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**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
NATIONAL MARINE FISHERIES SERVICE

Southwest Region  
777 Sonoma Ave., Room 325  
Santa Rosa, CA 95404-4731

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NOAA  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

April 19, 2010

In response refer to:  
SWR/F/SWR3: DWB

Charles A Rich, Chief  
State Water Resources Control Board  
1001 1<sup>st</sup> Street, 14<sup>th</sup> Floor  
Sacramento, California 95814

Dear Mr. Rich:

NOAA's National Marine Fisheries Service (NMFS) thanks you for this opportunity to review and comment on the Water Right Complaint Regarding Diversion of Groundwater on the Santa Margarita Ranch (SMR) in Trout Creek, located in the Upper Salinas River Watershed, San Luis Obispo County [File: 363:CEN:262.0(40-03-08)], California. The accompanied Staff Report, issued on February 22, 2010, summarizes the results of the investigation for the 1999/2000 complaint from the California Department of Fish and Game (DFG), Environmental Center of San Luis Obispo (ECOSLO), and California Sportfishing Protection Alliance (CSPA), as well as the 2008 complaint by North County Watch.

The Staff Report for State Water Resources Control Board (SWRCB) concludes: (1) there is insufficient evidence regarding the impact of unauthorized diversions that would constitute a trespass against the State of California, and (2) there is insufficient evidence to direct SMR and SWRCB to modify or terminate existing diversions in order to protect public trust resources. NMFS, as well as DFG, has repeatedly requested development of a water management plan by SMR to assess the impacts of water operations to ESA-listed South-Central California Coast (S-CCC) Distinct Population Segment (DPS) steelhead (*Oncorhynchus mykiss*). Although the abundance of steelhead in the Upper Salinas watershed is not well documented, steelhead have been documented in the project area (Franklin 1999; Titus, Erman *et al.* 2002; Franklin 2005; Good, Waples *et al.* 2005; NMFS 2006; Thompson 2006; Becker and Reining 2008). Since the first complaint filed in 1999, the status of S-CCC steelhead has continued to decline across the S-CCC DPS in general and the population has fallen to exceedingly low levels (Boughton 2006; NMFS 2006). This population decline heightens our concern regarding adverse impacts to the fishery resulting from SMR water operations.

S-CCC steelhead were listed as a threatened species on August 18, 1997 (62 FR 43937), pursuant to the Federal Endangered Species Act (ESA) of 1973, as amended. Regulations deemed necessary and advisable for their conservation were adopted under section 4(d) of the



ESA and went into effect on September 8, 2000. In addition, S-CCC critical habitat was designated on September 2, 2005, with an effective date of January 2, 2006. Critical habitat is defined as an area essential to the conservation of a listed species. Primary constituent elements (PCE) of designated critical habitat for listed steelhead include water quality and quantity, foraging habitat, natural cover including overhanging large wood, and migratory corridors free of obstructions. NMFS is extremely concerned that this species is close to extirpation in the Upper Salinas watershed and significant conservation actions will be necessary to halt and reverse their decline.

The Upper Salinas sub-population, and designated critical habitat, plays a crucial role in the vitality and recovery of the species. Moyle *et al.* (2008) identified that core populations of steelhead should be multiple and well dispersed, and non-core<sup>1</sup> populations are also needed for recovery of the S-CCC DPS of steelhead. Though the population in the Upper Salinas historically had low abundance, the installation of the Salinas Dam, which impounds Santa Margarita Lake, is responsible for the principal reduction in anadromous habitat. Limits to reproductive success of the sub-population are further diminished by reduction in surface flows, a primary reason for ongoing population declines in the watershed (Highland, personal communication, CDFG, 2006). Zimmerman (2002) noted that tributary streams had greater production of anadromous versus resident life history form of *O. mykiss* compared to larger order streams and it is common for steelhead to spawn in ephemeral streams, with juveniles migrating downstream to permanent waters to rear (NMFS, 2005). The vitality of the sub-population is the measure to determine the recovery of the DPS as the sub-populations will expand their distribution into other portions of the watershed.

Anthropogenic extraction of groundwater for beneficial uses has a suite of adverse impacts to aquatic organisms. Some of the more direct impacts include: (1) passage impediments to juvenile and adult salmonids; (2) impaired water quality; (3) increased water temperature; and (4) a reduction of viable rearing habitat for juvenile fish (Smith and The California Water Policy Center 1980; Moyle and Baltz 1985; Ebersole, Liss *et al.* 2001). Overdraft of groundwater can delay surface flows by extending the length of time required to recharge depleted aquifers (Zektser, Loáiciga *et al.* 2005), thus, truncating the already narrow migration window in the Salinas River for smolt and adult steelhead. Adult steelhead migrating into the Santa Margarita basin will have traversed over 140 river miles to return to spawn in their natal streams; this is the longest migration in the S-CCC DPS.

Delays in surface water recharge may be enough to prohibit upstream migrating adults from entering the Santa Margarita basin to spawn, which can lead to fish being trapped, predated, or cause mortality. As migrating adults expend energy reserves to further migrate to natal streams to spawn, any delay or barrier can be substantial enough that the individual may not have sufficient energy to continue to migrate, overcome any other potential barriers, or spawn. Due to the vast length of migration of the sub-population, without hydraulic connectivity to spawning habitat in tributary streams, an entire year's run could be lost if the Santa Margarita basin becomes dewatered.

