

B.5 COMMENTS FROM LOCAL AGENCIES AND ORGANIZATIONS

L-1 Susan M. Basham, Montecito Water District and Goleta Water District

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BY EMAIL (jcollins@mp.usbr.gov)

AND ONTRAC

Jack Collins, Resource Specialist
United States Bureau of Reclamation
1243 "N" Street
Fresno, CA 93721

Re: Comments on Draft Environmental Impact Statement for the
Cachuma Lake Resources Management Plan

Dear Mr. Collins:

We represent Montecito Water District and Goleta Water District (together the "Districts"), who have asked us to provide comments on the Draft Environmental Impact Statement (the "EIS") for the Cachuma Lake Resources Management Plan ("RMP") prepared by United States Bureau of Reclamation ("Reclamation"). We are submitting these comments within the applicable time period (expiring October 31, 2008), and therefore will expect to receive written responses to the Districts' specific concerns.

I. BACKGROUND AND STATEMENT OF INTEREST

Since 1921, Montecito Water District has provided water to an area measuring approximately 9,888 acres, of which approximately 849 acres are currently used for agriculture. More than 13,000 people rely upon the District for their domestic water supply.

Goleta Water District was established in 1944 and provides water to an area measuring approximately 29,000 acres along the coast of California west of the City of Santa Barbara. It has a pipeline system of approximately 230 miles. The District provides irrigation to agricultural land and domestic water service to more than 75,000 people and irrigation to agricultural land.

Both Districts were original "member units" of the Santa Barbara County Water Agency, which entered into a contract with the federal government for development of the Cachuma project. The project was planned, in part, to provide a reliable source of water to the communities served by the Districts.

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Goleta Water District initially relied on groundwater until 1955, when the Cachuma Project began delivering water to the District. Since then the Cachuma reservoir, now known as Lake Cachuma, has been the primary water supply source for the District. Montecito Water District is entitled to 2,651 acre feet of water annually from the Lake Cachuma, which represents approximately forty-one percent of Montecito Water District's annual water supply. In addition, Lake Cachuma acts as a storage reservoir for all State Water delivered to Montecito Water District, which accounts for an additional 22 percent of the District's supply. During normal water supply years, more than 60 percent of the District's water supply comes from Lake Cachuma.

The Districts are two of five member units of the joint powers agency known as Cachuma Operation and Maintenance Board ("COMB"), which is responsible for the operation and maintenance of the Cachuma Project water supply conveyance facilities. Cachuma Conservation Release Board ("CCRB") is also a joint powers agency and represents the South Coast member units' interests in Cachuma Project water rights and endangered species issues. The member units collectively provide water service to 9,000 consumers in the Santa Ynez Valley and about 200,000 people on the south coast of Santa Barbara County, as well as more than 40,000 acres of irrigated agriculture. The Cachuma Project provides about 70% of the total water supply to the member units.

The member units have interests in the Santa Ynez River watershed that reach beyond protection of water quality and water supply facilities at Lake Cachuma. They have been involved with interagency cooperative efforts to study and improve the Southern California Steelhead fishery in the lower Santa Ynez River system for over fifteen years, and are actively implementing the flow and non-flow management actions identified in the Lower Santa Ynez River Fish Management Plan and Cachuma Project Biological Opinion in cooperation with Reclamation.

Because of the Districts' substantial reliance on Lake Cachuma to provide water to their service areas and their continuing involvement in collective efforts, they have a substantial interest in the EIS and RMP and in any proposed recreational activity that may adversely impact the quantity or quality of this water source.

II. COMMENTS

L-1-1

A. Recreation Must Be Subordinate to, and Not in Conflict with, Protection of Lake Cachuma's Water Quality and Water Supply.

The EIS states that the original purpose for constructing Bradbury Dam was "to provide irrigation, domestic, and municipal and industrial water supplies to nearby water supply

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agencies” (EIS at 1-1) and to “[p]rotect the water supply and water quality functions of Cachuma Lake.” EIS at 1-2. The EIS acknowledges the continuing importance of Lake Cachuma to the area’s water supply, stating that “[o]ver the past 45 years, the Cachuma Project has been the principal water supply for the Santa Ynez Valley and South Coast communities, delivering an average of 25,000 acre-feet per year.” *Id.* at 1-1. Therefore “public uses of the lake must be consistent with protecting water supply and water quality and must accommodate the necessary reservoir operations and management needs.”

The RMP also acknowledges that the original Project purpose made public recreation an “incidental benefit of the Project.” *Id.* at 1-2. Nevertheless, all three action alternatives, including one labeled “no action,” include enhancements aimed at expanding recreation. Recreation is no longer the “incidental benefit” originally contemplated. In this Plan, it has become the driving force of the RMP, which must “accommodate” the reservoir-related needs.

**L-1-1,
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The Districts disagree with this fundamental premise and believes that the expansion of recreation contemplated by Reclamation in Alternatives 2 and 3 threatens water quality and is fundamentally incompatible with the primary purpose of the reservoir and with the Districts’ responsibilities to their customers. The RMP and EIS lack any meaningful discussion of potential conflicts between protection of water quality and water supply and the enhancement of recreational opportunities. All of the analysis should reflect consideration of the fundamental purpose of the reservoir, including the definition of alternatives and analysis of impacts.

