Steelhead Fly Fishing:
FIRST OF A FOUR PART SERIES!
Recapturing a steelhead stream:

The Ventura River

By MARK CAPELLI

EDITOR'S NOTE: Recently I heard that there was an effort underway to re-establish runs of steelhead in the Ventura River, only 40 miles north of Los Angeles. I contacted Mark Capelli, a member of the Ventura County Fish and Game Commission, and asked him to write the following story. The story is remarkable, for it documents the steady environmental decline of a once healthy steelhead stream and what is now being done to bring it back.

I have just learned that a group "Friends of the Ventura River" has been formed to work toward that goal. Funds are needed for printing, telephone calls, etc. If after reading the following article you would like to donate to this worthy cause write: Friends of the Ventura, 63 South Olive St., Santa Barbara, Ca. 93101.

CALIFORNIA STEELHEAD FISHERMEN normally associate sea-run rainbows with the great river systems of the north coast. Few would consider angling for steelhead in waters south of San Luis Creek, Santa Barbara County. Yet steelhead once ranged far down the coast and provided southern California anglers with winter steelheading well into the present century.

Three rivers in particular offered excellent steelheading in southern California: the Santa Ynez in Santa Barbara County, and the Santa Clara and Ventura in Ventura County. There were numerous smaller streams running as far down as the Mexican border which enabled local anglers to escape from the crowd, but those three rivers provided the most consistent southland steelheading.

Today, dams, diversions, flood control projects and pollution generated by southern California's burgeoning population have decimated steelhead populations in most of these streams. A recent survey by the California Department of Fish and Game suggests that the Ventura River, about eighty miles north of Los Angeles, is probably the southermost stream in California which still supports a steelhead run, though the number of fish presently migrating up the Ventura River hardly constitutes a viable steelhead fishery. This situation could change, however, if current efforts to rehabilitate the Ventura runs are successful.

The Ventura River is typical of the many short run coastal streams of California. Beginning in the transverse range, its headwaters flow for about sixteen miles through steep, rugged chaparral country before turning into a broad, flat valley and running another sixteen miles to the Pacific Ocean. Like nearly all California coastal streams, the Ventura River forms a brackish lagoon at its mouth which is subject to tidal action when not closed by a sandbar during the summer months.

There are four main tributaries - the Mailliua, San Antonio, Coyote and Santa Ana Creeks - which add another sixty miles to the river system and once served as the river's prime steelhead spawning and nursery grounds. Rainfall in the basin averages from fifteen inches at the river's mouth to thirty-five inches at the headwaters. Characteristically, flows are subject to extreme fluctuations, the river often running a city-block wide during the winter while sections frequently go dry or retain little surface flow during the late summer months.

References to the Ventura River stretch back to the early seventeenth century journal entries of the Spanish Explorer, Sebastian Vizcaino, who was first invited to come ashore near the present site of the city of San Buenaventura by an old man giving "arms that we must go to his land, where they would give us much food and water, for there was a river." The invitation proved fatal, first for the unsuspecting native, and eventually for the steelhead fishery.

When the Spanish finally founded Mission San Buenaventura near the mouth of the river in 1782, the first major diversion of its water via an aqueduct was begun. Later with the coming of the Americans, the ex-Mission lands became the site of a small farming settlement. With the discovery of oil in 1916, the settlement was soon transformed into a small city. In the wake of these developments came the now familiar mill-over effects or urbanization: increased diversions, dams, flood control projects and pollution.

Historical records indicate that the Ventura River provided a reliable food source for the native Chumash Indians and early settlers, and later, regular sport for coast and steelhead anglers.

Travelling through southern California in 1913, James Stansel Chase reported a "fine stream flows into the ocean at the west end of the city, and from May to October the breakfast tables of Ventura need river go trout." Twenty-seven years later, Donald H. Fry writing in the April issue of California Fish and Game noted that the Ventura River was one of the few streams in southern California having trout down to the ocean. Perhaps the most vivid recollection of the steelheading afforded by the river was recorded in a letter to James Roads written by Edgar Henke, a native of San Buenaventura and currently Co-Chairman of the California Committee of Two Million.

"The Ventura River," Henke recalled,
stories told. It’s all part of the adventurous past, and a very poorly written part of our history."

