demand – approximately 10% (5,300 AF).\textsuperscript{53} Agricultural water use can be reduced through increased efficiency without

\textsuperscript{47} Pub. Res. Code § 21002 (“public agencies shall not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would \textit{substantially lessen} the significant environmental effects of such projects” (emphasis added)); CEQA Guidelines § 15370 (“mitigation” includes “minimizing,” “reducing or eliminating,” and “compensating for the impacting by replacing or providing substitute resources.”)


\textsuperscript{49} Id. See also Cooley et al 2011 at 7.

\textsuperscript{50} GWD Water Supply Management Plan at 19.

\textsuperscript{51} Cooley et al 2011 at 9-10.

\textsuperscript{52} Id.

\textsuperscript{53} Cooley et al 2011 at 8.
reducing crop yields or area irrigated. Pacific Institute has estimated agricultural demand could be reduced by as much as 17% in California “by adopting efficient irrigation technologies, improved irrigation scheduling, and regulated deficit irrigation.” Recycled water can also be used to meet agricultural water demand (see below). The RDEIR should identify the potential to decrease agricultural demand for potable water, through increased efficiency and the use of recycled water, as feasible mitigation.

iii. The RDEIR fails to consider recycled water, rainwater harvesting as feasible mitigation strategies

The Member Units currently meet very little of their demand with recycled water programs or rainwater harvesting, while in other districts this is becoming an increasingly important component of water supply portfolios. The 2011 RDEIR does not discuss the potential for the Member Units to expand water recycling and rainwater harvesting in the future as a method to mitigate identified water supply impacts. Some Member Units are operating recycled water facilities (Goleta Water District, City of Santa Barbara), but they are not operating at full capacity. At a minimum, if additional infrastructure is necessary so that Members can take full advantage of existing plant capacities to offset drought time reductions in Cachuma supply, this should be required as a feasible mitigation measure. In addition, the RDEIR should require that a comprehensive feasibility study be conducted to evaluate ways to expand the use of recycled water, including the development of a regional project and a groundwater recharge project. This could be done in conjunction with the water conservation studies described below (and in our prior comments) to ascertain additional water savings beyond the 5,000-7,000 AFY already identified by the Pacific Institute.

iv. The RDEIR fails to consider use of WR 89-18 releases as feasible mitigation strategy

WR 89-18 releases currently occur for the purpose of maximizing the amount of water captured by downstream users. As we have repeatedly pointed out in our prior comments, the SWB has never evaluated the WR 89-18 release schedule to consider modifications to benefit steelhead and other public trust resources. Modifying WR 89-18 to coordinate releases for steelhead could fully maximize the amount of water available for both public trust uses and water supply, thus mitigating potential impacts to water supply.

Consideration of modifications to WR 89-18 is consistent not only with CEQA’s mandate to consider feasible mitigation measures, but also with the public trust doctrine

54 Id.
55 Id.
57 Cooley et al 2011 at 12.
58 EDC September 2007 Comment letter at 35-36. See also, discussion above regarding recycled water programs.
II. The 2011 RDEIR Fails to Evaluate Alternatives In Light of Potential Climate Change Impacts (Section 4.12)

The 2011 RDEIR includes a new section discussing climate change. (2011 RDEIR Section 4.12.) Comments were not solicited by the SWRCB on this portion of the RDEIR. However, information in this section discussing project implications resulting from climate change is significant new information that required recirculation of the EIR and should also have been identified for public comment.59

Certainly, the Cachuma Project must be evaluated in light of climate change impacts, including increased susceptibility to hazardous conditions.60 For example:

With the Santa Ynez River teetering near the southern limit of the steelhead’s geographic range, increasing environmental changes attributable to global warming (e.g., an increase in frequency and intensity of wildfires) could have major consequences to the Bureau of Reclamation’s proposed actions in the Revised Draft Environmental Impact Report (RDEIR).61

Although the RDEIR identifies potential new and increased impacts resulting from climate change – for example, aquatic ecosystem changes and increased risks of wildfires (2011 RDEIR at 4.12-11) – as explained by Dr. William Trush in his comments, it fails to evaluate how, and to what extent, the proposed actions can or will maintain and recover steelhead in light of anticipated climate change effects.62 As one example, Dr. Trush describes how a steelhead population sustained only 3 miles below Bradbury Dam (i.e., the scenario envisioned by each of the project Alternatives) “would be small, fragile, highly susceptible to disturbances, and would have extremely low resiliency in the event of more frequent and more intense wildfires, as well as other global warming effects.”63 However, no analyses have been conducted in the RDEIR to determine whether the proposed mainstem releases will provide sufficient spawning success in tributary watersheds, and protect and grow outmigrating pre-smolts and smolts once they leave tributaries and head down the mainstem channel.64 Dr. Trush provides examples of these and other quantitative analyses that could and should be conducted to

59 CEQA Guidelines § 15088.5(a).
60 CEQA Guidelines § 15126.2(a).
62 Id.
63 Trush 2011 at 4.
64 Trush 2011 at 3.
assess steelhead resiliency.65 Dr. Trush’s full comments are attached and incorporated by reference in their entirety.

