Dennis M. Murphy, CLU

May 25,2005

To: Santa Cruz County Fish and Game Advisory Commission

Subject: Steelhead trout no-take provision

Dear Commissioners,

At our meeting on May 5,2005 we discussed sending a letter to the National Marine Fisheries Service (NMFS, NOAA Fisheries) regarding the no-take provision *associated* with the listing of steelhead trout under the Endangered Species Act It was requested I provide additional scientific information relating to the populations trends of steelhead in our local streams.

I have enclosed for your review excerpts from the NMFS public hearing on the proposed listing of steelhead, held on October 7,1996. These excerpts include public statements by four fish biologists with extensive expertise on and experience with local steelhead trout. These professional testimonies clearly indicate that local steelhead trout were listed in disregard of the available scientific data. Furthermore, steelhead continue to be listed without scientific justification.

I have also enclosed information about the Monterey Salmon and Trout Project's STEP educational program. This is one of many desirable projects that are inappropriately hindered by the erroneous steelhead listing and its consequent restrictions and regulations.

It is my sincere belief this listing is not supported by the scientific evidence. As this opinion is shared by reputable scientists most familiar with the subject, it is the responsibility of this Commission to take a strong stand on this issue. I *urge* the Commission to send a letter to the appropriate agency(s) addressing the flawed nature of this listing and the resulting negative consequences on our community.

Sincerely,

Dennis M. Murphy, C.L.U.
Commissioner

DRAFT

SANTA CRUZ COUNTY FISH AND GAME ADVISORY COMMISSION

June 2, 2005

Mr. Rodney McInnis
Regional Administrator
NOAA Fisheries, Southwest Region
501 W. Ocean Blvd., Suite 4200
Long Beach, CA 90802-4213

Subject: Steelhead trout no-take provision

Dear Mr. McInnis,

The Santa Cruz County Fish and Game Advisory Commission recently reviewed a report on the population trends of steelhead trout in Santa Cruz County, authored by the Monterey Bay Salmon and Trout Genetic Enhancement Project. The salient conclusion of this report is that local steelhead populations have undoubtedly been increasing. Consequently, this Commission feels such data calls into question the need for continuing the "no-take provision."

The welfare of native fish runs in the streams of our county has always been a vital concern of this Commission. The protection and conservation of this valuable resource requires the continued support of recreational fisherman who enjoy this resource. The unnecessary "no-take provision" is counterproductive in this *regard.* We can see no scientific justification for the maintenance of such a restriction, especially as regards hatchery-raised fish.

The Commission recognizes *that* the Monterey Bay Salmon and Trout Project has exceeded all expectations in enhancing and improving steelhead abundance. This nonprofit organization is charitably funded and volunteer driven. Such unique grassroots achievements are generally most effective to long-term resource conservation and should not be disregarded. We strongly feel the time has come to recognize the successful efforts of this community. The "no-takc provision'' is penalizing those who havc worked long and hard to improve steelhead populations. Wc look forward to your reply.

Sincerely,

Chair
Santa Cruz County Fish and Game Advisory Commission

DRAFT

COPY Bob Briggs

UNITED STATES DEPARTMENT OF COMMERCE

National oceanic and Atmospheric Administration

National Marina Fisheries Service

PUBLIC HEARING ON THE PROPOSED

LISTING OF STEELHEAD TROUT

October 17, 1996

Monterey Beach Hotel, Monterey, California

MR. SMITH: My name is Jerry Smith. I don't represent, but I teach at the Department of Biological Sciences at San Jose State. I've been doing studies on steelhead in the Pajaro River since 1972 and on Aptos Creek in Santa Cruz County and other streams since 1981.

First, a very short comment in terms of the ESU's. The Central ESU goes down to Soquel Creek. The South-Central starts at the Pajaro River. Aptos Creek is in between those two ESU's. It belongs with the Central ESU. Aptos Creek is in Santa Cruz County. You also -- in terms of ESU's, there's substantial stocking of hatchery fish across those ESU's. San Lorenzo strain fish are stocked into the Pajaro River and Salinas River system.

Further comment in terms of the Central ESU. The

San Francisco Bay portion of the Central ESU presents a real problem. Since most of the fish are gone, trying to determine genetically what they're related to, in terms of an ESU, is going to be difficult, but the migration, temperature relationships there may not relate to what's happening in the Central Coast, Russian River to Aptos Creak system,

Within the Central ESU and within other systems

not useful, is at high flows, the damn is open and fish can bypass it. So you're missing fish at the peak time of the runs, and also, in a low flow year, when potentially you could get many of the fish and do an accurate count, there's a barrier in the San Lorenzo Gorge that in drought years, adults aren't able to negotiate. So there really are no good adult data for this system.

