

## Steelhead/rainbow trout resources of Orange County

### Santa Ana River

The Santa Ana River consists of about 95 stream miles. It is formed by the confluence of Coon and Heart Bar creeks and flows southwest to enter the Pacific Ocean at Huntington Beach State Park. In its lower 24 miles, downstream from the entrance to Santa Ana Canyon, the river is channelized. Prado Dam is located at about stream mile 31, near where the river enters Santa Ana Canyon. At about stream mile 70, the river leaves the San Bernadino Mountains and becomes a wash in the low gradient area downstream. Flows in the Santa Ana River are diverted into an aqueduct at a point near the Bear Creek confluence, and used to generate hydroelectric power.

In a survey report from the 1930s, DFG staff note the presence of rainbow trout in the San Bernadino Mountains portion of the Santa Ana River. The report states, "The Santa Ana is the best stream in Southern California" (DFG ca 1934a).

The lower Santa Ana River and the portion in San Bernadino County were stocked in 1930-1931 and subsequent years (DFG 1936a). A 1938 issue of the DFG journal indicates that fishing is "consistently good" in the portion of the Santa Ana River in the mountains (DFG 1938). A letter regarding steelhead distribution cites Evans (1950) as reporting that the lower reaches of the Santa Ana River contained a "good" steelhead run (DFG 1997).

The Santa Ana River upstream from the Bear Creek confluence was sampled in 1987 and *O. mykiss* was observed in two sections. The population was characterized as "apparently wild." A subsequent report states, "Trout reproduction appeared to be low, perhaps due to extensive sediment" (DFG 1990, p. 36).

The status review for steelhead completed in 2005 includes mention of the Santa Ana River. It cites Nehlsen *et al.* (1991) as listing the Santa Ana River steelhead stock as extinct (NMFS 2005). However, the status review notes *O. mykiss* as present in the upper Santa Ana River basin, upstream from an impassable barrier (NMFS 2005).

### Santiago

Santiago Creek consists of about 29 stream miles and is tributary to the Santa Ana River. Its headwater are on the western flank of Santiago Peak and the most upstream reach, about five miles in length, is referred to as Santiago Canyon Creek. The creek flows west to enter the Santa Ana River in the city of Santa Ana.

Villa Park Dam is located on Santiago Creek in the low gradient wash near the mouth of Weir Canyon, while Santiago Dam is about two miles above the mouth of the canyon in which the creek flows.

An account of fishing in 1907 appeared in a local newspaper in 1918. An angler reported taking 19 trout between 13 and "[j]ust short of 17 inches" in Santiago Creek (Sleeper 2002). The angler noted that the trout had been stocked.

Notes from DFG staff in 1947 indicate that fingerling *O. mykiss* were observed in Santiago Creek in that year (DFG 1952a). A DFG stream inventory, probably from 1973, indicates the rainbow trout are present both downstream from Santiago Dam upstream from Santiago Reservoir (DFG ca 1973).

### **Silverado**

Silverado Creek consists of about 8.5 stream miles and is tributary to Santiago Creek. It flows west, entering Santiago Creek about 2.6 miles upstream from the eastern extent of Santiago Reservoir.

A 1981 DFG memo states, “Due to the paucity of stream habitat in Orange County, the Department supports the practice of utilizing check dams for stocking catchable trout in Silverado, Trabuco, Holy Jim, and San Juan Creeks” (DFG 1981a).

### **Harding Canyon**

Harding Canyon Creek consists of about 3.8 stream miles and is tributary to Santiago Creek. It flows southwest, entering Santiago Creek at the town of Modjeska. The dam forming Modjeska Reservoir is located less than one-half mile from the mouth of Harding Canyon.

Field notes from DFG staff in 1947 indicate the presence of rainbow trout in Modjeska Reservoir. The notes state, “The trout must be established in the upper canyon and work down into reservoir continually” (DFG 1947a).

