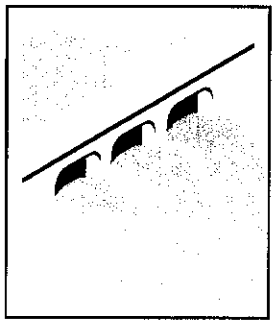

October 6, 2003

Mr. Andrew Fecko
Division of Water Rights
State Water Resources Control Board
P. O. Box 2000
Sacramento, CA 95812-2000

Re: Comments on Draft Environmental Impact Report for Consideration of Modifications to the United States Bureau of Reclamation's Water Right Permits 11308 and 11310 (Applications 11331 and 11332)

Dear Mr. Fecko:

The Cachuma Conservation Release Board ("CCRB") appreciates the opportunity to provide comments to the State Water Resources Control Board ("State Board") on the above-referenced Draft Environmental Impact Report ("EIR"). CCRB is a joint powers agency comprised of the Goleta Water District ("Goleta"), the City of Santa Barbara ("City"), the Montecito Water District ("MWD") and the Carpinteria Valley Water District ("CVWD"). The members of CCRB and the Santa Ynez River Water Conservation District, Improvement District No. 1 are the Cachuma Project Member Units. The Cachuma Project Member Units have been leaders in developing and implementing water conservation programs for more than 30 years. Notwithstanding their extensive water conservation efforts; however, the Member Units would face substantial, unmitigable water supply impacts if some of the alternatives set forth in the State Board draft EIR are implemented.

Unfortunately, these impacts are not necessarily apparent from a reading of the EIR since, in several instances, the document overestimates available water supplies, especially in drier years. When the overestimates are corrected, it will be seen that the water supply impacts from virtually all of the alternatives are substantially more severe than estimated in the draft EIR. Also, because necessary physical facilities are lacking, water cannot be simply transferred among and between the Member Units as the draft document presumes. Further, the EIR substantially overestimates the impacts to oak trees and to the County Park at Lake Cachuma. When the oak tree replacement program is better understood and when it is recognized that the County *does not object* to surcharging the Lake and is already underway in its efforts to relocate important facilities, it will be seen

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that the EIR incorrectly identifies the impact to oak trees and the Park as a Class I impact. At worst the impacts are Class II.

In short, after extensive review by CCRB's team of consultants, biologists and attorneys, we have identified inaccuracies in the EIR as currently written. In some instances, the analysis seriously under-estimates impacts that could result from the project. In other areas, the EIR over-estimates impacts. Thus, the resulting analysis for several of the alternatives is simply incorrect, calling into question all of the document's conclusions. We have also identified other technical comments that we have attached to this letter as Exhibit "A." As currently drafted, the EIR fails to comply with the requirements of the California Environmental Quality Act ("CEQA"). Additionally, comment letters have been submitted by the Santa Ynez River Water Conservation District and by the Santa Ynez River Water Conservation District, Improvement District No. 1. CCRB concurs with the comments in those letters.

Despite the errors and inaccuracies in the draft document, CCRB believes, nonetheless, that the EIR can be corrected prior to the Board's certification of the EIR and consideration of the project itself and thus, ensure compliance with CEQA. We welcome the opportunity to work with State Board staff and consultants to help bring the document into compliance with CEQA.

I. Due to the EIR's Incorrect Conclusions Regarding Project Impacts, the Significance Conclusions for Alternatives 3 (A) and (C) are Inaccurate

An EIR is an informational document that must be considered by a public agency before it approves or disapproves a project. Its purposes are to provide public agencies and the public with detailed information about the effect a proposed project is likely to have on the environment, to list ways in which the significant effects of a project may be minimized and to indicate alternatives to the project (Pub. Res. Code, § 21061.) The purpose of an EIR's alternatives analysis is to require lead agencies to implement feasible alternatives to reduce a project's significant environmental impacts. (Pub. Res. Code, § 21002.) Thus, an accurate analysis of impacts resulting from both the proposed project and the alternatives is vital to enable the lead agency to both inform other agencies of project impacts and to enable the lead agency to select the correct alternative.

A. The EIR Inaccurately Describes Available Water Supply

The EIR fails to meet basic CEQA requirements. The EIR inaccurately describes the volume of water supplies available to the Member Units and thus, significantly underestimates Project impacts.

First, the EIR substantially overstates the amount of Cachuma Project water available during critically dry periods. The EIR uses SYRHM results that are based on perfect knowledge of historical hydrology. However, in real time planning, it is impossible to know in advance when a drought is over and water managers will set aside additional reserves during a drought to provide a buffer should the drought continue for another year. Table 4-16 (Impacts on Cachuma Project Deliveries to Member Units) assumes perfect forecasting using historical hydrology, where the exact length of the drought is already known. We have provided a new Table 4-16b that illustrates the sensitivity of supply deliveries to model assumptions and the risk involved in water supply real time management decisions. (Exhibit "A", Item 40) This table should be incorporated into the EIR to accurately reflect project impacts and the real shortages the Member Units will face in a critically dry period.

The EIR also incorrectly estimates dry year groundwater supplies for the Member Units:

- The amount of groundwater available to the Santa Ynez River Water Conservation District, Improvement District No. 1 ("ID No. 1") is substantially overstated. The EIR states that the ID No. 1 water supply from Santa Ynez River Underflow and Santa Ynez Uplands groundwater basins produce approximately 8,300 acre feet per year ("afy"). In fact, the dry year groundwater supply available to ID No. 1 is approximately 3,770 afy. See attached Exhibit "B". Table 4-24 of the EIR thereby overestimates the ID No. 1's drought supply from groundwater sources by about 4,530 acre-feet per year (8,300 – 3,770 = 4,530) This 4,500 afy difference is an error that causes, along with other errors, much of the document's water supply analysis to be incorrect. It appears that the EIR errs by using nearly the maximum capacities of groundwater production for ID No. 1. The capacity of groundwater production from the Santa Ynez Upland groundwater basin has actually been reduced due to well destruction, water quality problems and, in dry and critical years by a lowering of the water table. Pumping from ID No. 1 river wells (4 and 6 cfs well fields) would be significantly reduced in drought year circumstances due to declines in water levels (dewatered storage) as determined by the Santa Ynez River Hydrology Model.

- The EIR also incorrectly describes Goleta's ability to pump groundwater to make up for reduced Cachuma Project supplies in a time of shortage. The basin from which Goleta pumps was adjudicated by the courts in the case of Wright v. Goleta Water District. Thus, the groundwater rights that Goleta has are limited. They cannot be increased without regard to the judgment in Wright v. Goleta Water District simply to make up for lost Cachuma Project supplies.

- The EIR understates the City of Santa Barbara's ability to pump groundwater during a critically dry period. The City's water supply strategy is to use its local groundwater conjunctively with its other supplies by keeping pumping low during periods of plentiful surface water and using groundwater to replace unavailable surface water supplies during drought periods.

The EIR overstates that amount of State Water that may be available during a drought and misapplies the CCWA drought buffer. Cachuma Member Units believe that for planning purposes State Water cannot be counted on for more than 50% delivery during a severe drought. The drought buffer cannot be added to the State Water delivery in its entirety. It must be added to the Table A amount prior to calculating the State Water delivery amount. See Exhibit "A", item 39.

The EIR also wrongly describes ways the Member Units can work together to minimize the water supply impacts of the alternatives.

- At page 4-36, it is suggested that the City of Santa Barbara, Goleta, and Montecito can address their deficits by buying water from ID No. 1 and Carpinteria. However, there is no surplus available to purchase.

- The EIR inappropriately groups all of the Member Units' water supplies to come up with a bottom-line Water Supply impact analysis. The Member Units cannot be grouped as if they were one public agency. These agencies do not act as one and cannot be treated as a single entity. Indeed, there is no existing program to implement sharing of water during a severe drought. Such a program, itself, would likely be subject to additional, future CEQA analysis.

- No infrastructure, legal or physical, exists to actually deliver such water regardless of available amounts to the Member Units. Even if physical delivery were possible and surplus water available, there are many overlying groundwater pumpers within the ID No. 1 service area who would object to significant amounts of water leaving the Santa Ynez River Valley during drought. Because the EIR analysis has grouped the Member Units' water supplies in addressing the impact analysis, these issues completely skew the results and must be corrected.

- Page 4-43 of the EIR states that "despite the fact that the Member Units already have implemented a number of conservation measures, it may be possible to implement

additional drought contingency measures identified as part of the Member Units' urban water supply contingency analysis in order to make up for temporary water supply shortage in a critical drought year under Alternatives 3(A) and 3(B)." Again, the EIR makes assumptions regarding the abilities of the Member Units based on pure speculation.

The three-year drought analysis in Table 4-25 is much more complicated than shown. Table 4-25 multiplies the many errors in the single drought year analysis by three. Cachuma supply is much less than stated, and additional assumptions must be made for State Water deliveries and groundwater production, which is limited by hydraulic considerations. A new Table 4-25 that corrects the errors in the existing table is also provided in Exhibit "A" attached hereto.

Thus, the EIR significantly overestimates available water supplies and underestimates Project impacts to Member Units. For the above reasons, and the additional technical comments in Exhibit "A", the Water Supply Conditions section of the EIR must be substantially revised prior to certification.

B. The EIR Significantly Misstates the Volume of Water Required for Fish Releases Under Certain Alternatives

The draft EIR estimates the volume of water required to meet the Biological Opinion long-term release requirements to be 2,600 afy. (DEIR, p. 3-9.) This amount is incorrect. Not including spills and natural flows, the total annual water needed from Cachuma Reservoir to meet Alternative 3(a) rearing target flows in the BO is 3,900 acre-feet on average for the model period 1918 through 1993 (76 years). This amount does not include any releases from the 3,200 acre-feet Passage Account or 500 acre-feet Adaptive Management account. This annual average figure does include the contributions from WR89-18 water rights releases and leakage from the dam in the amounts of 1,220 and 500 acre-feet per year, respectively, in meeting rearing habitat target flows. The conjunctive use of WR89-18 water rights releases to meet target habitat flows has been incorporated into the Settlement Agreement. The breakdown of releases that meet the rearing target flows is as follows:

	Acre-Feet/Year
Project Releases	2,185
Water Right Releases	1,220
Leakage from the Dam	500
Total	3,905

The leakage quantities as used in the model represent the historical rate of leakage from the spillway gates. To the extent the spillway gates are repaired to minimize the leakage, then an additional amount would be released for the purpose of fish habitat maintenance. But the total amount of water needed from Cachuma Reservoir for the final BO habitat target flows would still be about 3,900 acre-feet per year on average, according to the SYRHM.

The use of average annual numbers is also very misleading because the actual annual releases range from 800 to over 6,000 acre-feet in Alt 3(a), when releases for passage are considered. The effects of an "average" release also do not mean very much when assessing impacts in drought periods. It is recommended that the sentences regarding Cachuma water needed for providing interim and final BO habitat flow targets in the DEIR (pg. 3-8 3rd ¶, pg. 3-9, 1st ¶ and 3rd¶) be deleted or substantially modified with the additional details described here.

C. The EIR Significantly Overestimates Impacts to Oak Trees

The EIR also overestimates impacts to oak trees. On pages ES-7 and 4-115, the EIR incorrectly concludes that a Class I impact will result to oak trees. For the reasons set forth below, these impacts will be mitigated to below a level of significance. Therefore, impacts to oak trees should not be classified as a Class I impact but Class II.

The water level in Cachuma Lake varies depending upon runoff, evaporation, downstream releases, and diversions to the Member Units. The current maximum lake level is 750.75 feet. The peak lake level is typically reached in April or May as the winter runoff has ended and before significant diversions and downstream releases. Under current operations, the median lake level is estimated to be 733.7 feet. The median lake level with the 3-foot surcharge and the releases for fish as required under the BO would be 734.6 feet. With surcharging, future lake levels would exceed the current maximum lake level (750.75 feet) about 16 percent of the time, and would exceed this level for about four months, on average. The lake would reach the new maximum lake level (753 feet) about 9 percent of the time, on average. Hydrologic simulations of reservoir conditions indicate that surcharging would occur, on average, about every three years.

Increasing maximum lake levels over current conditions will affect the vegetation that currently occurs along the margins of the lake above the current maximum water level, including impacts to oak trees that occur along the margins of the lake. However, the loss of such trees would not occur immediately. In fact, oak tree loss in the direct inundation zone would in most instances occur over a period of 15 to 20 years. Some trees may persist for a longer period of time, as evidenced by the presence of trees, on or directly below 750 feet, current maximum water level for

more than 50 years. The loss of certain trees in the wave action zone would occur over a longer period of time, probably 20 or more years.

