STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF FISH AND GAME

SESPE CREEK WILD TROUT

MANAGEMENT PLAN

SESPE CREEK, VENTURA COUNTY

Region 5 Informational Bulletin 0014-10-1985

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CALIFORNIA WILD TROUT MANAGEMENT PROGRAM SESPE CREEK WILD TROUT MANAGEMENT PLAN SESPE CREEK, VENTURA COUNTY FEBRUARY 1986

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Prepared by

California Department of Fish and Game

with assistance from and in cooperation with

U.S. FOREST SERVICE
LOS PADRES NATIONAL FOREST

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PREFACE

In 1965, the Department of Fish and Game in the California Fish and Wildlife Plan recommended expansion of trout management activities to "protect and enhance wild trout fisheries" (CDFG 1965). In response to this recommendation, and to address concerns expressed by the public, the California Wild Trout Program was established by the California Fish and Game Commission in 1971. The primary purpose of the program is to preserve attractive stream trout fisheries which are naturally sustained by wild strains of trout rather than artificially maintained by domesticated, catchable-sized trout stocked on a put-and-take basis. Emphasis is placed on protecting the aquatic environment to perpetuate natural production and on preserving the natural character of the streamside environment to provide a quality angling experience. In addition, appropriate angling regulations are established to protect and manage the wild trout resource and fishery.

Since 1971, the Fish and Game Commission has designated 12 backcountry and 7 roadside streams as wild trout streams (Martis Creek Lake, the only lake in the program, was added in 1974). Each wild trout stream is to have its own management plan and angling regulations which will emphasize individuality and diversity. Sespe Creek, Ventura County, has been classified as a candidate wild trout stream and is being managed in anticipation of official designation.

Management goals for each stream will use the general goals of the wild trout program as guidelines. These goals are:

- To maintain wild trout populations at levels necessary to provide satisfactory recreational angling opportunities.
- To maintain and enhance where possible the habitat required for optimum wild trout production.
- To preserve the natural character of the streamside environment.

Management of backcountry streams, such as the reach of Sespe Creek being considered for wild trout stream designation, also will emphasize maintenance of the remote, secluded quality of the angling experience, which generally involves minimizing angler encounter with man's activities. Examples of such trout streams are rare in southern California.

This plan was prepared to identify the Department of Fish and Game's current and proposed activities on Sespe Creek, and to define the management direction to be taken in coordinating with agencies responsible for environmental protection. Along most of Sespe Creek, land use planning is the responsibility of the U.S. Forest Service (USFS). Pursuant to the Memorandum of Understanding between the Department and the Forest Service (Title 2600, Forest Service Manual), the Department will identify management direction which is intended to preserve and protect

fish and wildlife resources in national forests and the USFS will recognize the Department's responsibilities and concerns along with those of the other users of the forest in their multiple use planning.

RESOURCE STATUS

General Setting

Sespe Creek is located in central Ventura County approximately 70 miles northwest of the Los Angeles metropolitan area and is part of the Santa Clara River drainage system. It originates in western Ventura County about 20 miles northwest of the City of Ojai near the 5,000 ft elevation, and flows east and south for approximately 55 miles draining a watershed of approximately 270 square miles and joins the Santa Clara River near the City of Fillmore at the 400 ft elevation mark (Figures 1 and 2). State Highway 33 north from Ojai parallels most of the upper Sespe Creek section. The stream reach considered for wild trout designation encompasses approximately 25 miles of the middle and lower sections of the creek from Piedra Blanca Creek to Devil's Gate near the southern boundary of the Sespe Condor Sanctuary (Figure 3). Approximately 10 miles of the lower section of the creek flows through the Sanctuary.

The climate of the Sespe Creek drainage is hot and dry during the summer and mildly cool in the winter. Precipitation falls mainly as rain and occasional light snow in the upper section which usually melts quite rapidly. There is no snow pack in the Sespe drainage. The average annual rainfall in the Sespe drainage is approximately 25 inches.