I highly recommend that in terms of -- again, there aren't much data here either, but I recommend using juvenile numbers in the stream to assess the status, and there's alraady been a reference to Don Alley's work from 1981 to 1994 on Soquel Creek, and Don, I'm sure, is going to speak tonight a little bit to similar studies that have been done on the San Lorenzo. Those basically show that in terms of juvenile numbers in the streams, and other streams I'll supply you some data for, the numbers of juveniles have been pretty static since the mid-seventies, eighties and that period of time.

So in terms of listing, if the criteria for listing a species is basically a combination of what the present numbers are, what the recent trends are and what the threats are, if you're looking at the Central coast system, you're looking at a system tnat

if there vete declines, and there have been substantial declines in some of those streams, these declines took place early, Prior to the seventies. Basically, when major water projects were put in and when substantial development took place in the watersheds, and the sedimentation produced poor substrata in these systems,

Since the seventies, eighties, there have not been substantial declines in habitat quality. There haven't been substantial declines in juvenile numbers, and present activities in these watersheds are not a major threat. So if you're looking at preeent threats, in terms of trying to decide what's going an, these systems are not even threatened.

If you're looking at long-term patterns, in the past there have been substantial declines, but the Central Coast ESU is probably not even qualified far most streams for threatened status.

However, the South-Central system, which includes Pajaro River, Salinas system and so on, there are substantial problems there. The Pajaro River, due to a combination of droughts in '76, '77, and then the more recent five-year drought, the Pajaro River system steelhead populations have collapsed recently, and those collapses are continuing as urban development

takes place in the watershed and a5 continuing water use goes on.

The Salinas River system populations have collapsed, and there's large-scale water developments in the system, actually in the fifties with Nacimiento and San Antonio and water use in the system. Carmel River system has similar problems with major passage, and David Dettman's down coast in the South-Central system, the Big Sur, Little Sur systems, are very similar to what we have in the Santa Cruz mountains. The stream systems haven't changed substantially from the eighties to recently. The habitat looks the same, the numbers are the same. So you've got, unfortunately, kind of a schizophrenic ESU in terms of the quality trends and the species.

MR. GOLDEN: Your next speaker is David Dettman, to be fallowed by Dr. Jim Hughes.

MR. DETTMAN: Good evening. National Marine Fisheries Services, thank you for holding this hearinq in Monterey. I'd like to preface my comments by saying I am in general -- Dettman, D-e-t-t-m-a-n. I am in general agreement with the service's proposed

listing for steelhead under protection in the Endangered Species Act.

I think the information that's contained in your report makes it clear there's been a decline, however, a proposed listing of endangered versus threatened, I think, needs to depend upon very accurate information, and unfortunately much of the data that's in the various reports is of questionable accuracy. The estimated population numbers in the various tables, graphs and figures appear to be based more on almost anecdotal information or perhaps professional opinions rather than hard data.

And what is a little bit more disturbing than that is, and especially for ESU's 9 and 10, which I have the moat familiarity with, there are historical counts of adult steelhead, and those don't seem to have been used in the report as a basis for a listing. So I would encourage you to contact myself, Jerry Smith, any number of people in the Department of Fish and Came who are in the regional office here for accurate numbers. The numbers that do exist anyway. And I would ask, why were these numbers overlooked.

There are also other techniques available for estimatinq potential populations of adult steelhead, and Don Alley and I and Jerry have developed estimates

based on back calculations from juvenile populations, and those techniques, how to do that, are written down in various reports and we can supply those.

NOW', unfortunately, there aren't any historical numbers that are of great value and also, in terms of the current status, there aren't that many studies of adult populations of'steelhead in California. There are a few'. I'm familiar with'the one here in Carmel because that's where I work; "We operate a counting station on the San Clemente Dam that's been tallying the exact time and date of fish passage there since 1994, and just last year we installed a camera to take pictures 'ofthe fish. We haven't quite got that working yet, but we're still working on it. So there is information out there and we will supply you with those numbers.

So given this questionable nature of the data, I think the Service is going to have to spend some time in its decision-making, justifying the validity and the accuracy of those numbers and how they were arrived at.

I have 10 pages of comments here. I'm not going to make it all the way through this. I do have copies here. I'll be providing those to you and the court recorder, and also sending a final version of these

comments by 7th of November.