Low water, sometimes the total lack of it in the lower reaches of streams like the Ventura River fostered a form of steelhead fishing in southern California which has since become increasingly popular in more northern waters: surf-fishing at the river’s mouth. Claude M. Kreider experimented with the technique and recorded his impressions in a small book entitled "Steelhead," published in 1948. "Surf-casting for steelhead," Kreider explained, "is an interesting game as practiced by many anglers off the little rivers before the tidal bars are open .... You wear hip boots or waders, hurry out as fast as possible with a prearranged breake, make a long cast, hoping there will not be a break in the tide, and then retreat as the next comma comes pounding in. Surf fishermen ply their art through the winter off the Ventura River ... and frequently enjoy splendid sport, even in seasons when the river cannot break through to the sea ... in the evening there is the delightful spectacle of cracking salt-impregnated driftwood and the fading outline of the distant channel islands."

IV

Steelheading began to disappear on the Ventura River during the late 1940’s with the onset of a prolonged drought and the construction of Matilija Dam. Between 1946 and 1952 the basin’s average annual rainfall was cut in half. The seriousness of the drought became apparent by March of 1947. That spring field representatives for the California Department of Fish and Game made an inspection trip to the Ventura River to assess the effects of the low water on the steelhead fishery. The following excerpts from the report tell the story: "An estimated 250-500 adult steelheads were found to be present in scattered pools throughout the five mile section between the mouth of the river and the Foster Park bridge. In general the adult steelhead averaged 24-26 inches in length and weighed an estimated five to six pounds. Occasionally larger fish were found."

"In more detail, we examined the river mouth and found a huge bar present which makes it difficult for the fish to enter the river except at high tide. Although no adults were seen in the ocean, large numbers were reported to be frequently seen just outside the bar. While standing there examining the river mouth, three adult steelhead were seen to enter the river from the ocean."

"One hundred yards above the highway 101 bridge, the river widens into the first hole above the lagoon. At this point, thirty to forty adult steelhead were seen. Overhanging willows make an ideal location for poaching, which appeared to be fairly common. Four dead steelhead were found in the bushes at the pool."

"Approximately one-half mile above the Foster Park bridge, a city of Ventura water diversion intake is located. An old intake check dam five feet high exists across the river at this point. Only one steelhead was found in the pool below the check dam mainly trying to jump this obstacle. From the check dam down to the Foster Park bridge approximately fifteen adults were seen. Excellent, though limited, spawning gravel was noted and redds were being constructed."

"In dry years such as this, there is an estimated total of two miles of fairly suitable spawning area below Foster Park bridge. This may support a maximum total of one thousand spawning adult steelhead. Channel improvement to reduce hazards of up-stream movement was given consideration, but was decided not feasible in view of the many scattered areas of shallow riffles."

"Although it is regrettable that such fine steelheaders may be destined to endure low water conditions, it is not deemed advisable to take any action at this time, such as rescue or channel improvement."

The steelhead fishery had survived similar droughts. The climate of southern California, historically, has been subject to alternating periods of drought and flooding, fish and wildlife populations fluctuating with the annual rainfall. The effect of the drought during the late 1940’s, however, was compounded by the coincidental construction of Matilija Dam on Matilija Creek whose upper reaches were fed by cool springs during even the driest years.

Scheduled for completion by 1948, the Matilija Dam was to be a solid concrete
structure rising 152 feet from the creek bottom. The California Department of Fish and Game was well aware that fresh water trout streams were limited in Ventura County and recommended that every effort be made to protect them. Staff members also pointed to the economic significance of the Ventura River fishery. It was estimated that the river system supported a minimum of 4000-5000 adult steelhead in an average year, over half of which spawned in the area above the proposed dam site. Census checks had shown 259 steelhead angler on the opening day along the five mile stretch of stream open to fishing. The economic value of the fishery in 1946 was estimated at $100,000 annually.

Accordingly, a plan was submitted to trap adult migrants at the base of the dam and truck them over the top. It was suggested that the spillway be inclined with a deep hole at the bottom to allow pre-migrants and spawned-out adults above the dam to pass downstream. Staff also recommended that sufficient water be released below the dam to maintain resident fish, and that during the spring of the year additional water be released over the spillway to facilitate the passage of downstream migrants.

The fish ladder and holding facilities were to be constructed at county expense. Local opposition to the expenditure was faithfully reflected in a local newspaper editorial:

**THEIR EXPENSIVE FISH!**

"Along come the Fish and Game Commission and tells Zone 1 to spend $40,000 for a fish ladder. Wonder if they didn’t demand an escalator? So, the supervisors, figuring they have to do what the State Fish and Game Commission says, vote the $40,000. This leaves us wondering about several points: Will $40,000 worth of fish ever climb that ladder during the lifetime of Matilija Dam? Are there $40,000 worth of fish in the whole county? If so, where are they?"