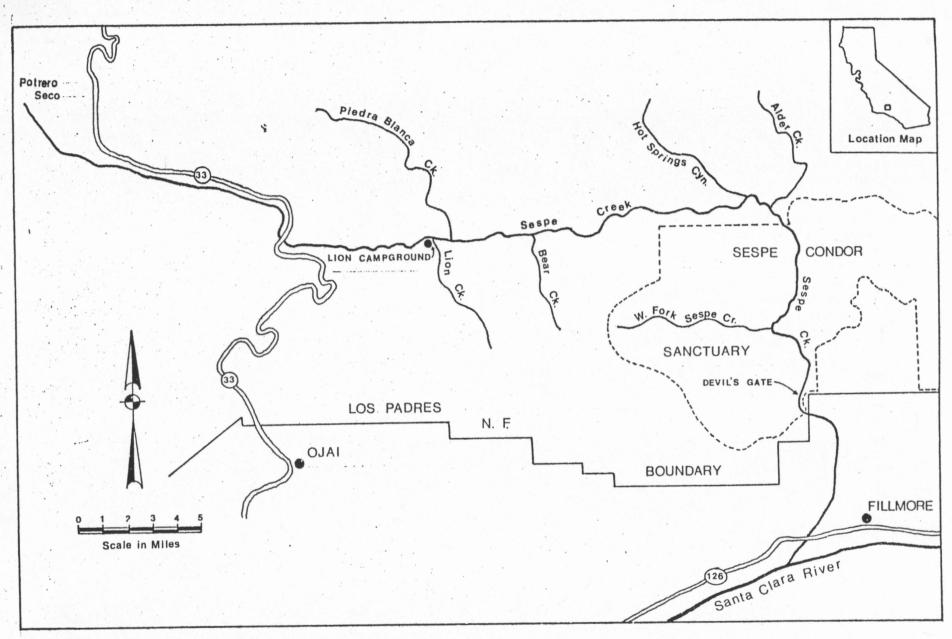


FIGURE 1. Sespe Creek drainage and general location.

FIGURE 2. Longitudinal stream profile of Sespe Creek

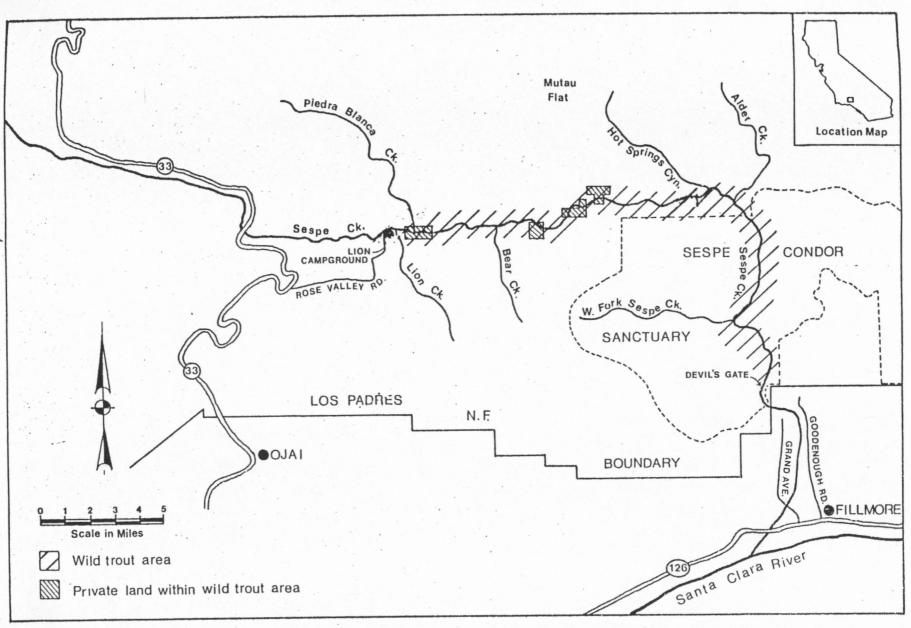


FIGURE 3. Sespe Creek wild trout area.

