Jane Farwell - SYRWCD and SYRWCD, I.D. No. 1, Joint Comments on Cachuma 2nd RDEIR

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Attachments:	SYRWCD & I.D. No. 1 Joint Comments on 2nd RDEIR.pdf

Ms. Farwell,

Attached are the joint comments of Santa Ynez River Water Conservation District and Santa Ynez River Water Conservation District, Improvement District No. 1, on the Second Revised Draft EIR, prepared in connection with consideration of modifications to U.S. Bureau of Reclamation's Water Right Permits to protect public trust values and downstream water rights on the Santa Ynez River below Cachuma Reservoir (SCH#1999051051).

Thank you,

Erin Lindsey

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May 31, 2011

VIA MAIL & EMAIL
(JFarwell@waterboards.ca.gov)

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

Re: Comments on the Second Revised Draft Environmental Impact Report Prepared in Connection with Consideration of Modifications to United States 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), dated April 2011 (SCH#1999051051)

Dear Ms. Farwell:

I. INTRODUCTION

The Santa Ynez River Water Conservation District ("SYRWCD") and the Santa Ynez River Water Conservation District Improvement District No. 1 ("I.D. No. 1") appreciate the opportunity to comment on the above-referenced 2nd Revised Draft

Environmental Impact Report ("2nd RDEIR") prepared by the State Water Resources Control Board ("State Water Board").[1]

SYRWCD and I.D. No. 1 encompass most of the Santa Ynez River Watershed downstream of Lake Cachuma and Bradbury Dam. One of the primary functions of both districts is to protect the downstream rights of their landowners and residents in and to the use of Santa Ynez River water below Bradbury Dam, including groundwater supplies and water released from Lake Cachuma. SYRWCD is responsible for ordering water rights releases in accordance with your Order WR 73-37, as amended by Order WR 89-18, and does so in collaboration with the United States Bureau of Reclamation ("Reclamation"). I.D. No. 1, in addition to relying upon appropriative water rights issued by the State Water Board to serve water within its service area, also holds a contract for approximately 10.31 percent of the yield of the Cachuma Project. Since the 2nd RDEIR considers modifications to the Reclamation's Cachuma water right permits and other related actions to protect public trust resources "and downstream water rights"[2] in the Santa Ynez River below Bradbury Dam, the 2nd RDEIR is of utmost importance to the SYRWCD and I.D. No. 1 and their constituents.

SYRWCD and I.D. No. 1 both commented on the 2003 DEIR and 2007 RDEIR previously issued by the State Water Board.[3] The State Water Board's notice accompanying the release of the 2nd RDEIR states that the comments made on those prior DEIRs will be combined and responded to in the Final EIR ("FEIR"). The notice also requests that reviewers limit their comments to Sections 4.3 and 6.0 of the 2nd RDEIR. Accordingly, in general, SYRWCD and I.D. No. 1 do not repeat their prior comments in detail, except in so far as they may be germane to Sections 4.3 and 6.0. However, because the 2nd RDEIR contains new information in other sections and because of our concern that the 2nd RDEIR accurately and comprehensively consider the potential effects of a State Water Board water rights decision regarding Reclamation's permits, SYRWCD and I.D. No. 1 have also included comments of a more technical nature in a technical appendix enclosed with this letter ("Technical Comments").

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[1] On May 16, 2011, the State Water Board notified representatives of SYRWCD and I.D. No. 1 that their May 13, 2011 requests for extension of time to submit comments on the 2nd RDEIR were granted, and that their comments were due by 5 p.m. on May 31, 2011.

[2] Consistent with the Notice of Preparation ("NOP") and 2nd RDEIR (2nd RDEIR, p. 1.0-2, 3.0-1), as used herein protection of "downstream water rights" includes maintenance of percolation of water from the Santa Ynez River stream channel as such percolation and subsurface storage would occur from unregulated flow (if the project not been constructed), in order that the operation of the Cachuma Project shall not reduce natural recharge and storage of groundwater from the Santa Ynez River below Bradbury Dam.

[3] Where appropriate, SYRWCD's September 28, 2007 comments on the 2007 RDEIR ("2007 RDEIR Comments") are referred to below.

II. BACKGROUND

SYRWCD was formed in 1939 to protect the water rights and supplies of its landowners and residents. Its boundaries encompass most of the lands within the watershed downstream of Lake Cachuma. The water rights of SYRWCD's constituents are not before the State Water Board. However, the predecessor to the State Water Board[4] recognized from the very beginning, in Decision 886, that Cachuma Project operations can have adverse impacts on the downstream water rights of SYRWCD's constituents and that such rights must be protected. (See, e.g., D-886, pp. 29, 33; D-1486, p. 15, fn. 11.) Thus, SYRWCD has historically been involved in Cachuma Project proceedings before the State Water Board.

I.D. No. 1 was formed in 1959 and holds a contract with Reclamation, through the Santa Barbara County Water Agency for an annual supply of approximately 10.31 percent of the Cachuma Project's yield. In addition, I.D. No. 1 produces water from Santa Ynez River subflow and the Santa Ynez Upland groundwater basin. It also holds a contractual entitlement of 2,000 acre feet of water per year from the State Water Project ("SWP") of which ID No.1 is allocated 500 AF with the remaining balance contractually transferred to the City of Solvang. The City of Solvang is located within I.D. No. 1's service area and also produces water from Santa Ynez River underflow. I.D. No. 1 and the City of Solvang have also participated in all of the proceedings involved in the present RDEIR.

In WR 94-5, the State Water Board ordered Reclamation to submit reports or data compilations developed pursuant to a 1994 MOU[5] to address and resolve outstanding fish and fish habitat issues related to the portion of the Santa Ynez River below Bradbury Dam. (WR 94-5, Finding Nos. 10 & 11, Order No. 3(b).) At the same time, the Board also ordered Reclamation to submit information developed and conclusions reached during negotiations among Lompoc and the Cachuma Member Units relating to water quantity and quality issues raised with respect to the Lompoc Plain. (WR 94-5, Finding No. 15, Order No. 3(d).)

As directed by WR 94-5, the parties to the 1994 MOU conducted studies and worked together to develop and implement a Fish Management Plan ("FMP"). The FMP protects and provides habitat enhancements for steelhead in the Santa Ynez River below Bradbury Dam through a combination of measures including releases of water stored behind the Dam in Lake Cachuma. In 1997 during development of the FMP, the

[4] For simplicity, hereinafter "State Water Board" will be used to refer to the State Water Resources Control Board and its predecessors.

[5] In addition to Reclamation and representatives for all the downstream water right interests, Lompoc, the Cachuma Member Units ("Member Units"), California Department of Fish and Game, and the United States Fish and Wildlife Service were parties to the 1994 MOU. (WR 94-5, Finding No. 11.)

National Marine and Fisheries Service ("NMFS") listed the Southern California Evolutionary Significant Unit of steelhead as an endangered species under the federal ESA. The parties to the 1994 MOU worked with NMFS to develop a Biological Opinion ("BO"), issued September 11, 2000, that provided for steelhead protection consistent with the FMP. The FMP, which was first presented to the State Water Board in 1999 and finalized in 2000, provides for releases below the Bradbury Dam as described in Alternative 3C in the 2003 DEIR, the 2007 RDEIR, and the 2nd RDEIR.

