United States Department of the Interior

BUREAU OF RECLAMATION
Mid-Pacific Regional Office
2800 Cottage Way
Sacramento, California 95825-1898

IN REPLY
REFER TO:
MP-440
WTR 4.10

SEP 2 8 2007

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

SUBJECT: Comments on Revised Draft Environmental Impact Report for Consideration of Modifications to the Bureau of Reclamation's Water Right Permits 11308 and 11310 (Applications 11331 and 11332) to Protect Public Trust Values and Downstream Water rights on the Santa Ynez River below Bradbury Dam (Cachuma Reservoir) July 2007, Cachuma Project, California

Dear Ms. Farwell:

Reclamation has reviewed the above-referenced State Water Resources Control Board (SWRCB) Revised Draft Environmental Impact Report (2007 DEIR) for modifications to its water right permits for the Cachuma Project (Bradbury Dam and related facilities), and hereby submits comments on the document pursuant to the California Environmental Quality Act (CEQA).

I. Background

The Cachuma Project was authorized by Congress in 1948 and constructed in 1953 to satisfy an urgent need for water supply to the south coast of Santa Barbara County. Reclamation applied for State water right permits which were granted in 1958 by a predecessor agency to the SWRCB under Water Right Decision D-886. The permits authorize Reclamation to store up to a total of 275,000 acre-feet annually in Cachuma Lake or Reservoir, impounded by Bradbury Dam, for irrigation, domestic, salinity control, incidental recreational purposes, stock watering (Permit No. 11308), and municipal and industrial purposes (Permit No. 11310).

The water right applications for the Cachuma Project were approved under the condition that the project be operated to protect vested prior water rights on the Santa Ynez River below the dam. The State Water Rights Board, now the SWRCB, reserved jurisdiction under the permits so that enough information could be obtained to determine the amounts, timing and rates of releases needed to protect downstream water rights.

The SWRCB has continued its reserved jurisdiction under Permits 11308 and 11310 to the present. In the late 1980's and early 1990's, operation of Cachuma Reservoir to satisfy downstream water rights was still a contested issue. Water Right Decision 89-18 resulted in new accounting, monitoring, and operating procedures for Cachuma Reservoir which were the result of negotiations between Reclamation, the Cachuma water users, and the downstream water right interests. However, further hearings on downstream water right impacts were delayed so that the parties could gain experience and data under the WR 89-18 operating procedures. While the parties were making progress, some issues regarding downstream water rights remained unresolved.

Also at that time, a severe drought had occurred in the Santa Ynez River basin resulting in additional concerns regarding the impact of the Cachuma Project on steelhead below Bradbury Dam. In response, the SWRCB, by Order WR 94-5, adopted November 17, 1994, continued its reserved jurisdiction to establish long-term permit conditions to protect downstream water right holders and to determine whether modifications to permit conditions would be required to protect public trust resources. In 1997, the Southern California steelhead (*Oncorhynchus mykiss*) Evolutionary Significant Unit (ESU) (hereinafter "steelhead") was listed by NOAA Fisheries, National Marine Fisheries Service (NMFS) as an endangered species under the federal Endangered Species Act. NMFS issued a Biological Opinion (BO) for Cachuma Project operations and maintenance in September 2000.

WR 94-5 also required that a hearing be commenced no later than December 1, 2000. On September 25, 2000, the SWRCB issued a Notice of Public Hearing to be conducted in two phases. Key Issues were identified in that notice for both Phase 1 and Phase 2. Phase 1 of the hearing occurred on November 6, 2000, pertaining primarily to issues regarding Reclamation's petitions for change in place- and purposes-of-use. In December 2002, the parties reached an historic Settlement Agreement which settles long outstanding issues regarding downstream water rights. Phase 2 of the hearing occurred in October and November of 2003 pertaining to downstream water rights and public trust resources.

