

## **1 STUDY PURPOSE/PROJECT DESCRIPTION**

Under an agreement with the Federal Energy Regulatory Commission, the California Department of Water Resources (DWR) maintains a year round trout fishery in Piru Creek between Pyramid Dam and Frenchman's Flat, located in the Angeles National Forest. To implement this agreement the California Department of Fish and Game releases a total of 3,000 pounds of hatchery raised fish into Piru Creek at Frenchman's Flat between November and May. Trout reproduce naturally upstream of Frenchman's Flat and portions of the stream in this location are considered a catch and release area.

The purpose of this study is to conduct four mid-week and four weekend creel census surveys on randomly selected dates at middle Piru Creek and Frenchman's Flat from October 2003 through August 2004. Creel census surveys were undertaken to determine angler usage of the area and quantify the number and species of fish caught at each location. Surveys were conducted in the middle section of Piru Creek and Frenchman's Flat, which are located approximately two miles downstream of Pyramid Dam.

## **2 SURVEY DATES AND CENSUS PERSONNEL**

Creel census surveys were scheduled on the following dates during May 2004. Four mid-week surveys were scheduled on May 7<sup>th</sup>, 10<sup>th</sup>, 13<sup>th</sup>, and 25<sup>th</sup>, and four weekend dates were scheduled on May 1<sup>st</sup>, 16<sup>th</sup>, 23<sup>rd</sup>, and 31<sup>st</sup>. May 31<sup>st</sup> was scheduled to identify angler usage on the Memorial Day Holiday. Aspen biologists conducted creel census training with the CDFG prior to deploying to the field. Field data were recorded for each angler present during the survey dates and included information including the type and number of fish caught, length and mass of the fish if not released, angler satisfaction, and age demographics. Creel census surveys in Piru Creek were conducted during the month of May 2004 by Lynn Stafford, Kathleen Robertson, and Christopher Meyer of Aspen Environmental Group, a DWR contractor.

## **3 SUMMARY**

Male anglers continue to comprise the majority of fisherman at both Piru Creek and Frenchman's Flat. Of the one hundred and one (101) anglers identified during the survey period, only eight women (ca. 8% of all anglers) were noted fishing in the project area. No single female anglers were identified during the May survey period. The total number of anglers recorded utilizing Piru Creek during May decreased substantially from the previous two months, with less than half the number of anglers observed during April. It appears that warmer summer months increase the amount of day use, camping and swimming activities at both upper Piru Creek and Frenchman's Flat. As summarized below weekend angler usage was down significantly as competition between anglers and swimmers increased. In fact on Memorial Day over six hundred (600) people were identified at Frenchman's Flat alone. On this day only three (3) anglers were observed fishing on Piru Creek. In addition, many anglers drove to the gate, observed the large numbers of people and left the area. Overall weekend angler usage dropped by approximately 50% during the May survey period. Increased summer temperatures, extended day light hours and the end of the school year may be a factor for the increased use of Frenchman's Flat by non-anglers. Activities included picnicking, camping, hiking and swimming.

Despite the reduction in usage during the May survey period approximately 94% of the anglers interviewed indicated they remained satisfied with their general fishing experience. It should be noted that the area continues to be utilized by a core group of anglers, although first time usage continues to occur. In addition, the total number of fish captured during May remained high, above six hundred (600) fish, despite the overall reduction in the total amount of anglers. In some instances anglers were

recorded landing between twenty-five fish (25) and fifty fish (50) during a single afternoon. Anglers who fished the catch and release areas generally enjoyed the fishing experience better than anglers seeking fish for consumption. Overall, approximately 72% of the anglers were satisfied with the size of the fish caught, however only 53% indicated they were satisfied with the number of fish captured. During the month of May there was a slight increase in angler satisfaction related to the size of fish captured, however there was no significant change concerning angler satisfaction with the number of fish captured. As noted during previous surveys, anglers who catch fish for consumption indicate they are rarely satisfied with the number or size of the fish taken and consistently request that CDFG stock larger trout. See Figure 1 and 2 at the end of this report to compare angler satisfaction responses for creel census surveys conducted from October 2003 to May 2004.

Although fly fisherman remained a significant presence, anglers utilizing bait or lures appeared to comprise the majority of anglers utilizing both Frenchman's Flat and Piru Creek upstream of Frenchman's Flat during the May survey period. In addition, large numbers of trout were caught and released by bait fisherman in the Frenchman's Flat area. Of the six hundred and twenty-two (622) fish captured during May over 82% were released back into the creek. Fly fisherman continue to release the majority of fish captured even when not fishing in the catch and release area. Midweek usage increased at upper Piru Creek and Frenchman's Flat during May; perhaps as a result of the increased camping and swimming that occurred during weekend periods. Overall use of the area during weekend periods by anglers dropped. Increased summer use of the area by non-anglers may limit the fishing opportunities along Piru Creek. As stocking is minimized after May and swimmers and campers dominate use of the stream it may result in decreased angler usage during weekend periods.