The release regime provided for in the FMP and the BO also formed the basis for negotiations among downstream water right interests and the Cachuma Member Units relating to resolution of their outstanding water quantity and quality issues. The compromise reached by these various interests is set forth in the "Settlement Agreement between Cachuma Conservation Release Board, Santa Ynez River Water Conservation District, Santa Ynez River Water Conservation District Improvement District No. 1, and the City of Lompoc, relating to Operation of the Cachuma Project," dated December 17, 2002 ("Settlement Agreement"). The Settlement Agreement is the first and only time, since proceedings commenced before the State Water Board, in which all parties -- Reclamation, the Cachuma Member Units and all downstream interests -- agreed on a mechanism for operation of the Cachuma Project that protects downstream water right interests and is consistent with the FMP's and BO's protections for steelhead and other public trust resources.[6]

The provisions of the Settlement Agreement were described in detail in the most recent hearing on the Cachuma Project (MU Exhibit 220; R.T. 202-218). The actual changes to Reclamation's permits that are required to continue implementation of the Settlement Agreement were described by Ms. Struebing (R.T. 218-220; DOI Exhibit 10) and are particularly described as technical amendments to WR 89-18 in Exhibit "C" to the Settlement Agreement.[7] As described by Ms. Struebing, only minor modifications to WR 89-18 are requested from the State Water Board to provide for continued implementation of the Settlement Agreement. One modification involves resolution of the issue of when a lower percolation curve will be used in lieu of an upper percolation curve for calculation of Below Narrows Account ("BNA") credits. In 1989, the State Water Board requested the parties to resolve the issue and return to the Board (see discussion of Ali Shahroody at MU Exhibit 220, p. 8-10; R.T. 208-211). The technical

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[6] The background leading up to the Settlement Agreement, its terms and conditions, and how those terms and conditions integrate into operation of the Cachuma Project are particularly described in detail in testimony of Charles Evans, William Mills and Ali Shahroody (MU Exhibits 219 and 220; R.T. 198-218) as well as in Section 3.1.1 of the Santa Barbara Countywide Integrated Regional Water Management Plan, dated May 2007. (The Plan is incorporated herein by this reference and available at http://www. countyofsb.org/pwd/water/irwmp.htm.) The testimony and exhibits referred to herein are from the record relating to Phase II of the 2003 Cachuma Hearing.

[7] As mentioned on page 10 of CCRB's and I.D. No. 1's comments on the 2007 RDEIR, the Settlement Agreement was previously evaluated under CEQA.

changes to WR 89-18 proposed by Reclamation resolve the issue and provide for credits based on the upper percolation curve for recharge on the Lompoc Plain in return for drought protection water for the Cachuma Member Units. The other requested changes to WR 89-18 proposed by Reclamation involve minor changes to observation and monitoring procedures necessary to update the water rights order to make it consistent with operational changes that were, in fact, implemented in 1989 (see discussion of Ali Shahroody at MU Exhibit 220, pp. 10-13; R.T. 211-212).

Consistent with the foregoing, SYRWCD and I.D. No. 1 support continued implementation of Alternative 3C including the minor modifications to WR 89-18 presented by Reclamation in the technical amendments in Exhibit "C" to the Settlement Agreement. We agree with the conclusion reached in the 2nd RDEIR that Alternative 3C is the environmentally superior alternative.

III. COMMENTS ON THE 2ND RDEIR

A. Project Description

SYRWCD and I.D. No. 1 previously commented that the 2007 RDEIR did not include a consistent project description. (2007 RDEIR Comments, p. 7.) The 2nd RDEIR appears to have addressed our main concerns, which were that the 2007 RDEIR did not identify a consistent project, that it did not sufficiently address Alternative 3C as the preferred alternative, and that it failed to include the technical amendments in Exhibit "C" of the Settlement Agreement in its description of Alternative 3C. (*Id.*) The 2nd RDEIR solves these issues. *Inter alia*, it describes the Settlement Agreement in detail and indicates that the agreement is part of Alternative 3C and, as such, is among the proposed project alternatives. (2nd RDEIR, pp. 3.0-9, 3.0-10 [Table 3-1], 3.1-14-16, 4.1-2.) More specifically, the 2nd RDEIR clarifies that Alternative 3C includes, among other key elements, "releases for downstream water rights pursuant to Order WR 89-18" as "modified by the Settlement Agreement." (*Id.*, p. 3.0-11 [Table 3-2].) In light of these clarifications and other statements in the 2nd RDEIR to the same effect, SYRWCD and I.D. No. 1 anticipate that if Alternative 3C is adopted in a final water rights decision, the State Water Board will also incorporate the technical amendments to WR 89-18 provided in Exhibit "C" to the Settlement Agreement and advanced by Reclamation in its testimony to the State Water Board.

B. Project Objectives

SYRWCD and I.D. No. 1 previously commented that the 2007 RDEIR did not include a clear statement of objectives, or clearly acknowledge that providing for continued protection of downstream water rights should be included as at least one of the project objectives. (2007 RDEIR Comments, p. 9.) The 2nd RDEIR has included protection of senior water right holders' water quantity and quality in the project objectives. (2nd RDEIR, p. 3.0-2.) Moreover, as acknowledged in the NOP and elsewhere in the 2nd RDEIR, protection of prior rights includes:

> "... the maintenance of percolation of water from the stream channel as such percolation would occur from unregulated flow, in order that the operation of the project shall not reduce natural recharge of groundwater from the Santa Ynez River below Bradbury Dam." (2nd RDEIR, pp. 1.0-2, 3.0-1.)

Thus, in general, the 2nd RDEIR appears to have addressed SYRWCD's and I.D. No. 1's concerns relating to the project objectives.

C. No-Project Alternative

SYRWCD and I.D. No. 1 previously commented that the 2007 RDEIR did not consistently describe a single no project alternative. (2007 RDEIR Comments, p. 10.) In contrast, the 2nd RDEIR indicates that Alternative 3C is the only no project alternative. However, Alternative 2 is still referred to as no project at least once in the document. (2nd RDEIR, § 6.1, p. 6.0-2.) This appears to be an oversight and, therefore, we assume any lingering references to Alternative 2 as a no project alternative will be deleted or deemed deleted.

As provided in the 2nd RDEIR (p. 3.0-15), the CEQA Guidelines provide that when the project is the revision of an existing, ongoing operation, the "no project" alternative will be the continuation of the existing operation into the future. (CEQA Guidelines, § 15126.6(e)(3)(A).) Further, the no project analysis should discuss what would reasonably be expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. (*Id.*, § 15126.6(e)(2).)

Alternative 3C is now appropriately characterized as the no project alternative, and it describes the provisions of the Settlement Agreement as well as the technical amendments set forth in Exhibit "C." As detailed above, the Settlement Agreement resulting from the State Water Board's WR Order 94-5 (Finding No. 15, Order No. 3(d)), settled a long-standing dispute between and among the downstream water right interests and the Cachuma Member Units relating to Cachuma Project operations, and it did so in a manner compatible with the release requirements in the Biological Opinion and FMP (Alternative 3C).

The 2nd RDEIR recognizes that the terms of the Settlement Agreement have been implemented, are part of ongoing Cachuma Project operations, and that the potential environmental impacts of implementing the Settlement Agreement (including Exhibit "C") are adequately studied and considered in the 2nd RDEIR. However, it should be noted that Paragraph 5.2 of the Settlement Agreement allows for possible termination if, following completion of the hearing required by Order 94-5, the State Water Board "does not require that downstream water rights releases continue to be made consistent with WR 89-18, as modified by this Agreement, without material change." Thus, while

Alternative 3C may be appropriately considered as the no project alternative – since both the Settlement Agreement and Biological Opinion are part of ongoing operations and it is reasonably foreseeable they will continue if no other alternative is selected – the State Water Board should make the minor technical amendments to WR 89-18 proposed by Reclamation to ensure that Cachuma Project operations will continue as provided in the Settlement Agreement.

D. Alternatives

1. Alternative 3C is the Environmentally Superior Alternative Among all the Alternatives, and is the Only Feasible Alternative That Meets All of the Project Objectives, Without Causing Significant Unavoidable (Class I) Impacts to the Member Units' Water Supply

SYRWCD's and I.D. No. 1's prior comments pointed out that the 2007 DEIR did not identify an environmentally superior alternative. (2007 RDEIR Comments, p. 12.) Under CEQA, an EIR must identify the environmentally superior alternative and, if that is determined to be the no project alternative, the EIR must also identify an environmentally superior alternative from among the other alternatives. (CEQA Guidelines, § 15126.6(e)(2).) The 2nd RDEIR addresses our comment in this regard. It concludes that Alternative 3C with technical changes to WR 89-18, as provided in Exhibit "C" to the Settlement Agreement, is the environmentally superior alternative. (2nd RDEIR, p. 6.0-3.) SYRWCD and I.D. No. 1 concur. Alternative 3C is the only alternative that: does not require further CEQA review, meets all the project objectives – protection of public trust resources and downstream water rights quality and quantity, *and* does not cause significant unavoidable impacts to the Member Units' vital water supplies.

