October 16, 2005

Sharon Stohrer
State Water Resources Control Board
P.O. Box 2000
Sacramento, CA 95812-2000

Comment on the Notice of Preparation for Upper North Fork Feather River (FERC #2105) Water Quality Certification Environmental Impact Report (EIR)

Thank you for the opportunity to comment on your preparation of Upper North Fork Feather River (FERC #2105) Water Quality Certification EIR. I am a retired fisheries scientist (Certified by the American Fisheries Society) with more that 40 years of experience in the field of fisheries and I support the State Water Resources Control Board's (SWRCB) efforts to restore the historic coldwater habitat once found in the North Fork Feather River. I am writing to request that your analysis of the alternative measures needed to mitigating for lost coldwater habitat in the North Fork Feather River should include structural modifications to the Lake Oroville Project (FERC 2100). Structural modifications at Lake Oroville directed toward improving downstream coldwater habitat would substantially reduce the significant environmental impacts related to FERC 2105 and address the cumulative impacts associated with all hydroelectric projects constructed along the North Fork Feather River.

Over the past 100 years, construction of hydroelectric projects in the Feather River watershed have changed the magnitude and timing of seasonal runoff, altered historic water temperature regimens to the detriment of the coldwater fish, and prevented anadromous fish from accessing historic spawning habitat. The cumulative impacts to the aquatic environment have been most profound in the North Fork Feather River. From 1908 to the present there have been seven major hydroelectric projects constructed in the North Fork Feather River which have significantly eliminated the coldwater fishery that historically existed in this river reach (see Attachment 1). In addition, construction of the Lake Oroville Project in the mid 1960's continues to threaten the long-term viability of the coldwater anadromous fishery still remaining in the Feather River.

Downstream of Lake Oroville there still exists a viable coldwater anadromous fishery that is remnant of the fishery that once historically existed upstream in the North Fork Feather River - Spring-run Chinook salmon and steelhead trout. Both the Feather River Spring-run Chinook salmon and steelhead are Listed under the Federal Endangered Species Act. In addition, the habitat downstream of Lake Oroville has recently been designated as "Critical" habitat under the Federal Endangered Species Act. Protecting and expanding this existing coldwater habitat would benefit adult Spring-run and expand the

nursery habitat needed by juvenile steelhead. The coldwater needed to accomplish habitat restoration is available in Lake Oroville but not always accessible because of operational constraints. Construction of a coldwater temperature device (CTD) similar to the one now operating in Lake Shasta would allow access to the coldwater without the necessity of bypassing power production. The Department of Water Resources (DWR) is reluctant to consider a CTD because of the expense but they may be more open to this possibility if they had financial support from Pacific Gas and Electric Company (PG&E). A PG&E/DWR partnership addressing water temperature problems in the Feather River will not only solve one of the critical issues related to the protection of endangered coldwater species but it would also help address the cumulative impact issues associated with a century of hydroelectric development in the North Fork Feather River.

Respectfully,

Mike Meinz
Fishery Scientist

Attachment:

cc:

Dr. Alan Lloyd
Agency Secretary
California Environmental Protection Agency
P.O. Box 2815
Sacramento, CA 95812-2815

Mr. Mike Chrisman
Agency Secretary
California Resources Agency
1416 Ninth Street, Suite 1311
Sacramento, CA 95814

State Senator Sam Aanestad
200 Providence Mine Road, Suite 108
Nevada City, CA 95959

State Senator Dave Cox
2140 Professional Drive, Suite 140
Roseville, CA 95661

State Assemblyman Rick Keene
1550 Humboldt Road
Chico, CA 95973

State Assemblyman Doug LaMalfa
2865 Churn Creek Road, Suite B
Redding, CA 96002

State Assemblyman Tim Leslie
3300 Douglas Blvd. Suite 430
Roseville, CA 95661

Attachment 1

History of North Fork Feather River Hydroelectric Development

1850

A major Anadromous Fishery existed in the NFFR

Spring-run Chinook salmon could ascend up the NFFR to the vicinity of a village called Seneca [About 80 miles upstream from the City of Oroville]. A 10 foot water fall [Salmon Falls] acted as a barrier except during high flow periods. During high flow periods, some salmon were able to get past the barrier and reach Big Meadow [Lake Almanor]. Steelhead may have also been present.