Tissue samples from Harding Canyon fish were analyzed as part of a study of the genetic structure of southern California *O. mykiss* in 2003. The resulting report indicates that the population is of coastal steelhead ancestry (Girman and Garza 2006). In December 2007, a mudslide filled a substantial reach of Harding Canyon Creek and may have extirpated the *O. mykiss* population in the stream.

### **Chino**

Chino Creek flows southeast and is tributary to the Santa Ana River. It enters the Santa Ana via the Prado Flood Control Basin. No fisheries information was found for Chino Creek. The creek is included to provide context for fisheries information applying to a tributary.

### **Cucamonga**

Cucamonga Creek consists of about 21 stream miles and is tributary to Chino Creek. It flows about five miles through Cucamonga Canyon, in which it is called Cucamonga Canyon Creek, before entering the lower gradient area downstream. In its lower portion, the creek largely is channelized. The most downstream portion of the creek appears on maps as Mill Creek, which joins Chino Creek via the Prado Flood Control Basin.

Cucamonga Canyon Creek was stocked in 1930 and subsequent years (DFG 1936b). Staff from DFG surveyed Cucamonga Canyon Creek in the 1930s and noted the presence of rainbow trout. The survey report notes “slight if any” natural propagation (DFG ca 1934b).

In a 1948 survey, DFG staff observed rainbow trout fingerlings and individuals to seven inches in Cucamonga Creek. The report notes “good” natural propagation (DFG 1948a).

### **San Antonio Canyon**

San Antonio Canyon Creek consists of about ten stream miles upstream from San Antonio Dam. The creek flows south from headwaters on the south flank of Mount San Antonio. The portion of the creek downstream from San Antonio Dam is in a lower gradient area and is channelized throughout about ten miles to its confluence with Chino Creek.

A 1938 issue of the DFG journal indicates that San Antonio Creek is a “consistently good stream” in terms of angling (DFG 1938). In a 1948 survey, DFG staff observed rainbow trout, including fingerlings, in San Antonio Creek. The report notes “fair” natural propagation (DFG 1948b).

According to an angler familiar with the streams of the Santa Ana River basin, *O. mykiss* occurs in San Antonio Canyon Creek. Individuals between about 7 and 14 inches in length have been observed in recent years (Yin pers. comm.).

### **Icehouse Canyon**

Icehouse Canyon Creek consists of about three stream miles and is tributary to San Antonio Canyon Creek. It flows west, entering San Antonio Creek west of Sugarloaf Peak.

A creel survey from 1950 indicates the presence of rainbow trout in Icehouse Canyon Creek (DFG 1950a).

### **Temescal Wash**

Temescal Wash drains the Temescal Valley. It flows northwest, entering the Santa Ana via the Prado Flood Control Basin. No fisheries information was found for Temescal Wash. The wash is included to provide context for fisheries information applying to a tributary.

### **Coldwater Canyon**

Coldwater Canyon Creek flows northwest about three miles through Coldwater Canyon. The 2.3 mile section downstream from Glen Ivy Springs is low gradient and is tributary to the Temescal Wash.

Notes taken in 1931 by DFG staff state, “The stream has been stocked with rainbow trout for a number of years with fair success I am told” (DFG 1931a). Coldwater Creek was surveyed in 1947 and multiple *O. mykiss* year classes were observed (DFG 1947b). During a 1950 inspection of Coldwater Creek, staff from DFG again observed multiple *O. mykiss* year classes. The report notes, “Natural reproduction appears excellent” (DFG 1950b).

Staff from USGS observed *O. mykiss* in Coldwater Canyon Creek in recent years. Further investigation is suggested to improve the understanding of the origin of this population (Fisher pers. comm.).

## **Warm**

Warm Creek originates on the southwest slope of McKinley Mountain and flows southwest through the town of Highland before entering the Santa Ana River near the town of Colton. Information concerning *O. mykiss* was not found for Warm Creek. It is cited here as context for fisheries information pertaining to tributary streams.

## **Lytle**

Lytle Creek flows through about 17.3 miles between its headwaters forks and its confluence with Warm Creek in the southern portion of the city of San Bernardino. The upper five miles of the creek and the headwaters forks are in a high gradient area, while the lower, low gradient portion includes the Lytle Creek Wash and a channelized section.