2. Alternative 4B Is of Doubtful Utility and Is Subject to Several Unknown Contingencies

SYRWCD previously commented that implementation of Alternative 4B is not realistic. (2007 RDEIR Comments, p. 13.) The comments also noted that former Alternative 4A was not included in the 2007 RDEIR because the City of Lompoc decided not to pursue a SWP water supply, and that Alternative 4B should not be included for similar reasons. (*Id.*) Finally, it was pointed out that, "in lieu of Alternative 4B, Lompoc has entered into a Settlement Agreement with the downstream water right interests and the Cachuma Member Units, which Reclamation has endorsed, that provides for modifications to WR 89-18 in light of the Biological Opinion to the satisfaction of Lompoc and all downstream water right interests. The Settlement Agreement resolves Lompoc's claims and protests relative to the operation of the Cachuma Project, including with respect to water quality, as provided in Paragraph 3 of the Agreement." (2007 RDEIR Comments, p. 14.) Nothing has changed in this regard. (See, e.g., 2nd RDEIR, p. 3.0-18.)

The 2nd RDEIR also concludes that Alternative 4B is the environmentally superior alternative among the alternatives (not including 3C). (2nd RDEIR, p. 6.0-3.) SYRWCD and I.D. No. 1 have concerns with this conclusion. We commented previously (2007 RDEIR, p. 14) that since Alternative 4B will result in fewer releases from the dam, there will be less conjunctive operation of downstream water rights releases with fish water releases as required under the Biological Opinion and the Settlement Agreement. Fewer releases will also cause adverse water quality impacts above the Narrows in the Santa Rita Area (2nd RDEIR, p. 4.5-14). The 2nd RDEIR suggests mitigating these impacts with additional water releases from the dam, the source of which is unidentified. This impact should be described as at least a Class III impact on water quality and perhaps water supply. Finally, Alternative 4B relies on the availability of SWP water, the reliability of which is lower now than when we commented previously (2nd RDEIR, pp 2.0-11-15, 3.0-17-18). Thus, while Alternative 4B is appropriate to consider for CEQA purposes, it is not environmentally superior to Alternative 3C.

Finally, although Central Coast Water Authority ("CCWA") was consulted when Alternative 4B was conceived, recent information (see, CCWA Comments on 2nd RDEIR) indicates that implementation of Alternative 4B will reduce the CCWA pipeline water pressure so much that CCWA would not be able to meet its contractual commitments without extensive improvements to its pipeline system. This also would compromise ID No. 1's exchange agreement and the mixing requirements of CCWA water with downstream water rights releases under the Settlement Agreement. Finally, there is no incentive for project participants to pursue this costly alternative, since through the Settlement Agreement they have already resolved their differences without additional costs for capital improvements or operations.

3. The 1.8-Foot Surcharge Alternatives

As SYRWCD and I.D. No. 1 previously commented, Alternatives 3B and 5B each assume operations under the Biological Opinion with a 1.8-foot surcharge, yet the 2nd RDEIR readily acknowledges that Reclamation has already increased the surcharge of Lake Cachuma from 0.75 to 2.47 and now can implement a 3.0-feet surcharge. (2nd RDEIR, p. 2.0-25.) Thus, operation under a 0.75 or 1.8-foot surcharge is no longer reasonably foreseeable. In addition, CEQA does not provide the State Water Board with independent approval power with respect to implementation of the Biological Opinion. Thus, SYRWCD and I.D. No. 1 believe neither a 0.75 nor a 1.8-foot surcharge is likely to be implemented at any time in the future. (*Kenneth Mebane Ranches v. Superior Court* (1994) 10 Cal.App.4th 276, 292; Public Resources Code §§ 21004, 21081(a)(3); CEQA Guidelines, §§ 15040(b) & (e), 15091(a)(3), 15126.6(a), 15364.) Furthermore, as noted below, the 2nd RDEIR concludes that Alternatives 3B and 5B, both of which assume only a 1.8 foot surcharge, could result in significant and unavoidable impacts to the Member Units' vital water supplies. (2nd RDEIR, p. 4.3-26.)

4. Alternatives 5B and 5C Are Environmentally Inferior Alternatives

(a) The 2nd RDEIR Correctly Concludes that Alternatives 5B and 5C Cannot Meet All the Project Objectives Without Causing Significant and Unavoidable (Class I) Impacts to the Member Units' Water Supplies

SYRWCD and I.D. No. 1 previously commented that the 2007 RDEIR did not adequately evaluate the potential impacts of Alternatives 5B and 5C on the Member Units' water supplies. (2007 RDEIR Comments, p. 18.) Significantly, the 2nd RDEIR appears to have recognized these comments and concludes that Alternatives 5B and 5C will have significant unavoidable impacts on those supplies. (2nd RDEIR, p. 6.0-2.) Specifically, Alternatives 5B and 5C (and 3B):

> "would result in potential shortages in supply during dry years that could require new sources of water, which could result in **significant and unavoidable (Class I)** impacts attributable to increased groundwater pumping, temporary water transfers, and desalinization." (*Id.*)

Therefore, the final EIR should acknowledge that Alternatives 5B and 5C are environmentally inferior to Alternative 3C, which meets all project objectives without causing significant unavoidable adverse affects on the Member Units' water supplies.

(b) The 2nd RDEIR Fails to Adequately Evaluate the Impacts of Alternatives 5B and 5C on Downstream Water Rights (including the ANA)

SYRWCD and I.D. No. 1 also previously commented that the 2007 RDEIR did not adequately address the potential impact of Alternatives 5B and 5C on water quality or quantity downstream of Bradbury Dam, including in particular the ANA.[8] (2007 RDEIR Comments, pp. 14-18.) In this regard, we provided detailed Tables 1, 2, and 3 which were model (SYRHM) runs quantifying, among other things, the significant additional loss of ANA credits that will result from implementation of Alternative 5C in contrast to Alternative 3C, during drought periods. (*Id.* at pp. 16-17.) The 2nd RDEIR similarly fails to adequately analyze whether Alternatives 5B and 5C will result in significant adverse impacts on downstream water quantity or quality due to, among other things, reduction of ANA credits, particularly during drought years. The 2nd RDEIR does state that "[n]o significant difference in management of ANA releases is expected to occur under the project alternatives compared to baseline (Alternative 2) operations." (2nd

[8] SYRWCD's comments on the 2007 RDEIR included extensive comments related to Alternatives 5B and 5C (2007 RDEIR Comments, pp. 14-21), which for the most part appear to still be relevant to the 2nd RDEIR. However, rather than repeating all of those comments herein, SYRWCD incorporates and makes them a part hereof by this reference.

RDEIR, p. 4.4-6.) However, the 2nd RDEIR nowhere actually quantifies the reduction of ANA releases or analyzes the management implications of these reductions, or explains why such reduction is or is not significant. Without this analysis and explanation, it is unclear from the 2nd RDEIR how the State Water Board could conclude that Alternative 5B or 5C meets all the project objectives and does not cause depletion of the ANA.

As discussed above, protection of downstream water rights is an objective of the project. Therefore, to be considered, Alternatives 5B and 5C must protect those downstream water rights. (CEQA Guidelines, § 15126.6(a).) But, the record fails to include any substantial evidence that they will do so. Further, the 2nd RDEIR does not explain what impacts Alternatives 5B and 5C will have on the Settlement Agreement.