Not only will tree loss occur over a long period of time, but the EIR improperly minimizes the fact that potential impacts to oak trees will in fact be mitigated through implementation of an oak tree mitigation program. (See p. 6-19 of FMP/BO EIR/EIS.) To offset the loss of these trees, BOR and the Cachuma Operation and Maintenance Board ("COMB") will implement a long-term oak tree replacement program in which coast live and valley oak trees lost due to periodic surcharging would be replaced in a phased manner linked to the incremental loss of oak trees over time. Reclamation has determined that the most desirable and appropriate locations for planting new oak trees would be in portions of the County Park at Cachuma Lake. There is no recruitment of oak trees in the park due to the cumulative disturbance by park visitors over time. Hence, there is a critical need to plant young oak trees in the County Park to replace the mature trees that are expected to suffer future natural mortality. Implementing the oak tree replacement program in the Park would both offset the loss of trees due to surcharging, and benefit recreational uses at the park. The oak trees would be established in undeveloped grassland and existing oak savannah areas of the Park. In the event that additional land is required for planting, BOR would use portions of Storke Flats, Santa Ynez Point area, Bradbury Dam, and Live Oak area where suitable conditions are present for oak restoration.

BOR would implement the program in a phased approach designed to replace oak trees *prior* to the impacts to the trees. Under this approach, BOR would immediately plant new trees in the Park to replace one half of the estimated total number of trees that would be eliminated over time. BOR would then monitor the loss of trees during surcharge events over the next 10 years. The number of downed or dying trees in and above the inundation zone would be counted immediately after surcharging events, as well as during the months when the water level recedes and bank erosion could occur. The number of trees lost during that year would be replaced at the County Park. At the end of 10 years, BOR would conduct a final count of trees in and above the inundation zone to determine the remaining number of trees that are likely to be eliminated over time due to future inundation. Based on this information, the total number of the estimated trees that could be adversely affected would be revised, and BOR would plant trees to complete the replacement process. This phased approach will be used to ensure a precise count of trees affected by surcharging and to allow BOR and County Parks the opportunity to refine and enhance the oak restoration program over time based on actual planting and maintenance experience.

BOR would maintain the replacement trees for a period of 10 years after their planting to ensure successful establishment and evidence of being self-sustaining. Maintenance would include watering, weeding, pest control, protection from human disturbance, and replacement planting. At the end of 10 years, BOR would determine if additional special maintenance is required, or if the

trees can persist in the Park under current habitat conditions and park maintenance. Oak trees would be replaced at a ratio that ensures a final 2:1 replacement ratio at the end of 20 years – that is, the target number of mature oak trees at 20 years would be twice the number removed by surcharging. Use of a target replacement ratio greater than 1:1 provides compensation for the loss of mature trees by establishing more trees and wildlife habitat than under current conditions. Reclamation will conduct a formal evaluation at 20 years to determine if additional Plantings are necessary to achieve the 2:1 replacement.

To achieve the target replacement ratio, oak trees will need to be planted at a higher initial replacement ratio to compensate for the expected loss of trees during early development due to predation, drought stress, disease, and vandalism. The mortality observed by County Parks during recent oak planting efforts at the park was about 33 percent. Based on this observed mortality rate, the initial replacement ratio to account for mortality would be 3:1 (incorporating a 2:1 replacement ratio and factor to account for mortality). The exact number of trees to be planted will be determined in 10 years after BOR has observed the effect of surcharge on shoreline trees. Coast live and valley oak trees would be planted in proportion to their occurrence in the surcharge impact zone.

Therefore, the effect of the proposed surcharge on oak trees along the lake shoreline is mitigable and would be fully offset by the proposed oak tree replacement program expected to die. Instead, because half of the total trees would be replaced immediately, and the loss of trees will occur slowly, visitors to the Lake will see more trees, not fewer trees, even in the initial years. Morever, the program would utilize state of the art oak tree propagation and maintenance techniques, and would receive long-term care by Reclamation until the trees become self sufficient. The proposed oak tree replacement program is designed to minimize the time period between tree loss from surcharging and establishment of self-sustaining trees by planting one half of the replacement trees prior to, or current with, the first surcharge year. There is simply no reason to assume, as the EIR does, that this extensive mitigation plan will not be effective and mitigate such impacts. For these reasons, the impacts to oak trees must be revised to Class II.

D. The EIR Significantly Overestimates Impacts to Recreation

With regard to impacts on Recreation, the draft EIR also *overestimates* impacts. The EIR concludes that Class I impacts will result if the relocation of certain facilities does not occur prior to surcharging or is deemed infeasible due to funding. (DEIR, p. 4-143.) This conclusion ignores the measures that will be implemented to reduce such impacts and this impact should also be reclassified to a Class II impact.

The Cachuma Lake Recreation Area ("Recreation Area") is federal land designated for

recreational uses. It includes Cachuma Lake and the surrounding land, which encompasses about 6,448 acres. After Reclamation constructed Bradbury Dam, the County of Santa Barbara ("County") agreed to manage recreation at the federally owned reservoir. A 50-year contract between BOR and the County was executed in January 1953. (See attached Exhibit "C") According to the contract, the County will develop, maintain and administer recreation at the Lake. The contract also requires that County facilities accommodate operational needs at the lake (see attached Exhibits "C" and "D"). The contract expired in January 2003. BOR issued an interim 2-year contract to the County to provide time to negotiate a new contract and complete a Resource Management Plan for the lake.

CCRB agrees that higher lake levels due to surcharging would affect recreational facilities at the County Park, which could disrupt recreational activities. However, County Parks already has began to take action to accommodate a 3-foot surcharge. In 2000, they completed an engineering feasibility study to identify preliminary facility relocation concepts and costs. They have applied for, and received, several grants from Reclamation and the State of California to design and relocate certain facilities to accommodate surcharging. BOR, COMB, and County Parks are currently exploring potential short-term interim measures to protect facilities that cannot be relocated prior to surcharging. Through these efforts, the impacts of surcharging on recreational facilities and uses at Cachuma Lake can be avoided or greatly reduced. Therefore, the EIR's conclusion that there is a potential for a permanent or ongoing-term disruption of recreational uses at Cachuma Lake is simply inaccurate and ignores the effectiveness of the measures that will be imposed.

Based upon the above-described inaccurate conclusions, the impact assessment in the EIR regarding alternatives impacts is incorrect. Alternative 3(C) in fact has fewer impacts than identified in the EIR; while in Alternative 3(A), which was identified as having the fewest total impacts has a much more severe impact on water supplies than assumed in the DEIR. (p. 6-3.) Table 6-1, which purports to summarize the impacts of the alternatives is inaccurate and must be revised. For these reasons alone, unless the EIR is revised to reflect the actual impacts, certification of the EIR and approval of the project based upon that certification, violates CEQA.

II. Alternative 3(A) is Poorly Defined

Alternative 3(A) allegedly incorporates water release requirements under order WR 89-18, releases to meet long term rearing and passage target flows under the Biological Opinion, and other steelhead conservation actions described in the Biological Opinion. (p. 3-9) However, the alternative is so poorly defined that it is impossible for an EIR reviewer to understand potential impacts that may result from this alternative if selected and implemented. When would this alternative begin--immediately or when the reservoir fills and spills? Does it allow surcharge? If so, to what level? If it fails to allow surcharge to 3.0' (elevation 753.00) it appears to be contrary to the Biological Opinion issued for the Cachuma Project. Also, if the conditions anticipated by Alternative 3(A) occur how are the volumes of the passage account and adaptive management

account to be determined? In this later regard, the EIR fails to recognize that passage flows are experimental in nature and were accepted by Reclamation and the Member Units *only* when they were linked by the Biological Opinion to a 3.0' surcharge of Lake Cachuma.

III. In View of the Settlement Agreement Entered Into By the Member Units and Downstream Interests, Alternatives 4(A) and 4(B) Are Not Required

The Member Units and downstream water interests including the City of Lompoc and the Santa Ynez River Water Conservation District worked hard over many months to resolve long-standing water rights and water quality issues. By virtue of their Agreement, they have resolved water quality issues without the necessity of drastic changes in Cachuma Project operations or water right deliveries. The terms of the Settlement Agreement thus render Alternatives 4(A) and 4(B) unnecessary

Moreover, as summarized on p. 6-3 (Section 6.1.2 dealing with "Impacts of Proposed Alternatives") Alternatives 4(A) and 4(B) would have substantial environmental effects. Other additional effects resulting from Alternatives 4(A) and 4(B) are identified in comments offered by the Santa Ynez River Water Conservation District and CCRB supports those comments.

III. Additional Comments on the EIR

As noted above, we also have a number of additional technical comments set forth in the attached Exhibit "A".

In conclusion, as stated above, despite the corrections required prior to certification and project approval, CCRB believes that the EIR can be corrected. We would be happy to meet with you to discuss these issues further.

Very truly yours,

Kate Rees

Kate Rees, Manager
Cachuma Conservation Release Board

KR:slf

Enclosures

cc: Cachuma Project Service List

Exhibit "A"
CCRB, Technical Comments on EIR

No.	Page	Reference	Comment
1.	ES-2	4	*"Reclamation initiated the interim target flows in 2001."* Suggested Revision: "Reclamation initiated interim target flows in October 2000."
2.	ES-4	Last	*"Alternatives 3C, 4A, 4B would involve a 3.0-foot surcharge, which would create more storage in Cachuma Lake and thereby offset the impact to Member Units' long-term water supply."* Suggested Revision: "...and thereby partially offset the impact..." Comments: The surcharge only partially offsets water supply impacts during droughts caused by releases for fish. The surcharge is established only when a spill occurs, while releases for fish would occur year-round every year.
3.	Table ES-1	Missing Issue Area	Suggested Revision: 1st column add an issue area of "Water Supply", 2nd column add: "Increase in shortages of water supply in drought years, increase in frequency of shortages", 3rd column add: "Adverse" Comments: The SYRHM modeling for the EIR shows that the impact to water supply between Alternative 2 and Alternative 1 is substantial.
4.	Table ES-1	Surface Water Hydrology	*"Frequency of spills are slightly reduced"* Suggested Revision: "Frequency of spills is slightly reduced"
5.	Table ES-1	Fish	*"More frequent flows that allow for steelhead migration, spawning, and rearing"* Suggested Revision: "...that allow for spawning and rearing in Hilton Creek and Highway 154 reach." Comments: The current operations (Interim BO) do not provide releases specifically for steelhead migration.
6.	Table ES-1	Riparian Vegetation	*"...due to greater moisture availability and lower growing season..."* Suggested Revision: replace "lower" with "longer"
7.	Table ES-1	Riparian Vegetation	*"Reduction in the frequency of spills that cause natural disturbances..."* Suggested Revision: Delete entire row Comments: Flooding issue already covered under surface water hydrology issue area, and increase in vegetation due to fishery releases covered in row above. Effect of spill reduction (caused by surcharge and fishery releases) on vegetation is known to be insignificant. Model shows only very small spills (less than 20,000 acre-feet) effected. Large spills, which are responsible for scouring vegetation, would still occur. It should be noted that there is little to no difference in the frequency of moderate to high flows downstream of the dam between current and recent historical operations because these flows are primarily due to natural runoff, not releases for water rights or fish.

No.	Page	Reference	Comment
			They will continue to scour the river channel and remove obstructive vegetation through natural riverine processes. For example, the flooding in 1969 is cited by Jones and Stokes (2000) as having the largest effect on vegetation. Model results show that the difference in flows at the Highway 154 Bridge for February 1969 would be less than one percent among all of the alternatives, ranging from 192,521 to 192,612 acre-feet.
8.	2-2	last	*"...Cachuma Project facilities may be used for...."* Suggested Revision: add "salinity control" to different uses
9.	2-5	Table 2-2	Suggested Revision: replace this table with previous version or reconcile following discrepancies: 1) inflows minus outflows do not equal changes in storage for practically every year in the table; 2) before 1974, spills occurring through the outlet works when reservoir elevations are above 750.0 feet should be accounted as spills rather than as water rights releases.
10.	2-8	Table 2-3	It is more appropriate to present Table 2-3 in calendar years rather than water years. Also, years 2001 and 2002 should be added. Hence, the Table should be presented as follows:

HISTORICAL DOWNSTREAM WATER RIGHTS RELEASES

Releases under WR 73-37			
Calendar Year	Releases (acre-feet per year)		
	ANA	BNA	Total
1974	1,353	0	1,353
1975	1,134	0	1,134
1976	4,237	0	4,237
1977	2,299	0	2,299
1978	62	0	62
1979	1,200	0	1,200
1980	0	0	0
1981	4,175	0	4,175
1982	6,655	755	7,410
1983	0	0	0
1984	3,162	0	3,162
1985	5,686	0	5,686
1986	5,317	1,780	7,097
1987	3,887	0	3,887
1988	5,050	1,283	6,333
Average	2,948	255	3,202

No.	Page	Reference	Comment

HISTORICAL DOWNSTREAM WATER RIGHTS RELEASES (CONT'D)

	Releases under WR 89-18		
1989	5,192	0	5,192
1990	4,792	0	4,792
1991	7,745	3,638	11,383
1992	4,930	3,287	8,217
1993	0	0	0
1994	6,727	4,012	10,739
1995	0	0	0
1996	7,319	3,459	10,778
1997	9,572	3,438	13,010
1998	0	0	0
1999	0	0	0
2000	4,360	1,858	6,218
2001	0	0	0
2002	9,054	4,412	13,466
Average	4,264	1,722	5,985

11.	2-8e	State Water & Storage	The Warren Act contract does not include a storage charge. This error is repeated throughout the EIR.
12.	2-11	2	*"...beginning in 1993, Reclamation surcharged the reservoir...The reservoir has spilled 17 times..."* Suggested Revisions: "... beginning in 1998 ... has spilled 18 times."
13.	2-13	Table 2-5	This table should have a footnote noting that the allocation does NOT provide al the water necessary for the releases (either interim or long term).
14.	2-14	1	Last sentence. This makes it sound like water rights releases will be made through the outlet works and ADDITIONAL water will be released (from some other account) to provide fish water into Hilton Creek. It would read ok if the "only" was removed.
15.	2-14	2	*"...are present in the Alisal Reach and in the calendar year following any such year"* Suggested Revision: "...in the water year following..."
16.	2-14	2	Sentence beginning with "instead." The text is correct that this is Reclamation's operating plan, however this has not been approved by NMFS and reconsultation is required should lake storage decline to 30,000 af. This should be noted.
17.	2-15	1	*"In the event that storms do not produce 150 cfs at Solvang, but flows exceed 25 cfs, then releases would be made to reach 150 cfs."* Suggested Revision: "...then releases up to 150 cfs would be made through the outlet works."

