

BARNUM & HERMAN

AN ASSOCIATION OF SOLE PRACTITIONERS

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Linda A. Lucido
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May 11, 2001

VIA PERSONAL DELIVERY

Matt St. John
North Coast Regional Water Quality Control Board
5550 Skylane Blvd., Suite A
Santa Rosa, California 95403

Re: March 12, 2001, Public Solicitation of Water Quality Information, Redwood Creek

Dear Mr. St. John:

I represent Barnum Timber Company, hereafter "Barnum," a landowner in the Redwood Creek watershed in Humboldt County, California. Barnum has asked me to provide information to the North Coast Regional Water Quality Control Board regarding conditions in Redwood Creek in response to the public solicitation for information issued by your office on March 12, 2001.

Barnum has been concerned about the listing of Redwood Creek as an impaired water body under Section 303(d) of the Clean Water Act since its original listing in 1993. Since that time, Barnum has endeavored to gather and assimilate all available information relating to conditions in Redwood Creek. Accompanying this letter is the majority of that information. Barnum submits this information to assist you in making better informed decisions regarding Redwood Creek and other North Coast water bodies, particularly in deciding whether, in fact, Redwood Creek should continue to be listed as impaired. Please take the time to fully review the information provided. This compilation of information is likely the most comprehensive ever assimilated regarding conditions of a California water body and has been produced over a time spanning several years at a cost of several hundred thousand dollars.

Barnum believes, based upon the scientific information available, that Redwood Creek is not impaired by sediment or any other pollutant; that, in fact, Redwood Creek is today in as good a condition as has existed in the historical past and is a healthy and productive water body.

LISTING OF REDWOOD CREEK

Section 303(d)(1)(A) of the Clean Water Act (33 USC 1313(d)(1)(A)) provides in relevant part:

“Each state shall identify those waters within its boundaries for which the effluent limitations required by section 1311(b)(1)(A) and section 1311(b)(1)(B) of this title are not stringent enough to implement any water quality standard applicable to such waters.”

The effluent limitation required by 33 USC 1311 are limitations on point sources of pollution. Thus, if limitations on point sources are not adequate to achieve applicable water quality standards, the states must identify the water body as impaired. There are no point sources in the Redwood Creek watershed; therefore, any listing of Redwood Creek must be based solely on conditions resulting from non-point sources.

In October, 1993, the United States Environmental Protection Agency disapproved California's 303(d) list of impaired water bodies and added seventeen additional waters to the list including Redwood Creek. Redwood Creek was then listed due to pollution by sediment. The basis for the listing was that aquatic habitat was impaired by excessive sediment loading caused by historic logging activity which was causing anadromous fish populations to experience significant declines, partly as a result of fisheries habitat degradation. Since the original listing in 1993, California has continued to summarily retain Redwood Creek on the 303(d) list, on the same basis, in each of its subsequent updates.

The water quality standard applicable to sediment in Redwood Creek is contained in the Basin Plan for the North Coast Region. The water quality standard for sediment is as follows:

“The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.”

Even though this narrative standard is extremely vague,¹ in order for Redwood Creek to be listed as impaired due to sediment, there still must be substantial evidence in the record that the suspended sediment load and suspended sediment discharge rate have been altered so as to cause a nuisance or so as to adversely affect beneficial uses.

¹In fact, this standard may well be invalid for vagueness since it arguably confers virtually unlimited discretion on the administrative enforcement agency whenever there is any adverse affect, of any infinitesimal magnitude. Further, the standard refers only to suspended sediment, not stored sediment, the alleged cause of habitat degradation.

The evidence that was the administrative basis of the original listing and the subsequent re-listings of Redwood Creek was very limited and mostly anecdotal. The listing was based primarily on a report from the Humboldt Chapter of the American Fisheries Society and a letter from the U.S. Fish and Wildlife Service. Neither contained any scientific data regarding conditions in Redwood Creek. The American Fisheries Society letter amounted to little more than an opinion poll of the group's members without any specific data regarding sediment conditions in Redwood Creek. Similarly, the Fish and Wildlife Service letter was based solely on the opinions of various federal regulators and contained no data on the sediment conditions in Redwood Creek.

Conversely, the materials accompanying this letter provide a comprehensive set of both historical and current scientific data and information regarding conditions in the Redwood Creek watershed. This newly provided information should provide the regional and state boards with a much more comprehensive understanding of the actual conditions. The materials accompanying this letter show that Redwood Creek:

1. like all river systems, is naturally dynamic, in a constant state of change;
2. currently has sediment conditions well within the range of historical conditions and not significantly different from the sediment conditions that existed prior to significant timber harvesting occurring in the watershed and prior to the major floods that occurred between the mid 1950s and mid 1970s;
3. currently supports healthy and productive populations of anadromous fish with reproduction levels at or above the carrying capacity of pristine river systems, amongst the highest recorded for West Coast streams; and
4. is now subject to land management techniques that have substantially reduced the input and affects of human caused sediment.