Lytle Creek was stocked in 1930 and in subsequent years. Staff from DFG surveyed Middle Fork Lytle Creek in the 1930s and noted rainbow trout present. The report indicates that successful spawning was unlikely (DFG ca 1934c).

A 1948 survey of South Fork Lytle Creek noted the presence of rainbow trout. The survey report deems natural propagation to be “good” (DFG 1948c). The North Fork was surveyed in 1948 and *O. mykiss* was not observed. The survey report indicated that natural propagation did not occur in the creek (DFG 1948d).

## **Cajon Wash**

The Cajon Creek Wash is the low gradient, alluvial product of flows from Cajon Canyon and is tributary to the Lytle Creek Wash. No fisheries information was found for this basin, but the feature is cited as context for its tributaries.

## **Cable**

Cable Creek is formed by the confluence of West Fork Cable Canyon and East Fork Cable Canyon Creek, from where it flows about 5.7 stream miles into Cajon Wash. The creek appears to be channelized in its lower reaches.

A 1930s survey of Cable Canyon Creek noted the presence of rainbow trout. The survey report called natural propagation in the creek “problematical” (DFG ca 1934d).

## **City**

City Creek consists of about 15.6 stream miles and is tributary to Warm Creek. The lower portion of the creek appears to have been re-routed to be tributary to the Warm Creek channel in the eastern portion of the city of San Bernardino. The creek has East Fork and West Fork City Creek tributaries in its headwaters.

City Creek was stocked in 1930 and in subsequent years (DFG 1936c). Staff from DFG surveyed East Fork and West Fork City Creek in the 1930s and noted the presence of rainbow trout. Natural propagation was not expected to occur in the creeks (DFG ca 1934e; DFG ca 1934f). A 1938 issue of the DFG journal indicates that fishing is “consistently good” in the portion of the

Santa Ana River in the mountains (DFG 1938). In a 1948 survey, staff from DFG observed rainbow trout fingerlings in West Fork City Creek and deemed natural propagation to be “fair” (DFG 1948e).

### **Mill**

Mill Creek consists of about 17 stream miles and is tributary to the Santa Ana River. It flows west from headwaters in Mill Creek Canyon to its confluence with the Santa Ana in the northern portion of the city of Redlands. An aqueduct carries Mill Creek flows in the creek’s lower reach, from the downstream entrance of Mill Creek Canyon at about stream mile 5.3 to a powerhouse located in the creek’s outwash plain.

Mill Creek was stocked in 1930 and in subsequent years. A 1948 DFG letter stated, “Mill Creek, at one time was said to have been one of the best trout streams in southern California” (DFG 1948f). Another DFG letter from 1948 states, “Conditions are very poor for fish life and food” (DFG 1948g).

### **Mountain Home**

Mountain Home Creek consists of about 3.7 stream miles and is tributary to Mill Creek. It flows south, entering Mill Creek at the town of Mountain Home Village.

Mountain Home Creek was stocked in 1930 and in subsequent years. A 1930s stream survey report deems that natural propagation does not occur and states about Mountain Home Creek, “Stream not very important” (DFG ca 1934g).

### **Falls**

Falls Creek consists of about 3.7 stream miles and is tributary to Mill Creek. It flows southwest, entering Mill Creek near Big Falls Campground.

Staff from DFG surveyed Falls Creek in the 1930s and noted the presence of rainbow trout with “fair” natural propagation. The survey report states, “...most of the fish caught are previous years plant. This is the original home of the Gorgonio Trout” (DFG ca 1934h).

Falls Creek was stocked in 1942 and in subsequent years. Staff from DFG surveyed Falls Creek in 1948 and observed adult rainbow trout. The survey report ascribes “poor” natural propagation to the population (DFG 1948h).

### **Alder**

Alder Creek consists of about 3.5 stream miles and is tributary to the Santa Ana River. It flows south, entering the Santa Ana southeast of Government Peak.