In August 2003, the SWRCB issued the first DEIR for Cachuma Project operations. Recently, in July 2007, the SWRCB issued a revised DEIR which drops certain alternatives from the 2003 DEIR from further analysis, and adds two additional alternatives. The addition of the alternatives is in response to comments on the original DEIR submitted by CalTrout. CalTrout urged the SWRCB to consider an alternative flow regime as defined in an environmental document prepared by Reclamation and the Cachuma Member Units in 1995, prior to consultation and completion of the BO by NMFS. The SWRCB has thus analyzed two new Alternatives (5B and 5C) which would implement the flow regime advocated by CalTrout in wet years, but revert back to the flow regimes in the BO in dryer years.

In general, Reclamation has three major concerns with the SWRCB 2007 DEIR. First, the premise that Alternatives 5B and 5C are more protective of fish – simply because they require releases of more water in wet years – is not supported by the 2007 DEIR. The 2007 DEIR analysis shows that Alternative 3C would be the most protective of steelhead in some respects,

and that there is little or no functional difference between Alternative 3C and 5C in other respects. Second, the 2007 DEIR underestimates impacts to water supply, and third, the 2007 DEIR ignores the 2002 Settlement Agreement which settles years of disputes regarding water right impacts below Bradbury Dam. Each of these concerns is set forth in detail below.

Reclamation continues to support Alternative 3C. Selection of either Alternative 5B or 5C may require re-consultation between Reclamation and NMFS, or invoke Section 10 of the ESA between SWRCB and NMFS. In addition, selection of either 5B or 5C could very well disrupt successful implementation of the Settlement Agreement with a result of litt.e to no net benefit to fish.

II. The 2007 DEIR Does Not Fully Analyze Impacts to Biological Resources under Alternatives 5B and 5C.

The scoring methodologies used to describe the effects of the alternatives to steelhead are similar to the methodology used by Reclamation and COMB in the February 2004 Final Environmental Impact Report/Environmental Impact Statement Lower Santa Ynez River Fish Management Plan and Cachuma Project Biological Opinion for Southern Steelhead Trout (FMP EIR/EIS). The scoring system described in the DEIR is, however, based on the assumption of an exclusively positive relationship between the amount of water available and the benefit to steelhead passage. In essence, the system described is that more water automatically equals more benefit, those benefits are equally distributed, and there are no adverse effects associated with the additional water.

The scoring used to describe the potential effects on passage for steelhead uses a score of 5 to indicate 15 or more days of passage in a year based on the amount of flow at the Alisal Road Bridge. Scores of 4 and below are broken into roughly equal 3-4 day blocks to a score of 0, indicating no passage days. The DEIR explains, on page 4-65, that the "remaining scores were assigned passage days by dividing the remaining passage days evenly amongst the scores. This reflects that, given the uncertainty and variability in steelhead travel times, passage opportunities to portions of the mainstem may be provided even with smaller numbers of passage days." The DEIR acknowledges (page 4-64) that there is uncertainty in the travel times for steelhead, and notes that NMFS considered 14 days of passage in a particular year to provide adequate passage opportunities.

The methodology in the DEIR does not account for other variables that affect passage, such as depth, velocity, substrate, temperature, in-stream objects (such as woody debris and beaver dams), water diversions (surface water and groundwater), dissolved oxygen, turbidity, resting and sheltering habitat, and predators. The rationale for excluding these variables should be explained.

The DEIR also does not recognize that passage to the dam is not necessarily a preferred goal, as the available high quality habitat in the area is primarily within the section of Hilton Creek on Reclamation land. Hilton Creek is nearing, if not already at, carrying capacity (based on

information collected by the Cachuma Conservation Release Board on behalf of Reclamation), a state that had not been reached at the time the FMP EIR/EIS was written. The increased production of Hilton Creek is, in large part, likely the result of the improvement projects completed by Reclamation as part of the BO. Passage through the Santa Ynez mainstem is therefore more appropriately scored on the ability of steelhead to reach the tributaries (e.g., Salsipuedes and Quiota Creeks), where large stretches of habitat suitable for spawning and rearing are found.