While the local county wardens had been able to persuade the Board of Supervisors to finance the project, the finished facilities had several serious defects. The step pools of the ladder, built a few yards out from the base of the dam, were subject to inundation by water crossing over the spillway. To further detract from the facilities’ effectiveness, an unexpectedly released down a side spout on the downstream face of the dam and therefore competed with the smallest flow in the ladder. Steelhead tended to run up the heavier flow which led to a dead end.

Despite staff recommendations, no provisions were made for transporting adult and smolt steelhead caught above the dam downstream. The spillway was a straight drop. Nor was water released to facilitate downstream migrants or maintain resident fish populations. Not surprisingly, the fish trapping facilities were hardly used. The last county warden retired in 1953; he reported that the most successful year was when the holding tank were three confused adult.

The design of the dam proved as faulty as the fish trapping facilities. Before the concrete had fully set, chunks appeared along the downstream bank. The project engineer was dismissed, and a law suit was filed against the major contractor. Little more than a decade later a large notch was cut in the face of the dam lowering the spill-way thirty feet. The notch, along with unexpected subsidence, has reduced the original storage capacity of the lake from 7000 to 2400 acre feet. In 1965, the California Fish and Game Commission authorized deactivation of the fish trapping facilities.

The construction of Casitas Dam on Coyote Creek in 1958 struck another blow to the Ventura River’s diminishing steelhead run. Again, no provisions for water releases or means of transporting mature fish upstream to spawn or getting juvenile fish back downstream were incorporated into the project. The anticipated effect of the project on the river’s anadromous fishery was blantly summarized by the Bureau of Reclamation: "With the completion of the project, what steelhead fishery that existed would, in all probability, be destroyed. A large wastewater reservoir would be created."

Much of the water in the Casitas reservoir was to come from the Ventura River via a diversion dam and canal which was expected to restrict, if not completely eliminate, access to the North Fork of the Ventura River. Aside from the smaller San Antonio Creek, this fork would be the only accessible spawning tributary remaining in the system. Initial consideration, therefore, was given by the California Department of Fish and Game towards requiring a fish ladder on the Los Robles diversion facility and providing minimum flows below Casitas Dam. After considerable discussion, however, it was decided that a ladder of an adequate design would be prohibitively expensive. Eventually the flow releases were also dropped, despite the suggestion of one staff member that "we protest these three (water) applications on the basis that no water would be released during the winter and spring spawning periods of anadromous fish, and therefore a valuable steelhead fishery would be lost." In lieu of these mitigations, the Department decided to require only that the diversion dam be designed in such a manner that a fish ladder could be added at some future time should water conditions be favorable for steelhead, and that the outlet at Casitas Dam be screened.

Ironically, at the time these recommendations were being formulated, the Ventura River was experiencing its best steelhead run since the 1947 drought. The period between 1953 and 1958 had been one of normal and above normal run-off and the size of the runs had been increasing.

As has so often been the case, the political climate more than weather conditions seemed to shape the Department’s recommendations for the Casitas project. Several years earlier, the Department had suffered a serious setback in its efforts to enforce section 5937 of the California Fish and Game Code which requires the owner of any dam (including the United States) to bypass suf-
ficient water to protect downstream fisheries or provide some other means for the preservation of fish. The issue was raised in connection with the Friant Dam on the San Joaquin River, a major component in the massive Central Valley Project.

The Department had asked for water releases below Friant Dam to protect a salmon run estimated at 242,625 fish annually. In the course of the litigation, the State Attorney General ruled the code section inoperative, arguing that it was "not a retention of water for preservation of fishlife, but rather a standard for the release of water in excess of what is needed for domestic and irrigation purposes so that what is available for fish life shall not be wastefully withheld." It was with some justification, then, that a Department official commenting on the Ventura County Water Project should concede: "I think we are going to have to face this water conservation program with a very 'dim view' as to the fisheries below these impounded dams.... Our best plan is not to aim at demanding releases below the considered impoundment to support a

migratory fishery.... As in the case of Cachuma Reservoir, (on the Santa Ynez River).... we may as well consider the steelhead fishing as a thing of the past."

The California Department of Fish and Game traditionally has been subject to political interference and has frequently been forced to ask "What can we get by way of" rather than "What should be done?" But as one observer has noted, this defensive mentality has led to a tendency to retrench before being attacked, to leave a position based on careful research, and to occupy some halfway ground that is untenable, to pull punches and to tell only half of the truth about a situation." Consequently, few effective provisions have been made to perpetuate the steelhead resources in the south half of the state.

What runs have survived have done so in the face of severely hostile conditions. Impoundments and diversions have not been the only obstructions southland trout and steelhead have had to overcome. Pollution and physical alteration of the streambeds have also been a continuous problem.