No.	Page	Reference	Comment
18.	2-15	2	*"The account will not be subject to evaporation or seepage losses, and can be carried over to subsequent years."* Suggested Revision: ". . . subsequent years. However, the account is reset when the reservoir surcharges."
19.	2-16	1	Last sentence. SYRWCD, ID#1 is also on this committee.
20.	2-17	2.4.4.1	Maintain Residual Pool Depth, *"This action will be accomplished by maintaining residual pool depth using releases from Cachuma Lake."* Suggested Revision: "Cachuma Lake or, through an agreement with SYRWCD ID#1, by providing water from nearby SYRWCD ID#1 wells, as necessary, to maintain residual pool depth in the Alisal and/or Refugio reaches, wherever steelhead are determined to be present."
21.	2-18	5	Sentence beginning "The SYRTAC prepared". The FMP was released in April 1999 (not 2000)
22.	2-19	Table 2-9	Last 3 rows are not FMP "actions" as they are not recommended. Need to be removed or otherwise categorized.
23.	3-5	2	Typo--first sentence. WR 89-18
24.	3-8	3	*"The annual amount to meet the Biological Opinion interim release requirements is estimated to be 1,300 af."* Suggested Revision: "The average annual amount to meet the Biological Opinion interim releases for meeting flow targets in the Highway 154 reach is estimated to be 2,500 af." This average annual figure for the model period 1918 through 1993 (76 years) includes the contributions from WR 89-18 water rights releases and leakage from the dam. The breakdown of releases for meeting the interim target at the 154 Bridge is as follows:

	Acre-Feet/Year
Project Releases	1,400
Water Right Releases	700
Leakage from the Dam	400
Total	2,500

To the extent the leakage from the spillway gates is minimized through repairs, then an additional amount is released for the purpose of meeting the interim targets in the Highway 154 reach."

25.	3-10	3	*"The average annual BNA delivery from Cachuma Lake is 1,556 af (1989-2000...The TDS of SWP water is 150 to 400 mg/L."* Suggested Revision:"... is 1,722 af (1989-2002)...SWP water is typically 150 to...".

No.	Page	Reference	Comment
26.	4-1	4	*"In 2000, NMFS..."* Suggested Revision: "In September 2000, NMFS."
27.	4-2	4	*"...to compare Alternatives 3A, 3B, 3C, 4A, and 4B with "No Project Alternative" (Alternative 2) to determine if they avoid any significant impact associated with current operations."* Suggested Revision: "...to determine if they avoid or lessen any significant impact associated with current operations or if they create or increase any significant impacts."
28.	4-7	1	*"The Narrows flow includes the effects of Cachuma Lake winter spill averaging about 34,800 afa and summer river releases of about 7,000 afa."* Suggested Revision: "... spill averaging about 37,500 afa and water rights releases of about 4,500 afa."
29.	4-8	5	*"As a result of these relatively high diversions in the early years of the 1988-91 drought, only 17,000 af could be delivered in calendar years 1990 and 1991."* Suggested Revision: Delete sentence. The previous sentence notes diversions in periods unrelated to the 1988-91 drought, providing inadequate support for the conclusion stated in this sentence.
30.	4-9	2	"Under the Agreement, the City's entitlements from Gibraltar Reservoir can be delivered to the City either from Gibraltar or Cachuma Lake. "Base Operation" entitlements that cannot be physically delivered from Gibraltar itself can be supplied to the City through Tecolote Tunnel. Conversely, diversions in excess of "Base Operations" entitlements can be made to the City through Mission Tunnel but must be mitigated by correspondingly reducing Cachuma contract water deliveries to the City through Tecolote Tunnel." Suggested Revision: "Diversions in excess of the "Base Operation" entitlement can be made to the City through the Mission Tunnel but must be mitigated by correspondingly reducing Cachuma contract water deliveries to the City through Tecolote Tunnel. Under the "Passthrough Operation," the City's entitlement that can not be physically delivered to the City from Gibraltar itself can be supplied to the City through Tecolote Tunnel."
31.	4-9	4	*"There are five stream gages on the river between Bradbury Dam and the Pacific Ocean."* Suggested Revision: "There are four stream flow gages operated by the USGS in WY2002 on the river between Bradbury Dam and the Pacific Ocean."
32.	4-12	Table 4-1	Suggested Revision: delete row on "Revised Order WR 89-18 ramping schedule" (not included in model due to monthly time steps)

No.	Page	Reference	Comment
33.	4-20	Last sentence	*"... such that there is very little difference in the frequency of low-flows near Salsipuedes Creek (Table 4-9)."* Suggested Revision: "... such that there is very little difference in the frequency of low-flows below Alisal Road (Table 4-9)."
34.	4-21	1	*"As shown in Chart 4-8 in Appendix B, the median monthly flows under current operations (Alternative 2) are slightly greater than...."* Suggested Revision: "...are greater than.."
35.	4-23	4	*"For example, under the current operations, flows at Highway 154 are 5 cfs or greater 47 percent of the time. In contrast, flows of 5 cfs or more under recent historic operations occurred only 40 percent of the time."* Suggested Revision: "For example, under the current operations, flows at Highway 154 are 2 cfs or greater 82 percent of the time. In contrast, flows of 2 cfs or more under recent historic operations occurred only 50 percent of the time."
36.	4-23	8	*"The increase in riparian vegetation probably would not be measurable below Buellton where flows would not be maintained for fish."* Suggested Revision: "The increase in riparian vegetation probably would not be measurable below Alisal Road where flows would not be maintained for fish."
37.	4-26		The EIR has a significantly different number for CVWD's available State Water than the FMP EIR. The FMP EIR used 1,650 af which is 75% of CVWD's annual 2,2000 af entitlement based on the August 2002 draft of the State Water Project Delivery reliability Report.
38.	4-26 to 4-30	Tables 4-10, 4-11, 4-12, Table 4-13, and 4-14	Comment: From the text, the values presented in the tables appear to represent averages, but the tables themselves are unclear on this. Besides averages, the range of supply and demand should also be presented.
39.		Tables 4-10 to 4-15 and Tables 4-19 and 4-24	The Cachuma Member Unit normal year and drought year supplies included in the draft EIR have numerous errors. We suggest the values shown in the following tables. In addition, several tables and much narrative needs to be redone to have a correct representation of the CCWA drought buffer. It is not used separate from other State Water supplies. The buffer amount is added to the entitlement amount of each agency and that total is multiplied by the delivery coefficient. For example, if Agency A has an entitlement amount of 1,000 AF, a drought buffer of 100 AF is added, and the State Water Project can deliver 70% of the amounts requested, Agency A would receive 70% of 1100 AF or 770 AF. The tables below show more accurately the normal water supplies of the Cachuma Member Units and the amount of water available during a drought. These values should be used to replace those used in Tables 4-10 to 4-15 and 4-19 to 4-24:

Revision of Tables on Water Supplies of the Cachuma Project Member Agencies for the CCRB Comments on the SWRCB DEIR on the Cachuma Project Permits

Steve Mack, Water Supply Manager, City of Santa Barbara
October 30, 2003

At the State Board Hearings on October 21, 2003, State Board staff pointed out inconsistencies in the tables on the water supplies of the individual Member Units contained in my testimony. These inconsistencies and errors were corrected and revised testimony was submitted at the hearing on October 23, 2003. Comment 39 of the CCRB Comments includes tables on the Member Units' supplies that contained the same errors. Below are the corrected tables. These tables should replace the tables in comment 39.

Water Supply And Demand - Carpinteria Valley Water District

	Normal Year (acre-feet per year)	Critical Drought Year (acre-feet per year)	Comment
Supplies			
Cachuma Project	2,813	1,132	Fixed percentage of Cachuma Project yield. Cachuma represents 41% of total supply
State Water Project	1,650	1,100	SWP Table A amount is 2,000 AFY plus 200 AFY of CCWA drought buffer; CVWD assumes 75% average annual delivery and 50% during drought
Local groundwater	3,000	4,650	Share of local groundwater basin
Total	7,463	6,882	
Demand			
Current (2001)	4,300		Approx. 50% for agricultural use
Planned Future (2020)	5,833	6,819	Because of Ag needs, assumes higher demand in drought

Sources: Fish Management Plan Environmental Impact Report (FMP EIR) 2003 and pers. comm. from C. Hamilton, Gen. Manager, June 2003).

Water Supply And Demand – Montecito Water District

	Normal Year (acre-feet per year)	Critical Drought Year (acre-feet per year)	Comment
Supplies			
Cachuma Project	2,651	1,066	Fixed percentage of Cachuma Project yield. Cachuma represents 34% of total supply

Jameson Lake, Fox and Alder creeks	2,000	312	Diversions on the upper Santa Ynez River. Drought year values are from SYRHM.
Doulton Tunnel	375	130	Drought year values are from SYRHM.
State Water Project	2,280	1650	SWP Table A amount is 3,000 AFY plus 300 AFY of CCWA drought buffer; MWD assumes 76% average annual delivery of Table A amount
Local groundwater	200	400	District's portion of Montecito Groundwater Basin's safe yield of1,650 AFY. Maximum pumping is 400 AFY.
Total	7,506	3,558	
Demand			
Current (2000)	6,073		12% is losses and transfers to City of S.B (300 AF).
Planned Future (2020)	6,835		Slight increase in all uses, allows for reserve

Sources: FMP EIR 2003 and pers. comm. from T. Mosby, Operations Manager, June 2003).

Water Supply And Demand – City Of Santa Barbara

	Normal	Critical Drought Year	Comment
	(acre-feet per year)		
Supplies			
Cachuma Project	8,277	3,330	Fixed percentage of Cachuma Project yield. Cachuma represents 45% of total supply
Gibraltar Reservoir and Devils Canyon	4,310	0	
Mission Tunnel	1,109	500	Infiltration; tunnel from Gibraltar Reservoir
Juncal Reservoir	300	300	Water from Montecito Water District per prior agreement
State Water Project	2,200	1,650	SWP Table A amount is 3,000 AFY plus 300 AFY of CCWA drought buffer;
Local groundwater	1,104	4,150	City's portion of the Santa Barbara Groundwater Basin's safe yield of about 1,850 AFY; used for seasonal peaking and to replace surface water shortages due to drought
Recycled	900	900	
Desalination		3,125	For use only during emergency. Currently in storage mode. Max. capacity = 3,125 AFY
Total	18,200	13,955	

Demand			
Current (2002)	14,342		
Planned Future (2009 per LTWSP)	18,200		

Source: FMP EIR 2003.

Water Supply And Demand – Goleta Water District

	Normal (acre-feet per year)	Critical Drought Year (acre-feet per year)	Comment
Supplies			
Cachuma Project	9,321	3,750	Fixed percentage of Cachuma Project yield; Cachuma represents about 55% of total supply
State Water Project	4,500	3,725	SWP Table A amount is 7,000 AFY plus 450 AFY of CCWA drought buffer. The District assumes 51-60 percent average annual delivery of Table A amount and drought buffer. The District's right to CCWA facility capacity is 4,500 AFY.
Local groundwater	2,350	2,350	District's portion of the Goleta Basin. Safe yield estimated at 3,410 AFY.
Recycled water project	1,500	1,500	Approximate capacity of built out project. Current production is approximately 1,000 AFY.
Total	17,671	11,325	
Demand			
Current (2000)	14,000		Includes approximately 1,000 AFY of recycled water
Planned Future (2020)	17,300		Includes approximately 1,500 AFY of recycled water

Sources: FMP EIR 2003, K Walsh, GWD General Mgr 2003.