Thus, contrary to the assertions in the RDEIR, it is feasible to predict and evaluate the project implications resulting from climate change, as well as how such changes would influence the implementation of the proposed project. The RDEIR impact analysis cannot be deferred to a point “if and when” the potential effects of climate change occur. (2011 RDEIR at 4.12-22.) This ignores CEQA’s mandate to analyze potential hazards “both as such hazards currently exist or may occur in the future.”66 It also fails CEQA’s requirement of “adequacy, completeness, and a good-faith effort at full disclosure.”67

The RDEIR also attempts to circumvent its legal obligations to analyze these impacts with a clearly deficient mitigation measure – “the local managing partner will update the Fish Management Plan and Biological Opinion to periodically manage the potential effects of climate change if and when they occur.” (2011 RDEIR at 4.12-22.) Mitigation measures under CEQA must be known, specific, feasible, effective and enforceable.68 CEQA also prohibits deferred mitigation.69 This nebulous requirement meets none of these criteria.

The RDEIR must be updated to analyze how, and to what extent, the proposed actions will impact steelhead and other public trust resources in light of anticipated climate change effects. This is significant new information that will require recirculation of the RDEIR for public review and comment because of 1) a new significant impact or substantial increase in the severity of environmental impacts would result; and 2) the 2011 RDEIR is fundamentally inadequate and conclusory in its current discussion of this issue.70

III. The 2011 RDEIR Erroneously Finds That All Alternatives Are Beneficial For Steelhead (Section 6.0)

The RDEIR finds that “All of the alternatives would result in beneficial (Class IV) impacts to . . . steelhead movement, migration and habitat.” (2011 RDEIR at 6.0-2.) This finding is incorrect because 1) none of the RDEIR Alternatives have been evaluated in light of climate change impacts; 2) none of the RDEIR Alternatives have been evaluated for impacts from WR 89-18 releases; 3) none of the RDEIR Alternatives

65 Trush 2011 at 4.
67 CEQA Guidelines § 15003(i); Kings County Farm Bureau v. City of Hanford (1990) 221 Cal.App.3d 692.
69 CEQA Guidelines § 15126.4(a)(1)(B).
70 CEQA Guidelines §15088.5.
properly considers the lagoon life history phases for steelhead; and 4) Alternative 4B causes a steelhead imprinting/migration impact that has not been mitigated. The RDEIR’s faulty finding about beneficial impacts undercuts its conclusion about the environmentally superior alternative, as discussed in Section IV below.

**a. No Alternatives have been evaluated in light of climate change impacts**

As discussed in Section II above, the RDEIR includes only a cursory review of potential increased impacts resulting from climate change and, moreover, fails to review any of the Alternatives for potentially significant increased impacts that may occur due to climate change affects.

**b. No Alternatives have been evaluated for impacts from WR 89-18 releases**

Water rights releases under WR 89-18 result in a number of significant, adverse impacts to steelhead, which we have identified in our prior comments on the EIR. The 2000 Biological Opinion identifies WR 89-18 releases as an issue of concern in the Santa Ynez River, and NMFS has recently affirmed that these releases are of concern for steelhead.

The 2011 RDEIR Alternatives all maintain the established WR 89-18 releases, which have never been evaluated for impacts to public trust resources, and the RDEIR itself continues to disregard potential adverse effects of WR 89-18 releases on steelhead or other public trust resources.

