

State of California  
The Resources Agency  
DEPARTMENT OF FISH AND GAME

**CENTRAL VALLEY SALMON AND STEELHEAD  
HARVEST MONITORING PROJECT**

**2001 ANGLER SURVEY**

December 2002

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**2001 ANGLER SURVEY <sup>1/</sup>**

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## SUMMARY

In October 1992, the Central Valley Project Improvement Act (CVPIA) was signed into law. One objective of the CVPIA is to restore the abundance of natural fish stocks in Central Valley Rivers and streams. To achieve this objective, the CVPIA requires the development of restoration actions that ensure sustainable, long-term populations of native anadromous fish stocks. Section 3406(b)(16) of the CVPIA specifies the development of a monitoring and assessment program to evaluate the effectiveness of implemented restoration actions. The Comprehensive Assessment and Monitoring Program (CAMP) was established for this purpose. The CAMP program recommends monitoring of both adult and juvenile fish populations. It was recommended that adult monitoring include spawner returns (escapement) as well as in-river recreational, ocean recreational and commercial harvest estimates.

In 1998, the California Department of Fish and Game (DFG) began the Central Valley Salmon and Steelhead Harvest Monitoring Project to help enumerate the number of adult Chinook salmon and steelhead resulting from natural production in Central Valley Rivers and streams. The harvest monitoring project was initiated to determine annual estimates of the total in-river harvest. In addition, this project will provide limited harvest data of other anadromous and resident sport fish species.

In 2001, the fourth year of the project, the Department conducted an angler survey on the Sacramento River and six major tributaries between January 1<sup>st</sup> and December 31<sup>st</sup>, 2001. Due to budget constraints, the Angler Survey Project focused on rivers that had significant angler effort for salmon and steelhead. A total of 21,597 anglers was surveyed who spent an estimated 1,604,546 angler hours sport fishing. Chinook salmon was the target of most anglers surveyed with striped bass being the second most sought after species. Anglers fishing for salmon expended an estimated 1,028,450 hours during the season. Striped bass fishermen expended an estimated 199,866 hours. Angling hours for steelhead were estimated at 53,951 for the areas surveyed.

Anglers fishing for Chinook salmon harvested an estimated 46,068 salmon for the season. Striped bass anglers caught and estimated 5,757 striped bass. Most steelhead anglers practice catch and release, the total harvest for steelhead was 639. There were 6,163 steelhead released.

## TABLE OF CONTENTS

Introduction .....	1
Study Area .....	1
Procedures .....	3
Statistical Design .....	3
Data Collection .....	4
Estimate Calculations .....	7
Findings .....	8
References .....	10
Appendix A: Description of the River Sections Surveyed .....	11
Appendix B: Estimated Angler-Hours and Number of Days Sampled .....	13
Appendix C: Estimated Harvest, Released, and Angler-Hours by Target Species.....	15

## **INTRODUCTION**

Native anadromous fish stocks in many Central Valley Rivers and streams have declined to such a critical level that many stocks are currently listed or are candidates for listing under the State or Federal Endangered Species acts. In an effort to restore the abundance of natural stocks, those salmon and steelhead produced outside of fish hatcheries, the Central Valley Project Improvement Act (CVPIA) was enacted in October, 1992. The CVPIA calls for the development of restoration actions that ensure long-term sustainable populations of native anadromous fish stocks. To evaluate the effectiveness of restoration actions, the Comprehensive Assessment and Monitoring Program (CAMP) was developed under Section 3406(b)(16) of the CVPIA.

To assist in the CAMP monitoring program, the California Department of Fish and Game (DFG) developed the Central Valley Salmon and Steelhead Harvest Monitoring Project. The DFG has used angler surveys in the past to monitor the harvest of anadromous fish within Central Valley Rivers and streams. Unfortunately, no comprehensive or long-term (more than 5 years) surveys have been made on a consistent basis. This project is designed as a long-term monitoring program to determine annual estimates of total in-river harvest of sport fish from the Sacramento River and major tributaries. Also, the data will complement and enhance other ongoing DFG harvest monitoring programs such as Department's adult striped bass, adult sturgeon, and ocean salmon harvest. This project originated in April, 1998 and is into its fourth year.