Water Supply And Demand – Santa Ynez River Water Conservation District, ID#1

	Normal (acre-feet per year)	Critical Drought Year (acre-feet per year)	Comment
Supplies			
Cachuma Project	2,651	1,066	Fixed percentage of Cachuma Project at 10.31%; Cachuma Project represents approximately 40% of total supply.
Santa Ynez Uplands Groundwater Basin	1,430	2,320	Production for normal year is based on an average of the last five years (1998-2002) which reflects Well Nos. 3, 4, and 5A remaining out of production (destroyed or water quality problems)

			and Well No. 7 producing at a reduced rate due to lower water levels. Drought supply is based upon average annual production during the 1987-1991 drought adjusted for Well Nos. 3, 4, and 5A and reduced production from Well No. 7.
Gallery Well	0	0	Currently inactive due to SWTR. Maximum permitted diversion is 515 AFY
Santa Ynez River Underflow	1,480	1,450	This is estimate of future maximum production from two permitted well fields
State Water Project	525	350	SWP Table A amount is 2,000 AFY plus 200 AFY of CCWA drought buffer. District's Table A amount is 500 AFY plus 200 AFY of drought buffer. The remaining 1500 AFY is allocated to the City of Solvang under a water supply contract. District assumes 75% delivery of its 700 AFY allocation in normal year and 50% during drought.
Total	6,086	5,186	
Current (2002)	5,792		
Planned Future (2020)	6,619		

Sources: FMP EIR 2003, Chris Dahlstrom, ID No.1 General Mgr 2003).

No.	Page	Reference	Comment

Water Supply And Demand - Carpinteria Valley Water District

	Normal Year (acre-feet per year)	Critical Drought Year (acre-feet per year)	Comment
Supplies			
Cachuma Project	2,813	1,162	Fixed percentage of Cachuma Project yield. Cachuma represents 41% of total supply
State Water Project	1,650	1,100	SWP Table A amount is 2,000 AFY plus 200 AFY of CCWA drought buffer; CVWD assumes 75% average annual delivery and 50% during drought
Local groundwater	3,000	4,650	Share of local groundwater basin
Total	7,463	6,912	
Demand			
Current (2001)	4,300		Approx. 50% for agricultural use
Planned Future (2020)	5,833	6,819	Because of Ag needs, assumes higher demand in drought

Sources: Fish Management Plan Environmental Impact Report (FMP EIR) 2003 and pers. comm. from C. Hamilton, Gen. Manager, June 2003).

Water Supply And Demand – Montecito Water District

	Normal Year (acre-feet per year)	Critical Drought Year (acre-feet per year)	Comment
Supplies			
Cachuma Project	2,651	1,095	Fixed percentage of Cachuma Project yield. Cachuma represents 34% of total supply
Jameson Lake, Fox and Alder creeks	2,000	312	Diversions on the upper Santa Ynez River. Drought year values are from SYRHM.
Doulton Tunnel	375	130	Drought year values are from SYRHM.
State Water Project	2,280	1650	SWP Table A amount is 3,000 AFY plus 300 AFY of CCWA drought buffer; MWD assumes 76% average annual delivery of Table A amount
Local groundwater	200	400	District's portion of Montecito Groundwater Basin's safe yield of1,650 AFY. Maximum pumping is 400 AFY.
Total	7,506	5,045	
Demand			
Current (2000)	6,073		12% is losses and transfers to City of S.B (300 AF).
Planned Future (2020)	6,835		Slight increase in all uses, allows for reserve

Sources: FMP EIR 2003 and pers. comm. from T. Mosby, Operations Manager, June 2003).

No.	Page	Reference	Comment

Water Supply And Demand – City Of Santa Barbara

	Normal	Critical Drought Year	Comment
	(acre-feet per year)		
Supplies			
Cachuma Project	8,277	3,420	Fixed percentage of Cachuma Project yield. Cachuma represents 45% of total supply
Gibraltar Reservoir and Devils Canyon	4,310	0	
Mission Tunnel	1,109	500	Infiltration; tunnel from Gibraltar Reservoir
Juncal Reservoir	300	300	Water from Montecito Water District per prior agreement
State Water Project	2,200	1,650	SWP Table A amount is 3,000 AFY plus 300 AFY of CCWA drought buffer;
Local groundwater	1,104	4,150	City's portion of the Santa Barbara Groundwater Basin's safe yield of about 1,850 AFY; used for seasonal peaking and to replace surface water shortages due to drought
Recycled	900	900	
Desalination		3,125	For use only during emergency. Currently in storage mode. Max. capacity = 3,125 AFY
Total	18,200	14,045	
Demand			
Current (2002)	14,342		
Planned Future (2009 per LTWSP)	18,200		

Water Supply And Demand – Goleta Water District

	Normal	Critical Drought Year	Comment
	(acre-feet per year)		
Supplies			
Cachuma Project	9,321	3,861	Fixed percentage of Cachuma Project yield; Cachuma represents about 55% of total supply
State Water Project	4,500	3,725	SWP Table A amount is 7,000 AFY plus 450 AFY of CCWA drought buffer. The District assumes 51-60 percent average annual delivery of Table A amount and drought buffer. The District's right to CCWA facility capacity is 4,500 AFY.
Local groundwater	2,350	2,350	District's portion of the Goleta Basin. Safe yield estimated at 3,410 AFY.
Recycled water project	1,500	1,500	Approximate capacity of built out project. Current production is approximately 1,000 AFY.
Total	17,671	11,461	
Demand			
Current (2000)	14,000		Includes approximately 1,000 AFY of recycled water
Planned Future (2020)	17,300		Includes approximately 1,500 AFY of recycled water

Sources: FMP EIR 2003, K Walsh, GWD General Mgr 2003.

No.	Page	Reference	Comment

Water Supply And Demand – Santa Ynez River Water Conservation District, ID#1

	Normal	Critical Drought Year	Comment
	(acre-feet per year)		
Supplies			
Cachuma Project	2,651	1,095	Fixed percentage of Cachuma Project at 10.31%; Cachuma Project represents approximately 40% of total supply.
Santa Ynez Uplands Groundwater Basin	1,430	2,320	Production for normal year is based on an average of the last five years (1998-2002) which reflects Well Nos. 3, 4, and 5A remaining out of production (destroyed or water quality problems) and Well No. 7 producing at a reduced rate due to lower water levels. Drought supply is based upon average annual production during the 1987-1991 drought adjusted for Well Nos. 3, 4, and 5A and reduced production from Well No. 7.
Gallery Well	0	0	Currently inactive due to SWTR. Maximum permitted diversion is 515 AFY
Santa Ynez River Underflow	1,480	1,450	This is estimate of future maximum production from two permitted well fields
State Water Project	525	350	SWP Table A amount is 2,000 AFY plus 200 AFY of CCWA drought buffer. District's Table A amount is 500 AFY plus 200 AFY of drought buffer. The remaining 1500 AFY is allocated to the City of Solvang under a water supply contract. District assumes 75% delivery of its 700 AFY allocation in normal year and 50% during drought.
Total	6,086	5,215	
Current (2002)	5,792		
Planned Future (2020)	6,619		

Sources: FMP EIR 2003, C Dahlstrom, ID1 General Mgr 2003).

40. 4-32 1

Suggested Revision: Add a new last sentence and a new table (Table 4-16b): "Table 4-16 also assumes a perfect forecasting ability using historical hydrology, where the exact length of drought is already known. However, in real-time planning additional reserves would likely be set aside during a drought which would exacerbate the shortages shown. With reserves set aside for an additional dry year following the worst year of the critical period, the shortages are greater, as described in Table 4-16b. This table illustrates the sensitivity of supply deliveries to model assumptions and the risk involved in water supply real-time management decisions. The SYRHM also assumes that the next 76 years will be similar to the hydrology of 1918-1993."

No.	Page	Reference	Comment

TABLE 4-16b IMPACTS ON CACHUMA PROJECT WATER SUPPLY IN CRITICAL DROUGHT PERIOD 1949-1951, WITH RESERVES SET ASIDE FOR ADDITIONAL DRY YEAR (ACRE-FEET)

Cachuma Operations	Shortage in Critical Drought Year 1951	Shortage as Percentage of Annual Draft	Cumulative Shortage in Critical Drought Period 1949-1951	Shortage as Percentage of Annual Draft for 3 Years
Alt 1	12,740	50%	22,800	30%
Alt 2	14,790	58%	27,030	35%
Alt 3A	16,500	64%	31,220	40%
Alt 3B	15,940	62%	29,460	38%
Alt 3C	15,380	60%	27,750	36%
Alt 4A-B	15,090	59%	24,530	32%

Note: Annual draft from Cachuma Project is 25,714 acre feet.

41. 4-32 Table 4-16

Row: Critical 3-year Drought Period
Suggested Revision: Change Critical 3-year Drought Period to following totals for each alternative, respectively: "14,210 18%; 20,130 26%; 24,850 32%; 23,370 30%; 19,920 26%; 17,470 23%" .
Comments: These totals represent the critical 3-year drought better than the totals currently listed, which are based on a water year, because these are the totals based on a year starting May 1st. In reality, May 15th is when water supply managers decide on the quantity of deliveries from Cachuma which will take place in the following year based on current storage levels. Since, the model uses a monthly time step the best simulation starts shortages beginning May 1st. The shortages starting from May are the most critical shortages of any 36-month period simulated by the model.

42. 4-32 and 4-33 Table 4-16

"...difference from Alternative 2"
Suggested Revision: Place another row that compares difference with Alternative 1 and discuss accordingly on page 4-33.
Comments: No environmental impact analyses were ever performed for releases for fish under the 1994 Fish MOU, WR94-5, or interim phase of the BO and FMP, even though the change in Cachuma Project operations involved, in essence, the same actions as the proposed project (Alternative 3C) including releases for fish and a surcharge. Part of the reason for this lack of environmental impact analyses was that one of the purposes of the releases for fish under the original 1994 Fish MOU was for "study", thereby implicitly promising environmental review at such later time that studies would provide appropriate reporting. Another reason is that impacts were deemed to be small. Even the 1.8' surcharge at one time was thought to have such small environmental impacts as to not require an environmental impact report. Given the lack of impact reporting for smaller increments of fish releases and surcharging, it is incumbent to use the opportunity presented by this report to review all of the incremental changes compared with recent historic conditions (Alternative 1).

No.	Page	Reference	Comment
43.	4-34	Table 4-17	*"Table 4-17 compares the Member Units' demand to their water supply from all sources, including the Cachuma Project and the SWP, in a critical drought year like 1951 under the project alternatives."* Suggested Revision: After this sentence include the following table modified as shown. The CCWA drought buffer is included in "Total Supply from Other Sources."

TABLE 4-17 (Cachuma supply with reserve set aside)
MEMBER UNITS' SUPPLY AND DEMAND IN CRITICAL DROUGHT YEAR (1951)

Water Supply Parameter	Alt 1, Historical Operations	Alt 2, current Operations	Alt 3A, No Surcharge	Alt 3B, 1.8' Surcharge	Alt 3C, 3' Surcharge	Alt 4A-B, BNA Exchange
Cachuma Project Yield in the Critical Drought Year	12,976	10,922	9,213	9,777	10,331	10,625
Total Supply from Other Sources	30,562	30,562	30,562	30,562	30,562	30,562
Total Supply (1+2)	43,538	41,484	39,775	40,339	40,893	41,187
Year 2000 demand	44,507	44,507	44,507	44,507	44,507	44,507
Surplus or shortage (3-4)	(969)	(3,023)	(4,732)	(4,168)	(3,614)	(3,320)
CCWA Drought Buffer (included in 2 above)						
Surplus or shortage by adding drought buffer (not used)						
Year 2020 demand	54,787	54,787	54,787	54,787	54,787	54,787
Surplus or shortage (3-8)	(11,249)	(13,303)	(15,012)	(14,448)	(13,894)	(13,600)
Shortage after adding CCWA drought buffer (included in 9)						

44.	4-40	3	*"A temporary increase in pumping in the Above Narrows Alluvial Aquifer is unlikely to have any environmental impacts."* Suggested Revision: "A temporary increase in pumping in the Above Narrows Alluvial Aquifer could include impacts such as degrading groundwater quality and increasing pump lifts."
45.	4-45	6	*"Groundwater levels in the Above Narrows Alluvial Groundwater Basin fluctuate in response to groundwater pumping and releases from Bradbury Dam."* Suggested Revision: "Groundwater levels in the Above Narrows Alluvial Groundwater Basin fluctuate in response to groundwater pumping, runoff from tributaries below Cachuma Reservoir, spills and releases from Bradbury Dam."