The Districts also question Reclamation’s presumption that there is any need to enhance recreation at Lake Cachuma. This presumption seems to contradict factual statements in the EIS. For example, the EIS states that population growth in the surrounding counties is expected to be “low” and that “growth in recreational demand for Cachuma Lake is somewhat unknown.” EIS at 4-58. Furthermore, boat usage on Cachuma Lake has decreased (EIS at 4-40), and “the annual number of vehicles visiting the Plan Area is decreasing . . .” *Id.* at 3-77. Nevertheless, “growth is assumed” by Reclamation. *Id.* at 4-58. The lack of any data supporting the need for recreational opportunities for a growing population undermines the basic premise of the RMP.

B. Protections for the Southern California Steelhead Must Be Paramount.

L-1-2

As Reclamation is aware, the Southern California Steelhead (*Oncorhynchus mykiss*) has been listed as a federally endangered species pursuant to the federal Endangered Species Act (“ESA”). 16 U.S.C. § 1531 *et seq.* Federal ESA protections extend to “all naturally spawned anadromous *O. mykiss* (steelhead) populations below natural and manmade impassable barriers” on the Santa Ynez River. 50 C.F.R. § 224.101. “Critical habitat” for this species has been designated along the Santa Ynez River up to Bradbury Dam, an impassable barrier, inclusive of the River tributaries’ upstream endpoints in Alisal, Hilton, Quiota, and San Lucas Creeks and one unnamed tributary. 50 C.F.R. § 226.211; 70 Fed. Reg. §§ 52509, 52517, 52580 (Sept. 2,

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**L-1-2,
Cont.**

2005). Therefore, no federal or federally supported action may adversely affect that habitat without first complying with the terms of the ESA.

The Districts are concerned that a number of the enhanced recreational activities proposed for Lake Cachuma fail to consider downstream impacts. The Plan Area is defined by the Lake and its shoreline, including areas under grazing leases, without consideration for the Santa Ynez River downstream and with little or no regard for events that continue to link the reservoir with its source river. For reasons discussed below, the Districts believe that the RMP and the EIS must be expanded to address a larger Plan Area – one that will take into consideration impacts on the endangered steelhead population.

C. Recreational Activities May Impact Water Quality or Water Supply.

1. Probable Introduction of Exotic Mollusks.

L-1-3

In recent years, the Quagga mussel (*Dreissena bugensis*) and its closely related cousin the Zebra mussel have become a major concern for water supply agencies around the nation. These species were inadvertently transplanted to the Great Lakes area of the United States in the ballast water of ships traveling from certain Eastern European sea drainages and river systems. RECOMMENDATIONS OF THE CALIFORNIA SCIENCE ADVISORY PANEL, CALIFORNIA'S RESPONSE TO THE ZEBRA/QUAGGA MUSSEL INVASION IN THE WEST, AT 2 (MAY 2007) [hereinafter CALIFORNIA'S RESPONSE]; CALIFORNIA DEPARTMENT OF FISH AND GAME, FREQUENTLY ASKED QUESTIONS QUAGGA/ZEBRA MUSSELS" [hereinafter FREQUENTLY ASKED QUESTIONS]. These fresh water mollusks, less than an inch long, have now spread throughout the Great Lakes region and the Mississippi River system, and were most recently discovered in Lake Mead and adjacent portions of the Colorado River system. See CALIFORNIA'S RESPONSE at 29 (App. A); "Frequently Asked Questions."

These mollusks wreak havoc on water delivery facilities, covering every inch of available surface in layers up to a foot thick. CALIFORNIA'S RESPONSE at 6. They consume vast quantities of nutrients from the water bodies they infest, leaving little in the way of food for native fish and other aquatic species and causing devastating impacts to natural ecosystems. *Id.* at 6-7; see FREQUENTLY ASKED QUESTIONS. These mollusks can fill water pipelines, block filtration facilities, and increase corrosion of water conveyance facilities. CALIFORNIA'S RESPONSE at 6; Karl Wirkus, Deputy Director of Operations, Bureau of Reclamation, Statement to the U.S. House of Representatives, Natural Resources Committee Subcommittee on Water and Power, June 24, 2008. Their removal often requires shutting down the facilities and removing the mussels manually with pressurized hot water, the application of high saline solution, or smothering through the wide-spread application of plastics for many weeks, or mechanical removal through sand blasting or manual scraping. CALIFORNIA'S RESPONSE at 12-13.

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The eastern part of the United States already has suffered direct economic costs of over \$100,000,000 annually. *Id.* at 8. In the west, impacts are likely to be at least as severe, if not more so, due to the “greater vulnerability of western waters, the greater dependency on transporting water over long distances, and the highly stressed aquatic ecosystems.” *Id.* at 9. In sum, “[t]he significance and potential impact of [Quagga and Zebra mussels] cannot be overstated.” *Id.* at (i).

Reclamation’s EIS acknowledges that Alternatives 2 and 3 would both increase boat use at Lake Cachuma. EIS at 4-27, 4-31. The EIS also states that this increased boat usage comes with an increased risk that Quagga and/or Zebra mussels could be introduced into Lake Cachuma. *Id.* at 4-37. Moreover, Reclamation agrees that these “mussels can multiply quickly and clog waterways and pipelines, affect lake ecosystems, and create costly maintenance issues. [N]o safe remedy is currently available for eliminating them for a waterbody once it is infested.”¹ *Id.* at 2-12. However, the EIS concludes that, through the implementation of inspection procedures, there would be “no impact” caused by Quagga or Zebra mussels. *Id.* at 4-71 (Tbl. 4.12-1).