1908 – 1927

Big Bend Dam & Powerhouse: Construction by Western Power Company; 1908 – 1914. The project utilized the existing mining tunnel to deliver water to the Big Bend Powerhouse. Early in 1968 the Powerhouse was covered by the rising waters of the state's Oroville reservoir.

Dam Height - 61 feet.

Diversion Unscreened

1930 - A fish ladder was constructed in Big Bend Dam. The ladder allowed some passage of anadromous fish until the Poe Project was built in 1958 – 50. By then, estimated number of anadromous fish spawning upstream of the future Oroville Dam site was around 2000 Spring Run Chinook, 3500 Fall Run Chinook, and 500 steelhead [1964-67 DFG trap records].

Max Diversion Capacity – 3,000 cfs

Canyon Dam (Lake Almanor): Constructed by Western Power in 1914. The Dam was expanded in 1916, 1927, 1963 & 1997. Canyon Dam was constructed for the purpose of storing runoff and releasing it during the summer months for power production at Big Bend.

FERC 2105

Dam Height – Originally the height was 71 feet. The present height is 135 feet

Present Storage Capacity – 1,142,251 Acre Feet

Max. Release from NFFR at Dam – From 1914 to 1949, releases were from 2,000 to 3,000 cfs for power production at Big bend Powerhouse. Presently the required release for resource protection is 35 cfs. The historic unimpaired base flow was around 600 cfs.

Present Minimum Flow – 35 cfs

Historic Base Flow – 600-700 cfs

Butt Valley Dam, Powerhouses and Prattville Intake: Constructed in 1921 and modified in 1997

Caribou Powerhouse #1 – Constructed in 1921
Max Capacity – 1,114 cfs
Caribou Powerhouse # 2 – Constructed in 1958
Max Capacity – 1, 464 cfs

FERC 2105

Butt Valley Creek Tributary to NFFR

Dam Height - ?

Dam Storage – 49,900 Acre Feet

Present Minimum Flow – Zero

Historic Base Flow – 35 cfs

1928 – 1948

Bucks Creek Powerhouse: PG&E completed construction on Bucks Creek in March 1928. It was for some years the highest head in the Western Hemisphere. Water here drops a vertical distance of 2,561 feet before hitting the turbine blades.

FERC 619

PG&E/Western Power Merge: 1935 - PG&E takes over Western Power

1949 – 1985

Cresta Dam & Powerhouse: Constructed 1949-1950

FERC 1962

Diversion Unscreened & Unladdered

Minimum Flow [1950] – 50 cfs
[See 7/28/00 Rock Creek Cresta Agreement for Revised Flows]

Historic Base Flow – 900 cfs

Maximum Diversion Capacity - 3,500 cfs

Rock Creek Project: Constructed 1950

FERC 1962

Diversion Unscreened & Unladdered

Minimum Flow [1950] – 100 cfs May through October
50 cfs November through April
[See 7/28/00 Rock Creek Cresta Agreement for Revised Flows]

Historic Base Flow – 900cfs

Maximum Capacity – 2,900 cfs

POE Dam & Powerhouse: Construction 1957 -1958

FERC 2107

Diversion Unscreened & Unladdered

Present Minimum Flow – Minimum release from Poe Dam of 25 cfs and an additional release if necessary to maintain a minimum of 50 cfs at the Pulga gaging station which is located downstream of Mill and Flea Valley Creeks.

Historic Base Flow – 900 cfs

Maximum Diversion Capacity – 3,700cfs

Beldan Dam - Constructed 1958

Beldan Ph - Constructed in 1969
Oak Flat Ph – Constructed in 1985

FERC 2105

Diversion Unscreened & Unladdered

Present Minimum Flow through Oak Flat Ph – 140 cfs May thru October
60 cfs November through April

Historic Base Flow – 600 cfs

Maximum Diversion Capacity – 2,000 cfs

1965

Oroville Dam: Construction 1957 -1965

FERC 2100

Diversion Unscreened & Unladdered

Dam Storage Capacity – 3,540,000 Acre feet