It cannot be over emphasized that the Settlement Agreement, as reflected in Alternative 3C which includes the technical amendments proposed by Reclamation, resolved a long-standing dispute and resulted in a contractual agreement to protect downstream water rights between downstream interests and the Member Units, in concert with the requirements of the Biological Opinion and the Fish Management Plan. The Settlement Agreement was entered into only after careful analysis, peer-review and study for many years and was subjected to thorough cross-examination in the State Water Board hearings. By way of contrast, there is no substantial evidence demonstrating that Alternatives 5B or 5C will protect downstream water rights. Nor have Alternatives 5B and 5C been subjected to peer-review or cross-examination.

Finally, as discussed below, Alternatives 5B and 5C will not avoid or lessen significant impacts to fishery resources in any way that is not already accomplished by Alternative 3C. Alternatives that do not avoid or lessen significant impacts caused by the proposed project should not be considered. (CEQA Guidelines, § 15126.6(a).)

(c) Implementation of Alternatives 5B and 5C Would Require Significant Additional Releases that Result in Class I Impacts to Water Supplies, but Achieve Little or No Fishery Benefits

Although Alternatives 5B and 5C cause adverse impacts on downstream water rights and the Member Units' water supplies, there is no substantial evidence that either alternative provides any additional benefits to steelhead in comparison to Alternative 3C. We concur with CCRB's position that the analysis in the 2nd RDEIR should integrate all lifestages and habitat relationships of steelhead/rainbow trout in the Lower River and account for habitat bottlenecks when evaluating the alternatives. (CCRB Comments on 2nd RDEIR, Section G.) Any benefits to steelhead/rainbow trout associated with Alternatives 5B and/or 5C compared to 3C during spawning and fry rearing lifestages are negated by limited habitat availability for all alternatives during the juvenile lifestage. It is the juveniles that pass through this lifestage that become adults. Thus, in view of the potential limitations to juvenile rearing common to all alternatives, Alternative 5B or 5C would not be expected to increase production relative to Alternative 3C.

Further, we concur with and incorporate by reference CCRB's position that the 2nd RDEIR fails to adequately analyze whether the additional higher flows of Alternatives 5B and 5C will affect interactions between individually benefited species such as resident bass and anadromous trout. (CCRB Comments on 2nd RDEIR, Section H.) It is well established, for example, that bass prey on fry and juvenile steelheed/rainbow trout. It is possible that increases in largemouth bass populations will increase the rates of predation on fry and juvenile trout. In other words, any benefit from flow for trout could be negated by the benefit also provided to bass. However, the 2nd RDEIR does not discuss the species interactions (e.g., predation) that could result from Alternatives 5B and 5C. Furthermore, even in the absence of active predation, there is no guarantee that additional pool habitat would be occupied with additional steelhead/rainbow trout. Competition and carrying capacity limitations also can affect the habitat available for native fish. These factors also are not considered in the alternatives analysis.

The California Constitution does not equate beneficial use with reasonable use (*Joslin v. Marin Mun. Water Dist.* (1967) 67 Cal.2d 132, 143), and prohibits unreasonable and wasteful uses of water. (Article X, § 2; *see also*, Water Code §§ 100, 275; *United States v. Gerlach Live Stock Co.* (1950) 339 U.S. 725, 751.) The courts have also confirmed that the State Water Board must prohibit unreasonable methods of diversion and use of water. (*People ex rel. SWRCB v. Forni* (1976) 54 Cal.App.3d 743; *Elmore v. Imperial Irr. Dist.* (1984) 159 Cal.App.3d 185, 198-199; *Imperial Irr. Dist. v. SWRCB* (1986) 186 Cal.App.3d 1160, 1162-69; *Imperial Irr. Dist. v. SWRCB* (1990) 225 Cal.App.3d 548, 559-562.) As explained above and in Sections G and H of CCRB's comments on the 2nd RDEIR, Alternatives 5B and 5C would result in significant unavoidable impacts to the Member Units' water supplies, in contrast to Alternative 3C which also provides equivalent benefits to fish. Thus, particularly when compared to Alternative 3C, Alternatives 5B and 5C are not reasonable alternatives and should not be further considered.

IV. TECHNICAL COMMENTS

Enclosed herewith and made a part of this letter by reference is a document entitled "Technical Comments" which includes comments of a more technical nature.

V. CONCLUSION

For the reasons set forth above, SYRWCD and I.D. No. 1 believe that the 2nd RDEIR resolves many of the issues raised by the 2007 RDEIR. Importantly, the 2nd RDEIR includes the clarification that Alternative 3C incorporates the Settlement Agreement. It also includes updated information on water supply, biological resources, oak trees and recreation, and corrections and clarifications in response to prior comments. As provided above, however, while the 2nd RDEIR is much improved, SYRWCD and I.D. No. 1 believe further clarification would be helpful on several matters including the minor technical amendments to WR 89-18 proposed by Reclamation and the downstream impacts to water rights and water quality caused by Alternatives 5B and 5C. By contrast

to Alternatives 5B and 5C, the impacts of Alternative 3C are known and can be accurately forecast because Alternative 3C has been part of Cachuma Project ongoing operations for several years. Alternative 3C is the only alternative that was developed after significant study and compromise, by all stakeholders, pursuant to the directions of WR 94-5. It is also the only alternative that meets all of the project objectives; that will avoid causing significant unavoidable (Class I) impacts to the Member Units' water supplies; and is the environmentally superior alternative among all of the alternatives that comprise the proposed project.

In conclusion, SYRWCD and I.D. No. 1 greatly appreciate your consideration of these comments and suggestions, and your efforts in preparing the 2nd RDEIR. Should you have any questions or require clarification regarding any of our comments, please contact the undersigned.

Sincerely,

SANTA YNEZ RIVER WATER CONSERVATION DISTRICT

Bruce A. Wales
General Manager

SANTA YNEZ RIVER WATER CONSERVATION DISTRICT, IMPROVEMENT DISTRICT NO.1

Chris Dahlstrom
General Manager

Enclosure (Technical Comments)

cc: Cachuma Project Hearing, Phase-2 Hearing Final Service List
USBR
CCRB
City of Solvang
City of Buellton
City of Lompoc
SYRWCD, Board of Directors
SYRWCD I.D. No. 1, Board of Trustees
Stetson Engineers
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Appendix to SYRWCD and ID No. 1 Letter

Dated May 31, 2011

TECHNICAL COMMENTS

2nd RDEIR

This document is appended to and incorporated by reference in Comments on the Second Revised Draft Environmental Impact Report prepared in connection with Consideration of Modifications to United States Bureau of Reclamation's Water Rights 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), dated April 2011 (SCH#1999051051).

Prepared by

Santa Ynez River Water Conservation District (SYRWCD) and

Santa Ynez River Water Conservation District Improvement District (ID No. 1)

May 31, 2011

The following comments are organized by section in the 2nd RDEIR.

1.0 INTRODUCTION

1. Page 4, para 3, line 5: Change "maintained" to "allowed to remain." Maintaining dewatered storage is not a goal of WR 89-18.

2. Page 4, para 4, line 1: Delete "slightly." As shown on Table 2-3 and discussed on page 10, releases under WR 89-18 were substantially higher than under WR 73-37, especially for the Below Narrows area.

3. Page 8, para 4, line 3: Surcharging for the fish water conservation pool is the amount of water stored above the operating full level (750.0') against the flashboards while the spillway gates are fully shut. There is no dam overflow, otherwise the integrity of Bradbury Dam would be at risk. Suggest replacing definition of surcharging to: "Surcharging is a term used to describe the operations at Bradbury Dam in which the water level of Lake Cachuma is allowed to rise above the elevation of the top of the spillway gates (750.0') in order to store more water for fishery releases. Flashboards have been installed on the spillway gates to allow surcharging up to 753.0'."

4. Page 8, para 4, lines 5 and 6: There is only one surcharge level above which (750') water can be surcharged. Surcharge level is not raised or lowered depending on reservoir capacity. Once the amount of water is surcharged above 750.0', that amount of water stored as fish conservation pool can be carried to a lower level when the reservoir is drawn down to meet other demands.