L-1-3

The Districts find this analysis both contradictory and incomplete. First, Reclamation states that quarantine and inspection protocols will be re-evaluated from time to time to determine their effectiveness and, should exotic mussels be found in the Lake, further protective measures would be suggested. However, Reclamation also admits that once a water body is infested, there is no means to completely eradicate the mussel species. *Compare* EIS at 4-37 *with* EIS at 2-12) Although efforts are being made to develop methods of controlling the growth and spread of these mussels in natural systems, no effective eradication method currently exists. Moreover, inspection and quarantine procedures are far from fool-proof. Quagga and Zebra mussels can be difficult to see when hidden on the mechanical assemblages of boats, and are often so small that they “feel like sandpaper to the touch.” CALIFORNIA DEPARTMENT OF FISH AND GAME, “ZEBRA MUSSELS FOUND IN CALIFORNIA RESERVOIR (Jan. 16, 2008) [hereinafter ZEBRA MUSSELS FOUND]. The mussels can survive for several days even when out of water (CALIFORNIA’S RESPONSE at 1 & n.26), and their microscopic offspring can be transported in a minimal amount of water. *Id.*; FREQUENTLY ASKED QUESTIONS. Federal and state wildlife agencies have hypothesized that the recent spread of the mussels from the eastern United States to Lake Mead and other western water bodies resulted from microscopic mussels being transported in the water sitting in the hull of recreational boats. ZEBRA MUSSELS FOUND.

Second, the EIS concedes that Quagga and Zebra mussels can clog pipelines and create costly maintenance issues, but the EIS fails to explain what this means in terms of Lake

¹ Preliminary investigations shows that both Quagga and Zebra mussels can be eradicated by the thorough application of boiling water and high saline solutions to discrete areas. However, the use of these methods is infeasible for the treatment of an entire infested water body as they would destroy the natural ecosystem along with the exotic mollusks.

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Cachuma specifically. Currently, the Santa Ynez River system is unaffected by Zebra and Quagga mussels. If exotic mussels infest Lake Cachuma, they are likely to spread throughout the Santa Ynez River watershed and clog the water delivery infrastructure that delivers water to hundreds of thousands of Santa Barbara County residents, businesses, and farms, including the Districts' customers. Such an infestation could greatly reduce the quantity of water that could be delivered, and putrefying mussels with their secondary excreted contaminants would reduce water quality. Given the aggressive growth patterns of the mussels, total occlusion of the water delivery system is a distinct possibility. In the absence of a redundant system for water delivery, and given the increasingly difficult task of finding alternative drinking water supplies, the effects of shutting down the Districts' infrastructures to remove mollusk populations would be devastating.

Third, the impacts of Quagga or Zebra mussel infestation of Lake Cachuma would not be limited to the reservoir but would likely spread throughout the Santa Ynez River system. Any downstream infestation is likely to have a serious impact on the federally-listed endangered Southern California Steelhead. While the EIS acknowledges that "[r]ecreational uses and improvements must also not interfere with protection of . . . Southern California steelhead" (EIS at 1-1), the increased lake boating allowed in Reclamation's Alternatives 2 and 3 increases the risk of exotic mussel infestation downstream as well as within the lake itself, since water is released from Lake Cachuma to support the listed fish population. The potential effects of such an infestation on listed fish and on an area beyond the defined "Plan Area" must be analyzed and discussed in the EIS.

2. Continued Contamination from 2-Cycle Engine Recreational Boats.

L-1-4

Recreational boating includes a wide variety of surface water and seagoing, motorized and non-motorized, registered and unregistered vessels. Within that mix of watercraft are those boats powered by carbureted 2-cycle engines. These engines were generally manufactured prior to 1999 and are considered "high emission engines," which emit high quantities of air and water pollutants during operation. Reclamation's EIS confirms that two-cycle engines may discharge as much as 30% of their fuel into the water, and that the use of these engines has resulted in "measurable water quality degradation in some of the nation's lakes and reservoirs." EIS at 3-6; *see* CALIFORNIA DEPARTMENT OF BOATING AND WATERWAYS, TWO-STROKE VESSEL ENGINES (2007).

In addition to pollution associated with the design of the 2-cycle engine, "[f]uel can [also] be introduced to lakes by overfilling boat fuel tanks by careless pump operators, leaking hoses, nozzles, or storage tanks and pumpage from bilges." MICHAEL S. LICO & THOMAS JOHNSON, GASOLINE-RELATED COMPOUNDS IN LAKES MEAD AND MOHAVE, NEVADA, 2004-06, U.S. DEPT. OF THE INTERIOR AND U.S. GEOLOGICAL SURVEY at 12 (2007). This fuel contains such compounds as benzene, toluene, ethylbenzene, xylene, oxygenated additives, and other

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compounds. *Id.* at 1. These compounds “are known to have adverse effects on human health and aquatic life.” *Id.* Additionally, these compounds are carcinogenic and, when exposed to the ultraviolet rays of the sun, can reform into secondary byproducts with increased toxicity. *Id.* at 1-2.

To protect drinking water quality and wildlife, the use of carbureted 2-cycle engines is restricted or prohibited on many lakes throughout California, including Anderson Reservoir, Calero Reservoir, San Pablo Reservoir, Los Vaqueros Reservoir, Lake Tahoe, Cascade Lake, Fallen Leaf Lake, Echo Lake, Diamond Valley Lake, and Lake Skinner. See CALIFORNIA DEPARTMENT OF BOATING AND WATERWAYS, LOCAL RESTRICTIONS ON PERSONAL WATERCRAFT AND/OR TWO-STROKE ENGINES (2007).