**c. No Alternatives properly consider the lagoon life history phases for steelhead**

The lagoon is critically important for steelhead migration and for steelhead rearing. In this regard, we have previously identified flaws in the impact analysis for steelhead including that it fails to consider the importance of the lagoon for smolt rearing. In addition, the migration analysis fails to consider whether the mouth of the lagoon would actually be open. The 2011 RDEIR continues these errors. New information recently presented to the public regarding the Santa Ynez River lagoon identifies the changes in hydrology – including construction and operation of upstream dams – and resulting physical impacts the lower River, on lagoon processes and habitat function. This information is relevant to the environmental setting. Analysis of the

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71 See, e.g., EDC September 2007 Comment Letter at 19-20.
74 EDC October 2003 Comment Letter at 10; See also, Keegan 2003 (Attachment 19 to EDC October 2003 Comment Letter).
75 EDC September 2007 Comment Letter at 21; See also, Williams 2007 (Attached to EDC September 2007 Comment Letter).
project alternatives in light of this information would likely identify new significant, and substantially increased, environmental impacts. The new information also demonstrates that the RDEIR alternatives – by relying primarily on the 2000 BO – do not achieve the EIR’s public trust objective. The RDEIR should be recirculated with this new information so that the public may have an opportunity to review and comment.

d. Alternative 4B may cause steelhead migration/imprinting and other impacts that are not mitigated

The 2000 Biological Opinion prohibits releases of SWP water into the River below Bradbury Dam when smolts are present due to concerns that steelhead could imprint on SWP water and become disoriented during subsequent migrations. Alternative 4B delivers SWP water into the River at Lompoc. Steelhead are present in the River below Lompoc, including the Lagoon, and may be adversely affected if reared in, or attempting to migrate in, water containing substantial portions of SWP water. Although, the RDEIR assesses the impact of flow rates and durations on steelhead migration, it fails to consider and analyze the impact of Alternative 4B’s SWP releases on steelhead migration. This impact is potentially significant, and unmitigated.

Alternative 4B also causes another impact that other alternatives do not cause: impacts to the Santa Ynez River from construction of a lengthy pipeline to deliver SWP water to Lompoc and construction and maintenance of four outlet works in the Santa Ynez River’s banks. (2011 RDEIR at 6.0-3.) Table 6-2 identifies this unique impact of Alternative 4B as a Class II impact to sensitive wildlife species. (2011 RDEIR at 6.0-7.) The RDEIR also finds that Alternative 4B would remove approximately 200 square feet of riparian vegetation at each of four outlets constructed on river banks causing a Class II impact. (2011 RDEIR at 4.8-16.) The RDEIR proposes to mitigate this loss by replacing riparian vegetation at a 2:1 ratio. (2011 RDEIR at 4.8-22.) However, the mitigation measure for this impact is insufficient pursuant to CEQA. Under CEQA, mitigation measures cannot be deferred without performance standards which are needed ensure the

77 2000 Biological Opinion at 71, Reasonable and Prudent Measure #5 (“Reclamation shall avoid mixing CCWA water in the Santa Ynez River downstream of Bradbury dam when steelhead smolts could become imprinted with it.”).
78 RDEIR Section 4.8.2.4 states “Alternative 4B would involve the construction of four outlets on the east bank of the Santa Ynez River to discharge SWP water for recharge into the riverbed. The outlets would consist of steel pipes extending to the base of the riverbank. A concrete or rip-rap spillway or apron would be constructed under each outlet to prevent bank erosion. About 200 square feet of riparian vegetation would be permanently displaced at each location. Vegetation that would be removed consists of mulefat and willow scrub, and possibly several mature willow or cottonwood trees, depending upon the final locations of the outlets. No mature oak trees or wetlands would be removed. The permanent removal of riparian vegetation from the four discharge outlets is considered a potentially significant, but mitigable impact (Class II). The impact can be mitigated by avoiding mature woodland habitat and by restoring any riparian scrub disturbed during construction.”
79 Mitigation Measure RP-2 states: “In the event that Alternative 4B is pursued, the facilities associated with Alternative 4B shall be designed and constructed to ensure avoidance of significant riparian vegetation. Any riparian vegetation displaced by construction activities and the new facilities on the riverbank shall be replaced on site at a 2:1 ratio.”
measures’ success.\textsuperscript{80} In this case the RDEIR defers preparation of a plan to replace lost riparian vegetation and does not identify (1) locations for replacement habitat, (2) methods of replacement, (3) plant types to use, (4) planting maintenance and irrigation methods, (5) requirements for replacing plants that may die, or (6) performance standards to ensure success such as (a) survival percentages, (b) percentages cover by native species, or (c) growth standards for different riparian plant species. Therefore, while Sections 4.8 and 6.0 and Table 6-2 identify Alternative 4B’s unique potentially significant impact of the SWP pipeline and outlets, they fail to include legally adequate mitigation that would support the RDEIR’s finding that the impact to riparian vegetation will be adequately mitigated, i.e., Class II. Because the mitigation measure is insufficient, the RDEIR must find this impact significant (Class I). Given that the Alternative 4B pipeline’s significant impact on riparian vegetation and sensitive species is (1) not adequately mitigated and (2) is entirely avoided by all other alternatives, Alternative 4B cannot be considered the environmentally superior alternative (see below).