Alder Creek was stocked in the 1930 and in subsequent years (DFG 1932). A 1930s stream survey report indicates that natural propagation in the creek is “very light if any” (DFG ca 1934i).

## **Keller**

Keller Creek consists of about 3.7 stream miles and is tributary to the Santa Ana River. It flows southwest, entering the Santa Ana less than one half mile upstream from the Alder Creek confluence.

Keller Creek was stocked in 1930 and in subsequent years (DFG 1930). A 1930s stream survey report indicates that natural propagation in the creek is “light, if any” (DFG ca 1934j).

## **Bear**

Bear Creek consists of about nine stream miles. It flows from the dam forming Big Bear Lake to its confluence with the Santa Ana River. According to a 1987 DFG report regarding several southern California streams, “There are no established flow releases from Big Bear Lake” (DFG 1990, p. 15).

Bear Creek was stocked in 1930 and in subsequent years. Staff from DFG surveyed Bear Creek in the 1930s and noted rainbow trout in the creek. Natural propagation was deemed to be “very slight, if any.” The survey report indicates that flows from Big Bear Lake allowed fish to over-summer. A 1938 issue of the DFG journal indicates that fishing is “consistently good” in Bear Creek (DFG 1938).

Staff from DFG sampled Bear Creek in 1986 and 1987 and observed multiple *O. mykiss* year classes (DFG 1990). A memo describing the sampling results states, “Bear Creek had the most abundant trout populations [of six southern California streams studied]” (DFG ca 1986). Bear Creek was designated a “wild trout water” in 1988 (DFG 1988). A 1989 management plan for the creek states, “It should be recognized that as little as a constant 1.0 cfs release could have significant benefits to the fishery in the upper reaches of Bear Creek...” (DFG 1989, p. 20).

A fish population survey was conducted on Bear Creek in 1992 and multiple *O. mykiss* year classes were observed. The survey report noted that rainbow trout were absent from the upper sections of the creek and “accounted for only 3% to 8% of the estimated [trout] population” in the lower section (Deinstadt 1992).

## **Siberia**

Siberia Creek consists of about three stream miles and is tributary to Bear Creek. It flows west from headwaters at Bluff Lake, entering Bear Creek at about stream mile five.

Siberia Creek was stocked in 1930 and in subsequent years (DFG 1931b). A 1930s stream survey report indicates that natural propagation in the creek is “very slight” (DFG ca 1934k).

## **Grout**

Grout Creek consists of about 2.7 stream miles and is tributary to Big Bear Lake. It flows east, entering the lake at Grout Bay.

Grout Creek was stocked prior to 1947. A stream survey report from that year notes the presence of rainbow trout. It states, “This stream is important only as a spawning stream for Big Bear Lake rainbow trout” (DFG 1947c).

### **Deer**

Deer Creek consists of about 4.3 stream mile and is tributary to the Santa Ana River. It flows southwest, entering the Santa Ana approximately one mile south of Seven Pines Peak.

A 1930s stream survey report notes the presence of rainbow trout and states that the creek has been stocked with “fair success” (DFG ca 1934l). The report indicates that natural propagation in the creek is “very little, if any [on] account of heavy fishing.”

### **Forsee**

Forsee Creek consists of about 5.4 stream miles and is tributary to the Santa Ana River. It flows northwest, entering the Santa Ana northeast of Pinezanita.

Forsee Creek was stocked in 1930 and subsequent years (DFG 1936d). Staff from DFG surveyed Forsee Creek in 1934 and noted the presence of rainbow trout. The survey report indicates that stocked fish over-summered but had limited available spawning habitat (DFG 1934).

### **Barton**

Barton Creek consists of about 1.7 stream miles and is tributary to the Santa Ana River. It is formed by the confluence of the West Fork and East Fork Barton Creek and flows northwest, entering the Santa Ana west of Seven Oaks.

Barton Creek was stocked in 1930 and in subsequent years (DFG 1936e). Staff from DFG surveyed Barton Creek in 1934 and noted the presence of rainbow trout. The survey report indicates that natural propagation was “very slight” (DFG ca 1934m).