Despite acknowledging the impacts on water quality associated with use of 2-cycle boat engines, the EIS concludes that the effect of allowing two-cycle boat use on Lake Cachuma is “minor.” EIS at 4.70 (Tbl. 4.12-1). It reaches this conclusion, in part, based upon an 11-year-old study (from 1997) concluding that petroleum byproducts are not an issue at Lake Cachuma. Nevertheless, it acknowledges that two-cycle boats owned by recreational boaters will be permitted at Lake Cachuma until the expiration of a five-year phase out period. *Id.* at 3-6.

**L-1-4,
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The EIS does not contain any specific analysis regarding the potential effects that these recreational boats may have on Lake Cachuma’s wildlife or the drinking water facilities that deliver water from the Lake to communities throughout Santa Barbara County. Neither does it contain any discussion whatsoever of the mitigation measures that would be required if hydrocarbon contamination at Lake Cachuma exceeds allowable limits, including the addition of costly water quality treatment facilities to target the petroleum-based pollutants. The EIS fails to include any discussion of the responsibility of Reclamation or the local managing partner with respect to the implementation of such measures.

The EIS also fails to consider the possibility that prohibitions on use of 2-cycle engines at other lakes throughout California may result in a concentration of these boats at Lake Cachuma, particularly since Lake Cachuma already is a recreational destination for people living outside Santa Barbara County. *Id.* at 3-62. This concentration of boats would result in a larger concentration of pollutants than is anticipated by the EIS, which could further compromise the quality of the water supply to the Districts and all of Santa Barbara County.

Just as the EIS is deficient in its analysis of potential system-wide impacts from Quagga and Zebra Mussels, discussed above, it is also deficient in its failure to consider downstream impacts of pollutants from two-cycle engines in use on the lake. Mandatory water releases from Lake Cachuma for the benefit of the critical habitat for the Southern California Steelhead would carry with them any pollutants released by carbureted 2-cycle engines. These pollutants, in

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sufficient concentrations, could harm the listed species unless additional restrictions on boat use or water treatment obligations were put into place.

Reclamation's reliance on unreliable and/or outdated information concerning use of 2-cycle engines, the potentially significant effects on wildlife species, and the need to protect water supply all suggest that Reclamation should broaden its "Plan Area" and consider other alternatives to the RMP as part of its Final EIS. Reclamation also should consider an immediate ban on carbureted 2-cycle engines rather than a five-year phase-out program.

If Reclamation intends to allow the long term use of 2-cycle carbureted engines at Lake Cachuma, it also must acknowledge that Reclamation, and its local managing partner, will be responsible for the development, implementation and funding of appropriate mitigation measures to negate the environmental effects such engines may have on the public water supply as well as the effects such engines may have on listed species.

3. Introduction of Pathogens Associated with Human Body Contact.

L-1-5

The EIS states that a primary difference between Alternatives 2 and 3 is that Alternative 3 would designate a portion of Cachuma Lake for swimmers and allow body contact with the water for the first time. EIS at 4-61. The EIS itself recognizes the problematic nature of mixing body contact and drinking water, noting that "[i]ntroducing body contact to the lake has an obvious impact on water quality." *Id.* It acknowledges that "[c]urrently water delivered to Goleta West by the Goleta Water District is chlorinated at the Goleta Sanitary District, but not filtered [U]niformed customers could consume unfiltered water that has received body contact." *Id.* at 4-6. For this reason, the impact from the addition of a swim beach "would be major" and have "an obvious [negative] impact on water quality." *Id.* Nonetheless, Reclamation rationalizes its conclusion that swimming should be allowed because "physical and chemical controls have been implemented at other drinking water reservoirs where body contact is allowed, which have been proven to be acceptable (see Section 3.9.1.2)." *Id.*

Reclamation's conclusion is contrary to expert analysis. Throughout the United States, body contact activities in drinking water reservoirs are generally forbidden because of serious public health concerns as well as increased water treatment costs. Anderson *et al.*, *Modeling the Impact of Body Contact Recreation on Pathogen Concentrations in a Source Drinking Water Reservoir*, Dept. of Soil & Env'l Sciences, at 3293 (July 10, 1998) [hereinafter Anderson, *Modeling the Impact*]. California law explicitly forbids body contact uses in drinking water reservoirs, with only a few limited exceptions. Health & Safety Code, § 115825(b) ("recreational uses shall not, with respect to a reservoir in which water is stored for domestic use, include recreation in which there is bodily contact with the water by any participant."). A specific exemption from this law is required for reservoirs with mixed drinking water storage and body contact uses, of which only a handful have been granted.

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Human body contact with a water body increases the pathogenic concentrations in that water body and, in turn, the risk of waterborne infection and disease for those who rely upon the reservoir for drinking water. Anderson, *Modeling the Impact* at 3293, 3305. Studies show that, due to shedding of residual fecal material and accidental fecal releases, body contact recreation can significantly elevate the levels of *Cryptosporidium*, rotavirus, poliovirus, *Escherichia coli*, *Shigella*, and *Giardia* concentrations in a water body.² *Id.* at 3293, 3305; MICHAEL A. ANDERSON, PREDICTED PATHOGEN CONCENTRATION AND CONSUMER HEALTH RISKS RESULTING FROM BODY-CONTACT RECREATION ON THE EAST AND WEST BRANCH STATE WATER PROJECT RESERVOIRS, FINAL REPORT TO THE STATE WATER CONTRACTORS (AUG. 2000) [hereinafter ANDERSON, PREDICTED PATHOGEN CONCENTRATION]. A study of several drinking water reservoirs in California concluded that “[b]ody-contact recreational activity is predicted to have significant effects on the pathogen concentrations in all of the SWP reservoirs.” ANDERSON, PREDICTED PATHOGEN CONCENTRATION at 32.