No.	Page	Reference	Comment
46.	4-47	4	Suggested Revision: Replace "bank infiltration" with "bank flows"

No.	Page	Reference	Comment
47.	4-47	7	*"In general, bank infiltration increases storage in the basin declines and adjacent aquifers are sufficiently full."* Suggested Revision: "In general, bank inflows increase when storage in the riparian groundwater storage in the basin declines..."
48.	4-47	4	*"When groundwater storage is sufficiently high such as during a period of high runoff, bank infiltration is derived from groundwater storage from adjacent formations."* Suggested Revision: "When riparian groundwater storage is sufficiently high such as during a period of high runoff, bank flows becomes modeled as an outflow to adjacent formations."
49.		Table 4-25	Table 4-25 incorrectly shows the three year drought water supply (1949-1951). • Local groundwater is shown incorrectly. An earlier comment shows the critical year groundwater supplies. Multiple year supplies during a critical drought period would be somewhat closer to those amounts on an annual basis, but multiple year supplies cannot be shown by taking the maximum amount, or any other amount, such as average supply, and multiplying by the multiple. Typically, groundwater production will decline when pumped at a maximum for extended periods. • The average State Water delivery cannot be counted on for a three year period during a drought. A reasonable conservative estimate would be 50% during the three year period. • This table uses the drought water buffer incorrectly. The corrected Table 4-25 should read as follows:

No.	Page	Reference	Comment

Table 4-25, revised (units are acre feet)
Member Units' Supply and Demand During Critical Three-Year Drought Period (1949-1951) Under Alternative 3-A

Local groundwater based on drought supply with a .8 reduction factor except ID No. 1 river wells which are based on simulated water levels (dewatered storage).	
State Water at 50% delivery and includes drought buffer	
Cachuma supplies reduced to include a reserve	
CVWD	
1. Local groundwater supply	11,160
MWD	
2. Jameson Lake and Alder Creek diversion	2,194
3. Doulton Tunnel and Fox Creek diversion	432
4. Local groundwater	960
5. MWD Subtotal	3,586
City of Santa Barbara	
6. Gibraltar Reservoir	4,055
7. Mission Tunnel Infiltration	1,577
8. Local groundwater	9,960
9. Recycled water	2,700
10. City of Santa Barbara Subtotal	18,292
GWD	
11. Local groundwater	5,640
12. Recyced water	4,500
13. GWD Subtotal	10,140
SYRWCD, ID#1	
14. Local groundwater	11,823
15. State Water Delivery (50%)	25,425
16. Cachuma Project yield in critical 3-year period	45,918
17. Total Supply in Critical 3-year period	**126,344**
18. Demand for 3-year Period based on Current Demand Level	133,521
19. Difference between 3-year Drought Supply and Current Demand	**(7,177)**
20. Demand for 3-year Period based on Planned Future Growth	164,361
21. Difference between 3-year Drought Supply and Planned Future Growth	**(38,017)**

No.	Page	Reference	Comment
50.	4-48	Table 4-27	Suggested Revision: typo: Santa Ynez Subarea Mean under Alt 1 = 2,471 af
51.	4-51		Section 4.5, Surface Water Quality relies on results from models developed by Stetson Engineers and overseen by the Santa Ynez River Water Quality Technical Advisory Committee (WQTAC) to describe water quality effects throughout the Santa Ynez River system. The WQTAC members agreed that the Stetson Technical Memoranda could be presented and used in the EIR, they did so with the caveat that non of the parties were satisfied that the information necessarily resolves the ultimate question of whether the Project has an adverse impact on downstream water quality. The WQTAC had no concurrence on the range of error in the models; it may be larger than the 150 to 300 mg/L stated in the DEIR. This is of particular concern because there are sections in the DEIR where effects are noted when the difference in values is very small – 10 mg/l or so. These effects are not only insignificant; they are within the error margin and should not be considered. The DEIR fails to adequately stress that the surface and ground water WQ models were accepted by the WQTAC *only* for the purposes of comparison of alternatives. Indeed, it was for these reasons, among others, that the parties agreed to move forward with the Settlement Agreement.
52.	4-52	3	*"Based on these observations, it appears that there is complete mixing of TDS in Cachuma Lake. Horizontal mixing of TDS is also very complete, ..."* Suggested Revision: "Available data from Tecolote Tunnel intake valves indicate that there is complete mixing of TDS in Cachuma Lake. Horizontal mixing of TDS also appears to be largely complete,..."
53.	4-52	4	insert new sentence Suggested Revision: "(4) Salinity data between Alisal Road and above the confluence of Salsipuedes Creek are also scarce."
54.	4-53	1	*"Flows that exceed 100 cfs typically have TDS concentrations of about 400 mg/L..."* Suggested Revision: "Flows that exceed 100 cfs typically have TDS concentrations that range from 300 to 700 mg/L...:
55.	4-53	Table 4-30	Suggested Revision: Sources Column for Narrows data should also include USGS

No.	Page	Reference	Comment
56.	4-54	3	*"Stetson Engineers calls this phenomenon "channel loading" or "Above Narrows salt increase....."* Suggested Revision: "Stetson Engineers call this phenomenon "channel loading" or "Alisal to Narrows Salinity Increases (ANSI)". Also add following bullets to sources and mechanisms: • River surface water evaporation • Dissolution of geologic formations in river channel
57.	4-54	4	*Possible sources of salts include weathering of geologic material...."* Suggested Revision: Add source: "Possible sources of salts include percolation from the Santa Ynez River, weathering..."
58.	4-54 and 4-55	last ¶ and first 2 ¶'s	Suggested Revision: Replace with following: "Based on limited salinity data collected by the USGS, Stetson Engineers (2000) estimated the actual salt loading between the dam and the Narrows during the WR89-18 releases. Performing a water and salt balance calculation using the 13 available samples during water rights releases, the average flux of the ANSI is estimated to be about 25 tons/day. In addition, the amount of flux of the ANSI is proportional to the flow as shown in Chart 4-15. Chart 4-15 also shows the flow-ANSI relationships used to calculate the amount of salt input due to the ANSI occurrence in the Buellton, East Santa Rita, and West Santa Rita subareas as used in the SYRHM."
59.	4-55	3 and 4	Suggested Revision: Replace with the following: "Stetson Engineers verified the accuracy of the SYRHM simulation of TDS at the Narrows, using historical Cachuma Reservoir operations and downstream water use data for the period 1942-1993 (52 years). Because continuous recording of TDS at the Narrows does not exist for the period 1942-1993, the historical monthly salt outflows at the Narrows had to be independently estimated using the measured daily flow at the Narrows and the flow-salt loading relationships based on actual water quality sampling at the Narrows. This method of calculating salt flux is referred to as the "estimated" historical salt flux at the Narrows. The match between the estimated salt flux and the measured salt flux for the Narrows is very good. This estimated salt flux based on measured data at the Narrows produced a continuous historic monthly data set, which could then be compared with the model output from the SYRHM. The method of calculating salt flux by the SYRHM is referred to as the "simulated" salt flux at the Narrows. The match between the SYRHM simulated and measured/estimated monthly salt flux at the Lompoc Narrows is very good. In addition, the TDS-flow relationships, as simulated by the SYRHM, were reasonable when compared with the estimated average monthly and measured instantaneous TDS at the Lompoc Narrows (Chart 4-12).

No.	Page	Reference	Comment
			The pattern of SYRHM simulation results compared with measured or estimated data is very similar for both surface water flows and surface water salinity where the simulation matches measured values better at high flows. The SYRHM's similarity to measured values of surface water salinity indicate that the salinity model is a reasonable tool for assessing the impact of Cachuma Reservoir operations on downstream surface water salinity and, most importantly, for comparing effects on salinity of the various alternatives."
60.	4-56	Discussion of State water	The Member Units do not, in fact, use the drought buffer as suggested. Most of the Member Units do not use the 77% delivery average suggested. The amount of drought buffer is not accurate.
61.	4-58	1	*"The higher TDS levels under Alternatives 3A-C as compared to Alternative 2 are probably attributable to the greater downstream releases for fish under these alternatives, which reduces the proportion of low-TDS SWP water in the reservoir compared to current operations."* Suggested Revision: "The slightly higher TDS levels under Alternatives 3A-C as compared to Alternative 2 are probably attributable to the greater downstream releases for fish under these alternatives, which accelerates releases of low TDS reservoir water after the reservoir spills or is greater than 120,000 acre-feet storage."
62.	4-58	3	*"However, the salinity modeling indicates that this improvement in TDS levels is mostly offset by the effects of evaporation on a larger lake surface during the subsequent summer months..."* Suggested Revision: "...summer months and by the higher releases for fish of low TDS reservoir water."
63.	4-58	4	*"The median TDS under current operations is 460 mg/L. Increasing lake TDS by 20 to 40 mg/L under Alternatives 3A-C and 4 would result in a median TDS of 480 to 500 mg/L."* Suggested Revision: "The median Cachuma Reservoir TDS under current operations (Alternative 2) is 575 mg/L and 585 mg/L under Alternatives 3A-C. During the dry years the difference in reservoir salinity between Alteratnatives 3A-C and Alternative 2 can be up to 20 to 40 mg/L."
64.	4-60	1	"In contrast, flows to augment steelhead passage ...because the passage flows would only last for 10-14 days and would mix with natural runoff from the tributaries." Suggested Revision: Delete and replace with "In contrast, flows to augment steelhead passage will be made through the outlet works. However, SWP deliveries will cease in such cases because no SWP water will be commingled in the outlets works in the months December through June when there is continuous flow downstream per the BO."

No.	Page	Reference	Comment
65.	4-60	4	*"SWP water is commingled with water rights and fish rearing releases. The amount of SWP water released for both purposes under current operations and under Alternatives 3A-C is essentially the same."* Suggested Revision: replace with "SWP water is commingled with water rights releases in the outlet works up to 50% of the total rate of release to the river at any time. SWP water will not be delivered through the Hilton Creek watering system through which releases for fish will be made. The amount of SWP water released during water rights releases under current operations and under Alternatives 3A-C is essentially the same."
66.	4-60	5	Suggested Revision: replace with: "The mean monthly TDS of flows at the Narrows from all sources (i.e. runoff and water rights releases) under Alternatives 3A-C will be essentially the same as Alternative 2 because the same amount of SWP deliveries during water rights releases is assumed (Chart 4-19). However, the TDS of flows at the Narrows for current (Alternative 2) and proposed operations (Alternative 3C) would be about 50-100 mg/L less in the late summer and fall months compared to recent historic operations (Alternative 1) due to SWP water commingled with water rights releases (Stetson Engineers, 2001c)."
67.	4-64	5	*"TDS in the main zone beneath the eastern plain has increased from about 1,000 mg/L to about 1,500 mg/L today."* Suggested Revision: "TDS in the main zone beneath the eastern plain has increased from about 1,000 mg/L to about 1,500 mg/L today on average. However in some areas close to the Santa Ynez River, TDS is still about 1,000 mg/L."
68.	4-70	6	*"...over the period 1952 through 1998..."* Suggested Revision: typo, "... 1952 through 1988 ..."
69.	4-71	Table 4-32	Central Plain Well 29N6 HCI Alt 3C *"1,986"*; Western Plain Well 25D1,3 USGS Alt 3A *"2,349"* Suggested Revision: typos Central Plain Well 29N6 Al 3C, change to "1,786"; change Western Plain Well 25D1,3 USGS Alt 3A "2,234"
70.	4-76	Last sentence	Reference should be 1997, not 1977.
71.	4-76	3	Whole paragraph - it is all outdated and needs to be made current (i.e., there is no steelhead critical habitat and FWS is no longer considering de-listing the goby).
72.	4-76	4	Typo. Last sentence. 1997
73.	4-84	3	Sentence beginning "Reclamation began". Implementation of the B.O. began in 2000 (It was Sept. 2000; this was originally wrong in the early drafts of the FMP/BO EIR/S and has since been corrected). Also needs to be corrected in the following sentence - releases began in September 2000.

No.	Page	Reference	Comment
74.	4-86	2	Sentence bginning "Temperature monitoring". Entrix did not do any temperature modeling in the report "Exntrix 2001" - just monitoring data. Temperature modeling was done for the 1995 contract renewal.
75.	4-90	3	Entrix did not do any modeling for this EIR.
76.	5-1	2	Typo. Last sentence. Quiota creek
77.	6-2	Last bullet	"Slight reduction in the frequency of spills that cause natural disturbances to riparian vegetation that enhance long-term reproduction and health." Suggested Revision: delete Comments: see discussion in Suggested Revisions #8
78.	6-2	add bullet under incidental adverse impacts	Suggested Revision: "Interim releases for fish cause increases in both the amount and frequency of shortages in water supply in drought years."
79.	6-3	Table 6-1	Suggested Revision: add "(water supply)" under Column Alt3A, Row Significant, unmitigable (Class 1)
80.	6-5	Table 6-2	row *"Slight reduction in the frequency of spills which could reduce the frequency of uncontrolled downstream flows....."* Suggested Revision: Remove row Comments: See discussion under Suggested Revision #8
81.	7-1	First bullet	The "Parent District" is not a diverter.
82.	9-1	Stetson Engineers	*"Matt Melter....Dawn Harrison"* Suggested Revision: "Matt Smeltzer....Dawn (Harrison)Taffler"; Also remove "This page left intentionally blank"
83.	Appendix B	Chart 2-4, y-axis	*"Acre-feet per year"* Suggested Revision: "Acre-feet per month"
84.	Appendix B	Chart 4-2	*"Historic Annual Rainfall Near Lake Cachuma"* Suggested Revision: change to "Historic Annual Rainfall near Gibraltar Reservoir"
85.	Appendix B	Chart 4-6	*"Annual Reservoir Storage"* Suggested Revision: "Simulated Monthly Reservoir Storage"

EXHIBIT "B"

TECHNICAL MEMORANDUM

STETSON ENGINEERS INC.

2171 E. Francisco Blvd., Suite K • San Rafael, California • 94901
TEL: (415) 457-0701 FAX: (415) 457-1638 e-mail: alis@stetsonengineers.com

TO:	Chris Dahlstrom	**DATE:**	September 29, 2003
FROM:	Ali Shahroody	**JOB NO.:**	1155-1
SUBJECT:	ID No. 1 Well Yields		

This technical memorandum provides the results of our analysis on: (1) impacts of lowered water levels during drought periods on yields from the ID No.1's river wells; and (2) reduced production capacity from ID No.1's wells in the Santa Ynez Upland basin.