Table 4-42 in the DEIR shows the scoring for the various alternatives for steelhead passage. Examination of the scores shown supports the selection of Alternative 3C as most beneficial to steelhead passage. Alternative 3C is estimated to provide a minimum of 11 days of passage (score of 4 or higher) in 37 of 52 (71%) years. Alternatives 5B and 5C are estimated to provide a minimum of 11 days of passage in 35 of those 52 years (67%). While Alternatives 5B and 5C are estimated to provide 15 or more days of passage in 33 years, as opposed to 31 years for Alternative 3C, the amount of additional passage days that would be provided would only be relevant if the steelhead were passing beyond the dam. As noted in the DEIR, operations of the dam, including releases, do not affect the flows in the tributaries. Hilton Creek is supplied with water based on the requirements established by the BO, and the remaining downstream tributaries are not connected to the lake at all. Hilton Creek is, as mentioned previously, already nearing its carrying capacity as a result of the habitat improvements that Reclamation has made to the creek.

Upstream passage only matters to the extent that it allows adult fish to move through the system into areas suitable for spawning. Downstream passage matters to the extent that juvenile fish can reach the ocean. Once upstream migrants leave the mainstem into the tributaries, passage flows cease to be relevant for those fish; the flows continue to be relevant to fish still migrating in the mainstem, of course. Downstream migrants are not, as far as Reclamation is aware, cued to migrate by conditions in the mainstem, but rather by conditions in the tributaries they inhabit. These tributaries are typical of southern California streams in that they are highly "flashy", which is to say that large pulse flows can occur over very short intervals. These pulse flows will be what triggers downstream migration from the tributaries into the mainstem.

Passage opportunities, therefore, are not equally beneficial for upstream and downstream migration. Within that limitation, however, the scores that represent what NMFS identified in the BO as appropriate for migration opportunities clearly reflect the advantages of Alternative 3C over both 5B and 5C.

The DEIR notes on page 4-67 that scores of 5 are provided in 23 years of the 52 year simulation under Alternative 2 for spawning habitat, and refers to Table 4-43. Table 4-43, however, shows a 76 year analytic period, not a 52 year period. The text or the Table should therefore be corrected.

The benefits to spawning steelhead, as shown in Table 4-43, are limited for all Alternatives. As mentioned previously, habitat suitable for spawning is limited in the mainstem, and

predominantly occurs in the tributaries. Water flow in the tributaries is not subject to the operations of the Cachuma Project, with the exception of Hilton Creek, which receives a permanent supply of water through the Supplemental Watering System identified in the BO. The benefits to the limited habitat available in the mainstem, which may or may not be significant under CEQA compared to the baseline, are not significantly different *to the species* between Alternatives 3C, 5B, and 5C.

Scoring for the fry and juvenile rearing analysis shows no functional difference between Alternatives 3C, 5B, and 5C for either analysis. The fry rearing shows an equal number of years estimated to provide sufficient flows (75 out of 76) with scores of 3 or higher. The juvenile rearing shows 74 out of 76 years for the three Alternatives with scores of 3 or higher. While Alternatives 5B and 5C have more scores of 5 (indicating flows of 10 cfs or more) than does 3C, this does not indicate a greater benefit than flows of up to 10 cfs. Neither the DEIR nor the BO identify any specific benefit that is provided by flows higher than 10 cfs. Flows are necessary for rearing, maintaining dissolved oxygen levels, providing feeding opportunities, and aiding in shelter from predators. But, flows beyond 10 cfs in the mainstem will not add to any of these benefits. A comparison between Alternatives should, therefore, look at the scores that do add to the value of the habitat to the species. Under that analysis, there is no functional difference between Alternatives 3C, 5B, and 5C.

The DEIR takes the position that all effects to steelhead from increased water flows are positive. While Reclamation agrees that there are numerous beneficial effects associated with increased flows, no mention is made of potentially adverse effects that could result. Increased turbidity, particularly in areas over substrates of fine sands such as much of the lower Santa Ynez River, can potentially damage gills and skin by abrasion, can hide potential predators such as warm water species, can decrease the thermal stratification of habitats (especially pools), and can reduce feeding opportunities for younger, smaller fish. Turbidity can also decrease reproductive success. Depending on the specific habitat type and substrate, and the resulting flow-related cover, increased flows may potentially wash the smaller emergent fry downstream and into unsuitable habitats. Again, these may or may not be relevant to the Santa Ynez River system, but no discussion of these, or any other potentially adverse effects, is presented in the DEIR. Because of the potential for adverse effects under Alternatives 5B or 5C, Reclamation may be required to re-consult with NMFS on the new operating criteria if either Alternative is chosen. Or, on the other hand, the SWRCB may be required to consult with NMFS under Section 10 of the ESA. There is no disclosure or discussion of these effects in the DEIR.