### **South Fork Santa Ana River**

The South Fork Santa Ana River consists of about 3.9 stream miles and is tributary to the Santa Ana River. It flows north, entering the Santa Ana River near University Camp.

In a 1908 paper, researchers described a new species of trout from the headwaters of the South Fork Santa Ana River, at 8,200 feet altitude (DFG 1931c).

The South Fork Santa Ana River was stocked in 1930 and in subsequent years (DFG 1936f). Staff from DFG surveyed the South Fork in 1934 and noted the presence of rainbow trout exhibiting “quite extensive” natural propagation. The survey report states, “It is one of the original sources of the Gorgonio trout which is now apparently extinct” (DFG ca 1934n).

Sampling by DFG staff in 1987 indicated that the South Fork Santa Ana River did not support a standing crop of rainbow trout (DFG 1987). According to the resulting report, “There are no dams on the stream, but during the spring through early fall, significant amounts of water are diverted to fill Jenks Lake” (DFG 1990, p. 18).

### **Aliso**

Aliso Creek’s headwaters are north of the Portola Hills. The creek flows south approximately 19 miles, entering the Pacific Ocean in the vicinity of Laguna Niguel.

A long-time resident of southern California and angler reported fishing in Aliso Creek and relayed an account of another angler catching steelhead in the early 1900s. Steelhead weighing in the range of eight to ten pounds were taken in the 1950s and through 1967. The angler observed six pairs of spawning steelhead in lower Aliso Creek in 1993 (Selby pers. comm.).

### **San Juan**

San Juan Creek consists of over 22 stream miles. It flows southwest, entering the Pacific Ocean at Doheny State Beach.

An account of an early survey of San Juan Creek appears in a study of the streams of Camp Pendleton: “...CDFG wardens Mayfield and E.D. Beeman described a survey of San Juan Creek conducted in February, 1940. In a 1 km section of stream, approximately 24 km upstream of the mouth, they found three pair of spawning steelhead” (Knight 1998,p. 20). A 1946 issue of the DFG journal relays reports of steelhead caught in the San Juan Creek estuary (DFG 1946).

Staff from USFWS reported capturing juvenile steelhead near the mouth of San Juan Creek in 1968. Surveys conducted after 1974 did not produce *O. mykiss* observations (Knight 1998).

A 1981 DFG memo states regarding San Juan Creek, “Water quality is generally poor except in wet years, when it supports catchable trout stocking for about 2 or 3 months” (DFG 1981b). A 1981 DFG memo states, “Due to the paucity of stream habitat in Orange County, the Department supports the practice of utilizing check dams for stocking catchable trout in Silverado, Trabuco, Holy Jim, and San Juan Creeks” (DFG 1981a).

A 2002 watershed management plan for San Juan Creek noted riverine and riparian habitat impacts from channel downcutting and other erosion problems, as well as poor water quality (USACE 2002). As part of a steelhead distribution study, staff from NMFS surveyed San Juan Creek in 2002. Four sites were sampled, and *O. mykiss* was found to be absent from the drainage (NMFS 2003). A 2004 memo from NMFS staff notes, “...steelhead are currently utilizing San Juan Creek and Arroyo Trabuco...” (NMFS 2004). The memo adds, “...the amount and quality of habitat in the San Juan Creek and Trabuco Creek watersheds is capable of supporting steelhead...” (NMFS 2004). The creek was surveyed by DFG staff in May 2006. The survey report notes 3-4 inch fish in one location that “appear to be juvenile wild *O. mykiss*” (DFG 2006). The report found “one, perhaps two” dams constituting total passage barriers.