IV. The 2011 RDEIR Fails To Correctly Identify The Environmentally Superior Alternative (Section 6.0)

The 2011 RDEIR finds that Alternatives 3C and 4B meet the project objectives for protecting public trust resources and protecting senior water rights. Because Alternative 3C is the No Project Alternative, the RDEIR concludes that Alternative 4B is the environmentally superior alternative. This conclusion is incorrect for the reasons we have stated in our previously submitted comments, which we incorporate here by reference, and for the following reasons highlighted by recent data and the new information in the 2011 RDEIR:

\textit{a. Alternatives 3C and 4B do not meet the critical project objective of protecting public trust resources}

The RDEIR finds that Alternatives 3C and 4B meet the objective of “protecting public trust resources, including but not limited to steelhead, red-legged frog, tidewater goby, and wetlands, in the Santa Ynez River downstream of Bradbury Dam, to the extent feasible . . . .” (2011 RDEIR at 6.0-3.) First, this characterization of the project objectives for public trust resources is inconsistent with the May 29, 2003 Notice from the SWRCB Hearing Officer that consideration of public trust issues “is not limited to public trust resources below Bradbury Dam.” (Emphasis added.) The RDEIR’s narrow focus on steelhead and other public trust resources below Bradbury Dam is inconsistent with the properly framed project objective of protection of public trust resources above \textit{and} below Bradbury Dam. As we have identified in our prior comments, the RDEIR simply fails to analyze impacts in light of this objective, which is the primary basis for the SWRCB’s consideration of this matter. It is unclear how this EIR will serve as evidence for the SWRCB’s ultimate hearing decision if it is inconsistent with the SWRCB’s overall public trust responsibility for the Bureau of Reclamation’s water rights permits.

\textsuperscript{80} CEQA Guidelines § 15126.4(a)(B); \textit{Sundstrom v. County of Mendocino} (1\textsuperscript{st} Dist. 1988) 202 Cal. App. 3d 296.
Second, as discussed above, this finding is necessarily predicated on the RDEIR’s prior incorrect finding that these Alternatives would result in beneficial impacts to steelhead movement, migration and habitat. (2011 RDEIR at 6.0-2.) As a result, the RDEIR has no reasonable basis to conclude that any of the Alternatives, including Alternatives 3C and 4B, would meet the public trust resources objective.

As a further example to highlight this, Alternatives 3 and 4 both simply implement the 2000 Biological Opinion. These flow schedules have been implemented pursuant to the Biological Opinion for 11 years and pursuant to the Fish Management Plan for multiple years prior to 2000. The steelhead population has not significantly improved during this time. Its numbers remain critically low in the Santa Ynez River. According to documents received from CCRB in response to a September 2010 Public Records Act request, the highest number of anadromous steelhead recorded since records have been kept subsequent to construction of Bradbury Dam in 1954 is 16. 81 This number starkly contrasts with identified historic runs of 9,000-30,000. 82 Thus, the Biological Opinion, and by extension Alternatives 3 and 4, are, at best, merely maintaining this highly depressed steelhead population on life support and are not adequate to protect public trust resources.

In this regard, it is also noteworthy that NMFS and the Bureau of Reclamation have reinitiated the Endangered Species Act Section 7 consultation because of “evidence generally indicating the Project is affecting endangered steelhead in a manner and extent not previously considered” in the 2000 BO. 83 This further underscores our points that the the 2000 BO is inadequate to protect public trust resources, and that the SWRCB should hold any further action on this EIR pending completion of the reinitiated consultation.

b. **CalTrout 3A2 modified is an environmentally superior alternative that should be analyzed in the RDEIR**

Under CEQA, the SWRCB cannot adopt an alternative if there is another feasible alternative that fulfills most of the basic project objectives and avoids or substantially lessens a significant impact. 84 In our October 2003 and September 2007 comment letters, EDC identified a new alternative that could feasibly protect steelhead without causing significant adverse impacts. 85 CalTrout’s Alternative 3A2 Modified for Dry Years is more capable of fulfilling the public trust objective and has been identified as the most