Records from a U.S. Geological Survey gauging station located approximately 6 miles upstream from Sespe Creek's confluence with the Santa Clara River show that the mean monthly flow for the past 19 years of record fluctuated from a low of 10.5 cubic feet per second (cfs) in September to a high of 623.9 cfs in February (Figure 4). Highest recorded flow during this period was 29,100 cfs on Jan. 25, 1969 and 28,000 cfs on February 9, 1978 (U.S.G.S. 1966-1984). The widely fluctuating monthly, seasonal, and yearly flows are characteristic of Sespe Creek and of most southern California drainages.

Sespe Creek can generally be divided into three segments. The upper section which parallels State Highway 33, the middle section with some evidence of man's past activities and the lower section which flows through the Sespe Condor Sanctuary. Man-made intrusions are most evident in the upper section. The middle section still has the remnant of a parallel dirt road that was in use until the mid 1970s when it was closed due to extensive flood damage. Although this road (7N03 - Sespe Road) was still a designated four-wheel drive off road vehicle (ORV) route in the 1976 Off Road Vehicle Plan of the Los Padres National Forest, hopefully it will not be reconstructed or reopened for ORV use. This remnant road now serves as a hiking trail and provides access to the middle section. The lower section through the Sespe Condor Sanctuary is more remote with limited access.

The area of the upper and middle sections of Sespe Creek is noted for its folded, layered sediments, exposed white sandstones, and rows of sandstone blocks and exposed beds which line the

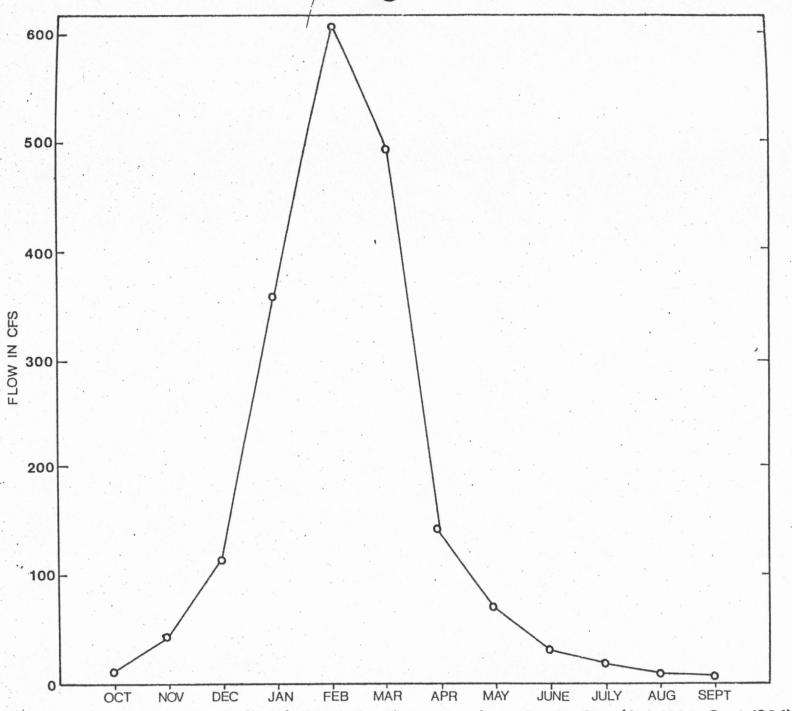


FIGURE 4. Mean monthly flow in Sespe Creek measured near Devil's Gate (Oct. 1966 - Sept. 1984).

stream channel. The stream channel in the middle section also is characterized by a broad rocky channel lined with willow, alder, and cottonwood, numerous large pools, and a perennial flow. The lower section, which passes through steep, narrow gorges, consists of exposed red sandstone beds (Sespe formation) considered to be excellent examples of "red beds". 1/