As identified in previous reports litter and refuse continue to dominate the majority of complaints received from both anglers and hikers. Summer weather and the Memorial Day Holiday increased the number of users to the area. Despite the efforts of USFS crews' large amounts of debris continue to be left along the length of Piru Creek. Prior to Memorial Day, the creel monitor noted that the USFS had increased the patrolling and clean up efforts underway at Piru Creek. In addition, a number of anglers were pleased to note the USFS checking campers and fisherman for permits. Poaching remains a significant concern and is repeatedly reported to the creel monitor.

Additional comments received by anglers during the survey period include:

- Install pay-phone for emergencies
- Trash although slightly better remains a problem
- Keep flows going strong
- Great spot for fishing and camping
- Stock fish all year
- Great fishing downstream of Frenchman's Flat in the gorge area
- Large bear seen in gorge
- Require additional resources to control poaching and illegal fishing
- Pleased to see USFS Ranger Thomas Chacon continue COC Prisoner Clean up Crew
- Very beautiful place being ruined by trash and debris
- Provide additional signs identifying what agency to contact for poaching concerns
- Violations continue in catch and release areas on a regular basis
- Please provide additional USFS and CDFG patrols
- Place additional portable toilets in campground, human waste everywhere after weekends

- Different groups would like the gate opened up to allow vehicle access further up the creek
- Large goldfish in creek

Rainbow trout remain the primary species sought by all the anglers surveyed. In addition, anglers notified the monitor that largemouth bass, catfish, goldfish and bluegill were observed in the creek. Of the 622 fish captured, measurements were obtained for approximately 63 fish. The monitor identified no hatchery marks and all fish observed had intact adipose fins. No significant difference in the lengths or mass of fish captured in Piru Creek was noted from previous months. Most fish were caught and released by the anglers prior to inspection by the monitor and anglers noted no abnormal fish. A brief summary of the creel census survey results for each site is located below. Table 1 and Table 2 summarize the creel census data, including statistics on measured fish, for the month of May 2004.

**Table 1 Creel Census Data at Piru Creek and Frenchman's Flat May 2004.**

Creel Census Location	Number of Anglers Per Site	Sex /Age Distribution of Anglers		Hours Fished Per Location	Number of Fish Caught	Number of Fish Released	Percent of Anglers Satisfied with Experience		
							Fishing Experience	Size of Fish	Number of Fish
Frenchman's Flat Mid-week	20	<16	0	88.5	181	147	92%	64%	40%
		16-30	5 (m)						
		31-45	1 (f) 8 (m)						
		46-55	2 (m)						
		56-65	5 (m)						
>65	3 (m)								
Frenchman's Flat Weekend	13*	<16	2 (m)	35.5	30	19	100%	77%	46%
		16-30	0						
		31-45	1 (f) 9 (m)						
		46-55	0						
		56-65	1 (m)						
>65	0								
Piru Creek Mid-week	45*	<16	0	153	251	192	93%	82%	57%
		16-30	7 (m)						
		31-45	15 (m)						
		46-55	14 (m)						
		56-65	9 (m)						
>65	4 (m)								
Piru Creek Weekend	23	<16	0	91.5	160	150	91%	65%	70%
		16-30	3 (m)						
		31-45	1 (f) 11(m)						
		46-55	1 (f) 4 (m)						
		56-65	2 (m)						
>65	1 (m)								
Totals	101	<16	0	368.5	622	508	94%**	72%**	53%**
		16-30	15 (m)						
		31-45	3 (f) 43(m)						
		46-55	1 (f) 20 (m)						
		56-65	17 (m)						
>65	8 (m)								

\*Some anglers fished at two locations.

\*\*Total number of anglers combined for both areas.

**Table 2 Summary of Fish Size and Length by Area for Frenchman's Flat and Upper Piru Creek.**

Creel Census Location	Number of Fish Caught	Number of Fish Measured	Average Length mm	Standard Deviation	Range mm	Average Mass grams	Standard Deviation	Range grams	Hatchery Marks
Frenchman's Flat Mid-week	181	22	234	25	(200-275)	274	40	(215-350)	Not observed
Frenchman's Flat Weekend	30	11	229	40	(165-275)	248	56	(165-315)	Not observed
Piru Creek Mid-week	251	22	258	22	(225-300)	324	40	(250-400)	Not observed
Piru Creek Weekend	160	8	246	22	(225-275)	276	29	(250-300)	Not observed

#### 4. SURVEY RESULTS FRENCHMAN'S FLAT

##### Frenchman's Flat Mid-Week

- A total of twenty-five (25) anglers were identified fishing at Frenchman's Flat
- One hundred and eighty-one (181) fish were caught and thirty-four (34) fish were kept by anglers during the midweek census period
- Average size of trout was 234 mm with a mass of 274 grams.
- Twenty-three (23) of twenty-five (25) anglers (92%) were satisfied with their fishing experience
- Sixteen (16) of twenty-five (25) anglers (64%) were satisfied with the number of fish caught
- Ten (10) of twenty-five (25) anglers (40%) were satisfied with the size of the fish caught
- With the exception of one (1) female angler (9% of anglers), all anglers were male
- Zero (0) anglers were less than sixteen years old, five (5) anglers were between 16-30, nine (9) were between 31-45, two (2) were between 46-55, five (5) were between 56-65, and three (3) were over 65 years of age.