The lower Ventura River runs through an out rich valley, first exploited in earnest during the 1920's. Until recently oil companies practiced a primitive form of water disposal, sinking their holding ponds of drilling mud and waste into the river during the first heavy rains of the season. Anglers frequently complained of their catches tasting of petroleum. Fish kills were common, the runs supposed merely an inexpensive (Continued on Page 44)
service charge for using the river as an open sewer.

With the decline of drilling and production, other oil-related industries began to develop along portions of the river. In 1951 the Shell Oil Company put a weir on the stream. The weir was to trap 510,000 gallons per day from the plant so toxic that the lower three miles of the river were rendered useless. In 1970 independent groups began investigating the discharge.

Students monitored the plant around the clock, while the Community Environmental Council of Santa Barbara enlisted the aid of a chemist from the University of California at Santa Barbara to analyze the plant's discharge. When two student investigators recorded an interview with a Shell quality control engineer at the plant, the tape was seized by company officials. The students later discovered that the engineer had spoken causally about accidental spills, lax enforcement of pollution controls, and the company's practice of coloring the plant's smoke to make it look clean.

The local community was alarmed, but after a year of concerted effort a Federal Grand Jury handed down an indictment on four counts of discharging toxic amounts of wastewater into the river. Shell became the first continuous-polluting plant in California under the old Rivers and Harbors Act of 1899 and was fined $30,000. The plant was then shut down for economic reasons. Current plans are to reduct the plant as an oil refinery and treat it with all discharges processed through a nearby sewage treatment plant.

Though the Shell Acme plan was the most serious source of pollution in the lower river, numerous smaller pollutants continue to discharge effluents into the river through a system of drainage conduits. A rock quarry operation had been waging its trial in this system to the California Department of Fish and Game, which had been relying on the pollution Quality Control Board, at the polluting of the California Department of Fish and Game, ordered a halt to the discharge. The Oak View Sanitary District has since 1964 discharged two cubic feet per second of secondary treated sewage into the river. A recent Federal grant to "tailpipe" the plant, however, is expected to improve the discharge slightly and prevent the frequent eruptions of detergent foam. Near the river's mouth a sand & gravel operation removes 200,000 tons of material annually from the river and the adjacent flood plain seriously disrupting the lichen and riparian plant communities. These problems are common, even classic examples of the abuses heaped upon the rivers and streams throughout California.

VI

With these deteriorated conditions the Ventura River has somehow maintained a remnant run of steelhead and supports a small population of resident trout and other fishes. In some severe conditions are idyllic. Robert Hogan, a local regular on the river, explains: "... over the past fifteen or sixteen years many more fish would have been taken but for the lack of fishermen, this has not been the case. When there exists favorable water conditions, I fish three or four times a week and seldom are another

angle.

Acknowledging the considerable problems confronting the Ventura River, the Ventura County Fish and Game Commission has recently issued a report calling for the protection of riparian habitat, wildlife, and the rehabilitation of its trout and steelhead fisheries. The proposal centers in the form of a two-part program: (1) the perpetuation and enhancement of a viable recreational stream in the lower reaches of the river free from pollution and incompatible developments, and (2) the rehabilitation of the river's formerly productive sport fisheries. Both programs will require that a master plan be prepared for the preservation and maintenance of the area's natural resources for their intrinsic, recreational and educational values, and that the plan recognize these as the highest and best uses of the area.

Some important ground work has already been laid. The county and city of Ventura, for example, have recently adopted open-space plans which designate the undeveloped portions of the Ventura River floodplain area as open space. Both plans acknowledge that the fish and wildlife of the river are of the potential for future water-related recreational activities.

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VII

The Ventura County Fish and Game Commission's report concedes that rehabilitation of the Ventura River is an ambitious undertaking, but argues that we must take the challenge that can be met if public and private interests are willing to work together. It appears that some of the cooperation necessary is already in evidence, though a large deal remains to be done if serious problems are again going to raise the challenge and sport of a winter steelhead fishery. The Commission's underlying thesis, however, is that fish and wildlife resources can be restored by the creative use of improved methods and techniques that have traditionally been used to reduce or destroy these resources.

In addressing the water problem, the Commission raises some fundamental questions about resource management. With the existing and planned water resources being used to support increased industrial activity and encourage an expansion of the present population without sufficient regard to the social and environmental costs or, with a more balanced approach that will insure long-term stability and preservation of historic natural amenities? The questions have wide application, the answers that are developed are ultimately determinate the future, not only of the Ventura River, but all of California's steelhead streams.