5. Page 8, para 4, line 6: The proper term is "spillway gate." Change "spillgate" to "spillway gates" globally in the document.

2.0 OVERVIEW OF THE CACHUMA PROJECT

1. Page 1, para 1, last line: Replace with " . . . a capacity of 250 cfs." Typically the maximum outlet releases are operated between 150 and 200 cfs.

2. Page 1, para 2, line 3: Replace with "A survey conducted in 2008 indicated that the reservoir capacity has been further reduced to 186,636 a.f. at elevation 750.0 feet (MNS, 2008)." This comment also applies to Page 4.2-5, paragraph 3, third sentence.

3. Page 6, Table 2-1: Explain ID No. 1 is receiving its Cachuma Project entitlement through an exchange with South Coast Project Member Units.

4. Page 6, Table 2-4: Explain the numbers in this table also include SWP water that ID No. 1 provides to the City of Solvang under a separate agreement. Please clarify whether this table also includes turnback water.

5. Page 9, para 3, line 9: Change "These releases" to "Typically, these releases." Change "rate of 135 to 150 cfs" to "rate of about 150 cfs."

6. Page 9, para 3, line 10: Change sentence to read "At that time, the releases are reduced for several weeks to months, to rates such as 50 to 70 cfs, depending upon percolation rates."

7. Page 15, para 5, line 2: Delete "frequency and." Modified Storm Operations only affects the magnitude of flood flows.

8. Page 15, para 5, line 4: Change to "Reclamation consults with the Santa Barbara County Flood Control District, the Member Units and downstream interests as appropriate."

9. Page 15, bullet, line 4: Change "Reclamation may avoid spills, which are uncontrolled and may cause flooding" to "Reclamation may attenuate (along with pre-releases and/or gateholding) the peaks of large flows that may cause flooding." Modified Storm Operations is exercised only with high flows when large spills and flooding are expected. The purpose of the operation is to reduce peak flows and not to avoid spills as suggested.

10. Page 16, Section 2.3, para 2: Change to "The reservoir has spilled 22 times since Bradbury Dam was completed. The most recent spills occurred in 1998, 2000, 2001, 2005, 2006, 2008 and 2011."

11. Page 18, para 3, line 4: Change "prepared by the SYRTAC" to "based on a Draft Fish Management Plan prepared by the SYRTAC."

12. Page 18, para 3, lines 5-9: Conservation measures in the Biological Assessment are getting confused with Conservation Recommendations in the Biological Opinion. The former are project actions and the latter are discretionary suggestions. Suggest changes as follows: add "and conservation measures" to sentence starting with "The modifications to project operations" on line 5. Delete the phrase on line 7 starting with "while the conservation measures . . . " Delete the last sentence here and put at the end of para 4. The Biological Opinion formed the basis for the Final Fish Management Plan.

13. Page 19, para 3, line 1: Change "SYRTAC" to "AMC." This is factually correct.

14. Page 25, last para: To accurately reflect what occurred, delete the existing paragraph and replace as follows: "In the Biological Opinion, NMFS authorized a ramping schedule for the rampdown of releases made to satisfy downstream water rights. These ramping rates, which are a refinement of rates recommended by the SYRTAC and used since 1994, are

detailed in **Table** 2-6, **Rampdown Schedule for Releases Made to Satisfy Downstream Water Rights**. These have been used since 2000."

15. Page 30, para 2, lines 1 and 2: Replace with "as with long-term target flows . . . " Delete "interim and." The Baseline Alternative (Alternative 2) does not have a Fish Passage Account.

16. Pages 18 through 41, Sections on BO and FMP: The 2nd RDEIR should mention that CEQA and NEPA environmental reviews already have been completed for the BO and FMP. The 2nd RDEIR should discuss the "Final Program and Project Specific Environmental Impact Report/Environmental Impact Statement for Lower Santa Ynez River Fish Management Plan and Cachuma Project Biological Opinion" (Cachuma Operation and Maintenance Board and Bureau of Reclamation, February 2004) (FMP/BO EIR/EIS).

17. Page 45, item 5: Suggest deleting "Conjunctive" from the heading of this item. The Below Narrows Account is dedicated for the recharge of the Lompoc groundwater basin. As practiced since 1989, the upper percolation curve (Curve A) has been used to determine the BNA credits without switching to the lower percolation curve (Curve B). The Settlement Agreement confirms the continued use of the upper curve as the basis to determine the BNA credits, except it provides for a separate accounting for possible use of a portion of the remaining BNA water in the reservoir by the Member Units in case of a drought situation. Suggest merging the two sentences by removing the part after "Order WR 89-18" in the first sentence and modifying the second sentence to read as: "the parties agree to remain on 'Curve A' so that more water is available for the Below Narrows area and some BNA water is made available to the Cachuma Member Units during shortage years."

3.0 PROPOSED PROJECT (ALTERNATIVES)

1. Page 4, 2nd bullet, line 7: Change "Santa Ynez River Alluvial Basin" to "Lompoc Basin."

2. Page 9, 2nd para from bottom, line 6: After "Opinion" add "and Settlement Agreement."

3. Page 15, para 4, line 1: The analysis of Alternative 3C, from its inception as an alternative in the 2003 DEIR, has included provisions of the 2002 Settlement Agreement. Neither the 2003 DEIR nor the 2007 RDEIR described the elements of the Settlement Agreement as they were analyzed in Alternative 3C. The 2nd RDEIR does not provide any revisions to Alternative 3C. Suggest changing the first sentence to read as: "In this 2nd Revised DEIR, Alternative 3C has been clarified to show the inclusion of provisions of the 2002 Settlement Agreement reached between CCRB, ID No. 1, SYRWCD, and the City of Lompoc."

4. Page 15, item 3: Suggest deleting "Conjunctive" from the heading of this item.

4.0 ENVIRONMENTAL ANALYSIS OF ALTERNATIVES (FLOW-RELATED ACTIONS)

Section 4.1 OVERVIEW OF IMPACT ASSESSMENT

The following comments are provided with respect to Alternatives 3C, 4B, 5B and 5C.

Alternative 3C

Alternative 3C incorporates provisions of the 2002 Settlement Agreement, including: FMP/BO fish releases, mixing of SWP water with water rights releases, conjunctive operation of water rights releases with fish water, San Lucas Creek check point, and the upper percolation curve for computation of ANA and BNA. Also it is worth noting that provisions of the Settlement Agreement are being implemented currently and, as such, it represents the No Project Alternative (Alternative 3C).

Alternative 4B

- Impacts from Alternative 4B not adequately discussed in 2nd RDEIR
    - There would be fewer days of water rights releases under Alternative 4B compared to the Settlement Agreement (Alternative 3C) which provides for an average annual release of 65 days (spill years excluded) conjunctively with fish water releases. Accordingly, Alternative 4B would increase impacts on the Project water supply and the ANA. Those impacts are not discussed in the 2nd RDEIR.
    - The 2nd RDEIR discusses important updates on the reliability of the SWP water, including analysis of the State Water Project Delivery Reliability Report 2009. This new information indicates greater shortages of water supply from the SWP water system during droughts than indicated in previous DEIRs (6% delivery or 94% shortage during a critical drought year). However, the implication of these greater shortages in SWP water is not discussed in the 2nd RDEIR in relation to Alternative 4B.
    - In the absence of BNA releases at Bradbury Dam, flows in the lower Santa Ynez River above the Narrows would have, on average, a higher salinity in summer months under Alternative 4B compared to the current operation. This should be identified as a Class III impact to surface water quality.