I would like to touch on a couple of other points. I have recommendations in here on recovery plans and monitoring those plans. I think it's very important that the Service, and perhaps the Department of Fish and Game, as the lead Federal and State agencies develop a system of key monitoring streams, and we need to develop criteria for those. They should include, for example, the size of the stream, whether it's feasible or not to even count adult fish on various streams, and the degree of habitat degradation that's occurred on these various, quote, key streams.

In each of those type of streams we need to monitor the juvenile production, in particular, every year. That should be a very basic information that is gathered. We've seen tonight some testimony on -- I think three or four people have testified to the effects of marine mammals.

One of the big problems, of course, with monitoring adults, is that you're monitoring the end result of several ecological stanzas when you look at adult returns. That makes it very difficult to assess the recovery and the success of recovery for the juvenile habitat, which is basically the fresh water

system. So these fall surveys that are typically done in October, we're in the middle of ours right now, are extremely important. They're critical.

And in the large streams, I think you need to estimate smolt production during drought periods. Many of the large streams, it's not technically feasible to get an accurate number of smolts in the stream, because the flow may go from 10 cfs up to 2,000 cfs, the way your trap goes upstream, so you lose data. Monitor small production in the drought years in some *of* the smaller tributaries. If those end up being developed as key streams, you can use traps to actually monitor and complete smolt production in most years.

And one other thing that I think you need to look at in the monitoring program, and that's for any ESU that's listed as threatened. If the take of adult steelhead is permitted in sport fishery, I think it's time for -- the State of California, probably, would administer this, but I think it is time for a punch card system, similar to the deer system in California, and perhaps even a lottery on Some of the ESU's. You'll find that there's going to be a great deal of pressure to continue sport angling, and you're not going to be able to avoid that. The important thing

is to make any angling compatible with the recovery plans.

I'd like to talk about just four more issues having to do with angling, because I think it's an important consideration you'll need to make. The Service needs to clarify whether or not to permit angling, as a decision in its final rule. some important observations that are valuable here, particularly on the South-Central region. Data that is available, and very little, indicates that the harvest rates on these populations can be especially high when stream flows are low. In 1984 we measured a harvest rate on the Carmel River of 35 percent, excuse me, of the run, which is much too high for naturally reproducing population, where there is a problem with diversions and such.

And more important than that, nearly all the fish that entered the river in January and February were caught. During that year. Twenty-five fish made it up the San Clamente during the months of January and February, and only -- and at the same time, over 300 fish were caught in the sport fishery below and kept. Historically, the impact of angling has been to concentrate the early portion of the run in the winter period.

In other words, there's certain streams where access is restricting to the spawning grounds for the early portion by selective removal of the early spawners. This probably has compressed the run timing. And I see Marty approaching the stand here, so I'm running out of time. I have a lot to say. It's all written down here and we'll be providing you additional comments.

currently -- I have one more thing that I want to add in terms of angling. Currently, angling is allowed in various juvenile streams that produce steelhead where resident and anadromous forms and morphs coexist. I think of them as morphs, not individual species. Observations on the Carmel River during 1996 indicated that the regulations that are in existence now resulted in the take of not only smolts, but adult steelhead in the reach above Los Padres.

So I would think that you would want to seriously address this issue in your final decision. Some streams, angling regulations allow resident upstream, both natural and manmade. This may not have as great an effect on steelhead stocks, and you'll need to perhaps modify your rule in relation to, you know, recommendations in those areas.

Basically, did a great job an delineating the

factors that are responsible for the decline in these two ESU's. I have a list here that's organized in a different way than your table, and much more detailed, and it lays out the factors in the ESU 9 and 10 in an organization based on adults, spawning, incubation, juveniles and then smolts. So I think you'll find those useful.

Darby briefly reviewed our conservation efforts at the district. We have a very vigorous, and he didn't say this, but very expenaive program there, but we think it's worthwhile. We've been able to bring the run back up from essentially zero for a period of five years to a run last year of 438. The average during the last six years has been 190, so we're well on our way to recovery. There's a lot of work still to do, and we look forward to working with you. Thank you.

followed by Al Haynes.

MR. ALLEY: Dan Alley, A-l-l-e-y. I'm just coming off 17 straight days of fieldwork to come here tonight. I had two weeks before that.

I'm upset. You say that you're using the best scientific data, however you haven't referenced me at all in any of your reports. I have a long list of experience. I have the widest breadth of experience on the Central Coast, working with fisheries from Santa Cruz County down through San Luis Obispo.