I. RIVER WELLS – YIELD IMPACTS

The impact on well yields from lowered water levels in Improvement District No.1's 4 and 6 cfs well fields were determined. The impact was quantified based upon the reduction of yield from full water level conditions at a typical well under average well field hydrogeologic characteristics for both full and reduced water level conditions.

The average hydrogeologic conditions (aquifer thickness, saturated thickness, and specified capacity) were based upon information obtained from drillers' reports and pump testing records. Well specific capacities and saturated thicknesses under test conditions were adjusted to full water level conditions based upon nodal dewatered storage values reported in the USBR monthly reports at the time the wells were drilled and pump tested.

Historical water levels declines from full storage were determined using the Santa Ynez River Hydrology Model simulations for Alternative 3A. Water level declines were determined for Nodes 21-23 (4 cfs well field) and Nodes 19-20 (6 cfs well field) for the years 1951 and 1991. The resulting water levels declines are shown in Table 1.

TABLE 1
WATER LEVEL DECLINES FROM FULL CONDITIONS (FEET)

	1951	1991
4 cfs Well Field	22	12
6 cfs Well Field	19	13

The declines indicated for 1951 represent the modeled maximum declines while the 1991 declines are more moderate declines that have occurred several times and can be expected to occur again. A summary of the water level declines and storage depletion for the nodes that include the two well fields are summarized in Table 2.

The calculated yield and yield reduction of a well in each well field corresponding to the modeled water level declines for 1951 and 1991 are shown in Table 3.

TABLE 3
CALCULATED YIELD REDUCTIONS

Water Level Conditions	4 cfs Well Field		6 cfs Well Field	
	Well Yield (gpm)	Yield Reduction (%)	Well Yield (gpm)	Yield Reduction (%)
Full	960	---	1,280	---
1951	290	70	300	77
1991	560	42	540	58

The above calculated values of the well yield reduction are for a single well. The impact of water level declines caused by other wells (interference) within or in the vicinity of the well field were not considered

The yields from the 4 and 6 cfs well fields for critical drought years of 1951 and 1991 are estimated as shown in Table 4.

TABLE 4
ESTIMATED YIELDS IN ACRE-FEET PER YEAR

Well Field	Permitted Amount	1951 Drought	1991 Drought
4 cfs	2,220	670	1,290
6 cfs	3,400	780	1,430
Total	5,620	1,450	2,720

TABLE 2
SUMMARY OF WATER LEVEL DECLINES IN GROUND-WATER NODES FOR 4 AND 6 CFS WELL FIELDS BASED ON SIMULATIONS FOR EIR ALTERNATIVE 3A

USBR (Reclamation) Monthly Reporting					Santa Ynez River Hydrology Model (SYRHM)							
	USBR	USBR	USBR	USBR			Alt 3A 1951	Alt 3A 1991	Alt 3A 1951	Alt 3A 1991	Alt 3A 1951	Alt 3A 1991
	Node	Nodal Well	Full Elevation	Ground Elevation	Nodes	Full Storage (af)	Min. Storage (af)	Min. Storage (af)	DWS (af)	DWS (af)	Elevation (ft)	Elevation (ft)
4 cfs Well Field	22	6N/30W-29E1	452	465	21-23	8,600	4,047	6,617	4,553	1,983	430	440
								Elevation drop from full =			-22	-12
6 cfs Well Field	19-20	6N/31W-22F1	392	400	19-20	6,600	4,008	4,753	2,592	1,847	373	379
								Elevation drop from full =			-19	-13

II. PRODUCTION CAPACITY OF UPLAND WELLS

Improvement District No. 1 has, in recent years, experienced significant ground-water production capacity reduction from three of the District's eight deep wells that produce from the Santa Ynez Upland ground-water basin. The annual production for the period 1981 through 2002 for each well is summarized in Table 5.

As indicated in Table 5 (attached), Wells 3, 4, and 5A have essentially been out of production since 1998 for the following reasons:

Well No. 3 - High nitrate levels (above the MCL) were detected in August 1998.

Well No. 4 - Currently considered a standby (by DHS definition) source. Well pumps air and requires throttling down to about 300 gpm. This well is currently considered by the District as a last resort.

Well No. 5A - Collapsed and abandoned.

The historical annual production from Wells Nos. 3, 4, and 5A are compared with the District's total production from the Santa Ynez Upland ground-water basin for the period 1981 through 2002. As indicated in Table 6 (attached), the District's reliance on these wells has declined from a peak 35 percent of total production in 1991 to essentially no production starting in 1998. The yield of Well No. 7 has declined since 2000 (refer to Table 6) as a result of lowered water levels.

The yield from the ID No.1 wells from the Santa Ynez Upland basin was about 3,670 acre-feet per year (including Well Nos. 3, 4, and 5A) during the recent drought of 1987 through 1991. With wells 3, 4, and 5A remaining out of production and Well No. 7 producing at a lower rate, the production capacity from the Upland wells is expected to be about 2,320 acre-feet per year as shown in Table 7, below.

TABLE 7
WATER PRODUCTION CAPACITY FROM UPLAND WELLS
BASED ON 1987-1991 DROUGHT

	Acre-Feet/Year
Total Production	3,666
Wells 3, 4, & 5A	(784)
Well 7 at 50%	(562)
Total	2,320

TABLE 5
HISTORICAL PUMPAGE IN ACRE-FEET FROM THE SANTA YNEZ UPLAND GROUND-WATER BASIN, IMPROVEMENT DISTRICT NO. 1, SANTA YNEZ RIVER WATER CONSERVATION DISTRICT

	Well 1	Well 2	Well 3	Well 4	Well 5	Well 6	Well 7	Well 15	Total
1981	306	73	405	125	42	256	868	0	2,075
1982	471	469	464	170	57	415	865	0	2,911
1983	489	776	460	185	25	295	748	0	2,978
1984	813	474	305	98	0	517	407	0	2,614
1985	887	497	474	163	0	546	1,032	0	3,599
1986	963	593	451	162	0	178	866	0	3,213
1987	389	437	197	18	0	40	615	637	2,333
1988	360	357	197	60	0	31	1,119	940	3,064
1989	178	246	465	83	434	1	1,698	1,184	4,289
1990	152	275	610	120	564	519	1,282	1,773	5,295
1991	0	6	622	56	494	200	909	1,060	3,347
1992	10	499	484	77	246	157	888	1,277	3,638
1993	59	835	425	104	371	277	542	1,069	3,682
1994	5	406	174	22	422	84	784	1,006	2,903
1995	14	685	403	92	263	329	836	1,402	4,024
1996	137	745	369	39	120	471	1,004	1,032	3,917
1997	530	600	334	59	25	410	1,005	604	3,567
1998	161	240	25	0	0	29	340	330	1,125
1999	260	552	0	6	0	99	812	612	2,341
2000	217	508	0	2	0	120	185	585	1,617
2001	222	168	0	0	0	233	253	419	1,295
2002	43	61	1	0	0	134	140	389	768

TABLE 6
COMPARISON OF PRODUCTION FROM WELLS NOS. 3, 4, AND 5, SANTA YNEZ UPLAND GROUND-WATER BASIN, WITH DISTRICT TOTALS

Year	Total Production (Acre-Feet)	Well Nos. 3, 4, and 5A		Well No. 7 Production (Acre-Feet)
		Production (Acre-Feet)	Percent of Total Production	
1981	2,075	572	28%	868
1982	2,911	691	24%	865
1983	2,978	670	22%	748
1984	2,614	403	15%	407
1985	3,599	637	18%	1,032
1986	3,213	613	19%	866
1987	2,333	215	9%	615
1988	3,064	257	8%	1,119
1989	4,289	982	23%	1,698
1990	5,295	1,294	24%	1,282
1991	3,347	1,172	35%	909
1992	3,638	807	22%	888
1993	3,682	900	24%	542
1994	2,903	618	21%	784
1995	4,024	758	19%	836
1996	3,917	528	13%	1,004
1997	3,567	418	12%	1,005
1998	1,125	25	2%	340
1999	2,341	6	<1%	812
2000	1,617	2	<1%	185
2001	1,295	0	0%	253
2002	768	1	<1%	140

EXHIBIT "C"

012 X

MASTER FILE
CONTRACT NO. 14-06-200-600

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION

Cachuma Project, California

ON TOP

AGREEMENT TO ADMINISTER RECREATIONAL AREA

THIS AGREEMENT, made this 12th day of January, 1953, in pursuance of the Act of June 17, 1902 (32 Stat. 388), and the acts amendatory thereof and supplementary thereto, between THE UNITED STATES OF AMERICA, hereinafter styled the United States, acting through the Bureau of Reclamation, hereinafter styled the Bureau, and the National Park Service, hereinafter styled the Service, agencies of the Department of the Interior, and the COUNTY OF SANTA BARBARA, a political subdivision of the State of California, acting by and through its Board of Supervisors, hereinafter styled the County:

WITNESSETH that in consideration of the covenants herein specified, it is mutually agreed as follows:

1. Description of land.

(a) Subject to the conditions hereinafter set forth, and the restrictions and limitations listed in this paragraph, County shall develop, maintain and administer as a recreational area the following described area in the County of Santa Barbara, State of California, hereinafter styled the premises to-wit:

A parcel of land lying in the Tequepis Rancho, San Marcos Rancho, Rancho Lomas de la Purificacion, Rancho Canada de los Pinos or College Rancho, and in fractional Sections 16, 17 and 20 in Township 6 North of Range 29 West of the San Bernardino Meridian, in the County of Santa Barbara, State of California, and more particularly described as follows:

Beginning at the southwest corner of Rancho Tequepis, known as Corner "T No. 3", and running thence along the west boundary of Rancho Tequepis, which boundary is the east boundary of Rancho Lomas de la Purificacion, North 01° 33' East 1032.1 feet to the southeast corner of that certain 386.60-acre tract of land in the Rancho Lomas de la Purificacion described as Tract One in the Decree on Declaration of Taking dated May 8, 1950, in the United States District Court, Southern District of California, Central Division, entitled United States of America, Plaintiff, vs. 572.32 acres of land, more or less, in the County of Santa Barbara, State of California, Anna V. Crawford, et al., Defendants, Civil No. 11572-WM, a certified copy of said Decree was recorded in the office of the County Recorder of said Santa Barbara County June 1, 1950, in Book 920 of Official Records at Page 261; thence running along the southerly and the westerly boundaries of said 386.60-acre tract as follows: North 71° 41' West 475.5 feet, thence North 82° 09' West 305.9 feet, thence North 32° 11' West 128.1 feet, thence North 70° 50' West 2334.7 feet, thence North 19° 10' East 60.0 feet, thence North 17° 18' West 1048.0 feet, thence North 46° 21' West 1205.0 feet, and thence North 30° 00' West 1009.4 feet to a point in the southerly boundary of that certain 9.00-acre tract of land in the Rancho Lomas de la Purificacion described as Tract Two in said Decree on Declaration of Taking, Civil No. 11572-WM; thence leaving the boundary of said 386.60-acre tract and running along the southerly and the westerly boundaries of said 9.00-acre tract as follows: North 88° 46' West 278.3 feet,

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Defendants, Civil No. 10812
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Township 6 North of Range 29
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° 30' East 2790.0 feet; thence
rth 51° 00' East 1883.6 feet
point in the northerly boundary
running along said boundary as

follows: South 62° 21' East 1893.1 feet, thence South 18° 26' West 3304.6 feet and thence South 68° 52' East 2191.5 feet to a point in the easterly boundary of the land described in Parcel 1 of the deed from Frederick William Matthiessen, Jr., et al., Trustees, et al., to Elizabeth Rixby Janeway, dated September 9, 1943, and recorded in the office of said Santa Barbara County Recorder on September 27, 1943, in Book 588 of Official Records at Page 226; thence leaving the northerly boundary of said 1320.77-acre tract and running along said easterly boundary, which is the northwesterly boundary of the 6661.45-acre parcel of land in the Tequepis Rancho and in the San Marcos Rancho described as Parcel One in the Decree on Declaration of Taking, dated May 22, 1950, in the United States District Court, Southern District of California, Central Division, entitled United States of America, Plaintiff, vs. 7215.9 acres of land, more or less, in the County of Santa Barbara, State of California, William S. Clark, et al., Defendants, Civil No. 11654-WM, a certified copy of said decree was recorded in the office of said County Recorder on June 26, 1950, in Volume 919 of Official Records at Page 321, as follows: North 73° 39' East 1392.3 feet, thence North 69° 00' East 1508.3 feet, and thence North 57° 52' East 1268.5 feet to an angle point in said easterly boundary, said angle point is the most northerly corner of said 6661.45-acre parcel and is shown and designated as point 23 on the map entitled "Record of Survey of Boundary Line between Cachuma Creek and Santa Cruz Creek located partly within Rancho Tequepis and partly within San Marcos Rancho, Santa Barbara Calif." filed in the office of said