The EIS provides no support for its conclusion that pathogenic contaminants can be managed effectively, other than the internal citation to the EIS itself. The internal citations to Section 3.9.1.2, actually contradict the EIS’s conclusion rather than support them. This section includes a discussion of eight area lakes, including Lake Cachuma, and the recreational opportunities they afford. EIS at 3-58 – 3-62. Of these eight lakes, three of them are drinking water reservoirs -- Lake Cachuma, Lake Margarita, and Lake Casitas (*Id.*) -- and the same three lakes do not allow body contact recreation. *Id.* at 3-58. Section 3.9.1.2 contains such statements as “Casitas Municipal Water District manages Lake Casitas as a drinking water reservoir, and therefore no body contact is allowed,” and “[a]s a drinking water reservoir for the City of San Luis Obispo, body contact is forbidden [at Santa Margarita Lake].” *Id.* at 3-59, 3-61. Thus, the referenced section actually shows that body contact is specifically not allowed where a reservoir is used for drinking water.

L-1-6

In concluding, contrary to expert analysis, that mitigation of contamination from body contact can be effective, Reclamation proposes as its primary mitigation a new potable water treatment facility or an upgrade to existing water treatment facilities. *Id.* at 4-8. There is no discussion of how much such facilities would cost or how they would be funded. Metropolitan Water District (“MWD”) previously performed studies assessing the health risks of allowing body contact recreation in the Eastside Reservoir (a.k.a. Diamond Valley Lake), a drinking water reservoir. *See To Protect Water Quality, MWD Board Bars Body Contact Recreation at Reservoir Project*, BUSINESS WIRE, Oct. 14, 1998. MWD’s studies showed that it would cost \$20.6 to \$62.4 million (in 1998 dollars) to install the necessary upgrades to existing water

² Both *Cryptosporidium* and *Giardia* are of particular concern in drinking water reservoirs because they can cause disease outbreaks at very low concentrations, and their effects include vomiting, diarrhea, fever, and even death. CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD, DEVELOPMENT OF A DRINKING WATER POLICY FOR SURFACE WATERS OF THE CENTRAL VALLEY, STAFF REPORT AT 3 (July 2008).

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treatment facilities, plus an additional \$10 million in annual operations, maintenance, and increased annual treatment costs. *Id.* In light of enormous costs and limited benefits, MWD prohibited body contact activities. *Id.* Unless Reclamation performs studies to determine how much its proposed mitigation will cost, and demonstrates that it has monies available for these mitigation measures, either from its own resources or those of the local managing partner, such mitigation is infeasible and remains a serious, unmitigated impact to human health and safety. In summary, any alternative that allows swimming in this reservoir will introduce risks to the public health and unacceptable environmental impacts, mitigation of which would be prohibitively expensive. Because the primary purpose of Lake Cachuma is to serve as drinking water supply, and because Reclamation has a non-discretionary duty to protect natural resources and the water supply, the Districts object to any alternative that allows swimming in Lake Cachuma.

D. Proposed Sport Fishing Conflicts with Protections for the Endangered Southern California Steelhead.

L-1-7

Under Alternatives 2 and 3, the RMP anticipates increasing or maintaining the population of stocked sport-fish in Lake Cachuma, including bass, trout, and other species. Lake Cachuma is formed by Bradbury Dam, and water releases from Lake Cachuma have the potential to carry non-native stocked fish into the lower river, which is designated critical habitat for the endangered Southern California Steelhead. The EIS fails to analyze the potential effects that such a stocking program would have on endangered steelhead downstream. *See* EIS at 4-27.

Predation can play a major role in the decline of fish species, and at least one study³ has concluded that the predation impact of striped bass on another federally endangered anadromous species, the winter-run Chinook salmon (*Oncorhynchus tshawytscha*), would introduce cause "a serious extinction risk." Steve T. Lindley & Michael S. Mohr, *Modeling the effect of striped bass (Morone Saxatilis) on the population viability of Sacramento River winter-run Chinook salmon (Oncorhynchus tshawytscha)*, FISHERY BULLETIN 101.2 at 1 (April 2003). This study explains that the striped bass was introduced to the Sacramento River to support commercial and recreation sport fishing, but that the bass preyed upon juvenile winter-run Chinook salmon as a food source. *Id.* at 3.

³ Many other studies concur that predation of bass species upon juvenile trout and other fish is a serious concern and that predation is a major source of mortality for a variety of fish species. *See, e.g.,* George P. Naughton & David H. Bennett, *Predation on Juvenile Salmonids by Smallmouth Bass in the Lower Granite Reservoir System, Snake River*, N. AMER. J. OF FISHERIES MGMT., 24:534-544 (2004); Bruce D. Bolding *et al.*, *Effects of Introduced Fishes on Wild Juvenile Coho Salmon in Three Shallow Pacific Northwest Lakes*, TRANSACTIONS OF THE AMER. FISHERIES SOC'Y, 134:641 (2005); Robert A. Tabor *et al.*, *Smallmouth Bass and Largemouth Bass Predation on Juvenile Chinook Salmon and Other Salmonids in the Lake Washington Basin*, N. AMER. J. OF FISHERIES MGMT., 27:1174 (2007).