The materials that accompany this letter provide comprehensive and compelling evidence that Redwood Creek is not an impaired water body. I believe that after an objective review of the information provided, you will conclude that Redwood Creek should be removed from the 303(d) list. The overwhelming bulk of scientific evidence supports this conclusion. There simply is no substantial evidence that suspended sediment loads or discharge rates are causing or threaten to result in any nuisance or adverse affect on the beneficial uses of Redwood Creek.

INFORMATION SUBMITTED

The information that accompanies this letter includes the following:

1. A compilation of the information in a report entitled, "*A Study in Change: Redwood Creek and Salmon*," published by CH2MHill, Inc. for the Redwood Creek Landowners Association in September, 2000. This peer reviewed report (see acknowledgments) presents a comprehensive discussion, with over 350 citations, of the conditions in Redwood Creek with particular emphasis on sediment conditions and fish populations. The materials cited in this report are included in the library that also accompanies this letter. The report concludes that Redwood Creek is not now impaired by sediment.
2. A letter from Donald W. Chapman to me dated September 21, 2000, offering his opinions regarding conditions in Redwood Creek. Mr. Chapman is regarded as the premier fisheries scientist with regard to West Coast salmonids. Based on his personal review of conditions in Redwood Creek, review of available literature on Redwood Creek and his vast experience, Mr. Chapman concludes that the production rate of salmonids in Redwood Creek is amongst the highest documented for streams along the Pacific Coast, and that objective review of the available information does not support a conclusion that fine sediments currently impair the aquatic habitat of Redwood Creek.
3. A library of reports, studies, photographs and other materials that includes 479 different sources of information related to conditions in Redwood Creek. Included are the materials cited in "*A Study in Change: Redwood Creek and Salmon*" as well as numerous additional materials. The library is organized in alphabetical order by the primary author's last name or a file name.
4. Reference lists to assist the reviewer in identifying the materials in the library by key words. Included is a spreadsheet listing those documents in the library that are related to a number of key subject areas. The relevant documents for each key word are listed by their individual reference ID number. Accompanying the key word spreadsheet are two reference lists showing the author, date, title, reference ID number and file name of each particular reference. One reference list is organized in order of the reference ID number. The other is organized in alphabetical order by author or file name. A reviewer should identify the reference ID number of the references associated with a particular subject area from the spreadsheet, locate the author, date and title from the reference list organized by ID number, and then locate the reference in the library in alphabetical order. If a particular document is not found in the library in alphabetical order, it is contained in a "library file." The library files are also shown on the reference lists and occur within the library in alphabetical order by file name. An example of where a file is necessary is where a scientific report is a part of a compendium of many reports by several authors.
5. An electronic bibliography contained in a database constructed using software entitled "*Reference Manager, Version 9*." The data base file is entitled "redwood creek file2.rmd," and is included on the computer disks that accompany this letter. If the reviewer has access to this particular software, it will be very helpful in review. I can provide assistance in utilizing the database.

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6. A report entitled "*Redwood Creek Rotary Screw Trap Downstream Migration Study Redwood Valley, Humboldt County, California April 4 – August 5, 2000*," prepared by Michael Sparkman for Doug Parkinson. This report documents the results of the operation of a rotary screw trap in Redwood Creek by the Redwood Creek Landowners Association in cooperation with the U. S. Fish and Wildlife Service during the Spring and Summer of 2000 to estimate the population of downstream migrating salmonids. The report documents large numbers of out migrating chinook salmon and steelhead trout (much higher numbers than other rivers sampled). This study is continuing in 2001, and a report on this year's results will be available in the Fall.

7. A spreadsheet created in "*Microsoft Excel*" that contains the data that was generated from the monitoring of the rotary screw trap in Redwood Creek during 2000. The spreadsheet is entitled "RC RST 2000.xls," and is included on the computer disks that accompany this letter. Additionally, I have included an Excel spreadsheet that contains the data gathered to date in 2001 from the monitoring of the rotary screw trap. This spreadsheet is entitled "RC RST 2001.xls." I can provide assistance in utilizing the spreadsheet data.

If there are any questions regarding the information provided, please contact me. My address and telephone numbers are shown on the letterhead. My e-mail address is "tmh@reninet.com." As requested in the public solicitation, I have included two copies of all documents and computer files. I have sent two complete sets of this letter and all the accompanying materials. Each set consists of an envelope and four boxes.

Thank you for the opportunity to assist you in making fully informed decisions.

Sincerely,


Thomas M. Herman

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Accompanying Materials

1. "*A Study in Change: Redwood Creek and Salmon* (enclosed with this letter)
2. Chapman letter (enclosed with this letter)
3. Redwood Creek Library (contained in four boxes delivered with this letter)
4. Reference Spreadsheet and Reference Lists (enclosed with this letter)
5. Electronic Bibliography (enclosed with this letter)
6. *Redwood Creek Rotary Screw Trap Downstream Migration Study Redwood Valley, Humboldt County, California April 4 – August 5, 2000* (enclosed with this letter)
7. Electronic Fish Data (enclosed with this letter)

cc: Barnum Timber Company (w/o enclosures)