## **STUDY AREA**

The study area consists of 554 miles of the Sacramento River and major tributaries which were divided into 20 sampling sections. The rivers comprising the study area are: Sacramento River from Carquinez Bridge upstream to the Anderson-Cottonwood Irrigation District (ACID) Dam in Redding (eight sections); Feather River from its confluence with the Sacramento River at Verona upstream to the Oroville Project Fish Barrier Dam in Oroville (three sections); Yuba River from the confluence with the Feather River near Marysville to one mile upstream of the Highway 20 bridge crossing (two sections); American River from its confluence with the Sacramento River at Discovery Park upstream to Nimbus Dam (three sections); San Joaquin River from its confluence with the Sacramento River upstream to Mossdale Crossing near Tracy (one section); South Fork Mokelumne River from its confluence with the San Joaquin River upstream to Interstate 5 bridge crossing including the North Fork Mokelumne River (two sections); Stanislaus River from McHenry Avenue bridge near Meyers upstream to Goodwin Dam (one section) (Figure 1).

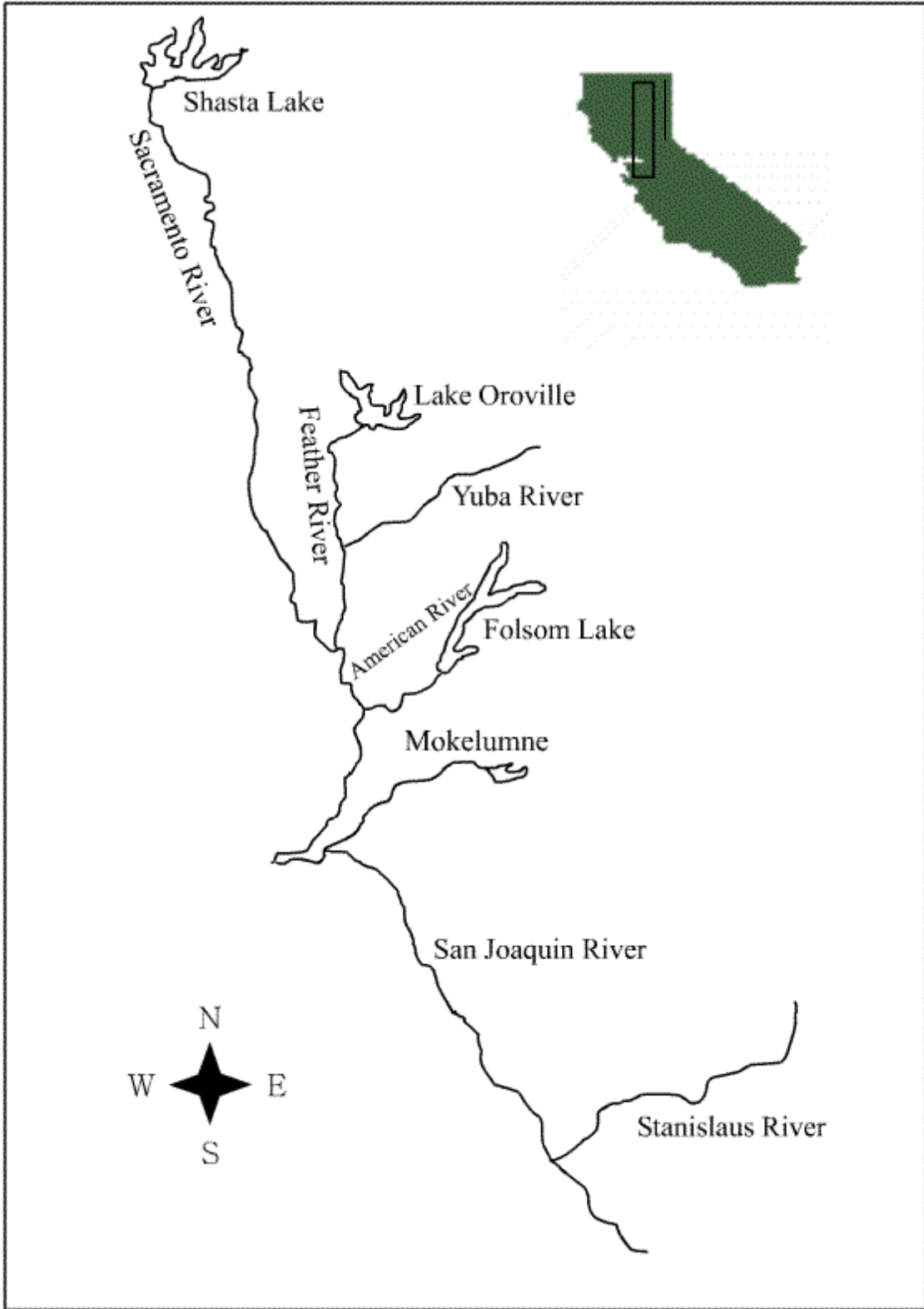


Figure 1. Angler Survey Rivers

## PROCEDURES

### Statistical Design

A stratified random sample design, based on the design used by the Sacramento River System Sport Fish Inventory (Wixom et al. 1995), was used to estimate the in-river harvest during the daytime sport fishery. While a night fishery exists in the Central Valley Rivers, no effort was made by this survey to evaluate the harvest by night time sport anglers.

A total of twenty sections was sampled. Sixteen of these sample sections ranged in length from 4 to 58 river miles. Two sample sections, that represented unique fisheries, were approximately one river mile in length. Sampling schedules and data summaries were compiled on a monthly basis. Months were arbitrarily chosen as sample periods.

All sample sections were surveyed eight randomly selected times each month – four weekdays and four weekend days. Weekdays and weekend days were placed in separate strata because more angling effort is commonly associated with weekend days.

Sample sections were surveyed by kayaks, drift boats or power boats with the exception of the Stanislaus River. Kayaks were used in shallow upstream reaches while power boats were used in rivers where tides, wind, and waves demanded the use of more seaworthy boats. The Stanislaus River was sampled by visiting designated access points between McHenry Avenue Bridge and Goodwin Dam. If vehicle(s) are present at an access point, then the creel clerk tries to locate the angler(s) by hiking along the stream bank until found. Sampling below McHenry Avenue Bridge was not feasible because of the limited public access and difficulty in locating anglers.