Southern riparian woodland is the most common streamside vegetation type along Sespe Creek. Tree species typical of this type are Fremont and black cottonwood, white alder, western sycamore, big leaf maple and California bay. Southern alluvial woodland composed primarily of Fremont cottonwood, western sycamore, willows and mulefat border drier sections of the stream. Although southern alluvial woodland tends to be more common along the lower reaches of the creek, both types are interspersed throughout the length of the stream, depending on local topography and tributary drainage. 1/

The fine-textured valley soils adjacent to the creek support Great Basic sagebrush. This vegetation type is equal in importance to chamise and mixed chaparral as well as coastal sage scrub which occurs in sections interchangeably along the Creek. In certain locations at higher elevations, both big cone Douglas-fir and canyon live oak extend to the Creek. 1/

1/ Information regarding geological formations, soils, and vegetation of the Sespe Creek Area was obtained from personal communication with Edward Gornowski, Asst. Recreational Officer of the Los Padres National Forest. Generally, water quality is very high; but there is some sedimentation and evidence of sulfur and oil from natural seeps in the middle section of the creek.

Access

Access to the entire length of the wild trout reach of Sespe Creek (approximately 25 miles of stream) is limited to foot traffic. There is vehicle access close to the upper boundary of the wild trout section at Lion Campground via State Highway 33 and Rose Valley Road from Ojai. Vehicle access is available to near the lower end at the southern boundary of the condor sanctuary by driving north from Fillmore on Goodenough Road (Figure 3). Access to the mid section of the wild trout reach is available by vehicle to Mutau Flats via Forest Service road 7N03 off of Lockwood Valley Road and then by foot for approximately 5 to 6 miles along Hot Springs Canyon.

In recent years, the owner of the private land which borders the southern boundary of the condor sanctuary and through which exists the only foot access to Sespe Creek from the lower end has not allowed this access to continue. It is hoped that some agreement can be reached with the private landowner in the near future to allow limited access by anglers and hikers to lower Sespe Creek through his land. In years past, a popular trip by a limited number of people has been to spend two or three days to hike the stream channel downstream from Lion Campground, through the Sespe Condor Sanctuary to end up near Fillmore.

Land Ownership

The wild trout reach of Sespe Creek is entirely within the boundary of the Los Padres National Forest. Small parcels of land along Sespe Creek upstream from the Sespe Condor Sanctuary are in private ownership (Figure 3).

Description Of The Fishery

Rainbow trout (Salmo gairdnerii) (RT) is the principal game fish of Sespe Creek. Historically, there were large runs of steelhead (anadromous rainbow trout) that occurred in the Santa Clara River drainage including Sespe Creek. Although these large runs are now gone due to water development and diversion projects, a small run continues to use Sespe Creek with a few being reported caught almost every year. Sespe Creek is the only tributary of any size in the Santa Clara River drainage that is still accessible for steelhead. There still exists in Sespe Creek the largest run by far of anadromous Pacific lamprey (Lampetra tridentata) (PLP) this far south in California. Threespine stickleback (Gasterosteus aculeatus microcephalus) (STB) and arroyo chub (Gila orcutti) (AC) are common to abundant throughout . the entire length of Sespe Creek. Green sunfish (Lepomis cyanellus) (GSF) can be abundant during low flow years, especially in the area from Lion Campground to Alder Creek.

Catchable rainbow trout are stocked in the reach upstream.

from Lion Campground along State Highway 33. Although no longer included in the stocking program, catchable trout also were planted in lower Sespe Creek near Fillmore in past years.

They are stocked only during ideal water conditions which usually occur during the late winter and spring months. No catchables are stocked within the wild trout section of the creek, although some may move into areas immediately below Lion Campground from the stocking in the campground area. The catchable trout stocking program in the upper and lower reaches of the stream is compatible with wild trout management of the intervening 25-mile reach proposed for wild trout stream designation.