Alternatives 5B and 5C

- Both Alternatives 5B and 5C would cause significant reductions in the ANA with adverse implications for effectively managing the account for the benefit of downstream water users, especially under drought conditions (see Tables 1 through 3 in the 2007 comment letter).
    - During a prolonged drought, supply of water from riparian wells for agricultural and municipal users, as well as individual domestic users, would be greatly impacted under Alternatives 5B and 5C. Impacts would be more likely to occur in the lower reaches of the Above Narrows area.
    - The loss of ANA water under Alternatives 5B and 5C could result in too little ANA water for the District to transport BNA water to the Lompoc Plain, thus tending to "strand" the Lompoc water in Cachuma Reservoir. The inability to deliver the BNA water would tend to increase the salinity of groundwater on the Lompoc Plain.
- Alternatives 5B and 5C would cause significant reductions to Cachuma Project yields. The 2nd RDEIR does discuss these impacts now relative to the 2007 RDEIR.
- There is no discussion in the 2nd RDEIR as to how Alternatives 5B and 5C avoid or lessen significant impacts caused by the No Project Alternative.

1. Page 1, para 1, line 3: After "other species," add "(2) releasing water rights water and other actions under the Settlement Agreement, and (3) . . ."

2. Page 2, para 2, line 2: Replace "NOP" with "Biological Opinion."

Section 4.2 SURFACE WATER HYDROLOGY

1. Page 6, para 4, lines 3-8: Add a footnote that the Bureau of Reclamation did a study that revised the peak flood estimates of 1907 and 1969 to 55,000 and 88,000 cfs, respectively. Strike last line.

   Reference: U.S. Bureau of Reclamation. Ostensaa, Dean A., Levish, Daniel R., and O'Connell, Daniel R. H. 1996. Paleoflood Study for Bradbury Dam, Cachuma Project, California, Seismotectonic Report 96-3. Seismotectonic and Geophysics Section, Technical Service Center, Bureau of Reclamation, Denver, Colorado.

2. Page 8, para 2: The following modifications are suggested:

   Line 1: Change "in 1993" to "in 1998."

   Line 2: Delete "frequency and."

Line 7: After "flood," add ", as well as gateholding which holds back the increase in inflows."

3. Page 8, para 3: Change "Section 3.22" with "Section 3.2.2." Change 'baseline conditions that existed in August of 2003" with "baseline conditions that existed in September of 2000."

4. Page 8, para 4, second sentence: Delete "The first action undertaken was the raising of the reservoir surcharge level from the previous elevation of 750.75 feet to an interim elevation of 751.8 feet." This action never occurred. The Final EIR/EA for the Biological Opinion and Fish Management Plan was completed in February 2004 and the plan was to proceed to the 753.0 feet surcharge (skipping the 751.8 feet surcharge).

5. Page 9, para 1, last sentence: Change "9,200" to "8,942" and "198,200" to "195,578" based on MNS (2008).

6. Page 11, Table 4-1: Add footnote for Alternative 3C as follows: "As modified by the Settlement Agreement for 3C."

7. Page 13, Peer Review subsection: Change "Santa Ynez River Technical Advisory Committee" to "Santa Ynez River Water Quality Technical Advisory Committee" and make global change in this subsection, changing "SYRTAC" to SYRWQTAC." (This was handled appropriately in Stetson 4.6.2.2 (Page 4.6-6).)

8. Page 18, para 2, lines 5 and 6: It is important to differentiate between the account balance and credits accrued under ANA. The ANA account balance (carryover) has tended to be larger because of the conjunctive operation of the ANA with the BNA since 1989 (WR 89-18). The releases have been more targeted to convey the BNA water to the Lompoc area while recharging the Above Narrows Groundwater Basin. There were no increases in the ANA credits as a result of the amendments to Order WR 73-37 in 1989. However, the amendments under WR 89-18 reduced the amount of loss from the BNA in spill years and provided some additional BNA credits associated with the percolation capacity in the Lompoc forebay. Chart 4-31 shows that there is a noticeable break between the pre- and post-1989 conditions for the BNA.

9. Page 18 para 2, lines 6 and 7: The statement that "Dewatered storage [in the Above Narrows] has not dropped below the 10,000-af threshold" is incorrect. Chart 4-30 shows that the dewatered storage was below 10,000 af at least in several years since 1991. Chart 4-30 shows that except for periods of extreme drought (1986-1991) and very wet winters (1997-98 and others), dewatered storage generally remains between 12,000 – 15,000 acre-feet. This could be substituted for the incorrect entry.

10. Page 18, para 2: Last sentence in paragraph 2 is incorrect. The Accumulated Drought Water Credit (ADWC) is for the benefit of the Cachuma Member Units during drought periods and is not released to downstream users. The 3,200 af is not an annual amount. The release of 25 acre-feet is deducted from the ANA and does not provide an additional water supply to downstream users. It provides additional water to Member Units by reducing the fish water releases from the reservoir. Suggest deleting the last sentence in paragraph 2.

Section 4.3 WATER SUPPLY CONDITIONS

1. Page 8, Table 4-14 – change "Alternative 3C" to "Alternative 5B" and delete "with reserves set aside" in the comment column for Cachuma Project in Table 4-14. Although the Cachuma Project supply to the Member Units for the critical drought year (1951) should have been based on Alternative 3C, that is not the case in Table 4-10 through 4-14. Also, the critical drought year supply should include reserves set aside for an additional drought year and that is not the case either in Tables 4-10 through 4-14. The yield from the 4 and 6 cfs well fields for critical drought (1951) is estimated to be 1,450 acre-feet, not 2,215 acre-feet shown in Table 4-10 and 4-18 (refer to the Technical Memorandum (Stetson, 2003) attached as Exhibit B, to comments submitted by CCRB and ID #1 on 2003 DEIR).

2. Page 9, Table 4-15: See ID No.1's Technical Comment No. 12 from the 2003 DEIR.

3. Page 26, Indirect Environmental Impact of Water Supply Shortages: ID No. 1 has concerns regarding the increased releases for flow targets at Alisal Bridge under Alternative 5B and 5C. Since 2005, the long-term BO flow targets (same as Alternative 3C) of 1.5 cfs have been in effect at Alisal Bridge from 2005 through 2009 and most recently will be in effect for 2011 through at least 2012. These flow targets at Alisal Bridge have had adverse impacts to ID No. 1's water supply including:

    - Unanticipated increased releases from Cachuma Project which will impact Member Units supplies during droughts (see comments on 2007 RDEIR);

    - Due to the Surface Water Treatment Rule, several of the District's Santa Ynez River wells become inoperable due to the increased flows in the river. Water cannot be produced from wells when surface water in the river channel occurs within 100-150 feet of these wells, unless the water receives the required filtration in a treatment plant and meets the standards of the Surface Water Treatment Rule.

These impacts under Alternative 3C will be made even worse under Alternatives 5B and 5C because the flow targets at Alisal Bridge are increased under these alternatives.

4. Page 26 Section 4.3.2.7: See ID No.1's Technical Comment Nos. 19 and 20 from the 2003 DEIR.

Section 4.4 ABOVE NARROWS ALLUVIAL AQUIFER

1. Page 1, para 1: Change "fluctuate" to "change" in the second sentence. The third sentence is inaccurate. With the exception of the Highway 154 and Alisal reaches which extend 10 miles below the dam, the alluvial deposits are wide and deep in the Above Narrows area downstream of Alisal Bridge. The pumping in the basin is not heavy and with subflow condition and high transmissivity, fluctuations in water levels are small. However, changes in groundwater storage and groundwater levels occur in response to dry and wet cycles. Delete the third sentence.

2. Page 1, para 2: Change the second sentence to read as: "The Above Narrows Alluvial Groundwater Basin is usually recharged after the onset of 'wet' conditions." Change the word "full" to "recharged" at the end of the third sentence. The basin may not reach a full level due to degradation.

3. Page 1, para 3: Insert "phreatophytes" after "pumping" in the first sentence. The analogy in the second sentence is incorrect because there are surface and subsurface contributions from tributaries, as well as return flows, which tend to keep the upper reaches of the alluvial basin watered. Although the dam is blocking the natural flow (including subflow) of the Santa Ynez River to replenish the upper reaches of the Above Narrows Groundwater Basin, historically water rights releases have kept the upper basin replenished. Delete the last two sentences in paragraph 3.