For each section surveyed, a random start time and launch location were chosen. Start times were classified as either early or late. An early start time was scheduled to begin ½ hour after sunrise, while a late start time would vary depending on length of section and time of year. Typically, a late start time was scheduled so that the survey would end at or near sunset. Launch locations would either be at the upstream or downstream end of the sections to be surveyed. In those sections where kayaks were used, the launch location was always at the upstream end of the section.

All data collected were linked by river mile. Actual river miles were used for the Sacramento River sections. Each tributary was given a unique number series to identify it from other rivers in the database. The number series assigned to each tributary were as follows: Feather River, 400 series; American River, 500 series; Yuba River, 600 series; San Joaquin River, 700 series; South Fork Mokelumne River, 800 series; North Fork Mokelumne River, 900 series; Stanislaus River, 1000 series. River mile designations were marked in ascending order from downstream to upstream.

## Data Collection

Three field data sets were required to calculate use and catch: hourly counts, angler counts, and angler interviews. Hourly counts determined the portion of the whole represented by the sample day angler count. For this survey, hourly counts collected by Wixom (1995) were used. Where hourly count data were unavailable, data sets were developed by using the hourly counts of representative rivers.

On each sampling day, the procedure was to make a high speed pass to the end of the section. This first pass was called the angler count. Data collected during the angler count included: time of observation, location by river mile, number of boats, number of boat anglers, and the number of shore anglers. At the end of the angler count, a second pass was made traveling back through the section to conduct angler interviews. Prior to beginning the interviews, the survey crew determined the feasibility of interviewing all anglers counted during the angler count. If it was determined that this was not feasible, then they randomly chose an  $N^{\text{th}}$  angler to be interviewed. Once an  $N^{\text{th}}$  angler interval was chosen, that interval was maintained through the entire section for that survey date. Data collected during each interview included: location by river mile, fishing method, number of hours fished, number of anglers in group, target species, zip code, whether the trip was completed, and the number of fish kept and released by species.

Nine sport fish species found in the Central Valley rivers were considered “Target Species.” Those species were: Chinook salmon, steelhead, Rainbow trout, striped bass, sturgeon (all species), American shad, catfish (all species), sunfish (all species), and black bass (all species) (Table 1). If anglers did not indicate they were fishing for one of the target species, the code “ANY” was used.