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<sup>1</sup> A core population is defined as populations that exist in large watersheds such as the Salinas, Carmel or Big Sur River, whereas a non-core population would be species inhabiting a particular tributary or sub-watershed within the larger watershed.

Chronic effects of groundwater overdraft can result in mortality and reduced individual fitness as well, which acts to further impair long-term survival of the population. Malcolm *et al.* (2004) found groundwater-surfacewater interactions had a marked effect on survival of salmon ova in redds where reduction in groundwater-surfacewater interactions resulted in hyporheic hydrochemistry that caused mortality of eggs. Alterations to the hyporheic zone can also alter the development and size of embryos (Youngson, Malcolm *et al.* 2004). Therefore, the amount and timing of SMR's operations may impact S-CCC steelhead in a multitude of ways at various life stages. Without preservation and protection of this sub-population and the designated critical habitat, the DPS is likely to decline further.

The SWRCB Staff Report asserts there is a lack of evidence to warrant a modification of SMR water operations. We continue to believe that the SWRCB should require SMR to provide accurate information regarding water budget, monitoring plans, system infrastructure, well operation reports, and instream flow gauges. NMFS requested that the EIR incorporate appropriate measures and analysis of operations and SMR's water operation effects on federally-listed species and their designated critical habitat. The Final EIR was approved December 28, 2008, without incorporating these concerns. SWRCB has gone on to state that "...the Santa Margarita basin has not been studied to the extent necessary to provide an accurate estimate of dependable yield" (2010). Despite the paucity of information to make informed decisions necessary to evaluate impacts to public trust resources, the project continues to move forward. NMFS believes that federally-listed species have been impacted with the adoption of the water operations at SMR.

Under the ESA, it is unlawful for any person subject to the jurisdiction of the United States to "take" any species of fish or wildlife listed as endangered within the United States. 16 U.S.C. § 1538(a)(1)(B). The term "take" is defined by the ESA to mean harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such activity. 16 U.S.C. § 1532(19). "Harm" has been defined by NMFS to mean:

... an act which actually kills or injures fish or wildlife. Such an act may include significant habitat modification or degradation which actually kills or injures fish or wildlife by significantly impairing essential behavioral patterns, including breeding, spawning, rearing, migrating, feeding or sheltering. 50 C.F.R. § 222.102.

Under section 4(d) of the ESA, 16 U.S.C. § 1533(d), the Secretary is required to adopt such regulations as he deems necessary and advisable for the conservation of species listed as threatened. Such regulations may include application of the prohibitions contained in section 9(a) of the ESA, 16 U.S.C. § 1538(a), which apply to endangered species. Protective regulations for S-CCC steelhead issued pursuant to section 4(d) of the ESA became effective on September 8, 2000, (65 FR 132); (50 C.F.R. § 223.102(a)(5)). With certain limited exceptions, these regulations apply the section 9(a) prohibitions, including the "take" prohibition, to S-CCC steelhead. The prohibition against unauthorized "take" of S-CCC steelhead applies equally to persons engaged in activities that are not intended or designed to take species listed under the ESA, but may do so incidentally. Available information indicates SMR's past, current and


future water operations and their groundwater extractions, likely "harm" listed steelhead and adversely modify designated critical habitat in Trout Creek. NMFS bases this conclusion on long-term observations that document Trout Creek, which historically maintained surface flows, now dewater during the summer low flow period.

We believe continued implementation of the SMR project, including the Residential Cluster Subdivision and associated agricultural practices, results in significant adverse impacts to listed steelhead due to the pumping capacity of the nine wells (Upper Trout Creek: 3D2<sup>2</sup>, 34M, 34C; Lower Trout Creek: 216, 16Q, 16L, and 8Q; and Yerba Buena: 17M1 and 18H1), and their delivery location and ancillary conditions authorized by the SWRCB under their appropriative water right. We recommend the SWRCB require SMR to develop a water management plan that avoids adverse impacts to all life stages of listed steelhead. Under Section 4(d), federally-listed species are provided protective regulations to provide for the conservation of the species. If the SMR cannot operate in a method that does not avoid "harm" to steelhead, an incidental take permit will be required. Absent a federal nexus, NMFS can provide take authorization that is not likely to jeopardize S-CCC DPS steelhead through section 10(a)(1)(B) of the ESA.

NMFS requests the SWRCB evaluate the necessary targeted flows for all life stages of S-CCC steelhead and assess the impacts from the operation of the SMR water right on the species. Following determination of the impacts, NMFS recommends collaborating with SMR, DFG, and NMFS to develop alternatives or modify operations to minimize adverse effects to steelhead.

Thank you for your cooperation in the above. We look forward to continued opportunities for NMFS and the SWRCB to cooperate in the conservation of listed species. If you have any questions or comments concerning this letter please contact Devin Best at (707) 578-8553 or via email at [devin.best@noaa.gov](mailto:devin.best@noaa.gov).

Sincerely,



*for* Dick Butler  
Santa Rosa Area Office Supervisor  
Protected Resource Division

cc: Brian Erlandsen, DFG, Fresno  
Doug Filliponi, Santa Margarita Ranch LLC  
Roger Root, USFWS, Ventura Office  
Susan Harvey, North County Watch, Templeton, California

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<sup>2</sup> In the case of well 3D2, the water could be used for two applications: (1) for seasonal irrigation, and/or (2) to supplement storage of reservoirs either A or B.

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