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In addition, introduced fish may interbreed with a wild population and thus dilute the wild population's genetic makeup. This is of particular concern because wild "fishes exhibit complicated patterns of genetic differentiation . . . that demonstrate local adaptations [whereas] domesticated strains . . . have in most cases been found to exhibit reduced genetic diversity." Michael M. Hansen, *Estimating the long-term effects of stocking domesticated trout into wild brown trout (Salmo trutta) populations; an approach using microsatellite DNA analysis of historical and contemporary samples*, MOLECULAR ECOLOGY at 1003-04 (2007). Intrusion by domesticated salmonids into wild populations "may lead to domestication selection that results in lowered fitness." *Id.* at 1004.

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The EIS explains that the Southern California Steelhead has been listed as an endangered species under the federal Endangered Species Act since 1997. EIS at 1-2. It discloses that water releases from Bradbury Dam are mandated for the protection of the steelhead. *Id.* It also acknowledges that any recreational uses approved as part of the RMP must not adversely affect the listed fish. *Id.* at 1-1. Despite these statements, the *analysis* provided in the EIS is severely limited and does not provide an adequate evaluation of impacts to steelhead. While it acknowledges that water releases from Lake Cachuma are mandatory, Reclamation provides no discussion regarding the potential escape of bass into the lower river and the predation impacts that they may have upon the listed steelhead. The EIS contains no analysis of the potential for interbreeding of listed steelhead and non-native trout which may also escape over Bradbury Dam during spill periods. In the absence of any acknowledgement of these potential impacts, Reclamation fails to discuss any mitigation that might avoid these impacts.

L-1-8

Again, the Districts find that the definition of the "Plan area" is too limited to address the full scope of potential environmental impacts. In addition to the reasons noted above, the analysis in the EIS should be expanded to account for the RMP's potential downstream impacts to the Southern California Steelhead.

E. Reclamation May Not Rely upon Outdated Information in Assessing Alternatives.

L-1-9

If relevant information about the proposed action or alternatives is "outdated, [it] renders the overall conclusions uncertain," and this likely leaves an EIS inadequate. *Klamath-Siskiyou Wildlands Center v. U.S. Forest Service*, 373 F. Supp. 2d 1069, 1081 (E.D. Cal. 2004); *City of Carmel-By-The-Sea v. U.S. Dept. of Transp.*, 123 F.3d 1142, 1151 (9th Cir. 1997) ("Accurate scientific evidence remains essential to an [EIS], and . . . an agency [cannot] rely on 'stale' scientific evidence"). As discussed in the RMP Guidebook, "[w]hen extracting information from current data, caution should be taken to ensure the accuracy, coverage, completeness, and current nature of such data." RMP Guidebook at III-6.

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**L-1-9,
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The Districts are concerned that some of the analyses and underlying data regarding the alternatives are outdated. In some instances the EIS relies upon studies that are more than a decade old. For example, the EIS cites a 1997 analysis of gasoline compounds in Lake Cachuma. EIS at 3-6. This study is certainly not “current.” While the Total Dissolved Solids in the lake vary by season and over time, the EIS references no information more current than 1997. See EIS at 3-5. In addition, surveys for some types of listed species were performed more than ten years ago. EIS at 3-29–3-30. The RMP Guidebook states that “it may be prudent” for Reclamation “in some instances to initiate studies to collect information that can fill data gaps” RMP Guidebook at III-6. It would be prudent for Reclamation to undertake additional research to locate more recent analyses or commission new studies where necessary to ensure the reliability of the data underlying the EIS’s analysis.

L-1-10

As acknowledged in the EIS, Reclamation developed its alternatives in 2002 and 2003. EIS at 2-6. Six years is a long time when considering the events that affect water supply at Cachuma Lake. Reclamation should explain the six year delay between the development of the alternatives and their evaluation in the EIS.

The planning time-span for the RMP is 20 years. However, given the six-year delay, 30% of the Project time span has already elapsed, and certain anticipated future events already have occurred. For example, the National Marine Fisheries Service (“NMFS”) Steelhead Recovery Plan has been in preparation for several years and a “Recovery Plan Outline” was published in 2007. The EIS fails to acknowledge these events, much less incorporate them into its analysis. Reclamation should adjust its 20 year time frame to reflect those events that are anticipated in the twenty years following certification of the EIS.

F. The RMP and EIS Lack a Realistic Assessment of Funding and Staffing Requirements.

L-1-11

The EIS currently concludes that there will be no significant impacts to the lake or its water quality with the implementation of proposed mitigation measures. However, some mitigation measures are insufficiently defined or are infeasible, and all appear to lack funding. Reclamation’s Resource Management Plan Guidebook (“RMP Guidebook”) states that “[e]ach alternative should be realistic and implementable within anticipated funding and staffing levels.” RMP Guidebook at III-9. Even though this is a programmatic RMP, the EIS contains no discussion of staffing or the source of funding for the alternatives or mitigation actions identified in the RMP. Without this information, it is impossible for the Districts to determine which actions discussed in the EIS are truly feasible.

The Districts are particularly concerned that some proposed measures necessary to mitigate particular impacts may be illusory. An example is the proposed mitigation for allowing body contact swimming in Lake Cachuma: the construction of a new potable water treatment

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L-1-11,
Cont.

facility. EIS at 4-8. Because of state and federal budget constraints and a shortage of local funding sources, it is questionable if this proposal can be implemented. As noted in the EIS, even “[m]aintaining roads within the Cachuma Park area has been deferred over the last 10-15 years due to the lack of available funds.” *Id.* at 3-77.

