

**From:** Paul Slavik <paul@qcranch.com>  
**To:** <jfarwell@waterboards.ca.gov>  
**Date:** 5/16/2011 11:31 AM  
**Subject:** Second Revised EIR Bureau of Reclamation 11331 and 11332  
**Attachments:** Cachuma 2011 EIR Cover letter.pdf; Comments to 2011 2nd Revised EIR.pages

Attached are comments in two related documents in response to the above referenced EIR. I encourage the full review of these documents. Hard copies are being sent concurrently.

Thank you.

**PAUL SLAVIK**  
PO Box 867  
SANTA YNEZ, CA 93460

2011 MAY 16 PM 2:14

May 16, 2011

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

DIVISION OF WATER RIGHTS

RE: Second Revised Draft EIR in Connection with Bureau of Reclamation Permits 11331 and 11332

The project alternatives in set forth in this draft EIR are largely driven and controlled by the current biological opinion regarding Southern California steelhead populations in the Santa Ynez River watershed. This biological opinion is designed to create an endless supply of bureaucratic process and publicly funded projects and while creating no meaningful change in steelhead populations.

The focus of these current recovery efforts ignore known scientific data developed by the same agencies now responsible for implementing this biological opinion. There is total disregard for successful and cost effective fisheries management practices employed elsewhere and previously employed in the Santa Ynez River. More critically, the current biological opinion ignores the 2005 U. S. Geological Survey study that fish in the lower Santa Ynez River watershed are hybridized hatchery descendants which do not qualify for listing under the Endangered Species Act.

Fish and Game agencies throughout the country utilize steelhead stocking programs with absolute predictable results. Conservation hatchery programs preserve the desirable genetic traits while restoring the fisheries in immediate terms. The "Field of Dreams" strategy currently used in the Santa Ynez River is scientifically proven to be a dead end road on many levels. Most distressing is that the State of California did extensive studies of this and determined that native steelhead will reproduce at a rate of 1:1 while hatchery fish reproduce at a rate of 15:1 (Hallock, Van Woert, Shapavalov 1961).

Today, despite spending hundreds of millions of dollars in the Southern California region alone, annual counts of returning steelhead in the Santa Ynez River range from 0 to 16 with and an average of 3.1 fish. When people are made aware of this fact pattern, the common reaction is shock at the massive and well organized misappropriation of public and private resources. The typical response to this is that we need to stop following mandates created by individuals and government agencies that have a vested interest in the process and no accountability as to results. This has been and continues to be a complete betrayal of the public trust interests and private property rights.

State Water Resources Control Board

May 16, 2011

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Attached are comments and reference materials cited relative to the 2009 Draft  
Southern California Steelhead Recovery Plan that have application to this draft EIR.  
Please take the time to review this in its entirety as it is critical this process not be  
allowed to continue to the detriment of the environment, the economy and the quality of  
life throughout the State of California.

Sincerely,



Paul Slavik

**Jane Farwell - Second Revised EIR Bureau of Reclamation 11331 and 11332**

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**From:** Paul Slavik <paul@qcranch.com>  
**To:** <jfarwell@waterboards.ca.gov>  
**Date:** 5/16/2011 11:44 AM  
**Subject:** Second Revised EIR Bureau of Reclamation 11331 and 11332  
**Attachments:** Cachuma 2011 EIR Cover letter.pdf; Comments to 2011 2nd Revised EIR PDF.pdf

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I am resending this as I realized that one of the documents may not have been in a compatible format. Please let me know if you have any problems reading the attached.

Attached are comments in two related documents in response to the above referenced EIR. I encourage the full review of these documents. Hard copies are being sent concurrently.

Thank you.

## Comments to the 2009 Southern California Steelhead Recovery Plan

This Plan as drafted, creates a significant distortion of the factual and scientific data as to the genetic significance for listing under the Endangered Species Act (ESA), the causes of steelhead decline in the region, and the potential for efficacy of the proposed recovery strategies.