The number of fish kept and released was recorded separately for each of the nine target species. All other fish species caught were recorded separately by species in a column labeled “Other” (Table 2).

A length measurement was used to differentiate between steelhead and rainbow trout. All rainbow trout 18 inches or greater were considered to be steelhead. Rainbow trout less than 18 inches were recorded as rainbow trout (McEwan, personal contact 1998)<sup>1</sup>.

Additional data were collected from five of the nine target species when kept by anglers. The five species were: Chinook salmon, steelhead, rainbow trout, striped bass and sturgeon. Each fish was measured to the nearest 0.5 centimeter fork length and inspected for any marks or tags. A total length measurement was taken on sturgeon. All Chinook salmon and steelhead caught were inspected for the presence of an adipose fin. A salmon missing an adipose fin indicated the fish was of hatchery origin and likely contained a coded-wire tag (CWT) in its head. The head was removed from adipose fin clipped fish and sent to the DFG Ocean Salmon Project laboratory in Healdsburg for later analysis.

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<sup>1</sup>D. McEwan, 1998, Senior Biologist, California Department of Fish and Game.



Table 1. Species symbols, common and scientific names of target species observed in the 2001 Angler Survey, January 1 through December 31, 2001.

Family	Target Species	Species Symbol	Common Name	Scientific Name
Salmonidae:	Chinook Salmon	KS	King Salmon	<i>Oncorhynchus tshawytscha</i>
	Steelhead	SH	Steelhead Trout	<i>Oncorhynchus mykiss</i>
	Rainbow Trout	RT	Rainbow Trout	<i>Oncorhynchus mykiss</i>
Moronidae:	Striped Bass	SB	Striped Bass	<i>Morone saxatilis</i>
Acipenseridae:	Sturgeon	ST	White Sturgeon	<i>Acipenser transmontanus</i>
Clupeidae:	American Shad	AS	American Shad	<i>Alosa sapidissima</i>
Ictaluridae:	Catfish	CF	Channel Catfish	<i>Ictalurus punctatus</i>
			White Catfish	<i>Ameiurus catus</i>
			Brown Bullhead	<i>Ameiurus nebulosus</i>
			Black Bullhead	<i>Ameiurus melas</i>
Centrarchidae:	Sunfish	SF	Bluegill	<i>Lepomis macrochirus</i>
			Redear Sunfish	<i>Lepomis microlophus</i>
			Black Crappie	<i>Pomoxis nigromaculatus</i>
	Black Bass	BB	Largemouth	<i>Micropterus salmoides</i>
Other:	Any Species	ANY	The "ANY" designations was used for anglers who indicated they were not fishing for a specific species.	

Table 2. Non-target species symbols, common and scientific names of species observed in the 2001 Angler Survey, January 1 through December 31, 2001.

Family	Common Name	Species Symbol	Scientific Name
Salmonidae:	Brown Trout	BN	<i>Salmo trutta</i>
Cyprinidae:	Common Carp	CP	<i>Cyprinus carpio</i>
	Splittail	SPT	<i>Pogonichthys macrolepidotus</i>
	Squawfish	SQ	<i>Ptychocheilus grandis</i>
Catostomidae:	Sacramento Sucker	SKR	<i>Catostomus occidentalis</i>
Pleuronectidae:	Starry Flounder	STR	<i>Platichthys stellatus</i>

## Estimate Calculations

Sample day estimates for angler-hours were created by dividing the observed angler count by the average hourly count within the respective hour interval. The mean of the sample days within a stratum was expanded by the number of days available in the month to obtain the total for the stratum. For each month and section, weekend and weekday strata were combined for total estimated angler-hours as follows:

$$\text{TOTALAH}_i = ((\text{ALLWD}_i * \text{WDAVG}_i) + (\text{ALLWE}_i * \text{WEAVG}_i))$$

$\text{TOTALAH}_i$  = total angler-hours (the subscript  $i$  denotes the stratum containing a particular combination of section and month).

$\text{ALLWD}_i$  and  $\text{ALLWE}_i$  = number of weekdays and weekend days, respectively available in the month.

$\text{WDAVG}_i$  and  $\text{WEAVG}_i$  = mean of expanded sample-day angler-hours for weekdays and weekend days, respectively.