County Recorder in Book 26 of Record of Surveys at Page 142; thence leaving said easterly boundary and running along the northeasterly boundary of said 6661.45-acre parcel as follows: South 49° 05' East 6243.6 feet, thence South 03° 40' East 2960.6 feet, thence South 01° 33' West 1736.0 feet, thence South 57° 22' East 8016.2 feet, and thence South 23° 37' East 6361.7 feet to a point in the northerly boundary of the tract of land described in the deed from Novi Equipment Company to Dwight Murphy dated September 3, 1946, and recorded in the office of said County Recorder in Book 704 of Official Records at Page 384, said point is also in the northerly boundary of the 442.90-acre parcel of land in the Tequepis Rancho and in the San Marcos Rancho described as Parcel Three in the Decree on Declaration of Taking dated July 27, 1950, in the United States District Court, Southern District of California, Central Division, entitled United States of America, Plaintiff, vs. 2124.67 acres of land, more or less, in the County of Santa Barbara, State of California, Cruz Freeman Kinney, etc., et al., Defendants, Civil No. 11961-C, a certified copy of said Decree was filed in the office of said County Recorder on August 18, 1950, in Book 935 of Official Records at Page 233; thence leaving the boundary of said 6661.45-acre parcel and running along the northerly boundary of said 442.90-acre parcel, which boundary is the northerly boundary of the tract of land described in said deed to Dwight Murphy, South 33° 18' East 268.6 feet to the most easterly corner of said 442.90-acre parcel, said corner is distant along the northerly boundary of the tract of land described in said deed North 33° 18' West 125.7 feet from a steel bar set at the southeast terminus of the thirtieth course

described as bearing "S 34° 25' E 394.22 feet" in said deed; thence leaving the northerly boundary of the tract of land described in said deed and running along the easterly and the southerly boundaries of said 442.90-acre parcel as follows: South 19° 00' West 1455.6 feet, thence North 71° 25' West 1118.8 feet, thence North 46° 07' West 995.6 feet, thence North 50° 14' West 161.6 feet, thence North 54° 59' West 280.9 feet, thence North 64° 38' West 79.3 feet, thence North 60° 24' West 234.5 feet, thence North 44° 31' West 719.8 feet, thence North 62° 18' West 135.6 feet, thence North 79° 53' West 414.9 feet, thence North 65° 41' West 1076.9 feet, thence North 13° 33' West 417.8 feet, thence South 77° 23' West 654.4 feet to a point in the northerly boundary of State Highway 150, thence southeasterly along said northerly boundary of State Highway 150 on a curve to the right with a radius of 280 feet and a delta of 44° 29', the chord of which bears South 49° 36' East 211.9 feet, for an arc distance of 217.4 feet to the end of said curve, thence continuing along said northerly boundary of said highway, South 27° 21' East 286.4 feet to a point that is North 62° 39' East 30 feet from a point on the center line of said State Highway 150 designated as USBPR STA. 533+85.44, thence leaving the northerly boundary of said State Highway South 62° 39' West 60.0 feet to a point in the southerly boundary of said State Highway 150, thence northwesterly and southwesterly on a curve to the left with a radius of 300.0 feet and a delta of 141° 21', the chord of which bears South 81° 59' West 566.2 feet, for an arc distance of 740.1 feet to the end of said curve, thence southwesterly on a curve to the right with a radius

of 630.0 feet and a delta of 29° 27', the chord of which bears South 26° 02' West 320.3 feet, for an arc distance of 323.8 feet, thence South 37° 41' West 587.1 feet, thence South 88° 24' West 235.9 feet, thence South 56° 24' West 800.0 feet, thence South 34° 36' West 215.4 feet, thence South 72° 33' West 323.5 feet, thence South 62° 46' West 258.0 feet, thence South 73° 01' West 222.7 feet, thence North 77° 28' West 909.4 feet, thence South 81° 35' West 116.1 feet, and thence North 82° 45' West 211.4 feet to the most westerly corner of said 442.90-acre parcel, said corner is in the southerly boundary of the tract of land described as Parcel One in the deed from Dwight Murphy to the Novi Equipment Company, dated October 25, 1945, and recorded in the office of said County Recorder on November 19, 1945, in Book 665 of Official Records at Page 72 and is distant along said boundary North 08° 27' East 191.0 feet from a 1-inch pipe with copper tag stamped "755 J.A.K." set at the northerly terminus of the course shown as "north 7° 04' east 180.26'" on the map entitled "Map of a portion of the property of Dwight Murphy in the San Marcos and Tequepis Ranchos and Sect. 2 T. 5 N, R. 29 W., SBB & M", filed in the office of the County Recorder of said County in Book 27 Record of Surveys at Page 82; thence leaving the boundary of said 442.90-acre parcel and running along the southerly boundary of the 6661.45-acre parcel of land in the Tequepis Rancho and in the San Marcos Rancho described as Parcel One in the Decree on Declaration of Taking, dated May 22, 1950, in the United States District Court, Southern District of California, Central Division, entitled United States of America, Plaintiff, vs. 7215.9 acres of

land, more or less, in the County of Santa Barbara, State of California, William S. Clark, et al., Defendants, Civil No. 11654-WM, a certified copy of said Decree was recorded in the office of said County Recorder on June 26, 1950, in Volume 919 of Official Records at Page 321, as follows: North 82° 45' West 34.8 feet, thence North 81° 18' West 792.5 feet, thence North 68° 46' West 345.9 feet to a point in the southerly boundary of State Highway Route 80, thence North 16° 50' East 30.0 feet to a point in the center line of State Highway Route 80 and more particularly designated "Sta. 471+00 P.O.T. USBPR", thence continuing North 16° 50' East 30.0 feet to a point in the northerly boundary of said State Highway, thence South 84° 40' East 150.4 feet, thence North 69° 27' East 255.6 feet, thence North 03° 15' East 440.7 feet, thence North 31° 29' West 938.1 feet, thence North 14° 54' West 796.8 feet, thence North 25° 47' West 133.1 feet, thence North 59° 28' West 211.4 feet, thence North 22° 25' West 215.0 feet, thence North 31° 27' East 117.0 feet, thence North 72° 38' East 280.2 feet, thence North 28° 31' East 117.0 feet, thence North 20° 45' East 120.9 feet, thence North 17° 35' West 240.2 feet, thence North 46° 58' West 71.3 feet, thence North 74° 46' West 193.6 feet, thence South 41° 08' West 184.6 feet, thence South 75° 48' West 141.6 feet, thence North 53° 08' West 800.0 feet, thence South 65° 26' West 962.1 feet, thence South 14° 31' West 857.4 feet, thence South 11° 21' West 1080.5 feet to a point in the center line of said State Highway and more particularly described as "52.06' back of Sta. 441+14.78 EC USBPR", thence continuing South 11° 21' West 112.9 feet, thence North 58° 47' West 5014.0 feet, thence North 65° 26' West 161.6 feet to a point in the easterly boundary of the road

right-of-way as described in the deed to David Gray dated April 18, 1928, and recorded in the office of said County Recorder on September 7, 1928, in Book 151 of Official Records at Page 433, said point being distant South 70° 03' East 10.0 feet from a point in the center line of said road that is distant South 19° 57' West 65.7 feet from the southerly terminus of a course marked "N 18° 51' 50" E 88.08'" as shown on that certain map entitled "Survey of the Property of Dwight Murphy in Ranchos San Marcos & Tequepis and in Sects. 2 & 3, T. 5 N., R. 29 W., S.B.B. & M." dated January 1939 and filed in the office of said County Recorder in Book 25, Record of Surveys, at Page 66; thence along said easterly boundary of said road right of way the following courses: South 19° 57' West 64.8 feet, thence South 07° 57' West 106.2 feet, thence South 00° 59' West 99.4 feet, thence continuing South 00° 59' West 65.8 feet, thence South 14° 30' West 154.2 feet, thence South 18° 11' West 164.4 feet, thence South 22° 36' West 159.1 feet, thence South 39° 19' West 106.0 feet, thence South 46° 19' West 197.1 feet, thence South 40° 15' West 409.3 feet, thence South 08° 59' West 125.8 feet, thence South 23° 55' West 109.1 feet, thence South 16° 55' West 228.5 feet to a point in the southerly boundary of Rancho Tequepis; thence leaving said easterly boundary of said road right-of-way and running along said southerly boundary North 61° 33' West 14140.2 feet to the point of beginning at the southwest corner of Rancho Tequepis,

as shown on the map attached hereto and made a part hereof as Exhibit "A".

(b) In the development, maintenance, and administration of the area described in (a), the County shall be subject to the following limitations and restrictions:

1. Except as otherwise authorized by law, the County shall not obstruct or in any manner interfere with that portion of the demised area lying within the right-of-way of the highway known as Highway Sign Route No. 150 (sometimes known as State Highway Route No. 80), as relocated in connection with the construction of the Cachuma Dam and Reservoir.

2. The following area shall be a limited use area:

All lands and water situated to the west of a line described as follows:

Beginning at a point located at Station 676+85.00 on State Highway 150 (relocated) and proceeding in a general northerly direction downstream along the water course which intersects the highway at that point to the point of interception of said water course by the reservoir at the maximum controlled flow line at contour elevation 768 feet; thence in a general easterly direction along the said contour line to a point on the shore approximately 1,500 feet in a direct line easterly from the upstream lip of the spillway; thence in a general northerly direction across the reservoir at a point on the maximum controlled flowline approximately 1,000 feet east of the north abutment; thence in a generally westerly direction through the points of maximum

elevation to the point of intersection with line representing a northerly projection of the center line of the service roadway across the dam, thence northerly to the northern boundary of the Cachuma Reservoir lands.

(a) The County may use the above described area for recreational purposes subject to the following conditions:

(1) The United States shall have the right to close the area whenever the operation of the project requires its use by the United States.

(11) The County, before permitting use of the area or any portions thereof by the public shall construct adequate fences as may be required by the Bureau to prevent public entry during any period when such areas are closed by the United States for project purposes.

(111) The provisions of Article 9 hereof shall apply with respect to any liability for damage to property or injuries to persons resulting from use of this area by the United States.

3. Recreational activities shall be prohibited in the area described as follows:

All water situated within a 1,500-foot radius of the intake of Tecolote Tunnel, together with those lands situated north of relocated State Highway No. 150 and within 1,000 feet on either side of the center line of said Tecolote Tunnel.

(c) The Government may either revest in condemnation actions pending for the acquisition of the demised land, or by deed, grant, or other

instrument of conveyance, grant mineral rights, oil and gas rights, easements and right-of-way for highways, telephone, telegraph and power lines, and the County shall not interfere with any such rights granted by the United States or with the persons exercising such rights.

Except in the case where any interest in the property is conveyed by special act of Congress, the United States shall, before executing any deed, grant, or other instrument of conveyance granting mineral rights, oil and gas rights, easement, and rights-of-way for highways, telephone, telegraph, and power lines, notify the County before such conveyance is executed and furnish the County with information concerning such rights to the end that the County will be given an opportunity to be heard in situations where the transfer or conveyance of any of such rights might unduly interfere with operation of the recreational area by the County.

2. Exceptions and reservations. The County shall not interfere with:

(a) Private rights which have lawfully attached to all lands prior to the date of this agreement.

(b) The rights-of-way for ditches and canals provided by the Act of August 30, 1890 (26 Stat. 391).

(c) The rights-of-way heretofore acquired or initiated for highways, railroads, irrigation works, or for any other purpose.

(d) The right to prospect and carry on developments for oil, gas, coal, and other minerals on the premises, under the Act of October 2, 1917 (40 Stat. 397), and the Act of February 25, 1920 (41 Stat. 437).

(e) A right-of-way along all section lines, or other practicable routes when locations on section lines are not feasible, freely to give ingress to, passage over, and egress from said premises for the purpose of carrying on any authorized operations of the United States.

(f) The right of the United States to all uranium, thorium, or any other materials which are or may be determined to be peculiarly essential to the production of fissionable materials, whether or not of commercial value, together with the right of the United States through its authorized agents or representatives at any time to enter upon the premises and prospect for, mine, and remove the same.

3. Term of agreement. This agreement shall be for a period of fifty (50) years from the date hereof, unless sooner terminated as herein provided, or unless extended by mutual agreement by the parties hereto.

4. Miscellaneous conditions. In the use of the premises, the County shall faithfully observe the following conditions, and each of them:

(a) No unlawful business shall be carried on.

(b) No waste shall be committed.

(c) The area described herein shall be used for the purpose of developing, maintaining, and operating a recreational area in accordance with a Plan for such purposes to be prepared by the County and submitted to the Service. Said Plan shall be reviewed by the Service and shall be subject to approval by the Bureau, and upon such approval, shall be attached hereto and made a part hereof and

marked Exhibit "B." The County shall complete the Plan and submit the same to the Bureau on or before the date of execution of this agreement, unless the Bureau consents in writing to an extension of said date. Modifications and amendments to said plan may be made by the parties hereto: Provided, That each party, before submitting any modification or amendment, shall obtain technical review thereof by the Service. After such review and upon approval by the other party, such modification or amendment shall be in full force and effect and shall be annexed to the Plan. Said Plan and any amendment or modifications thereto shall be considered as a guide to the orderly development of the facilities and services in the recreational area, and shall not be construed to commit the County to any period of time within which the facilities and services shown therein shall be established or requiring the County to construct or provide any one particular facility or all of the facilities or services mentioned in the Plan or amendments thereto: Provided, That the County shall not construct or furnish any facility or service which is not included in the Plan or any amendment thereto.

