Statement of Qualifications of Scott B. Engblom

Scott B. Engblom 1865 Channel Drive Ventura, CA 93001 TEL Home: (805)-653-2597 TEL Cell: (805)-216-5135 E-mail: sengblom@cachuma-board.org

Education

<u>Humboldt State University – Arcata, CA; 1988-1993</u> Bachelor of Science Degree – Fishery Biology

<u>Ventura Community College – Ventura, CA; 1984-1988</u> Business Emphasis; 1988

Buena High School, Ventura, CA; 1982-1984 High School Diploma, 1984

Professional Experience

<u>Project/Fisheries Biologist</u> – (April 1994-Present) Cachuma Operation and Maintenance Board 3301 Laurel Canyon Road Santa Barbara, CA 93105 Supervisor: Kate Rees (805)-569-1391

I was the project/fisheries biologist working as a consultant for the project from April 1994 through August 1998. Hired on as a permanent employee by the Cachuma Operation and Maintenance Board August 1998 to the present conducting the same duties described below.

Since 1994, I have been the project/fisheries biologist for the Santa Ynez Technical Advisory Committee. The project involves documenting and quantifying the seasonal timing and numbers of adult and juvenile steelhead/rainbow trout and other fish species migrating into and out of the mainstem Santa Ynez River and major tributaries. Additional goals accomplished include documenting the geographic location, timing, and numbers of trout and other fish species spawning and rearing within the mainstem and tributaries. Sampling methodologies include use of weir/fyke barrier traps, electrofishing, and direct observation techniques. Also preform stranding surveys, spawning surveys, passage barrier surveys, fish rescues, genetic tissue sampling, water quality surveys, limnological surveys in Lake Cachuma and the Santa Ynez Lagoon, flow measurements, and habitat evaluation techniques. The focus of the studies is on

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monitoring federally endangered southern California steelhead/rainbow trout (*Oncorhynchus mykiss*). Supervise staff of 1-4 biologists and biotechnicians, and responsible for daily field, laboratory and field operations. Responsibilities include performing field surveys, data analysis, report writing, budget preparation and management, personnel recruitment, personnel management, training of staff, public outreach presentations, quarterly presentations to the COMB Board and Technical Advisory Committee. Prepared and assisted in the preparation of numerous study plans designed to increase understanding of southern steelhead/rainbow trout behavior and habitat preferences. Additional responsibilities include coordination of study activities with county, state, federal agencies, conservation organizations, and private landowners. Responsible for implementing management and enhancement actions, monitoring habitat conditions, and performance of management actions. Regularly consult with National Marine Fisheries Service and other resource agencies for environmental compliance of management projects including preparation of necessary permit applications and monitoring reports.

<u>Scientific Aide</u> – (July through November1992, July through October 1993) California Department of Fish and Game Inland Fisheries Division 1701 Nimbus Road, Suite C Rancho Cordova, CA Supervisor: David Lentz (916)-355-0101

Worked as a team member in a statewide inventory crew monitoring and evaluating wild trout stream throughout California. Conducted direct observation/snorkel surveys. Responsible for fish species identification and enumeration of each species over various lengths of stream. Using backpack and boat electrofishers, conducted quantitative trout population estimates using the three-pass removal method. Utilized mark/recapture methods using boat electrofisher. Collected length, weight, and scale samples from selected size ranges of captured fish. Performed physical habitat and water quality measurement at each site. Responsible for explaining safety rules to volunteers when working in water with electricity. Demonstrated ability to work in a team player during long days and adverse weather conditions. Wrote reports and analyzed data as needed. Responsible for maintaining good relations with the public and other resource agencies.

<u>Biological Technician</u> – December 1992 through February 1993 Humboldt State University Arcata, CA Supervisor – Ross Taylor

Assisted in monitoring spawning migration of coastal cutthroat trout (*Salmo clarki clarki*) and steelhead at McDonald Creek, tributary to Stone Lagoon, Humboldt County. Collected length, weight, and scale samples from migrating fish. Applied Floy anchor tags to selected size classes of captured fish. Recorded water quality and flow on a daily basis. Responsible for weir and camp maintenance. Demonstrated ability to work long hours under adverse weather conditions.

<u>Biological Technician</u> – (July through August 1990-91) Entrix, Inc Walnut Creek Supervisor: Tom Keegan (916)-782-9100 (Employed now with ECORP Consulting)

Conducted aquatic invertebrate sampling. Electrofished random size ranges of brown trout (*Salmo trutta*) and rainbow trout and removed their stomach contents using non-lethal methods, preserved contents for later identification. Collected aquatic invertebrate samples in benthic areas using Serber samplers. Recorded habitat type and flow at each site.

Using backpack electrofishers, conducted quantitative trout population estimates using the three-pass removal method. Obtained length, weight, and scale samples from selected size ranges of captured trout. Performed physical habitat and water quality measurements at each site. Demonstrated ability to perform work under adverse weather and trail conditions. Displayed ability to work well with others in a team setting. Maintained and repaired equipment when necessary.

<u>Seasonal Aide</u> – August through November 1990-1991 California Department of Fish and Game 5341 Ericson Way Arcata, CA 95521 Supervisor – Mike Lau (707)-822-0328

Monitored the migration and harvest of Chinook salmon (*Oncorhynchus tshawytscha*), Coho salmon (*Oncorhynchus kisutch*), and steelhead on the Trinity River using an Aframe Alaskan-style weir trap. Collected lengths and scale samples and applied spaghetti tags to migrating fish, assessed general condition of all salmonids passing through the trap. Performed carcass and snorkel surveys upstream of camp 3-6 days per week. Conducted daily inspections of trap site to insure trap and weir integrity, maintained camp and trap site, and maintained good relations with general public.

Reports/Publications

Engblom, S.B. 1994. Santa Ynez River Technical Advisory Committee Annual Report and project documents. 1995

Engblom, S.B. 1995. Santa Ynez River Technical Advisory Committee Annual Report and project documents. 1996

Engblom, S.B., Hansen, C. 1997. Synthesis and analysis of information collected on the fishery resources and habitat conditions of the lower Santa Ynez River: 1993-1996.

Engblom, S.B. 1997. Santa Ynez River Technical Advisory Committee annual report and project documents, 1996-1997. 1998

Engblom, S.B. 1999. Santa Ynez River Technical Advisory Committee annual report and project documents, 1998-1999. 2000

Engblom, S.B. 2001. 2001 Lower Santa Ynez River steelhead studies – annual report. 2001

Academic Research

- Benthic macroinvertebrate study identifying aquatic invertebrate species within the lower Santa Ynez watershed (ongoing)
- Back-calculated length at age paper using scales from captured adult and smolting steelhead (ongoing)

Certifications/Permits

- Swiftwater Rescue Technician I, 1993
- CPR and Medic First Aide 2003
- State of California Scientific Collection Permit (#801009-02)
- Federal endangered species section 10 permit to collect data on southern California steelhead in the Santa Ynez River
- Licensed state of California professional hunting guide 2001-present