Hourly count data were not available for all rivers surveyed. For example, Feather River hourly counts were used with Yuba River angler count data; Sacramento River counts were used with San Joaquin River and Mokelumne River angler count data; and American River hourly counts were used with Stanislaus River angler count data.

Angler hour estimates were scaled down to each species by multiplying the total angler-hours by the observed percent distribution of effort for each target species:

$$\text{TOTALAHSP}_{ij} = \text{TOTALAH}_i * \text{FISHHRS}_{ij}$$

$\text{TOTALAHSP}_{ij}$  = estimated angler-hours (subscript  $i$  denotes the stratum containing a particular combination of section and month,  $j$  denotes target species)

$\text{TOTALAH}_i$  = total angler-hours (the subscript  $i$  denotes the stratum containing a particular combination of section and month).

$\text{FISHHRS}_{ij}$  = the ratio of the sample total angler-hours for species “ $j$ ” divided by the sample total angler-hours for all species in section and month “ $i$ ”.

Catch per unit effort,(CPUE) was calculated from the sample total number of fish caught divided by the sample total hours fished for each target species within the selected month and

section “i”. It was assumed that the catch rate was the same for all days of the week. Separate values were calculated for harvested and released fish. Therefore:

$$CPUE_{ij} = \text{SUMFISH}_{ij} / \text{SUMHRS}_{ij}$$

$CPUE_{ij}$  = catch-per-unit-effort for harvested or released target species.

$\text{SUMFISH}_{ij}$  = total observed number of fish harvested or released.

$\text{SUMHRS}_{ij}$  = total observed angler-hours expended to catch and release a target species.

Catch is the product of the estimated angler-hours and CPUE for target species, section, and month selected, where:

$$\text{CATCH}_{ij} = \text{TOTALAHSP}_{ij} * CPUE_{ij}$$

$\text{CATCH}_{ij}$  = Estimated catch for a harvested or released target species.

$\text{TOTALAHSP}_{ij}$  = estimated angler-hours (subscript i denotes the stratum containing a particular combination of section and month, j denotes target species)

$CPUE_{ij}$  = catch-per-unit-effort for harvested or released target species.

## FINDINGS

This is the fourth year of a multi-year project designed to estimate angler effort and harvest. Angler surveys were conducted on the Sacramento, Feather, Yuba, American, San Joaquin, Mokelumne, and Stanislaus rivers at various times between January 1 and December 31, 2001. All rivers were not sampled for the entire year. These data represents estimates for the various rivers only for the portion of the year that sampling occurred. Limited sampling was due to budget reductions which did not allow all rivers to be sampled for the entire year or open season. Hence, the project focused on rivers that had significant angler effort for salmon and steelhead which was based on past survey results (Murphy et al., 1998, 1999, and 2000). A total of 21,597 anglers was interviewed, and these data form the basis for the angling effort and harvest estimates. Sport anglers spent an estimated 1,604,546 angler-hours fishing in the Central Valley Rivers surveyed. Chinook salmon was the species targeted by most anglers followed by striped bass.

The salmon season opened July 15, 2001 on the Sacramento River and closed January 13, 2002. Steady angling continued through the season with the peak in angling effort occurring in September and October. In 2001, anglers spent an estimated total of 1,003,818 hours fishing for Chinook salmon in the Sacramento River. Anglers harvested an estimated 45,063 salmon for their efforts. Striped bass was the second most targeted species. Striped bass and steelhead were also encountered during this time. In 2001, an estimated total of 105,860 hours was spent targeting striped bass with an estimated total of 2,836 striped bass harvested during the sample period. Hours spent fishing for steelhead was estimated at 3,369. Most anglers practice catch and release, thus many steelhead are not counted in the harvest estimates. An estimated total of 89 steelhead were retained with 681 estimated released.

Angler surveys for the American River were conducted during January 2001 and from March 1 through June 30, 2001. During the sampling period steelhead was the primary target of most anglers followed by striped bass and then Chinook salmon. A total of 38,128 hours, 20,648 hours, and 5,667 hours were expended in pursuit of steelhead, striped bass and Chinook salmon, respectively. Anglers harvested an estimated 479 steelhead (3,120 released), 432 striped bass (1,369 released), and 304 Chinook salmon (247 released) during the sampling period.