A wild trout fishery exists on Sespe Creek even in areas now stocked with catchable trout. But the most popular area for wild trout fishing is downstream from Lion Campground. This area is now only accessible by hiking, but in years past the reach between Lion Campground and Hot Springs Canyon was open to ORV use until the mid 1970s when the road was damaged during high flows and closed.

Fishing for wild trout was very popular when the road was open and provided excellent fishing in the early spring. But with the easy access, angling success would rapidly diminish as the season progressed. With the closing of the road angling pressure was greatly reduced and apparently resulted in satisfactory angler success extending over a much longer period of the year.

Flow conditions also affect angler success in Sespe Creek. Low flow years usually reduce angler use and angler success, as early as late winter in some years as the flow is reduced to a series of small pools connected by very shallow surface flows. Some sections may even cease to flow above ground and become

intermittant. Years with normal precipitation produce good flows well into the summer.

Angler use below Hot Springs Canyon and through the Sespe Condor Sanctuary is lighter than areas upstream because this reach is more rugged and remote. The trout fishery appears to be better in this section because of the reduced angler use and the presence of more and larger pools formed by the steep canyon. This section seems to provide larger trout and better angler satisfaction.

Fishery Status Survey

A backpack electroshocking survey was initiated in 1983 to determine the status of rainbow trout in Sespe Creek. Annual surveys were conducted in 1983, 1984, and 1985 at stations near Bear Creek and Hot Springs Canyon to compare trout relative abundance, year class strength, condition, and length parameters.

The 1983 survey was conducted in October-November. Total discharge for the 1982-83 water year for Sespe Creek was the third highest in the last 19 years and this influenced flows well into the 1983-84 water year as indicated by the unusually high mean monthly flow of 78.6 cfs in November of 1983. Total shocking time expended while sampling at the two locations during the 1983 survey was 57.8 min. A total of 68 RT were sampled during this time for a mean of 1.18 RT/min of shocking time (Table I). A total of 220 AC, 88 STB, and 3 GSF were also sampled.

TABLE 1 SESPE CREEK ELECTROSHOCKING SURVEY 1983, 1984 and 1985

Bear Creek Location

Date of Survey
Mean Monthly Flow*
Total Shocking Time
Water Temperature
Rainbow Trout (RT)
Arroyo Chub
Stickleback
Green Sunfish
Pacific Lamprey Young
Rt/min. of Shocking Time

Т	1983	1984	1985
	Oct. 22	May 12	May 18
	84.3 cfs	15.3 cfs	11.4 cfs
	29.5 min	27.6 min	29.7 min
		64°F to 66°F	60°F to 66°F
	62	91	49
	103	110	7
	33	23	6
	3	_	56
	_	16	1
	2.10	3.30	1.65

Hot Springs Canyon Location

Date of Survey
Mean Monthly Flow
Total Shocking Time
Water Temperature
Rainbow Trout
Arroyo Chub
Stickleback
Green Sunfish
Pacific Lamprey young
RT/min. of shocking time

1983	1984	1985
Nov. 1 78.6 cfs 28.3 min 51.4 F 6 117 55	May 16 15.3 cfs 34.3 min 63°F to 70°F 68 164 22 8	May 22 11.4 cfs 32.4 min 69.5°F to 75.5°F 18 7 25 118
0.21	1.98	0.56

RT/min. of shocking time for both locations

1.18	2.57	1.08

^{*}Means are derived from flows measured by the U.S.G.S. near Devil's Gate. Flows are expected to be less in survey areas.

The 1984 survey was conducted in May. The 1983-84 water year, although starting out rather high, ended well below normal. The mean May 1984 Sespe Creek flow was 15.3 cfs as compared to 327 cfs in May of 1983. Total shocking time of 61.9 min. produced a total of 159 RT for a mean of 2.57 RT/min of shocking time. In addition 274 AC, 45 STB, 8 GSF and 16 PLP young were sampled.