(d) The County may construct, maintain, and operate roads, trails, docks, and other marine facilities, power lines, sanitation facilities, water supplies, communications, camp and picnic grounds, and other facilities and services consistent with the uses for which the premises are to be maintained and administered in accordance with the Plan: Provided, That upon the termination of this agreement by lapse of time or otherwise, the County, at its own cost and expense except as otherwise provided in Subparagraph 4(i), shall

remove all such improvements other than such improvements which the Bureau and the County, by mutual agreement, may allow to remain without cost to the United States, and restore the land as nearly as possible to the condition of the land prior to the construction of such improvements.

(e) The County may issue and shall control, regulate, and administer all licenses, leases, and concession agreements for rendering public service for recreational purposes, and leases and licenses for grazing, cultivation, or other proper uses of the land within the recreational area, in accordance with standards or regulations prescribed or approved by the Bureau and furnished by the Bureau in order that the County may have full knowledge thereof. All such instruments shall be subject to the exceptions set forth in Article 2 and such other provisions for the protection of the interests of the United States as may be required by the Bureau, and shall include also the nondiscrimination clause set forth in Article 10 hereof.

(f) The County is authorized to make and enforce such rules and regulations for the use of the premises as are necessary and desirable to prevent pollution of water and air; protect the health and safety of persons using the recreational area; protect plants, fish, and wild life; protect and conserve the scenic, scientific, aesthetic, historic and archeological resources of the area; and preserve law and order: Provided, That all such rules and regulations shall be consistent with controlling rules and regulations of local, State and Federal regulatory authorities.

(g) The County shall establish and maintain such protective services as may be necessary and practicable for fire prevention in the premises and shall coordinate and cooperate with the Bureau in providing adequate fire protection for the premises.

(h) In carrying out the provisions of this article, the County shall coordinate its activities and cooperate with the Fish and Wildlife Service, Department of the Interior, and the State Fish and Game Commission with respect to the protection of fish and wild life; with the Service with respect to the best and most desirable uses of the premises for park and recreational purposes; with the proper local, State, and Federal agencies with respect to fire protection and other health and safety measures for the benefit of the public.

(i) Net income shall mean income derived from the operation of the recreational area after deducting all expenditures paid or obligated by the County for operation and maintenance. Out of the net income derived each year by the County in the operation, administration, and maintenance of the area described herein, including net income derived from licenses, leases, and concession agreements, the Bureau and the County shall establish a reserve fund to be utilized by the County for the further development of the area. The amount of the annual net income to be set aside in the reserve fund shall be determined by agreement between the County and the Bureau within 120 days after the close of the accounting year as herein defined: Provided, That from and after five (5) years from the date of the execution of this agreement, 50 percent of the net income each year may be set aside for amortization and repayment of capital

expenditures for the development of the area made by the County from County funds derived from any source other than the reserve fund. In the event the Bureau and the County fail to agree on the amount to be set aside in the reserve fund or account, the decision of the contracting officer of the Bureau shall be final, subject only to appeal within thirty (30) days to the Secretary of the Interior or his duly authorized representative whose decision on such appeal shall be final and conclusive on the parties hereto. The County shall furnish a statement to the Bureau of the extent of the work and materials, labor, and equipment for additional development and the estimated cost thereof, including the estimated cost of any other items involved in the completion of the proposed development, and the reserve fund, if any, may be expended by the County for such development. The accounting year shall be from the 1st day of July to the 30th day of June. The County shall furnish the Bureau with a certified financial statement of income and expenses within ninety (90) days after the close of the accounting year and shall make available to the Bureau for inspection at the Auditor's Office in the Courthouse, Santa Barbara, California, all books, records, accounts, and all other records pertaining to such income and expense. The reserve fund or account may accumulate for any successive ten (10) year period. Any portion of the annual net income not set aside in the reserve fund or for amortization of capital expenditures shall be paid to the Bureau and applied by the Bureau, to the extent it is authorized to do so by law, to the credit of the Cachuma Project. Any amount in the reserve fund in excess of such

accumulation shall not be available to the County for expenditure, but shall be paid immediately to the Bureau and shall be applied by the Bureau to the extent it is authorized to do so by law to the credit of the Cachuma Project: Provided, That the Bureau may permit accumulations for longer than ten (10) years when in the opinion of the contracting officer of the Bureau, whose decision in the matter shall be final, the failure of the County to make expenditures for the development of the recreational area is caused by conditions beyond its control and without its fault or negligence. Upon termination of this agreement, by lapse of time or otherwise, the unobligated and unexpended portion of the reserve fund may be expended by the County only for the purpose of removing improvements from the recreational area and restoring the land as nearly as possible to the condition of the land prior to the construction of said improvements, as referred to in subdivision (d) of section 4. Any balance in the reserve fund not expended for such purposes shall be paid to the Bureau.

5. Right to continue construction. The Bureau reserves the right to continue the construction, operation, and maintenance of any Federal reclamation project, including facilities now located on the premises, or to be located thereon as provided in section 8 hereof.

6. Ingress and egress. The United States and its officers, agents, employees, contractors, licensees, and permittees, shall, at all proper times and places, have the right freely to have ingress to, passage over, and egress from all the premises, for the purpose of enforcing, exercising, and protecting the rights described and reserved by this agreement.

7. National Park Service assistance. The Service agrees to:

(a) Review and approve or disapprove in writing any modification or amendment to the Plan submitted to it by the Bureau or the County, and

(b) Upon request by the Bureau, advise and counsel the Bureau with respect to public services in the premises relating to the development and management of recreational facilities.

8. Jurisdiction over land. The immediate jurisdiction, control, and administration of the premises shall be under the control of the Bureau subject to the primary use and disposal of these lands under the Act of June 17, 1902 (32 Stat. 388), and acts supplementary thereto and amendatory thereof: Provided, however, That such primary use and disposal shall be exercised to the exclusion of the County only when, in the opinion of the Regional Director of the Bureau, the premises are required for use or disposal under the Federal reclamation laws by reason of material changes in the economics of land use or by reason of the need for the use of the premises in connection with any reclamation project authorized by the law of the United States.

9. Risk-damages. To the extent that the County is legally authorized to assume this obligation, it shall be solely responsible for, and shall indemnify and save the United States harmless from and against any liability for any injury to any person or any damage to any property caused by or resulting in any manner from the County's exercise of the privileges or rights granted by this agreement.

10. Nondiscrimination clause. The County shall not discriminate against any employee or applicant for employment because of race, creed,

color, or national origin, and shall require an identical provision to be included in all subcontracts: Provided, however, That this clause does not refer to, extend to, or cover the business or activities of the County which are not related to, or involved in the performance of this agreement.

11. Termination of agreement. This agreement shall terminate and all rights of the County hereunder shall cease, and the County shall quietly and peaceably deliver to the Bureau possession of the premises subject to the provisions of subarticle 4(d) and in like conditions as when taken, reasonable wear and tear by the elements excepted:

(a) At the expiration of the term as provided in Article 3.

(b) Upon six months' written notice by the United States, if legislation, which is inconsistent with the purposes of this agreement, or which requires other use of the premises, is enacted by the Legislature of the State of California or the Congress of the United States.

(c) At the expiration of six months after service of written notice by the United States that the Bureau requires the use of the land in accordance with Article 8.

(d) Upon failure of the County to observe any of the conditions, exceptions, or reservations set forth in this agreement, the United States shall give written notice to the County of the obligations of the County on which it has defaulted or the provisions of the agreement that have been violated and shall give the County ninety (90) days in which to initiate measures to cure the default or correct the violations. This agreement shall terminate on the 90th day following

service of a written notice on the County of its failure to initiate measures to cure the default. The County shall promptly and expeditiously conclude measures taken to cure the default or to correct the violations.

In the event of termination of this agreement for any cause, the County and the lessees, licensees, permittees, and concessioners of the County shall be permitted to continue the exercise of the privileges granted by their leases, licenses, permits, or contracts under the supervision of a new administering agency, or an arrangement for continued operations, or for sale or removal of improvements within a reasonable time shall be permitted by the Bureau.

12. Transfer of interest. Except as specifically provided in Article 4(e), the County shall not assign this agreement or any interest therein without the written consent of the Bureau.

13. Officials not to benefit. No Member of or Delegate to Congress or Resident Commissioner shall be admitted to any share or part of this contract or to any benefit to arise therefrom. Nothing, however, herein contained shall be construed to extend to any incorporated company if the contract be for the general benefit of such corporation or company.

14. Successors in interest to be obligated. The provisions of this agreement shall apply to and bind the assigns of the United States and the County.

IN WITNESS WHEREOF, The parties have hereunto set their names as of the date first above written.

THE UNITED STATES OF AMERICA

By _____
Bureau of Reclamation

By _____
National Park Service

COUNTY OF SANTA BARBARA

By _____
Chairman, Board of Supervisors

ATTEST:

_____
J. E. LEWIS, County Clerk

EXHIBIT "D"

United States Department of the Interior

BUREAU OF RECLAMATION
South-Central California Area Office
1243 N Street
Fresno, California 93721-1813

IN REPLY REFER TO:

JUL 12 2002

SCC-414
WTR-4.00/Lands 6.00/Cachuma RMP

Jan Abel
Cachuma Operation and Maintenance Board
3301 Laurel Canyon Road
Santa Barbara, California 93105-2017

Subject: Recreational Area Agreement (Contract No. 14-06-200-600) Cachuma Project - Your letters dated December 5, 2001 and February 28, 2002)

Dear Ms. Abel:

This letter is in response to the Cachuma Operations and Maintenance Board (COMB) above referenced letters signed by Mr. Robert E. Wignot and yourself respectively. Specifically, you requested for Reclamation to provide a Solicitor's opinion as to whether the above referenced Agreement provides for the costs associated with the relocation of recreational facilities at Lake Cachuma. These facilities also include the recreation area's water treatment plant and sewage lift stations in the event of a 3.0-foot surcharge of the reservoir, as stipulated in the September 11, 2000, Biological Opinion (BO) issued to Reclamation by the National Marine Fisheries Service (NMFS). In addition to a Solicitor's opinion you also requested that the existing Agreement not be extended without a clear provision that provides for the County of Santa Barbara to incur all the costs for relocation of any of their facilities.

As you know, this Agreement between the United States, Bureau of Reclamation (Reclamation) and the County of Santa Barbara (County) expires on January 12, 2003. We have consulted with our Solicitor's office on this issue and firmly believe that Reclamation has several viable options available including but not limited to terminating the Agreement upon expiration.

Furthermore, if the Regional Director determines that the land is needed for any Reclamation Project authorized by law, Reclamation has the option to terminate the Agreement at the expiration of six months notice to the County. If the Agreement is terminated, the County is required to remove all improvements at its own expense and to return the lands to the United States in similar condition as when the Agreement was executed.

Currently, Reclamation is pursuing implementation of the terms and conditions set forth in the BO, including a 3 foot surcharge. Under certain hydrologic conditions, the surcharge will cause Lake Cachuma water levels to rise, and cause more frequent inundation of County recreation facilities operated and maintained pursuant to the Agreement unless these facilities are moved. Surcharging the reservoir falls within the parameters of Article 8 of the Agreement, because the land that would be inundated is needed to continue operation of the Cachuma Project (Project) for the uses for which it was authorized.

However, while Reclamation believes that the surcharge falls within the uses envisioned in Article 8 of the Agreement, that is, Reclamation needs the use of the lands covered in the Agreement to maintain deliveries of Project water to fulfill the authorized purposes of the Project and implement the terms and conditions of the BO, it is Reclamation's goal to have the parties come to some agreement regarding the lands needed for the surcharge.

In the event such an agreement cannot be reached, Reclamation may consider its option to terminate the Agreement under the termination provisions of Article 11, or simply allowing the Agreement to expire without renewal.

Article 11 requires that "...the County shall quietly peaceably deliver to the Bureau possession of the premises subject to the provisions of subarticle 4(d) and in like conditions as when taken, reasonable wear and tear by the elements excepted;...". Therefore, any expenses for moving facilities that would be inundated by implementation of the surcharge should be borne by the County.

In summary, Reclamation anticipates negotiating a new Agreement in good faith with the Santa Barbara County Parks Department while keeping in mind the concerns that were expressed in your letters.

If you have any questions, please contact me at (559) 487-5116 or at (559) 487-5933 for the hearing impaired or Sheryl Carter at (559) 487-5299 or at (559) 487-5933 for the hearing impaired.

Sincerely,

Michael Jackson

Michael Jackson
Deputy Area Manager
South-Central California Area Office

cc: Charles Hamilton
Carpinteria Valley Water District
1301 Santa Ynez Avenue
Carpinteria, California 93014

Fred Adjarian
Montecito Water District
583 San Ysidro Road
Montecito, California 93150-5037

Steve Mack
City of Santa Barbara
PO Box 1990
Santa Barbara, California 93102-1990

Kevin Walsh
Goleta Water District
4699 Hollister Avenue
Goelta, California 93110-0781