4. Page 2, para 2: Change "fluctuate" to "change" in the first sentence referring to Chart 4-9. Chart 4-9 shows end-of-year dewatered storage in the Above Narrows Alluvial Basin. SYRWCD has not tried to maintain the dewatered storage between 10,000 and 13,000 af in the Above Narrows Alluvial Basin, nor has it tried to maintain the dewatered storage within a narrow range as alluded in this paragraph. SYRWCD releases water to meet the rights of water users downstream of Bradbury Dam. Delete or modify the 2nd and 3rd sentences in this paragraph.

5. Page 2, para 3, last sentence: Change "fluctuates" to "changes" in connection with the annual changes in water quality.

6. Page 2, para 4: Add the following sentence at the end of this paragraph. "Losses through phreatophytes also contribute to the concentration of total dissolved solids in the basin."

7. Page 2, para 7, line 1: Change sentence to: "Groundwater levels in the Above Narrows Alluvial Groundwater Basin change in response to groundwater pumping, runoff from tributaries below Cachuma Reservoir and spills and releases from Bradbury Dam."

8. Page 4, para 3: This section on the Groundwater Management Efforts and Programs should be updated, as suggested below:

"In cooperation with water purveyors in the District, SYRWCD prepared a report outlining various water resources management alternatives (Stetson, 1992). Groundwater management efforts were initiated by SYRWCD and local purveyors in the Lompoc Basin in 1985. Through cooperative funding efforts with the USGS, the Basin water resources were evaluated, a comprehensive monitoring program was prepared and implemented, and a groundwater model was developed (Bright et al.; 1992, 1997). The City of Lompoc initiated an AB 3030 Plan recently. Working with the City of Buellton, SYRWCD completed an AB 3030 Plan for the Buellton Uplands Basin in 1995. A similar effort for the Santa Ynez Uplands Basin was terminated because most of the Basin is outside of the District."

9. Page 6, para 1, lines 3 and 4: Change sentence to "These charts also show that there is no significant difference in the year-to-year variation in dewatered storage in the aquifer, except during droughts." See on Chart 10, for example, the periods in the early 1950's and 1990's.

10. Page 6, para 2, lines 1 and 2: As commented above, SYRWCD does not manage (nor does the District actively engage in the management of) the dewatered storage in the Above Narrows Groundwater Basin through the ANA releases from Cachuma Lake. SYRWCD releases water to meet the rights of water users downstream of Cachuma Lake. The District manages the timing and rate of of water rights releases once credits are sufficient to do so, based in part on dewatered storage along the River and on the Lompoc Plain. Change sentence to "It should be noted that SYRWCD manages water rights releases in order to provide water supplies to users along the River and on the Lompoc Plain to fulfill their senior water rights."

11. Page 6, para 2: The new check point at San Lucas Creek as opposed to the old checkpoint at San Lucas Bridge on the Santa Ynez River should render approximately the same result without the changed conditions. The Accumulated Drought Water Credits are derived from the BNA and would not result in additional releases. However, conjunctive use of water rights releases with fish water, including ramping rates, and 65-day average annual water rights releases as provided in the Settlement Agreement would result in additional releases to the downstream area for the benefit of fish and project water supply. Suggest to modify the sentence to read as: "In addition, use of the upper percolation curve subject to Accumulated Drought Water Credits, conjunctive use of water rights releases (spill years excluded) with fish water, 65-day average annual water rights releases and release of 25 af/month during no flow periods as described in the Settlement Agreement will result in some additional ANA and BNA releases to the downstream areas which also benefit the fish and project water supply."

Change "(1913-1993)" to "(1918-1993)."

12. Page 6, para 2, lines 10 through 12: The last two sentences in para 2 are incorrect. It is not clear why the period 1999 through 2010 was selected to calculate ADWC, because the Settlement Agreement was not signed until December 2002. It would have been more relevant if the calculation was performed for the period 2003 through 2010. The amount of ADWC for the Cachuma Member Units totaled to 892 acre-feet for 2003-2010. The years of accumulation are designated to be 2005, 2006 and 2008 during the eight-year period. The last sentence in para 2 is erroneous and it should be deleted.

13. Page 6, para 2, lines 2 and 3 (second sentence): Change sentence to "Significant differences in management of ANA releases are expected to occur among project alternatives compared to Alternative 3C ("No Project Alternative"). See Section III.D.4(b) of SYRWCD/ ID No. 1 letter to which these comments are appended.

Section 4.5 SURFACE WATER QUALITY

1. Page 11, para 5, lines 7-14: Delete. Trends in salinity cannot be estimated from sample data at Solvang and the Narrows because samples are collected at different flow rates. Ideally, continuous EC data should be used to determine trends in salinity. Suggest adding the following paragraphs:

"Continuous EC for salinity was measured during water rights releases in 2000, 2004 and 2007. In 2000, very little SWP water was mixed in with the releases but SWP water was mixed continuously during the 2004 and 2007 releases. These years have available specific conductance data as well as water quality samples. Figures 22 through 24 from the report "Water Quality in the Lower Santa Ynez River 2007 Water Rights Releases" (Stetson, 2008) show salinity data at the USGS Long Pool, Solvang and Lompoc Narrows gages, respectively. The effect of SWP water is clearly noticeable at the Long Pool gage when SWP was mixed in water rights releases for about five days in year 2000. During this short period of SWP mixing, salinity dropped to the 2004 and 2007 levels. Overall, the 2004 and 2007 water rights releases were about 110 to 130 mg/L lower in total dissolved solids concentration than the year 2000 water rights releases at the Long Pool gage. The reduction in salinity due to SWP water mixing would result in a reduction of about 1,700 to 2,400 tons of salt loading in the lower Santa Ynez River for the total amount of 11,600 acre-feet of water rights releases in 2007."

"Other locations downstream of Bradbury Dam also show improvements in water quality in the 2004 and 2007 water rights releases compared to year 2000. Figures 23 and 24 show that the 2004 and 2007 water rights releases were about 100 to 150 mg/L lower in total dissolved solids concentration than the 2000 water rights releases at both Solvang and the Lompoc Narrows. Figure 24 shows that the 2007 water rights releases have the lowest salinity at the Lompoc Narrows compared to the releases in 2000 and 2004."

"Stetson (2008), from which this information is taken, also is cited on pg.4.5-12 and should be included in Section 10 (References)."