The 1985 survey also was conducted in May. The 1984-85 water year was again well below normal. The mean May 1985 flow was 11.4 cfs. Total shocking time of 62.1 min. produced a total of 67 RT for a mean of 1.08 RT/min of shocking time. Also, 14 AC, 31 STB, 174 GSF, and 1 PLP young were sampled.

It is interesting to note that RT density as measured by shocking rate was highest in 1984 during a period when flows were closer to "normal" than in either 1983 or 1985.

Scales from 72 RT collected from a total of 294 RT sampled during the three years were examined for age determination. This analysis revealed that of these 72 RT, approximately 3% were young-of-the year (age 0), 68% were age I, 26% were age II, and 3% were age III. Generally they represented fork length-age groups according to the following:

Fork	length group	Age
0	- 8 cm	0
9	- 17 cm	I
18	- 24 cm	II
>25	cm	III



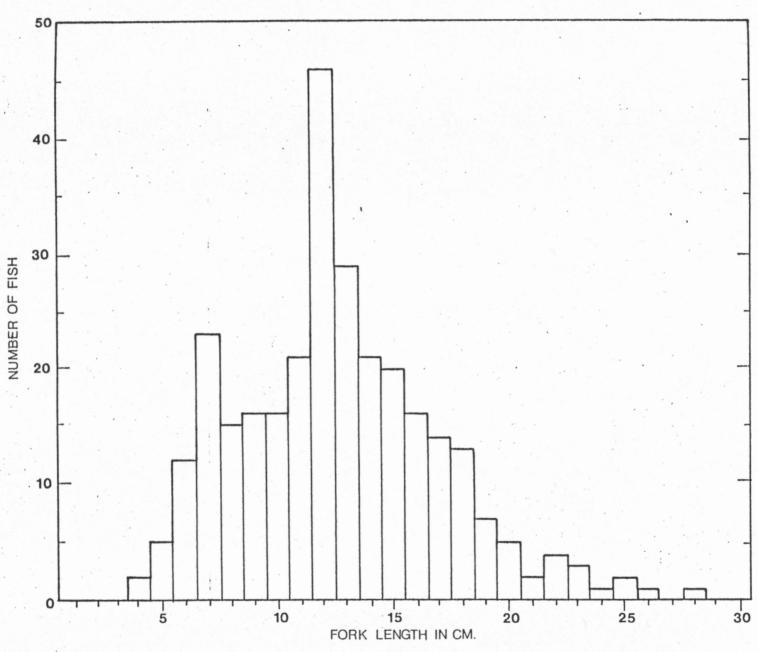


FIGURE 5. Length of Sespe Creek rainbow trout sampled in 1983, 1984 and 1985.

Fork length frequencies of sampled RT showed two peaks assumed to be representing the O and I age class (Figure 5). More Age I class RT were sampled then Age O, probably indicating shocker selectivity for larger fish.

An angling survey was initiated in the spring of 1985 to gather information on angler use and attitude. The survey consisted of a pre-addressed and stamped questionnaire that was distributed at Lion Campground. The questionnaires requested information on use, success, and personal angling interest (Appendix I). Because of various problems associated with distribution, low flows, and the Wheeler fire, the response has been too few to make any analysis this year. The survey will be continued next year with some modifications to the questionnaire and its distribution.

Land Use Management

Most of sespe creek and all of the wild trout section lies within the boundary of the Los Padres National Forest. The USFS is responsible for the land use planning and management of this area. Most of the wild trout section is in an area being assessed for wilderness designation to be managed by Los Padres National Forest. The USFS also is assessing most of Sespe Creek, again including the wild trout section, for recommended designation as a wild and scenic river under the wild and scenic rivers system program.

MANAGEMENT PROGRAM

Management Goals

The goals of wild trout management for Sespe Creek are:

- To protect and maintain the aquatic and riparian habitats
 of Sespe Creek and its tributaries.
- To perpetuate a self-sustaining, balanced wild rainbow trout population.
- To perpetuate the self-sustaining anadromous populations of native steelhead and Pacific lamprey.
- 4. To continue to provide a quality backcountry trout angling experience characterized by a naturally scenic, remote and secluded streamside environment in southern California.