I am an active member of Sierra Club, particularly task force, commented on numerous THP's in the area. I originated Friends of Soquel Creek.

I'm active with the Citizens for Responsible Resource Management Project, manager Soquel Creek Management Plan, member of the Santa cruz Resource Conservation District. I surveyed many of the streams in tne Pajaro system and sampled many of the sites in Santa Cruz county. I've done smolt trapping on the San Lorenzo, in-stream flow analyses an San Lorenzo River, feasibility study for a dam there. My recommendations for fishery releases killed the damming project there.

I've worked on IFIM on the Carmel River, san Simeon creek to the south. Santa Rosa Creek, I've surveyed and sampled Santa Rosa Creek, San Simeon Creek for a number of years. Arroyo Grande Creek further south in Pismo Beach. Recommended by CDFC to do further studies.

Past evidence for adult numbers, I agree with Jerry Smith, are based an nothing really. I refer to the Titus report, which gives the widest breadth of information. Most *of* it's anecdotal. For example. on the San Lorenzo. in '65, it was estimated there were 23,000 adult fish returning based on observations of local field personnel.

Many of the descriptions in the past are very qualitative. Such as on Bear Creek, they say the stream contained adequate spawning and rearing

habitat. Local residents reported -- the creeks report a substantial run of steelhead each year, Fishery biology did not really become quantitative along the Central Coast until at Least the mid-seventies maybe into the eighties, except for Shapovalov and Taft's work early on. Further on in Sianne Creek (phonetically), when they started collecting data from electro-fishing, their densities were approximately the same as we found in 1981 for juvenile steelhead, and in '95 when I sampled, we had considerably higher densities. So, considerably higher than 85; 70.

In Beane Creek (phonetically) a tributary to Sianne densities, we have found in '81 were greater than the 70, and in '95 they were still higher. SO juvenile densities are at least as good as they were in 1970, what Jerry Smith said.

I was hired by Cambria Community Services District in San Luis Obispo County. I work on San Lorenzo Creek and San Simeon Creek. I drove from down there to come here tonight. The work in Titus' reports, for all of San Luis Obispo County, there's no estimates of adult steelhead populations in the past, none at all. so what do you base the decline on?

Also, I was misquoted in Titus in a personal

communication, so I suggest that you confirm anything you read in these reports based on personal communication.

The present estimates of adult densities are based on nothing. The Schoman (phonetically) report was referred to continually in your reports. You say you're basing your judgments on the best scientific data. Schoman came to me and Jerry Smith to ask us what we thought the adult densities were like these days. We both told him the same thing, there wasn't enough data to really ray much at that time, so he found someone who would give him some answers. Someone who was not a fisheries biologist, who gave him armchair estimates based on no evidence, and you use that in your reports. Is that good science?

Why didn't you refer to my estimates? I gave estimates for the San Lorenzo River. .Igave estimates for Soquel Creek, adults returning, based on a model and actual sampling data. I gave estimates for Santa Rosa Creek down south. Why weren't those in your report? Why did you use anecdotal armchair estimates from someone who was not a fisheries biologist?

My present estimates for steelhead returning to Santa Rosa Creek, based on '94 data, which was a drought year to Santa Rosa Creek, was 202 adult

steelhead. Why wasn't that in your report? And that's based on the best data we have and the best model I could Use.

Shapovalov and Taft, in the San Lorenzo system in 19 -- based on my model I estimated returning adults in 1981 just from mainstream juveniles, to be 1,506 in '81. In '94 I estimated 1,076. 1995, 1,784 adults returning. Why weren't those estimates in your report? I guess you don't think I'm credible. But you'll listen to someone who's not even a fisheries biologist.

There are several other experts in the room such as Dave Strig, people who have worked at the fish hatchery locally on Big Creek. They have -- they have feelings for what adult densities are like as well.

So I too would like for you to extend the time of comment, because I'm going to be doing fieldwork until the end of October, and I don't have time at present to get the comments in. So I would very much like for you to extend the comments for two months. The field season is now, for people who are actually doing fieldwork. Thank you.

MR. STRIG: I'm Dave Strig, Monterey Bay Salmon Trout Project. Some inference has been made tonight to the adult fish numbers in the San Lorenzo River. Some of that data has come from the Monterey Bay Salmon Trout Project's trapping records. Those traps on the San Lorenzo are at the Felton Diversion Dam. That dam does not operate 24 hours a day, doesn't operate the whale season. Sometimes that trap is only in operation a matter of a few days' in a year, and those numbers are being presented as being the total run.