### ESA LISTING STATUS

The Southern California Steelhead ESU was established in 1997 as the result of dual DNA analysis by Dr. Jennifer Nielsen. It was determined at that time that these fish were unique to the region and met the two requirements of an ESU and listing under the ESA; 1) reproductively isolated - 2) represent an important component in the evolutionary legacy of the species.

In 2003, Dr. Nielsen further studied fish populations throughout the Santa Ynez River Watershed. As a result of that work, a report was generated entitled "Genetic Influence of Hatchery-Origin Fish to Natural Populations of Rainbow Trout in the Santa Ynez River, California". As demonstrated in the excerpt below, the report concludes that populations in this watershed are largely descendant of hatchery fish thus negating the assertion that native fish in the region have been reproductively isolated. Most notable in the study as cited below, populations the Lower Santa Ynez River watershed that have a direct connection to the ocean are largely descendants of introduced hatchery-origin fish.

*Nielsen et al. (2003) report that haplotype frequencies for mtDNA did not differ significantly ( $p > 0.05$ ) among three natural populations in the lower Santa Ynez River watershed (Cachuma Reservoir, Hilton Creek, and the lower Santa Ynez River) and one or more hatchery strains, suggesting that *O. mykiss* in those latter three populations were largely the descendants of introduced hatchery fish.*

The report continues with measurements of influence throughout the watershed. This genetic analysis and demonstrated hybridization negates the establishment of an ESU and protection under the Endangered Species Act as these populations are clearly not reproductively isolated or of evolutionary significance. Populations in the lower Santa Ynez River with direct access to the ocean fall into this group of hybrids.

As determined by previous court rulings, hatchery-origin fish are not eligible for protection under the Endangered Species Act or classification as a DPS (Distinct Population Segment). In light of this information, there is no basis for protection under the ESA.

I am now told that new studies of Dr. Nielsen's DNA analyses have somehow expunged hatchery DNA from the tissue samples; a necessary step to maintain listing under the ESA.

## STEELHEAD HISTORY

The Plan references historic steelhead runs of 32,000 to 46,000 in the region with no reference whatsoever to the extensive stocking and fisheries management practices that created and maintained those numbers. There is no mention of the continued use of these methods to maintain steelhead populations in all other parts of the country.

In the Santa Ynez River, steelhead runs were estimated to be near 12,900 annually in the early to mid 1940's per Shapavalov and others that studied the watershed at that time. Not stated in the Plan was the fact that during the years 1939 through 1946, 4.3 million fish, an average of 614,000 fish per year, were either rescued, stocked, managed or relocated within the Santa Ynez River watershed to insure adequate numbers of surviving steelhead though the dry seasons. The resulting runs of 12,900 fish equates to 2% of 614,000 fish managed or maintained. This number relates exactly the expected return rate demonstrated in the 1961 CDFG study referenced below.

NMFS prepared a document entitled Southern California Steelhead ESU - Historic Stream Bed Habitat Distribution which details the stocking and fisheries management practices from the late 1800's to the mid-1950's. The most significant citations related to rescuing millions of first year fish in various locations in the Lower Santa Ynez River watershed during the time periods of the 1930's and 1940's. If natural steelhead runs were self-sustaining prior to the loss of habitat behind Bradbury Dam, why was so much effort required in fisheries management? In the midst of the Depression and later, during World War II, would such efforts be a priority if natural supplies were sufficient and self-sustaining? It is clear from the record that active management of the fisheries was absolutely necessary to protect fish from natural flow limitations throughout the watershed prior to the construction of Bradbury Dam.