III. <u>The 2007 DEIR Inadequately Discloses the Impacts of Alternatives 5B and 5C on Water Supply.</u>

The DEIR Executive Summary concludes that Alternatives 3B, 3C, 4B and 5C would avoid the potentially significant indirect impacts associated with a reduction in water supply to the Member Units that would occur under Alternative 5B. It goes on to state that under Alternative 5B, the release requirements would only be partially offset by a 1.8-foot surcharge. These statements seem to be unsubstantiated based on all water year types. The support behind these

conclusions, both in the Executive Summary and in the cumulative impacts section needs to be disclosed and discussed.

It is more likely that a significant Class I cumulative impact may occur based on all of the potential Alternatives due to a significant reduction in water supply available to member Units from the Cachuma Project. (See 2007 DEIR, Sections 4.3 and 7.0.) These reductions were previously recognized in both the FMP EIR/EIS, as well as the BO.

The water supply impacts as shown in Table 4-16 of the 2007 DEIR are underestimated for some water year types. In both critical drought years (1951) and critical 3-year drought periods (1949-1951), year-to-year water supply management becomes crucial. Water managers routinely prepare for additional dry or drought years by storing (where possible) additional waters. These reserves serve as a safety net to ensure sustainability if conditions the following water year remain critically dry. Without these reserves during drought years, the potential impact to an individual Member Unit may be significant. For an accurate representation of impacts to water supply, Table 4-16 should be revised to include reserves.

As Table 4-16 currently states, under Alternative 5B there is approximately 12, 506 acre feet (af) of shortage, which constitutes a Class 1 impact. If the 2007 DEIR were to be revised to include for reserves in a critical drought water year and in 3-year critical drought period it is likely that all water year types would result in an equal or greater shortage amount (i.e. more than 12,506 af), thus constituting Class 1 impacts for all Alternatives in drought years.

Demand for water from the Cachuma Project is very dynamic -- both during the water year as well as between water years. The 2007 DEIR should use the most current and best available demand information supplied from the Member Units to conduct its analysis. The numbers in the DEIR are outdated. While it is fully expected that future demand maybe difficult to pinpoint, Member Units do have anticipated long-term water supply plans, and these plans should be utilized to assist in projecting impacts.

A set of operating conditions, consistent with Alternative 3C, has already been developed between Reclamation, NMFS, various downstream interests, and other parties as a result of the BO and the FMP. By operating in accordance with these conditions, the Member Units have already incurred significant water supply reductions. Because even less water is available to the Member Units under alternatives 5B and 5C, the DEIR should include an incremental shortage analysis to determine the impacts to Member Units relative to Alternative 1 in critical drought periods.

The U.S. Geological Survey Water Supply Paper "Water Resources of Southern California with Special Reference to the Drought of 1944-1951" shows that several severe droughts have occurred historically in the Santa Ynez Basin (1928-34, 1986-91, and 1949-51). With the greatest potential impact to the water supply of the Cachuma project situated around the critical drought years, a sensitivity analysis assuming a 10 to 20 percent reduction in runoff should be conducted and included in the DEIR to accurately determine impact to the water supply.

Alternatives 5B and 5C require a much larger continuous flow targeted at Alisal Bridge (10.5 miles below Bradbury) during the summer months compared to the FMP and BO. This target flow at Alisal Bridge versus Highway 154 Bridge (3.5 miles below Bradbury) could require additional releases of water from Bradbury Dam to compensate for losses to the riverine system as infiltration. A sensitivity analysis is needed to quantify these values accurately in the DEIR. With so many variables that could cause a change in the loss factors, it seems prudent to convert all release flows as targeted at Bradbury Dam.