Management Direction

- Continue to evaluate the Sespe Creek wild trout
 population and fishery by monitoring programs to
 determine trout population status and angling pressure
 and success.
- 2. Preserve the natural integrity of Sespe Creek and maintain habitat quality.

- 3. Coordinate with USFS to mutually insure compatible land use policies within the Forest Management Plan.
- 4. Oppose water developments which would destroy stream habitat and/or significantly alter the flows needed to maintain self-sustaining wild trout populations in Sespe Creek.
- 5. Advocate plans, projects and actions that enhance opportunities for runs of steelhead and Pacific lamprey to utilize Sespe Creek.
- Restrict vehicular access along and to Sespe Creek to what is presently available.
- Promote use of prescribed burning to enhance quantity and duration of flows in Sespe Creek.
- Recommend appropriate angling regulation changes when justified.
- 9. Recommend that Sespe Creek be designated a Wild Trout Stream by the California Fish and Game Commission.

Fishery Management

General trout angling regulations currently apply to the

Sespe Creek fishery. Sespe Creek is included in the southern fishing district of the California sportfishing regulations and is open to angling all year with a five trout limit. The influence of angling on the wild trout population under the existing regulation is being evaluated.

Electroshocking sampling surveys to collect baseline trout population data will continue. To monitor angler use and success, a program using questionnaires and spot creel census is planned.

There are no plans to change the trout angling regulation for Sespe Creek until the data from all the surveys through 1987 are collected and analyzed. The regulation will be changed when necessary and justified to achieve the fisheries management goal for Sespe Creek.

Trends in abundance, size and age structure of the trout population and in angler use and success will be monitored periodically following the initial surveys and analysis.

Environmental Monitoring

Sedimentation caused by man's activities in relation to state Highway 33 can become a problem if not properly monitored and corrected. Just such a problem did occur recently when work by Cal Trans to repair flood damage to Highway 33 was improperly done in violation of written project guidelines. As a result, sediments were washed downstream well into the wild trout section of the Creek.

Illegal use of ORV's can and does occasionally happen along some sections of Sespe Creek. Off-road-vehicle use along and in the stream channel can have a deleterious effect on riparian growth and aquatic habitat. Access to the Creek by illegal ORV users is usually by way of Mutau Flat and lightly used Hot Springs Canyon trail. Although illegal ORV use appears not to be a serious problem now, it can become so if it is not dealt with in its early stage.

Sespe Creek provides excellent recreational opportunities in addition to fishing. These include swimming, hiking, camping, horseback riding and nature study activities. Excessive recreational use has the potential of causing water quality problems and stream habitat degradation. These activities are not presently causing any apparent problems, but their effects on the environment should be monitored to detect early signs of a problem if it should occur.

Wild Trout Stream Designation

Sespe Creek is considered to be an excellent wild trout fishery resource which has exceptional value due to its proximity to the state's largest metropolitan area. Studies have shown that trout production and the angling opportunity offered by the trout populations in its semi-remote setting are comparable to other officially designated backcountry streams. Wild trout designation will encourage recognition of the value of this resource as a part of California's program to maintain and manage the best of the

state's remaining wild trout waters. The proposed designation has been coordinated with the Forest Service and is now ready for Commission consideration. The Department will propose that the 25 miles of Sespe Creek be designated by the Fish and Game Commission as a Wild Trout Stream.

PROGRAM IMPLEMENTATION SCHEDULE

			Department Section	Implementation
			or Agency	
Tas	k		Responsible	Date
A.	Fish	ery Management		
	1.	Complete surveys to	R5	1986, 1987
		collect initial base-		Spring
		line trout population		
		data at Bear Creek		
		and Hot Springs Canyon		
		stations.		
	2.	Conduct angler ques-	R5	1986, 1987
		tionnaire and spot		Spring
•		creel census to		
		determine angler use,		
		success, and attitudes.		
	3.	Conduct reward tagging	R5	1986, 1987
		program to determine		Spring
		angling quality and		
		trout harvest.		
	4.	Periodic monitoring of	R5/USFS	1988 and
		population status, angl	er	every 3
		use and success, and		years
		trout harvest.		