##### Frenchman's Flat Weekend

A brief summary of creel census survey results is located below:

- A total of thirteen (13) anglers were identified fishing at Frenchman's Flat
- Thirty (30) fish were caught and eleven (11) fish were kept during the weekend census period
- Average size of trout was 229 mm with a mass of 248 grams.
- All thirteen (13) anglers polled were satisfied with their fishing experience
- Ten (10) of thirteen (13) anglers (77%) were satisfied with the number of fish caught
- Six (6) of thirteen (13) anglers (46%) were satisfied with the size of the fish caught
- With the exception of one (1) female anglers (8% of anglers), all other anglers were male
- Two (2) anglers were less than sixteen years old, zero (0) anglers were between 16-30, ten (10) were between 31-45, zero (0) were between 46-55, one (1) were between 56-65, and zero (0) were over 65 years of age.

## 5. SURVEY RESULTS PIRU CREEK

### Piru Creek Mid-Week

- A total of forty-five (45) anglers were identified fishing in Piru Creek
- Two hundred and fifty-three (253) fish were caught and fifty-nine (59) were kept during the midweek census period
- Average size of fish was 258 mm with a mass of 324 grams.
- Forty-two (42) of forty-five (45) anglers (93%) were satisfied with their fishing experience
- Thirty-seven (37) of forty-five (45) anglers (82%) were satisfied with the number of fish caught
- Twenty-six (26) of forty-five (45) anglers (57%) were satisfied with the size of the fish caught
- No female anglers were identified during the census period
- Zero (0) anglers were less than sixteen years old, seven (7) anglers were between 16-30, fifteen (15) were between 31-45, fourteen (14) were between 46-55, nine (9) were between 56-65, and four (4) were over 65 years of age.

### Piru Creek Weekend

- A total of twenty-three (23) anglers were identified fishing in Piru Creek
- One hundred and sixty (160) fish were caught and ten (10) fish were kept during the weekend census period
- Average size of trout taken was 246 mm with a mass of 276 grams
- Twenty-one (21) of twenty-three (23) anglers (91%) were satisfied with their fishing experience
- Fifteen (15) of twenty-three (23) anglers (65%) were satisfied with the number of fish caught
- Sixteen (16) of twenty-three (23) anglers (70%) were satisfied with the size of the fish caught
- With the exception of five (5) female anglers (22% of anglers), all other anglers were male
- Zero (0) anglers were less than sixteen years old, three (3) anglers were between 16-30, twelve (12) were between 31-45, five (5) were between 46-55, two (2) were between 56-65, and one (1) was over 65 years of age.

Figure 1. Angler Satisfaction for Piru Creek  
 Oct 2003-May 2004

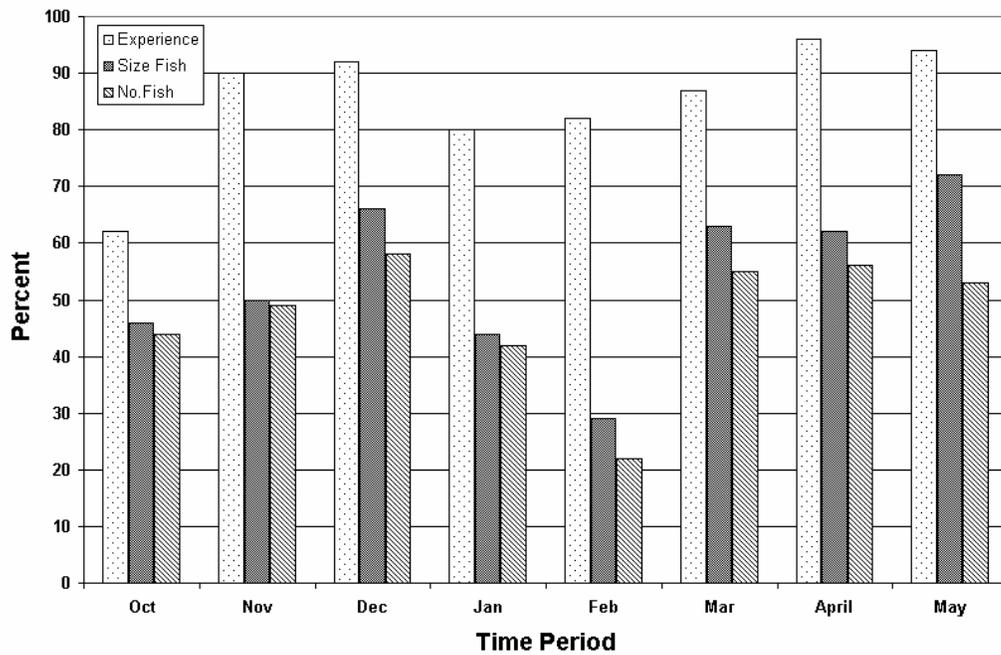


Figure 2. Total Number of Fish Caught and Released-Total Number of Anglers Present  
 Oct 2003- May 2004