The Feather River was surveyed in January 2001 and then again from March 1, through June 30, 2001. Water levels on the Feather River were very low throughout the year resulting in decreased angler effort and harvest. The greatest angling effort was for striped bass with significantly less effort for Chinook salmon and steelhead, during the sampling period. An estimated total of 60,206 angler hours was spent fishing for striped bass with 18,965 and 12,087 angler hours spent fishing for Chinook salmon and steelhead, respectively. Harvest estimates for striped bass, Chinook salmon and steelhead was 1,993 (1,865 released), 700 (114 released), and 70 (2,296 released) fish, respectively.

The Yuba, San Joaquin, Stanislaus and Mokelumne rivers were not sampled for most of the 2001 season due to inadequate funding. The project only surveyed in January for the rivers mentioned above.

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## APPENDIX A

### Description of the River Sections Surveyed

River Miles	Section Number	Description	Distance (Miles)
<b>Sacramento River/Delta</b>			
-22 to 12	1.0	Carquinez Bridge to Rio Vista Bridge	35
13 to 59	2.0	Rio Vista Bridge to mouth of American River	48
60 to 89	3.0	American River to Knights Landing (Hwy. 113 Bridge)	29
90 to 143	4.0	Knights Landing to Colusa (River Rd. Bridge)	54
144 to 199	5.0	Colusa to Hamilton City (Hwy. 32 Bridge)	56
200 to 242	6.0	Hamilton City to Red Bluff Diversion Dam	43
243 to 280	7.0	Red Bluff Diversion Dam to Deschutes Road Bridge	38
281 to 298	8.0	Deschutes Road Bridge to ACID Dam at Redding	18
<b>American River</b>			
500 to 504	9.0	Discovery Park to Interstate 80 Bridge	4
505 to 522	10.0	Interstate 80 Bridge to Hazel Avenue Bridge	18
523	10.1	Hazel Avenue Bridge to Nimbus Dam	1
<b>Feather River</b>			
400 to 438	11.0	Verona to Sunset Pumps	39
439 to 458 460 to 467	12.0	Sunset Pumps to Feather River Fish Hatchery (excluding Thermalito River outlet)	28
459	12.1	Thermalito River Outlet (only)	1
<b>Yuba River</b>			
600 to 612	13.0	Marysville to Daguerre Point Dam	13
613 to 622	14.0	Daguerre Point to 1 mile upstream Hwy. 20 Bridge	8
<b>San Joaquin River/Delta</b>			
700 to 757	15.0	Mossdale Crossing to the confluence with the Sacramento River	58
<b>Mokelumne River</b>			
800 to 822	16.0	South Fork - from mouth to Interstate 5 Bridge Crossing	23
900 to 910	17.0	North Fork - from mouth to confluence with South Fork at New Hope Landing	11
<b>Stanislaus River</b>			
1029 to 1058	18.0	Stanislaus River from McHenry Avenue to Goodwin Dam	29



## APPENDIX B

Estimated Angler-Hours and Number of Days Sampled

TOTAL NUMBER OF ANGLER-HOURS

River:	Sacramento								American			Feather			Yuba		San Joaquin	Mokelumne	Stanislaus	TOTAL	
Section No.:	1	2	3	4	5	6	7	8	9	10	10.1	11	12	12.1	13	14	15	16	17	18	
January	46,255	11,815	4,587	4,510	3,892	4,112	4,786	4,715	874	22,432	6,240	1,135	5,693	204	681	3,242	11,845	2,316	853	3,239	143,427
February																					0
March									4,063	12,022	1,231	47,273	3,898	405							68,892
April									10,226	8,033	504	11,884	3,413	453							34,513
May									8,369	12,186	604	12,926	3,751	3,089							40,925
June									2,985	14,014	7,134	4,891	6,260	10,686	1,940	2,154					50,064
July		41,719	23,301	15,260	26,872	80,228	5,546	5,779													198,705
August		53,029	31,698	43,122	34,484	44,475	9,732	7,992													224,533
September		151,486	52,801	33,005	32,038	41,277	35,439	5,937													351,983
October		179,902	61,038	11,709	18,723	22,476	27,779	19,536													341,164
November		35,691	16,401	7,973	10,220	9,745	14,048	9,836													103,915
December		21,817	1,768	3,483	2,637	5,607	3,803	7,309													46,424
TOTAL:	46,255	495,459	191,595	119,062	128,866	207,921	101,134	61,105	26,518	68,686	15,713	78,109	23,015	14,838	2,621	5,396	11,845	2,316	853	3,239	1,604,546