1988

B. Angling Regulation

1. Recommend angling R5
regulation changes if
justified after analysis
of fishery data is
completed.

C. Environmental Monitoring

1. Monitor water quality R5/USFS On-going as
 sedimentation, necessary
 recreational use, and
 illegal ORV use.

D. Land Use Planning

1. Coordinate with Los R5 On-going
Padres National
Forest in developing
management programs
which will preserve
and protect the aquatic
habitat and the
natural character of
the stream side
environment.

2. Coordinate with CalTrans R5/USFS On-going to insure maintenance activities will not be detrimental to water quality of Sespe Creek.

REFERENCES

- California Department of Fish and Game. 1965. California fish and wildlife plan; Volume I, Summary. Calif. Dept. Fish and Game, 192 p.
- U.S. Geological Survey, 1966-1984. Water data report CA-66-1 through CA-84-1; water resources data for California water years 1966 through 1984; Volume I.

DEPARTMENT OF FISH AND GAME



APPENDIX I

A REQUEST FROM
THE CALIFORNIA DEPARTMENT OF FISH AND GAME

TO

SESPE CREEK ANGLERS AND RECREATIONAL USERS

As you are aware, Sespe Creck is one of the last free-flowing streams of its size remaining in Southern California. Much of the stream flows through remote areas. The majority of Sespe Creck is not planted with trout and relies on natural reproduction and habitat protection to maintain the trout population. A section of the creek between Pedra Blanca Creek and Devil's Gate near Fillmore is being considered for designation as a Wild Trout Stream by the Department of Fish and Game. This wild trout stream designation will not affect the catchable trout planting program which now exists at Lion Campground and the Upper Sespe Creek along Highway 33.

The Department is in the process of gathering information for preparing a management plan for this section of the creek, and we need your input. By filling out and returning the attached addressed, pre-stamped question-naire, you will help us in the preparation of the management plan and also give us an understanding of the preferences and interests of those who use the creek for angling.

The questionaire applies only to the area of Sespe Creek being considered for wild trout stream designation. Please detach this cover letter, fill out the questionaire, fold it into thirds, staple or tape together and mail.

Thank you for your help.

SESPE CREEK USE QUESTIONNAIRE

Date(s) of visit to Sespe Creek
County of residence Number in party
Reason for visit: Angling Hiking Remote area camping
Horseback riding Bird watching Other
How far did you go into Sespe Creek?
Express the one most important factor of Sespe Creek area that draws you
to the area
Any suggestions or comments are encouraged. Use "additional comment"
section under Angling Survey.
ANGLING SURVEY
Following are questions regarding this visit only.
1. Number of days fished
2. Number of trout caught by party
3. Number of trout released by party
4. Approximate total number of hours fished per day by party
5. Check method of angling: bait lure fly
6. How many other anglers did you see?
Following are questions regarding other visits to Sespe Creek.
1. Approximately how many times a year do you fish Sespe Creek
2. What areas of Sespe Creek do you usually fish
3. What is the average number of anglers who accompany you?
4. Approximately how many other anglers do you see on your trips?
5. Approximately how many hours per day do you fish?
6. Approximately how many trout do you catch on each trip?
7. Approximately how many trout do you keep on each trip?
8. If you had to release all of the trout you caught, would you continu
to fish Sespe Creek? YesNo
9. If you had to use only artificial lures to fish for trout, would you
continue to fish Sespe Creek? YesNo
10. Are you satisfied with the quality of fishing in the Area of Sespe
Creek where you have fished? Yes No
11. Additional comments or suggestions:
12. Would you release some or all of the trout you caught so that a
larger population of wild trout would exist? Yes No
13. Did you know that the trout you caught were wild trout? Yes No