



**Cachuma Project Hearing, Phase 2**  
**United States Bureau of Reclamation Applications 11331 and 11332**  
**Statement of Mark H. Capelli**

**Qualifications**

I am the Area Recovery Coordinator, within the Protected Resources Division of the Southwest Region of the National Marine Fisheries Service, for the Southern California and South-Central California Steelhead Evolutionary Significant Units. The purpose of my testimony is to summarize the historic and current status of the steelhead resources of the Santa Ynez River system.

**NOAA Fisheries**

In August 1997 NOAA Fisheries listed the steelhead in southern California as endangered. The original listing included all the coastal drainages from the Santa Maria River (Santa Barbara County) to Malibu Creek (Los Angeles County), including the Santa Ynez River up to the Bradbury Dam (Santa Barbara County). Subsequently, NOAA Fisheries extended the listing south to include the coastal drainages to the U.S.-Mexico border. Listed steelhead from the Santa Maria River, inclusive, to the U.S.-Mexico border were included in the Southern California Evolutionarily Significant Unit (ESU) based upon similar genetic, physiological, behavioral, and other environmental characteristics.

In listing southern California steelhead as endangered, NOAA fisheries made the following observation regarding the Santa Ynez in its final rule (August 18, 1997): "Estimates of historical (pre-1960s) abundance for several rivers in this ESU are available: Santa Ynez River, before 1950, 20,000 to 30,000 (Shapovalov & Taft 1954[sic]; CDFG, 1982, Reavis, 1991, Titus et al. In press)" "The present estimated total run size for 6 streams (Santa Ynez River, Gaviota Creek, Ventura River, Matilija Creek, Santa Clara River, Malibu Creek) in this ESU are summarized in Titus et al., and each is less than 200 adults." "No time series of data are available within this ESU to estimate population trends. Titus et al. summarizes information for steelhead populations based on historical and recent survey information." "The primary reason for concern about steelhead in this ESU are the widespread, dramatic declines in abundance relative to historic levels." P. 43949

Prior to as well as subsequent to the listing of southern California steelhead, including those in the Santa Ynez River system, as endangered, NOAA Fisheries conducted a series of status reviews of westcoast salmon and steelhead.

The 1996 Status Review of West Coast Steelhead from Washington, Idaho, Oregon, and California noted that "Steelhead populations between the Santa Ynez River and Malibu Creek show a predominance of a mitochondrial DNA type (ST8) that is rare in populations to the north. Allozyme data indicate that two samples from Santa Barbara County are genetically among the most distinctive of any natural populations of coastal steelhead yet examined" P. 66

The 1996 Status Review also reported that: "Estimates of historical (pre-1960s) abundance are available for several rivers in this ESU (Table 23): Santa Ynez river before 1950, 20,000-30,000; Ventura River, pre-1960, 4,000-6,000; Santa Clara River, pre-1960, 7,000-9,000; Malibu Creek, pre-1960, 1000." "The present total run size of 6 streams in this ESU were summarized by Titus et al (in press); all were less than 200 adults (Table 24, Fig 26)" The estimated total run size for the Santa Ynez River was reported at less than 100 adults per year, a decline of greater than 99%. P. 143

In 2003, NOAA Fisheries prepared an updated of the Status Review of West Coast Steelhead in California, Oregon, and Washington, including the Southern California steelhead Evolutionarily Significant Unit, of which the Santa Ynez River is a part. The draft report indicates that: "It seems likely that the larger river systems were originally the mainstay of the [Southern California] ESU. Large river systems that harbored steelhead populations in the past are (from north to south) the Santa Maria, Santa Ynez, Ventura, Santa Clara, Los Angeles, San Gabriel, Santa Ana, and possibly the San Diego. Of these eight systems, the data suggests that steelhead currently occur in only four – the Santa Maria, Santa Ynez, Ventura, and Santa Clara." The basic conclusion reached as a result of the updated Status Review is that the Southern California ESU remains at risk of extinction. [no pagination]

### **California Department of Fish and Game**

The California Department of Fish and Game personnel have made estimates of the steelhead runs in the Santa Ynez River prior to the construction of Bradbury Dam (1953), but after the construction of Gibraltar Dam (1920) and Juncal Dam (1926).

In a report prepared in 1945 by Leo Shapovalov, the Senior Anadromous Fisheries Biologist for the California Department of Fish and Game's Bureau of Fish Conservation, the Department noted that: "From a fisheries viewpoint, the Santa Ynez River is of major importance as the spawning grounds and nursery of the largest steelhead run in southern California, and the source of the majority of the game fish stocked in the waters of Santa Barbara, Ventura, and San Luis Obispo counties." [no pagination]

Regarding the estimated annual run-size of adult steelhead in the Santa Ynez River in the 1940's following the construction of the two upstream Gibraltar and Juncal Dams, but

prior to the construction of Bradbury Dam in 1953, the 1945 Department of Fish and Game report indicated that: "The size of the spawning run is indicated by the estimate of an experienced employee of the California Division of Fish and Game that the numbers of adults are compare to those at Benbow Dam on South Fork of Eel River, where from 13,000 to 25,00 fish have been counted each year during the past six years." [no pagination]