TOTAL NUMBER OF SAMPLE-DAYS

River:	Sacramento								American			Feather			Yuba		San Joaquin	Mokelumne	Stanislaus	TOTAL	
Section No.:	1	2	3	4	5	6	7	8	9	10	10.1	11	12	12.1	13	14	15	16	17	18	
January	5	7	8	7	6	6	8	8	8	8	8	8	6	6	6	6	5	8	8	6	138
February																					0
March									7	7	7	6	6	6							39
April									6	6	6	8	8	8							42
May									8	8	8	8	7	7							46
June									8	8	8	8	6	6	6	6					56
July		8	8	6	7	8	8	8													53
August		8	8	8	8	8	8	8													56
September		6	6	7	7	8	8	7													49
October		8	8	7	6	7	5	8													49
November		7	8	7	8	5	8	8													51
December		8	8	8	6	8	7	8													53
TOTAL:	5	52	54	50	48	50	52	55	37	37	37	38	33	33	12	12	5	8	8	6	632

## APPENDIX C

Estimated Harvest, Released and Angler-Hours by Target Species

CHINOOK SALMON

TOTAL ESTIMATED HARVEST

River:	Sacramento								American			Feather			Yuba	San Joaquin	Mokelumne	Stanislaus	TOTAL			
Section No.:	1	2	3	4	5	6	7	8	9	10	10.1	11	12	12.1	13	14	15	16	17	18	TOTAL	
January	0	16	101	56	273	63	104	0	0	0	57	0	0	0	0	0	0	0	0	0	0	670
February																						0
March									0	0	0	0	0	0	0	0	0	0	0	0	0	0
April									0	0	0	0	0	0	0	0	0	0	0	0	0	0
May									0	0	0	0	0	32	39							71
June									0	0	247	0	125	505	0	0						877
July		129	87	293	835	2,829	18	0														4,191
August		292	180	1,690	1,104	2,554	402	0														6,222
September		5,797	1,407	1,466	2,858	2,223	2,540	0														16,292
October		7,531	2,497	264	779	1,238	1,602	0														13,911
November		564	409	297	737	576	518	0														3,102
December		0	0	0	95	369	269	0														733
TOTAL:	0	14,329	4,683	4,066	6,679	9,852	5,454	0	0	0	304	0	156	544	0	0	0	0	0	0	0	46,068

TOTAL ESTIMATED RELEASED

River:	Sacramento								American			Feather			Yuba	San Joaquin	Mokelumne	Stanislaus	TOTAL			
Section No.:	1	2	3	4	5	6	7	8*	9	10	10.1	11	12	12.1	13	14	15	16	17	18	TOTAL	
January	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
February																						0
March									0	0	0	0	0	0	0	0	0	0	0	0	0	0
April									0	0	0	0	0	0	0	0	0	0	0	0	0	0
May									0	0	0	0	0	78								78
June									0	0	247	0	0	36	0	0						283
July	0	0	0	0	0	0	0	0														0
August	0	0	0	15	24	0	11	0														50
September	0	45	82	75	82	412	0															696
October	872	329	0	118	74	147	0															1,541
November	18	54	0	174	0	27	0															273
December	0	0	0	0	0	0	0	0														0
TOTAL:	0	890	428	98	391	172	598	0	0	0	247	0	0	114	0	0	0	0	0	0	0	2,938