Stated in the Plan are major alleged threats contributing to the decline of steelhead in the region over the last 60 years. These threat assessments include all aspects of human interaction with the environment and the resultant impacts on the decline steelhead. Yet according to government records, the last recorded significant steelhead run in the Santa Ynez River was in 1946-47; a full 7 years prior to the completion of Bradbury Dam and the resultant loss of 71 percent of available habitat in the watershed. In one year, was the sudden decline of steelhead runs the result of a catastrophic confluence of habitat destruction from human activity in the region as suggested in the Plan? Did agricultural and human related effluents degrade water quality in the river and estuaries as asserted in the threat assessments? Despite these assertions, Santa Ynez River water quality continues to meet human consumption standards throughout the region as confirmed by the Department of Health for the County of Santa Barbara. Did the introduction of hundreds of small migration barriers throughout the region cause fish runs to suddenly cease in 1946-47? The government documented history clearly

demonstrates that these are not the factors that led to the sudden and sustained steelhead decline.

The year 1946 was the beginning of a 7 year draught. Despite the absence of Bradbury Dam, storm flows were insufficient to open the sand bar at the mouth of the Santa Ynez River during this time frame. It was these draught conditions that led to emergency action by Congress for the completion of the dam in 1953. Once completed, water releases for the benefit of steelhead were recommended and anticipated by CDFG but not authorized resulting in decades of lost opportunity for returning steelhead. Without regular flows from the dam, stocking and fisheries management ceased due to lack of viable habitat below the dam. The remaining few fish were allowed to decline in the absence of water releases from Lake Cachuma.

Today, water is released to create habitat below the dam however, 71% of the watershed is above the dam requiring significantly greater storm events to clear the sand bar at the mouth of the river for steelhead migration. The timing, duration and intensity of flows does not replicate the natural patterns that existed prior to the existence of the dam thus greatly reducing, if not eliminating, migration potential in the remaining habitat as was the case in the 2008-2009 season, a near normal rainfall year.

#### HABITAT CREATION VERSUS FISHERIES MANAGEMENT

Years of intense research document four significant factors affecting steelhead populations and their inability to recover under the strategies laid out in the Plan.

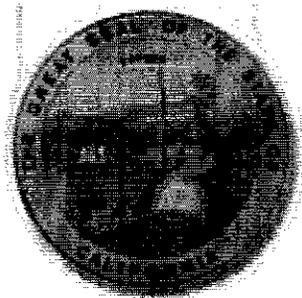
1. Steelhead return almost exclusively to streams from which they were released or spawned.
2. Natural reproduction by steelhead is a ratio of 1:1. A population of 100 spawning adult steelhead, will produce 100 adult fish.
3. Hatchery produced fish reproduce at a rate of 15:1
4. Introduced steelhead have a sea-run return rate of 2 percent.

Below are excerpts from the 1961 State of California study, the results of which are mirrored in studies and fisheries management practices throughout the U.S.

#### **STATE OF CALIFORNIA DEPARTMENT OF FISH AND GAME**

#### **FISH BULLETIN No. 114**

### **An Evaluation of Stocking Hatchery-Reared Steelhead Rainbow Trout (*Salmo Gairdnerii Gairdnerii*) in the Sacramento River System**



2011 11 16 10:10:10

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By  
**RICHARD J. HALLOCK**  
,  
**WILLIAM F. VAN WOERT**  
, and  
**LEO SHAPOVALOV**  
1961

***Comparison Between Yearlings Released and Sea-run Adult Returns***

*During the first four years of the study, 663,240 marked yearling steelhead were liberated. From these releases, including all sizes of fish planted, there were 13,055 sea-run steelhead returns to the upper river. The percentage return of adults from an average brood year was thus about 2 percent of the yearlings stocked (Table 5). Stating this in another way, it took about 50 average-sized hatchery yearlings to produce one adult steelhead return. Therefore, if naturally-spawned steelhead had the same survival rate as hatchery fish, an average of a little over 1,000,000 juvenile steelhead a year migrated out of the upper Sacramento River during the study to maintain the average run of 20,542 adults.*

## **CONCLUSIONS**

*It may be concluded from this study that stocking hatchery-reared yearling steelhead is a valid method of supplementing natural steelhead production in the Sacramento River. Natural reproduction by steelhead during the study period was on the order of 1 to 1 (i.e., for each adult one other was produced), while artificial propagation produced about 15 fish for each one spawned.*

The above study is but one of many such studies available that confirm life histories, 1:1 natural production rates and 50:1 stocking rates required to maintain healthy fisheries. Supplementing current populations is the first, most essential and arguably the only step required to maintaining or recovering populations.