As potential mitigation for Cachuma Project water shortages the 2007 DEIR suggests several alternatives. The alternative that discusses increased groundwater pumping could result in a plethora of adverse indirect impacts. Salt-water intrusion and an evaluation of local groundwater rights, at a minimum, need to be explored if the impacts of pumping groundwater are to be accurately evaluated. These impacts are not adequately disclosed in the DEIR.

Another alternative that the 2007 DEIR discusses is the use of desalination to offset the loss of water supplies during critical drought years. This alternative could also result in a host of adverse indirect impacts. No National Pollutant Discharge Elimination System (NPDES) permits have been issued for desalination. Without NPDES permits for the City of Santa Barbara, it is unknown if this alternative is even feasible. An analysis of the feasibility, limitations, and impact of using desalinization water to mitigate impacts to the water supply to the Cachuma project needs to be undertaken before the SWRCB can rely on this alternative as an actual offset to water supplies

IV. The 2007 DEIR Does Not Fully Disclose the Impacts of Alternatives 5B and 5C on the 2002 Settlement Agreement.

As a result of Order WR 94-5, data was gathered in an effort to provide the SWRCB with the necessary information to come to a decision that will meet the needs of both the downstream water right holders and public trust resources. As discussed earlier, a Settlement Agreement was reached in 2002 as a means to resolve the long-standing issues relating to the operations of the Project and its impacts to downstream water rights and public trust resources. While Reclamation is not a party to the Agreement, it reviewed the methodology used to support the Agreement, and supports operations of the Project that are compatible with the Settlement Agreement. Reclamation believes that the Agreement resolves the SWRCB's issues concerning downstream water rights and public trust resources, and has requested modifications to its permits consistent with the Settlement Agreement.

Alternatives 5B and 5C are not compatible with the Settlement Agreement. The 2007 DEIR makes no mention of the Settlement Agreement, or whether the Agreement could survive under either Alternative.

V. Other.

The DEIR attempts to analyze the effects of the various Alternatives on individual resource areas (e.g., steelhead, surface water, riparian and lakeshore vegetation, archaeological and cultural resources, etc), and presents a summary table on pages 6-2 & 6-3. This table presents the various Alternatives and resource areas and identifies which will be impacted by each Alternative. There is also a very brief summary on page 6-4 of water supply impacts. There is, however, no conclusory description of the aggregate impacts to the resources for each Alternative. The DEIR stops short of describing in sum total how the environment would be affected by each Alternative, beneficial, adverse, or neutral.

In addition, the DEIR analyzes both a 1.8-foot surcharge and a 3.0-foot surcharge. An accurate description of the current operations would be that the Project includes a 3.0-foot surcharge. Reclamation has implemented the 3.0-foot surcharge under its existing permits to store up to 275,000 acre feet per year. The impacts of the 3.0 surcharge were analyzed in the Final EIR/EIS for the Lower Santa Ynez River Fish Management Plan.

VI. Conclusion.

The SWRCB 2007 DEIR inadequately discloses the effects of Alternatives 5B and 5C. Actual benefits to fish are overstated while potential adverse impacts are ignored, adverse water supply impacts are understated and inadequately discussed, and the DEIR does not disclose impacts to the Settlement Agreement. Reclamation believes that the DEIR's analysis of Alternatives 5B and 5C are woefully inadequate to support any decision by the SWRCB to regulate flow for the benefit of steelhead beyond those flows required by NMFS in the BO. Reclamation understands that the SWRCB has an independent obligation to protect public trust resources, but that any regulation beyond the BO must be justified with adequate science and environmental analysis. In addition, regulation beyond the BO, based on inadequate science and analysis, is not enough reason to increase adverse impacts to water supply, and disrupt implementation of a long awaited Settlement Agreement. Alternative 3C remains the only SWRCB Alternative which adequately considers and accommodates all impacts and interests.

Please refer any questions regarding these comments to Mr. Bob Colella of our water rights staff at (916) 978-5256, or to Sheryl Carter of Reclamation's South-Central California Area Office at (559) 487-5299.

Sincerely,

Richard J. Woodley
Regional Resources Manager