A steelhead recovery watershed management plan was prepared for San Juan Creek in 2007. The plan states, “Specific factors on Trabuco Creek and San Juan Creek that negatively impact the habitat or conditions needed for Steelhead survival, growth, or reproduction include low or reduced flows in some sections due to groundwater pumping and creek diversions (with associated



water temperature increases), water quality degradation from a variety of sources, invasive plant communities (such as *Arundo* and *alyssum*), competition with non-native fish, predation by non-native predators (such as the bullfrog), stream channelization and other forms of alterations, manmade and natural barriers, siltation of spawning habitat, degradation of riparian plant communities that provide cover, and temperature regulation of the stream” (CDM 2007, p. 3-34). According to the plan, the San Juan Creek lagoon “...is highly impacted by sediment loading...” (CDM 2007, p. 5-41). The plan notes the presence of perennial wetted pools in the upper watershed and adds, “It is important that the pristine condition of the upper watershed be preserved to facilitate steelhead recovery” (CDM 2007, p. 4-28). Preparing the plan included spring and fall surveys of a lower, middle, and upper San Juan Creek reach. No salmonids were observed during the surveys.

An adult salmonid between 18 and 24 inches in length was observed in lower San Juan Creek in March 2007. Staff from DFG stated, “...it was most likely a steelhead” (DFG 2007). A 25 inch steelhead was observed in the San Juan Creek estuary in February 2008 by staff at Doheny State Park (Capelli pers. comm.). An individual estimated to be 37 inches in length was observed in March 2008 in lower San Juan Creek that was re-located to the estuary by DFG staff.

### **Arroyo Trabuco (Trabuco)**

Arroyo Trabuco consists of over 21 stream miles and is tributary to San Juan Creek. It flows south, entering San Juan Creek south of the city of San Juan Capistrano. A grade control structure at the I-5/Camino Capistrano crossing and another structure located at about stream mile 2.4 are total passage barriers (CDM 2007).

An interview with a local resident, Joseph Wilkes, produced an account of fishing in Arroyo Trabuco in the 1880s. “I got a trout seventeen and a half inches long, and we got any number of trout from twelve to fifteen inches in length” (Sleeper 2002). A 1939 DFG memo indicates that steelhead fingerlings rescued from San Mateo Creek were placed in upper Arroyo Trabuco (DFG 1939). An ichthyological note from 1939 describes collecting a single *O. mykiss* specimen from Arroyo Trabuco (Miller 1939). Notes from DFG staff in 1947 indicate that fingerling *O. mykiss* were observed in Arroyo Trabuco in that year (DFG 1952a). A 1981 DFG memo states, “Due to the paucity of stream habitat in Orange County, the Department supports the practice of utilizing check dams for stocking catchable trout in Silverado, Trabuco, Holy Jim, and San Juan Creeks” (DFG 1981a).

A 2002 San Juan Creek watershed management plan found “phenomenal degrees of erosion damage” in the previous 20 years in the lower reaches of Arroyo Trabuco (USACE 2002). A 2005 newspaper article describes plans to install a fish ladder on the culvert on Arroyo Trabuco under Interstate 5 (Lin 2005). The article states, “State biologists in May 2003 spotted what they believed were southern steelhead trout at the bottom of the culvert, the first sighting there in decades” (Lin 2005). A 2004 memo from NMFS staff notes, “...steelhead are currently utilizing San Juan Creek and Arroyo Trabuco...(NMFS 2004). The memo adds, “...the amount and quality of habitat in the San Juan Creek and Trabuco Creek watersheds is capable of supporting steelhead...(NMFS 2004).

A steelhead recovery watershed management plan was prepared for Trabuco Creek in 2007. Preparing the plan included spring and fall surveys of a lower, middle, and upper Arroyo Trabuco reach. Salmonids that “appeared to be rainbow trout, 1-2 year age class” were observed to be “relatively abundant in selected pools in upper reach” (CDM 2007, p. 4-25). The report notes in regards to the observed *O. mykiss*, “Possibly survivors from past stocking efforts.”

### **Falls Canyon**

Falls Canyon Creek consists of about 1.5 stream miles and is tributary to Arroyo Trabuco. It flows south, entering Arroyo Trabuco northeast of the town of Trabuco Canyon.

Field notes indicate that DFG staff observed rainbow trout in Falls Canyon Creek in 1947 and 1949 (DFG 1950c).

### **Holy Jim Canyon**

Holy Jim Canyon Creek consists of about 2.8 stream miles and is tributary to Arroyo Trabuco. It flows south, entering Arroyo Trabuco in the upper portion of Trabuco Canyon.