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81 Cachuma Conservation and Release Board. 2010. Requested Data from the Lower Santa Ynez River Steelhead / Rainbow Trout Monitoring and Habitat Restoration Program. Jul 28. [Attached] (See p. 3, Table 2 and Figure 3.) In addition, only 9 to 11 steelhead have been captured on the Santa Ynez River this year. Robinson, Tim (CCRB). 2011. Personal Communication to Brian Trautwein (EDC). May 11.
82 See, e.g., CalTrout Ex. CT-90 at 2-4, discussing historic steelhead abundance on the Santa Ynez River.
protective standard based on available information. This Alternative must therefore be evaluated in the RDEIR. Water supply and demand projections should be corrected and analyzed consistent with the analysis of the Pacific Institute and our comments above regarding water supply impacts to properly assess water supply impacts, as well as how this Alternative comports with (1) the water supply impacts of measures designed to protect public trust resources; and (2) the extent to which any water supply impacts can be minimized through the implementation of water conservation measures.” (2011 RDEIR at 6.0-3.)

CalTrout has also previously recommended, and continues to recommend, additional studies to augment this core Alternative: 1) a “demonstration flow assessment” to confirm the efficacy of any adopted instream flow schedule; 2) a study of modifications to WR 89-18 to maximize the beneficial use of Cachuma Project water; and 3) additional water conservation studies to identify additional water savings beyond the 5,000-7,000 AFY identified by the Pacific Institute.

In addition, to comply with the SWRCB’s obligation to consider public trust resources in the Santa Ynez River, and the May 29, 2003 Notice from the SWRCB Hearing Officer that consideration of public trust issues “is not limited to public trust resources below Bradbury Dam,” the RDEIR must also evaluate alternatives that consider public trust resources above Bradbury Dam. As discussed in our prior comment letters, fish passage around Bradbury Dam must be considered, and a study of such passage must be conducted to fulfill the public trust objective.

V. The 2011 RDEIR Fails To Consider Potential Future Projects in Cumulative Impacts Analysis (2011 RDEIR Section 7.0)

The 2011 RDEIR fails to identify and evaluate significant new information about potential future projects in its Cumulative Impacts analysis that may result in cumulatively considerable impacts. These projects include: 1) The City of Solvang’s Water System Master Plan Update; and 2) the Alisal Ranch project near Solvang.

Solvang’s Water System Master Plan Update includes installing additional River wells and increased pumping of Santa Ynez River water. This project is expected to reduce flows in the River, which may necessitate increased releases from Bradbury Dam to meet the target flows established by the 2000 Biological Opinion and discussed in this RDEIR. This pumping could also potentially impact South Coast water supplies. These

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86 See discussion in EDC September 2007 Comment letter at 31.
87 EDC September 2007 Comment letter at 35.
88 EDC September 2007 Comment letter at 35.
89 EDC September 2007 Comment letter at 35-36. See also, discussion above regarding recycled water programs.
90 See EDC September 2007 Comment letter at 32-34.
and other potential significant impacts are discussed in detail in comments submitted by EDC to the City of Solvang regarding the project.93

The Alisal Ranch project includes construction of a new irrigation reservoir on property near Solvang. Among other concerns, this project may lead to “diminished surface flows or complete drying of streams which, in turn, may result in adverse effects to steelhead or habitat for the species.”94

The RDEIR Alternatives must be considered together with these projects and evaluated for significant cumulative impacts to steelhead and other public trust resources in the Santa Ynez River.

VI. Conclusion

As detailed above, numerous errors persist in the 2011 RDEIR that render it inadequate under CEQA and as evidence for the SWRCB in the Cachuma hearing proceedings.

Thank you for the opportunity to comment on this document. Please contact Karen Kraus at (805) 658-2688 if you have any questions.

Sincerely,

Karen M. Kraus
Staff Attorney

Brian Trautwein
Environmental Analyst

Attachments
cc: Cachuma Project Hearing Service List
    (5/13/11)

See also, Root, Roger (FWS). 2010. Letter to Tammy Weber RE Draft Mitigated Negative Declaration For the Proposed Alisal Ranch Reservoir, Solvang, Santa Barbara County, California. Dec 22. [Attached]
List of Attachments


Regional Water Quality Control Board. 1999a. Staff Report For Regular Meeting of July 9, 1999.


Cachuma Project Phase 2 Hearing
Final Service List
(updated 05/13/2011)
(Based on 01/05/2004 list, updated 07/26/2007, updated 06/08/2010, updated 01/20/2011, updated 05/13/2011)

The parties whose email addresses are listed below agreed to accept electronic service, pursuant to the rules specified in the hearing notice.

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