To determine the feasibility of carrying out proposed mitigation measures, Reclamation should estimate how much the proposed actions under all of the alternatives would cost in order to reduce the impacts to a level of less than significant. To the extent Reclamation does not make such funding available, the local managing partner may have no choice but to refuse to implement many of the RMP programs.

Implementation of the RMP mitigation programs is the responsibility of Reclamation and its local managing partner. If Reclamation cannot demonstrate how a mitigation action will be funded, that mitigation measure should be rejected. In the alternative, if Reclamation is proposing to carry out the mitigation responsibilities itself, its intention should be clearly stated, and the mitigation plan should identify the entities that ultimately will implement and fund these actions under the RMP. Should Reclamation decide to proceed with an RMP that increases recreational uses at Lake Cachuma, to the detriment of Lake Cachuma’s water quality or water supply delivery facilities, the Districts cannot be responsible for the costs of mitigating for those major impacts. Reclamation’s responsibilities must be acknowledged in the EIS.

III. WATER QUALITY/WATER SUPPLY PROTECTION ALTERNATIVE

L-1-12

Despite the uncontroverted importance of Lake Cachuma as a drinking water reservoir and the RMP’s stated purpose to address a need for “ensuring timely delivery of high-quality water to water users while enhancing natural resources and recreational opportunities” (RMP 1.3), the EIS does not examine any alternatives that would enhance the protection of water quality. Instead, Alternative 1 is focused on infrastructure improvements without expanded recreation and Alternatives 2 and 3 are focused entirely on increasing recreation at Lake Cachuma. Both Alternatives 2 and 3 generate far greater impacts on water quality than Alternative 1, even with the mitigation measures discussed in the EIS. In fact, the EIS acknowledges that many of the proposed mitigation measures are inadequate as mitigation of potential impacts to the lake’s water quality. Because of the importance of protecting the public’s primary drinking water supply, the Districts suggest the addition of a Water Quality Protection alternative to address this deficiency.

A. Reclamation’s RMP Guidebook Requires Alternatives that Address All Public Concerns.

As discussed in Reclamation’s RMP Guidebook, “[e]ach alternative . . . should address and resolve, in a different manner, the issues and concerns raised by the public . . .” RMP

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**L-1-12,
Cont.**

Guidebook at III-9. The RMP Guidebook also states that Reclamation should select those alternatives or combinations of land uses and management actions that are “widely accepted by the public and entities” and “without serious conflicts.” *Id.* at III-10. During the scoping process, members of the public pointed out the vital importance of protecting the water quality of Lake Cachuma. EIS at 2-24. Despite these public concerns and the RMP Guidebook directives, however, the EIS gives short shrift to protection of water quality in the reservoir. In fact, as discussed throughout this letter, some of the activities proposed in Alternatives 2 and 3 are seriously in conflict with the primary purpose of Lake Cachuma as a drinking water source. The Districts see the EIS as deficient in its failure to consider the full spectrum of public concerns, including particularly protections for the quality of drinking water, and to assess alternatives focused on this public need.

B. The Range of Alternatives in the RMP and EIS is too Narrow to Comply with NEPA Requirements.

Despite acknowledging the need to protect the reservoir as a source of drinking water, not one of Reclamation’s ten objectives for the project directly addresses protection of water quality. The closest reference to the water in the reservoir is indirect: “Develop strategies and approaches to protect and preserve the natural, recreational, aesthetic, and cultural resources.” RMP at 1-3. Nevertheless, while Reclamation has focused exclusively on recreation-enhancing alternatives, several project objectives could be met without enhancing recreational opportunities. At the same time, there may be opportunities to enhance recreational opportunities without risking damage to the Lake’s water quality. Therefore, a “range” of only two options appears to be inadequate. See *Morongo v. Federal Aviation Admin.*, 161 F.3d 569, 575 (9th Cir. 1998); *California v. Block*, 690 F.2d 753, 767-768 (9th Cir. 1992).

L-1-13

NEPA requires that an EIS “[r]igorously explore and objectively evaluate all reasonable alternatives.” 40 C.F.R. § 1502.14(a). All reasonable alternatives include those that would achieve only some of the federal lead agency’s objectives. *Natural Resources Defense Council, Inc. (“NRDC”) v. Morton*, 458 F.2d 827, 836 (D.C. Cir. 1972). In this case, NEPA requires Reclamation to study the reasonable alternatives that can meet some or all of its stated objectives, with or without the expansion of recreation. Under this broad mandate, the inclusion of an alternative that would not have any negative impacts on the water quality and water delivery facilities of Lake Cachuma and downstream water bodies would strengthen Reclamation’s environmental analysis and provide a clear comparison with the impacts of recreation-based Alternatives 2 and 3.

A water quality/water supply protection alternative could include all beneficial aspects of Alternatives 2 and 3 without the negative environmental impacts. For example, it could incorporate the Trails, Vegetation, and Fisheries Management Plans, a ban on 2-cycle motors, and institution of a strict Quagga mussel containment program by limiting access to the lake to

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Cont.**

local and rental boats only. While this would not necessarily enhance recreational activities, it would meet most of the other Project objectives and avoid potentially significant impacts.

