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303 (d) Deadline: 1/31/06

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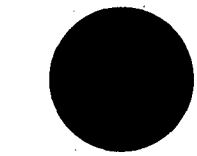

January 17, 2006

VIA EMAIL

Selica Potter
Acting Clerk to the Board
State Water Resources Control Board
Executive Office
1001 I Street, 24th Floor
Sacramento, CA 95814

RE: REVISION TO FEDERAL CLEAN WATER ACT SECTION 303(d) LIST OF WATER QUALITY LIMITED SEGMENTS FOR CALIFORNIA

REDWOOD CREEK, HUMBOLDT COUNTY

Dear Board Members:

I represent Barnum Timber Company, hereafter "Barnum," a landowner in the Redwood Creek watershed in Humboldt County, California. I am providing information to the State Water Board regarding conditions in Redwood Creek in response to the public solicitation for comments and information on proposed revisions of the federal Clean Water Act section 303(d) list of water quality limited segments.

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. 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 nearly a decade at a cost of several hundred thousand dollars.

We understand that the Board and its staff failed fully to review, consider and employ Barnum's submission in 2001, and claimed that it found the submission confused and not wholly user friendly. Our submission in 2001 was orderly and included an annotated index. We trust that this effort will ensure that full and proper consideration will be given to this submission during this proceeding.

By way of updating and strengthening the evidence in support of Barnum's 2006 submission I have attached the most recent report by the California Department of Fish and Game Anadromous Fisheries Resource Assessment and Monitoring Program documenting the salmonid abundance and productive capacity of Redwood Creek. The evidence provided in this report of the considerable abundance of salmonids being produced in Redwood Creek does not suggest or support a designation of impairment from either sediment or temperature for Redwood Creek.

Barnum believes, based upon the scientific information available, that Redwood Creek is not impaired by sediment, temperature 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 REDWOD 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, 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.

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.

The Board's case for its "temperature" listing of Redwood Creek is similarly flawed. The *entire* evidence supporting the Board's 2002 Maximum Weekly Average Temperature ("MWAT") of 14.8 degrees Celsius is a single study of temperatures of rivers in Washington, Oregon, and Idaho – none in California – all scores or hundreds of miles north of Redwood Creek. No evidence exists to suggest that the MWAT is even achievable, much less sustainable, in Redwood Creek.

Conversely, the materials accompanying and incorporated by reference into 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 and incorporated by reference into 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;

4. is now subject to land management techniques that have substantially reduced the input and affects of human caused sediment; and,

5. never could under natural circumstances achieve the MWAT prescribed for it.

The materials that accompany this letter and are incorporated by reference 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.

The information that was previously submitted to the North Coast Regional Water Quality Control Board by Barnum regarding Redwood Creek during the previous 303(d) listing cycle is voluminous. I spoke personally with your staff member Dorena Goding on November 28, 2005, and she informed me that the entire Barnum record supporting delisting of Redwood Creek already submitted to the State Water Board would be included in the current 2006 listing cycle by referencing it herein, as a convenience to the State Water Board to avoid redundant materials being submitted. By way of reminder and guide, the Barnum's 2001-02 cycle submission included:

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 acknowledgements) 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 submitted by Barnum in its previous submission. The report concludes that Redwood Creek is not now impaired by sediment.

2. A letter from Donald W. Chapman to Mr. Thomas M. Herman 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 material 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 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 provided by Barnum. If the reviewer has access to this particular software, it will be very helpful in review. I can provide assistance in utilizing the database.

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 that large numbers of out migrating Chinook salmon and steelhead trout (much higher numbers than other rivers sampled). This study has continued annually, and additional data is available from the California Department of Fish and Game.

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 spread sheet is entitled "RC RST 2000.xls," and is included

on the computer disks that were previously submitted by Barnum. Additionally, an Excel spreadsheet that contains data gathered during 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.

New information that accompanies this letter includes the following:

1. A report entitled "*2003 Annual Rerport Upper Redwood Creek Juvenile Salmonid Downstream Migration Study, 2000-2003 Seasons Project 2a5,*" prepared by Michael D. Sparkman for the Anadromous Fisheries Resource Assessment and Monitoring Program dated January 27, 2004. Please note that the downstream salmonid migrant monitoring has continued in Redwood Creek annually to this day. Final reports have not yet been distributed by the California Department of Fish and Game, but should be available shortly. Also, draft reports are available. I can assist the State Water Board in obtaining data and draft reports from the California Department of Fish and Game.

If there are any questions regarding the information provided, please contact me. My address and telephone numbers are shown on the letterhead. My email address is s_horner@cox.net.

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

Sincerely,

Stephen R. Horner
General Manager

SRH:sh

Attachments:

1. *2003 Annual Rerport Upper Redwood Creek Juvenile Salmonid Downstream Migration Study, 2000-2003 Seasons Project 2a5*