The lack of fisheries management in the Santa Ynez watershed for the past 60 years and has resulted in low populations of sea-run steelhead. Since the year 2000, fish counts range from 0 to 16 sea run fish per year with an average count of 3.1 fish per year. The study referenced above, as well as studies done in Washington, Oregon and Idaho reconfirm that unimpeded, sea-run steelhead will return on a ratio of 1:1 or less. Habitat creation and restoration do nothing to overcome this natural production mathematical problem.

In 2010 and 2011 (thru May 3rd), following two exceptional rainfall years, 1 and 9 fish, respectively, were observed in the lower Santa Ynez River watershed. As shown in the 1961 study, starting with the current population at these levels, in a perfect environment, produce the same numbers now, tomorrow and forever. It could not be clearer that spending tens of millions of dollars on habitat creation/restoration, has had no meaningful impact restoring steelhead. NMFS has not demonstrated sustained or meaningful growth of steelhead populations in the absence of artificial production in any region of the country, yet this is the foundation of this Plan uniquely crafted for Southern California in complete contrast to steelhead fisheries management in the balance of the Continental United States.

## **COST OF RECOVERY UNDER THE PLAN**

The Plan is misleading in that no attempt is made to estimate the overall costs of implementation. To the contrary, it states that "estimating total cost of recovery is much more challenging if not impossible" for reasons including a lack of barrier inventories and assessments.

In 2004 a report was issued by Stoecker Ecological Consulting entitled Steelhead Migration Barrier Inventory and Recovery, in which the 150 barriers in the Santa Ynez River Watershed are identified, GPS located, photographed and assessed as to the method of recommended remediation. Most of these barriers are low flow crossings or culverts under roads. The method of mitigation preferred by CDFG and NMFS is bridges or bottomless culverts. With current costs running between \$400,000 and \$660,000 for each barrier, it is easy to project costs exceeding \$100 million dollars for this watershed alone. Why is this not disclosed?

This Plan as drafted proposes an endless series of activities, studies and projects in contravention to the public trust interests without regard to economic impacts and destruction of the most basic rights guaranteed under the constitution. There is 1) no clearly defined course of action 2) no implementation timelines 3) no stated recovery goals 4) no source of funding identified 5) no limits on or estimates of implementation costs 6) no emphasis on accepted and proven scientific fisheries management practices and 7) no accountability.

In contrast, a single generation conservation hatchery program can produce sea-run fish as a cost of \$3 each versus embarking on multi-decade plan costing hundreds of millions of dollars that is scientifically proven to merely maintain the estimated 500 remaining sea-run (hatchery-origin hybrid) fish produced in the region today. A hatchery program can be implemented immediately with calculable results and identifiable costs utilizing the best representative genetic stock of the region. The misguided goal of genetic perfection sought by the Plan is no longer achievable and has infinite economic and social costs.

#### PROPERTY RIGHTS

The Plan proposes such actions as relocating agricultural and cattle operations; limiting access to and use of private land by the landowners; limiting water extraction in defiance of valuable standing water rights; involvement in land use and zoning determination to limit uses, guaranteed under law, that conflict with the Plan goals. All of these constitute a taking under the law with no proposals set forth for just compensation.

This total disregard and decimation of private property and water rights such as that witnessed in California's Central Valley are perilously evident in the Plan. The fact pattern in these two regions are alarmingly parallel. Like the Southern California Steelhead, the Delta Smelt has hybridized with stock imported from Japan (*Hypomesus nipponensis*) by CDFG starting in 1959 (per USGS - reference below). Despite USGS confirmation of this fact, NMFS ignores this critical genetic link by maintaining the Delta Smelt on the Endangered Species List and continuing enforcement of the ESA. As a result, 450,000 acres of productive farmland producing billions of dollars of agricultural product have been destroyed. These include permanent crops that would take decades to replace. Multi-generation farming entities have been bankrupted and tens of thousands of lives have been affected. The direct and residual economic impacts of

these policies and practices are inestimable and in violation of protections under the ESA.