Holy Jim Canyon Creek was stocked in 1948 and in subsequent years. Field notes were reviewed for the late 1940s and no record of observation of over-summering *O. mykiss* was found (DFG 1952b).

A creel census in 1951 indicates that Holy Jim Canyon Creek supported a rainbow trout fishery. The trout were believed to be of both wild and stocked ancestry (DFG 1951).

A 1981 DFG memo states, "Due to the paucity of stream habitat in Orange County, the Department supports the practice of utilizing check dams for stocking catchable trout in Silverado, Trabuco, Holy Jim, and San Juan Creeks" (DFG 1981a).

### **Hot Spring**

Hot Spring Canyon Creek consists of more than seven stream miles and is tributary to San Juan Creek. It flows southwest from headwaters near Los Pinos Peak, entering San Juan Creek near San Juan Hot Springs.

A review of steelhead related information produced reports of *O. mykiss* in Hot Spring Canyon Creek. According to the reference, "Rainbow trout were present in Hot Springs Canyon Creek during a 1946 CDFG survey, and rainbow trout stocking records dated back to 1943" (Titus *et al.* in prep.).

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**Table 8. Distribution status of *O. mykiss* in coastal streams of Orange County, California<sup>1</sup>**

Watershed	Stream/Tributary	Historical Presence	Current Presence	Evidence of Decline	Anadromy	Current Population Status
Santa Ana River	Santa Ana River	DF	UN	Y	N	0
Santa Ana River	Santiago	DF	UN	Y	N	0
Santa Ana River	Silverado	UN	UN		N	0
Santa Ana River	Harding Canyon	DF	DF	Y	N	0
Santa Ana River	Chino	UN	UN		N	0
Santa Ana River	Cucamonga	DF	UN	Y	N	0
Santa Ana River	San Antonio Canyon	DF	DF	Y	N	3
Santa Ana River	Icehouse Canyon	DF	UN		N	0
Santa Ana River	Temescal Wash	UN	UN		N	0
Santa Ana River	Coldwater Canyon	DF	DF	Y	N	0
Santa Ana River	Warm	UN	UN		N	0
Santa Ana River	Lytile	DF	UN	Y	N	0
Santa Ana River	Cajon Wash	UN	UN		N	0
Santa Ana River	Cable	PS	UN		N	0
Santa Ana River	City	DF	UN	Y	N	0
Santa Ana River	Mill	DF	UN	Y	N	0
Santa Ana River	Mountain Home	UN	UN		N	0
Santa Ana River	Falls	DF	UN	Y	N	0
Santa Ana River	Alder	PS	UN		N	0
Santa Ana River	Keller	PS	UN		N	0
Santa Ana River	Bear	DF	DF	Y	N	3
Santa Ana River	Siberia	PS	UN		N	0
Santa Ana River	Grout	DF	UN		N	0
Santa Ana River	Deer	PB	UN		N	0
Santa Ana River	Forsee	PS	UN		N	0
Santa Ana River	Barton	PS	UN		N	0
Santa Ana River	South Fork					
Santa Ana River	Santa Ana River	DF	PA	Y	N	0
San Diego	San Diego	UN	UN		UN	0
Aliso	Aliso	DF	PS		UN	0
San Juan	San Juan	DF	DF	Y	UN	2

<sup>1</sup>Please see Methods section for an explanation of titles and values used in this table.

**Table 8. Distribution status of *O. mykiss* in coastal streams of Orange County, California<sup>1</sup>**

Watershed	Stream/Tributary	Historical Presence	Current Presence	Evidence of Decline	Anadromy	Current Population Status
San Juan	Arroyo Trabuco	DF	DF	Y	N	2
San Juan	Falls Canyon	DF	UN		UN	0
San Juan	Holy Jim Canyon	DF	UN		UN	0
San Juan	Hot Spring Canyon	DF	UN		UN	0

<sup>1</sup>Please see Methods section for an explanation of titles and values used in this table.