They may only be -- in fact, last year I think our run was 328 fish and we had 21 days of trapping with volunteers. That 21 days *of* volunteer trapping is trapping that goes on in the evening, sometime

around 6:00 or 8:00 o'clock, and is out in the morning sometimes 4:00 to 6:00 o'clock, and that is the total operation of the trap. High water, the trap doesn't operate. Really low flows the fish aren't moving, the trap is not operating.

So there's lots of fish and lots of opportunity for fish to get past those traps without us seeing or counting them, but we are trapping at the peak *of* the flows when we can got in. After the City puts this diversion dam, is a trap for the City to impound water at the Lock Loman (phonetically) Storage Reservoir. Once they get the reservoir full, they discontinue using the dam, so it goes down.

So normally that trap was only in operation the first six rains or so in the winter. The dam was not up. It's an inflatable dam. Than the, dam goes up, and usually by mid-March the dam is down for the season. And the peak of our runs are usually in March. So we're not seeing the bulk of the fish. So the numbers Chat have been used, which were supplied by the Department of Fish and Game to NMFS, is the numbers that were caught at the trap, and they are a representative proportion of tho run in the trap, not tho total run, and I have done the same as Don with his samplings and just taken those numbers, figured

the numbers to days. And in the last year when Don thought we had about: 1,900 or so adult fish, my sufficient calculation came to about 2,020 something fish, so we're within pretty much ballpark figures. And the numbers are a little bit higher than vhat people are saying in some of the reports that are out there riqht now, Thank you.

MR. STERN: Anyone else like an opportunity to speak?

Well. we've had some excellent comments tonight. I really appreciate everyone's attendance and comments, and at this point I'd like to close the Monterey Public Hearing for steelhead. Thank you, very much.

(Time noted: 9:25 p.m.)

Subj: **STEP Information**
Date: **5/22/2005** 8:29:34 P.M. Pacific Standard **Time**
From: HMiller334
To: DennisM343
CC: big49erallen@juno.com, rebeccafitch@yahoo.com

Hi Dennis..... Here's the information you requested.... Best wishes, Hugh

PS. I will check with Becky Fitch on the availability of the DVD and, hopefully, send you one pretty soon. Is this your correct address: 210 Sherman Drive, Scotts Valley, CA 95066?)

-STEP Web Page Address.... http://www.steponline.info/

-STEP Description.....

SALMON & TROUT EDUCATION PROGRAM
-STEP-

PROGRAM DESCRIPTION:

The Salmon & Trout Education Program (STEP) has been developed to provide students with a chance to learn "hands on" about salmon steelhead and the habitats in which they live. The **K-12** program uses a thematic firsthand approach. offering teachers the tools and the id for integrating math, science. language, arts, etc. Students learn about salmon and steelhead life cycles. their habitat requirements and th problems and solutions to preserving these "indicator" species and the watersheds in which they live.

Teachers who wish to learn and participate in teaching STEP are offered a two-day workshop, which provides cooperative learning, utilizing actual lessons from the curriculum material. Teachers interact and learn together. exchanging ideas and experiences with each other and with the trainers who are teachers themselves. Highlights include demonstrations of favorite lessons and activities including an off site stre study and an overview of the classroom incubation activity. Teachers will learn actual methods and techniques for working with groups of students out on a stream and how to process streamside information back in the classroom. Teachers are provided with a copy of the orig STEP curriculum. revised lessons and packet of resource materials. For teachers who desire to participate in classroom incubation, guida is given in the materials required, actual set-up and the permitting process required to allow live wild steelhead eggs to be raised to fry stag and then be released into a local stream.

BACKGROUND:

The STEP program is part of the Monterey Bay Salmon and Trout Project (MBSBTP) which is a non-profit volunteer organization dedicated restoring the runs of native salmon and steelhead. The Salmon *8* Trout Education Program has been in existence since its pilot conceptio 1987. From this one classroom the program and a network of teachers has grown to over **120** classrooms. Classrooms from agricultura communities such as Gonzales and Salinas, or from the urban inner cites of San Jose or Santa Clara or from the coastal hills of Santa Cru and San Mateo counties have all joined together to form what is known as STEP. Several school districts have chosen to take STEP distr wide as well, allowing mentors and leaders to develop a scope and seauence within their own district. Teachers share and link informatio and experiences locally, regionally and world wide via the NET.

If you would like additional information about STEP, you may contact STEP's Educational Advisor, Barry Burl at **(831) 688-0187** or STEP's Coordinator Hugh Miller (408) **268-3945**