The exclusion of critical relevant information from the Plan is alarming and brings into question the motivations and goals therein. All of the information referenced in this writing was obtained from readily available government sources. In cases such as this, the terminology used by the courts is an "egregious abuse of the Endangered Species Act". These actions and policies threaten the credibility and viability of the Endangered Species Act and negatively reflect on all other conservation efforts. The further implications of legal liability on the part of government agencies results in additional impacts, the costs of which are ultimately borne by taxpayers. California does not need a multi-decade failed experiment. California cannot afford to be driven by self serving biological "opinions" designed to preserve governmental process in total disregard of threatened and endangered species. The process that has been followed since the listing of the Southern California Steelhead is the ultimate betrayal of the public trust interests.

#### DELTA SMELT HYBRIDIZATION FROM THE USGS

***Nonindigenous Occurrences:*** The wakasagi was stocked in **California** in Sly Park Reservoir (El Dorado County), Dodge Reservoir (Lassen County), Spaulding Reservoir (Nevada County), Big Bear Lake (San Bernardino County), Dwinnel Reservoir (Siskiyou County), Shastina Reservoir (Siskiyou County), and Freshwater Lagoon (Humboldt County) in 1959 (Wales 1962; Moyle 1976a; Courtenay et al. 1984; Dill and Cordone 1997). It was then stocked in Lake Almanor (Plumas County) on the North Fork Feather River in 1972 (Dill and Cordone 1997). It migrated downstream from Lake Almanor to Lake Oroville (Dill and Cordone 1997). It has recently been observed in the lower American River, Cache Slough off the Sacramento River and the Mokelumne River, and at the Central Valley Project and State Water Project fish salvage facilities in the south Delta (Dill and Cordone 1997). The species can be expected to occur in the lower Klamath, the Sacramento, and possibly other drainages (Moyle 1976a). Most recently, it was found in the Sacramento-San Joaquin Estuary, Suisun Marsh, and the the Yolo Bypass, Yolo and Solano Counties, (Aasen et al. 1998; Sommer et al. 2001; Matern et al. 2002; Moyle, unpublished).

***Means of Introduction:*** Wakasagi were intentionally introduced in 1959 from Japan by the California Department of Fish and Game as an experimental forage fish for trout (Wales 1962; Moyle 1976b; Dill and Cordone 1997).

**Status:** This species is established in several reservoirs and associated tributaries in California (Moyle 1976a; Shapovalov et al. 1981; Courtenay et al. 1986). It has not been recorded in Big Bear Lake since 1960 (Swift et al. 1993).

**Impact of Introduction:** This species has been found to negatively impact kokanee *Oncorhynchus nerka* and threadfin shad *D. petenense* (Dill and Cordone 1997). It also is known to hybridize with the native and federally endangered delta smelt *Hypomesus transpacificus*. Hybridization between the two species was suspected by Courtenay et al. (1986), and was later confirmed (Dill and Cordone 1997; Trenham et al. 1998).

**Remarks:** Dill and Cordone (1997) reviewed its introduction history in California. In documenting the original introduction, Wales (1962) incorrectly identified the species as *Hypomesus olidus*. Several authors (e.g., Moyle 1976a; Lee et al. 1980 et seq.) treated the introduced wakasagi as a subspecies of *H. transpacificus* (i.e., as *H. t. nipponensis*). In California the wakasagi is generally considered a freshwater species, hence its often-used name "freshwater smelt" in that state; however, it has recently been discovered in brackish waters, further threatening the continued survival of the imperiled delta smelt (Dill and Cordone 1997).