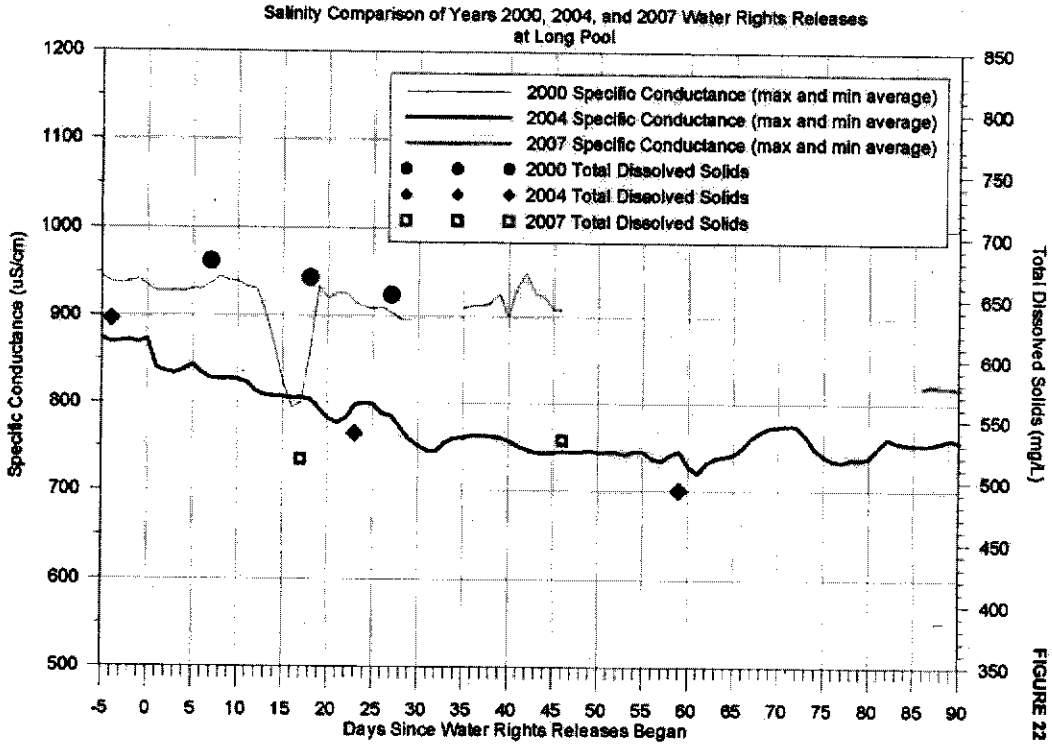

FIGURE 22

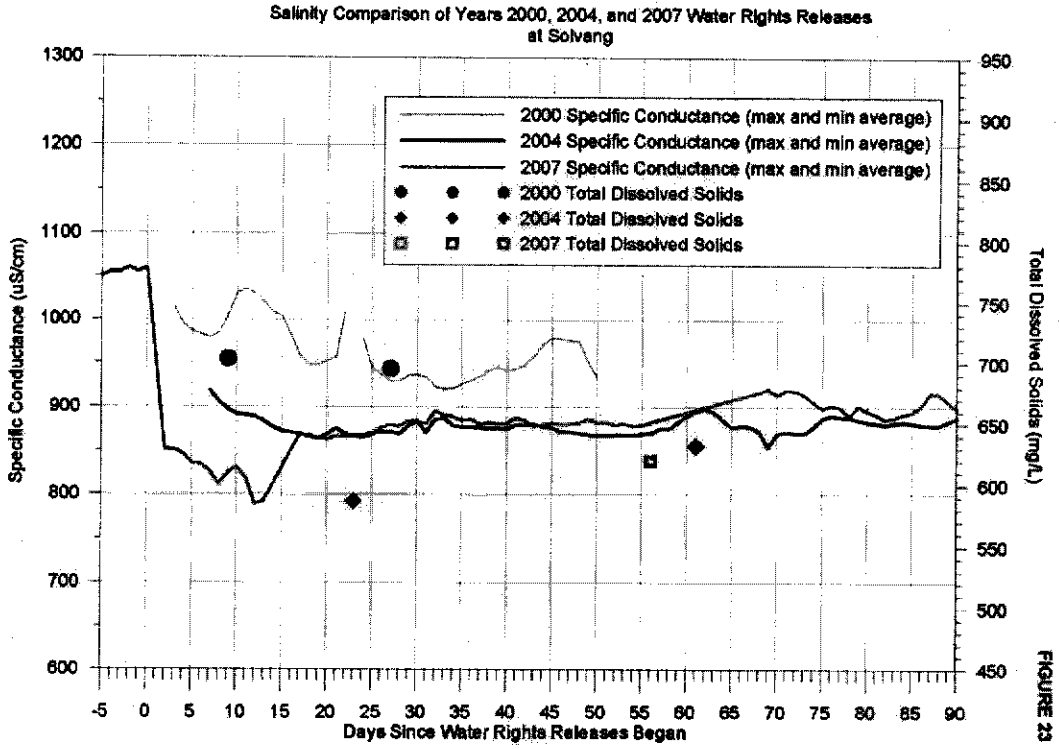

FIGURE 23

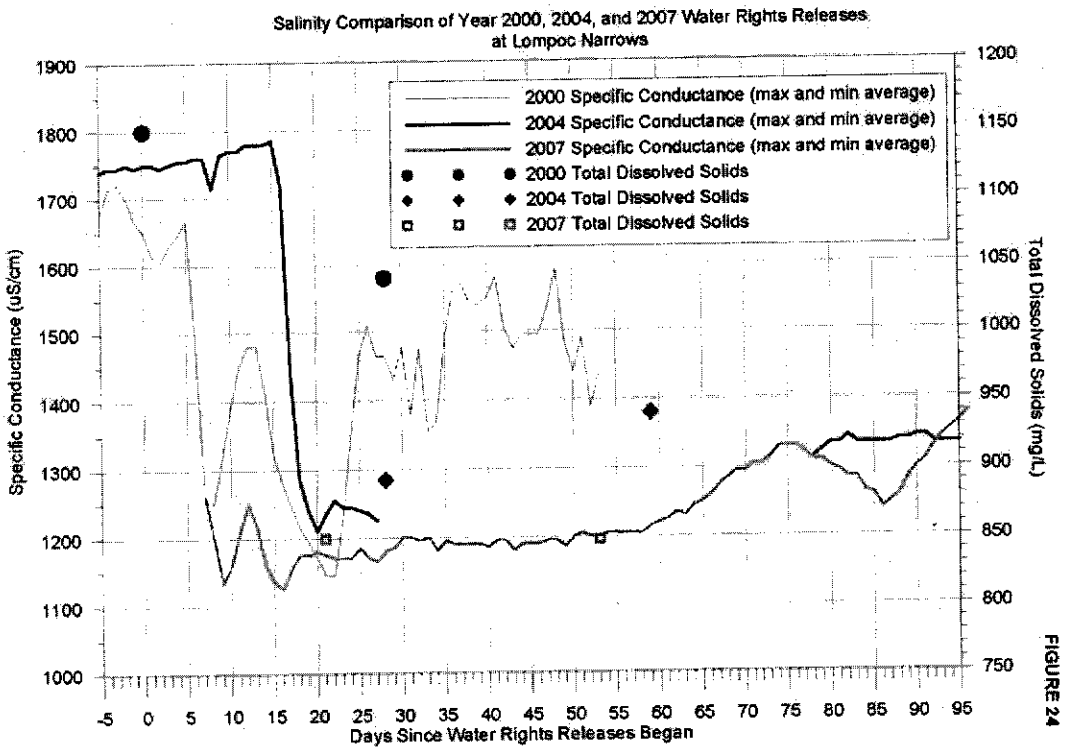

FIGURE 24

2. Page 12, para 3, last two sentences: Delete the last two sentences beginning with "Under the recent . . .". Trends in salinity cannot be estimated from sample data at Solvang and the Narrows because samples are collected at different flow rates. Also remove the trendlines in Charts 4-32a and 4-32b (Appendix B) for the same reason.

3. Page 14, para 1: The potential increase in TDS under Alternative 4B for the Santa Rita sub-unit upstream of the Lompoc Forebay should be disclosed as Class III impact.

Section 4.6 LOMPOC GROUNDWATER BASIN

1. Page 3, para 2: Change "VAFB" to VAFB and/or the Federal Penitentiary." VAFB's wells have been transferred to and are now used by the prison farm.

2. Page 4, para 4, last sentence: This is potentially misleading. The seawater is in water bearing materials originally deposited in a marine environment and the sentence could be interpreted to mean seawater intrusion. Sentence is not necessary and should be deleted.

6.0 COMPARISON OF ALTERNATIVES

1. Page 2, para 2: Delete "(No Project)." Alternative 3C is described as the No Project Alternative throughout the rest of the document.

2. Page 4, Table 6-1 and Table 6-2: Add "X" under Alt 4B in the row Surface Water Quality (Class III Impacts). As discussed in Section 4.5.2.3 "Impacts of Alternative 4B" Class III impacts are described for the potential to slightly increase in TDS in fish water releases from the dam under this alternative. More importantly, the section states "This increase in TDS under Alternative 4B would also impact salinity in the alluvial groundwater basin immediately upstream of the Lompoc Narrows, which is the Santa Rita sub-unit." Although not disclosed in this section, this impact should also be described as a Class III impact on surface water quality under Alternative 4B in Table ES-2.

3. Page 6, Table 6-2: Under "Lompoc Groundwater Basin Conditions", change the word "increased" to "decreased".