Reclamation also might consider an alternative with expanded recreational opportunities outside the Cachuma Recreation Area to support the notion that expanded recreational activities are needed in the general geographic area near Lake Cachuma. For example, activities similar to those proposed in Alternatives 2 and 3 could be analyzed for Lake Casitas, Lake Piru, or Lopez Lake instead. Or, because the proposed recreational opportunities are partially for the benefit of Los Angeles County residents (EIS at 3-62), expanded recreation in a lake in Los Angeles County could be analyzed. Because Lake Cachuma is first and foremost a drinking water reservoir, while other area lakes are not, this approach could meet an objective to protect Lake Cachuma's water quality while enhancing recreational opportunities in the general geographic area.

Without analyzing alternatives that would have no negative impacts on Lake Cachuma's water quality and water supply facilities, the benefits and drawbacks of the current alternatives cannot be fully understood or evaluated.

IV. CONCLUSION

The enhancement of public recreational opportunities at a reservoir that is a primary water supply for Santa Barbara County, including thousands of residents of Montecito Water District and Goleta Water District, raises serious concerns for the Districts. While it may be possible to enhance certain aspects of the existing recreational activity at the Lake without jeopardizing water supply and/or water quality, the EIS stops short of providing a complete assessment of obvious sources of contamination, including the Quagga mussel, body contact, and 2-cycle motors, and it has not begun to address other potential environmental impacts. The RMP fails to provide an appropriate comparative alternative that would outline activities designed to preserve and potentially enhance water quality at the reservoir.

L-1-14

The Districts' view is that recreational activity such as swimming, boating, and sport fishing is fundamentally incompatible with protection of a water source, but that many potentially significant environmental impacts of recreation can be reduced or mitigated to an acceptable level if properly anticipated. An increase in the intensity of recreation, and the introduction of different kinds of recreational activity, pose an increasingly greater risk to the quality of water and to the availability of water supply that demands far greater scrutiny than this EIS provides.

Lake Cachuma was established as a reservoir for drinking water, not a recreational lake. The enhancement of recreation should not come at the expense of its primary and still vital purpose. Thus, Reclamation has a higher burden than it has yet met in demonstrating that either

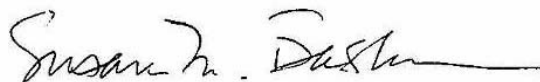
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Cont.**

Alternative 2 or Alternative 3 will not have severe and potentially unmitigable impacts on this vital water supply.

The Districts thank Reclamation for providing the opportunity to comment on the proposed Cachuma Lake Resources Management Plan and Environmental Impact Statement and looks forward to receiving and reviewing Reclamation's responses to these comments and the Final EIS.

Very truly yours,



Susan M. Basham
for PRICE, POSTEL & PARMA LLP

SMB:lkh

cc: Tom Mosby, General Manager, Montecito Water District
Eric Ford, Interim General Manager, Goleta Water District

Responses to Comment L-1

L-1-1

See the responses to Comments R-1-9 and R-1-10.

L-1-2

See the response to Comment R-2-16 in regard to downstream impacts. Specific comments about Southern California steelhead are addressed in subsequent responses.

L-1-3

The damage that could result from an invasive mussel infestation is well documented, as indicated in the comment. The Draft RMP/EIS includes discussion of invasive mussels in both the description of existing conditions and the impact analysis for the proposed alternatives (EIS Sections 2.5.2, 3.4.4.2, 3.9.2.2, 4.4.3.2, and 4.4.7). Updated information about the potential impacts of invasive mussels to water supply facilities, water quality, and endangered steelhead has also been added to the Final EIS in Sections 3.4.4.2, 4.1.3, 4.1.7, 4.4.3.2, and 4.4.7.

It should be noted that the statement "no safe remedy is currently available for eliminating (invasive mussels) from a water body once it is infested" has been deleted from the RMP/EIS. Updated information on mussel control and eradication methods (Section 4.1.7) includes cases

and ongoing research for eliminating infestations without jeopardizing water quality or natural resource protection.

The comment suggests that the risk of mussel damage will only become greater with the introduction of additional boats into the lake. As stated in the response to Comment R-2-15, the Preferred Alternative would not expand boating capacity beyond No Action levels. Moreover, the potential also exists for transport of invasive mussels to Cachuma Lake by other sources such as water facilities support staff or recreationists using the Santa Ynez River upstream of Cachuma Lake.

L-1-4

See the response to Comment R-1-19 in regard to the phaseout of nonconformant marine engines.

L-1-5, 6

No body contact will be allowed under the Preferred Alternative. It should be noted that some water bodies that serve as reservoirs allow body contact, as described in the response to Comment R-1-12.

L-1-7

See the response to Comment R-1-18 in regard to Southern California steelhead.

L-1-8

The Final EIS has been revised to include additional information about Southern California Distinct Population Segment (DPS) steelhead downstream of Bradbury Dam (Sections 3.4.5.2 and 4.4.7), water delivery facilities downstream of Bradbury Dam (new Section 1.1.2), and water releases for downstream fisheries protection (Section 1.1.4).

L-1-9, 10

See the response to Comment R-1-15.

L-1-11

See the response to Comment R-1-14.

L-1-12, 13

See the responses to Comments R-1-12 and R-1-13.

L-1-14

Reclamation recognizes that recreation must be compatible with the project purpose of water supply and disagrees that none of the alternatives would be compatible with water quality protection. The issues summarized in this conclusion are addressed in the responses to more specific previous comments. The Preferred Alternative would not substantially expand

recreation, and Section 2.4.2 provides for discontinuation of recreational uses or activities allowed under the RMP at the discretion of the local managing partner.