The 1945 Department of Fish and Game report also indicates the that "The very large size of the run is indicated by the fact that in 1944 the California Division of Fish and Game rescued 1,036,980 young steelhead from the partially dry bed of the Santa Ynez river above the site of the proposed Cachuma Dam." The report noted further that "These fish probably represented only a small fraction of the young steelhead produced, since large numbers migrated downstream prior to the start of rescue operations or remained in localities inaccessible to the rescue crews." [no pagination]

In 1996 the Inland Fisheries Division of the California Department of Fish and Game issued a Steelhead and Restoration and Management Plan for California. This report again reaffirmed the size and importance of the steelhead runs in the Santa Ynez River prior to the construction of Bradbury Dam in 1953: "Historically, the Santa Ynez River supported the largest steelhead run in southern California (Shapovalov 1945)." P. 194

In a 2001 survey of the history and status of steelhead in California coastal drainages south of San Francisco Bay, Robert G. Titus, et al. reported that: "The Santa Ynez River probably supported the largest steelhead run in southern California, and was famous for its steelhead sport fishery (e.g., Mears 1947). In an early account, Holden (1910) related the popularity of the lower Santa Ynez for catching steelhead as large as 9 kg, and how these fish would ascend the stream 65-80 km to spawn in the upper drainage where resident rainbow trout were also abundant (see also Fry 1938)." P. 249

Titus also noted that: "No counts were ever made of the adult steelhead run in the Santa Ynez, but as Shapovalov (1944a) indicated, the 1,036,980 juvenile steelhead rescued form the drying main stem in 1944 suggested a very large run. This count would serve as the basis for an underestimate of the adult run size as an additional proportion of the juvenile population went uncounted: fish which migrated to the lagoon before rescue began, those which survived in the remaining live portions of the river system and those which presumably died in the desiccated lower reaches of tributaries." P. 251

### **U.S. Bureau of Reclamation**

The U.S. Bureau issued a report and findings on the Cachuma Unit of the Santa Barbara County Project in 1945 and 1948. The reports incorporated assessments of the Santa Ynez River steelhead runs by the U.S. Fish and Wildlife Service and the California Department of Fish and Game.

The 1945 Bureau Report incorporated the U.S. Fish and Wildlife Service assessment of the "Effects on Fish and Wildlife Resources for the Propose Projects in Santa Barbara

County, Calif.". Regarding the effects of the proposed water supply development on the Santa Ynez River, the report noted that: "Cachuma Dam will remove from availability about two-thirds of the best spawning grounds in the Santa Ynez River system." P. 41

The Bureau Report noted further that: "The Santa Ynez River is the best steelhead (*Salmo gairdnerii*) river in southern California. Not only does the run provide fine angling in the Santa Ynez River, but young steelhead from this river are used to stock other streams, less favored with spawning areas, in Santa Barbara, Ventura, and San Luis Obispo Counties. In 1944, over 1,000,000 young steelheads were rescued from drying portions of the Santa Ynez and distributed to the Santa Ynez and other streams. Nine-two thousands were planted in the Santa Maria River. The run of adult steelheads, providing splendid fishing in the lower 34 miles of river, is estimated to average 20,000 annually. These large gamey fish, comparable in size and fighting qualities to the Atlantic salmon, are worth conservatively \$10 [in 1945 dollars] apiece, both as sport fish and as brood stock for this three-county conservation program. This yields an annual value of \$200,000 [in 1945 dollars], which capitalized at 4 per cent indicates a total value of \$5,000,000 [in 1945 dollars]." P. 118

Regarding the recreational use of the Santa Ynez steelhead fishery, the Bureau Report noted that "The latest available data show that in 1941, 4,375 anglers took 262,000 trout including the above-mentioned adult steelhead in Santa Barbara County. The Santa Ynez and the Sisquoc (tributary to the Santa Maria) are the streams of greatest importance. It is difficult to appraise the value of this fishing for immature and resident trout, but it is comparable to \$5,000,000 [in 1945 dollars] for adult steelheads. The greater part of the Santa Ynez system and a large part of the Santa Maria Basin lie in the Los Padres National Forest and their sport fisheries constitute one of the chief attractions to visitors." P. 118

The 1948 Bureau Report also noted that: "The Fish and Wildlife Service has estimated that construction and operation of Cachuma unit will result in an annual loss of \$80,000 [in 1948 dollars] due to the reduce spawning grounds available to steelhead and an annual benefit of \$10,000 [in 1948 dollars] from the increased fish production in the reservoir. This represents a net annual loss of \$70,000 [in 1945 dollars]" P. 36

## Summary

The available historic information on the Santa Ynez River indicates that it was a major steelhead river in southern California, perhaps the largest, which prior to the construction of Bradbury Dam in 1953, supported an adult run of steelhead that numbered in the thousands. This run of steelhead supported an important recreational fishery that served regional as well as local anglers. The current status of the Santa Ynez River steelhead runs is substantially depressed, probably numbering less than 100 sea run adults annually, and is included in the Southern California steelhead evolutionarily Significant Unit, which is considered at a high risk of extinction and consequently listed as endangered under the Federal Endangered Species Act.