ESTIMATED ANGLER-HOURS

River:	Sacramento								American			Feather			Yuba	San Joaquin	Mokelumne	Stanislaus	TOTAL			
Section No.:	1	2	3	4	5	6	7	8*	9	10	10.1	11	12	12.1	13	14	15	16	17	18	TOTAL	
January	0	562	1,234	647	3,000	3,159	1,677	0	0	27	636	0	0	0	0	0	0	0	0	0	0	10,942
February																						0
March									0	0	0	0	0	0	0	0	0	0	0	0	0	0
April									0	27	0	0	0	0	0	0	0	0	0	0	0	27
May									0	46	0	0	1,091	3,050								4,187
June									51	488	4,392	322	4,267	10,235	0	0						19,755
July		12,878	16,734	10,074	21,625	74,898	555	0														136,764
August		25,386	26,060	40,610	31,808	43,340	8,010	0														175,213
September		131,963	49,388	31,250	30,135	39,636	30,242	0														312,614
October		164,622	58,667	9,557	16,721	20,877	22,071	0														292,516
November		18,293	13,081	5,655	9,456	8,332	10,903	0														65,721
December		0	0	0	2,174	5,314	3,223	0														10,711
TOTAL:	0	353,704	165,165	97,793	114,920	195,556	76,680	0	51	588	5,028	322	5,358	13,285	0	0	0	0	0	0	0	1,028,450

STEELHEAD

TOTAL ESTIMATED HARVEST

River:	Sacramento								American			Feather			Yuba	San Joaquin	Mokelumne	Stanislaus	TOTAL			
Section No.:	1	2	3	4	5	6	7	8*	9	10	10.1	11	12	12.1	13	14	15	16	17	18		
January	0	0	9	0	0	0	0	0	0	177	57	0	0	0	0	0	0	0	0	0	0	243
February																						0
March									0	190	0	0	70	0								260
April									0	54	0	0	0	0								54
May									0	0	0	0	0	0								0
June									0	0	0	0	0	0	0	0						0
July		0	0	0	0	0	0	0														0
August		0	0	0	0	0	0	0														0
September		0	0	0	0	0	0	0														0
October		0	0	0	0	0	55	0														55
November		0	0	12	0	13	0	0														26
December		0	0	0	0	0	0	0														0
TOTAL:	0	0	9	12	0	13	55	0	0	422	57	0	70	0	0	0	0	0	0	0	0	639

TOTAL ESTIMATED RELEASED

River:	Sacramento								American			Feather			Yuba	San Joaquin	Mokelumne	Stanislaus	TOTAL			
Section No.:	1	2	3	4	5	6	7	8*	9	10	10.1	11	12	12.1	13	14	15	16	17	18		
January	0	16	0	0	0	0	122	0	0	1,554	198	0	962	0	0	67	0	0	0	0	0	2,918
February																						0
March									0	886	155	0	562	0								1,603
April									0	327	0	0	581	0								908
May									0	0	0	0	191	0								191
June									0	0	0	0	0	0	0	0						0
July		0	0	0	0	0	0	0														0
August		0	0	0	0	30	0	0														30
September		0	0	0	0	0	41	0														41
October		0	0	0	0	29	331	0														361
November		0	0	0	27	0	41	0														68
December		0	0	0	0	43	0	0														43
TOTAL:	0	16	0	0	27	103	535	0	0	2,767	353	0	2,296	0	0	67	0	0	0	0	0	6,163

ESTIMATED ANGLER-HOURS

River:	Sacramento								American			Feather			Yuba	San Joaquin	Mokelumne	Stanislaus	TOTAL			
Section No.:	1	2	3	4	5	6	7	8*	9	10	10.1	11	12	12.1	13	14	15	16	17	18		
January	0	206	111	0	74	269	330	0	134	21,879	5,378	87	5,540	204	155	214	0	0	0	0	0	34,580
February																						0
March									0	8,020	1,085	0	3,116	329								12,551
April									0	1,593	0	19	1,220	113								2,945
May									0	0	0	0	669	0								669
June									0	38	0	0	789	0	0	0						827
July		0	0	0	0	0	0	0														0
August		0	0	0	0	299	0	0														299
September		0	0	0	0	0	27	0														27
October		0	0	0	0	265	787	22														1,074
November		0	0	43	157	228	170	0														599
December		0	0	0	76	293	10	0														379
TOTAL:	0	206	111	43	307	1,354	1,326	22	134	31,531	6,463	106	11,334	647	155	214	0	0	0	0	0	53,951

**RAINBOW TROUT**

**TOTAL ESTIMATED HARVEST**

River:	Sacramento								American			Feather			Yuba	San Joaquin	Mokelumne	Stanislaus	TOTAL			
Section No.:	1	2	3	4	5	6	7	8*	9	10	10.1	11	12	12.1	13	14	15	16	17	18		
January	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
February																						0
March									0	285	0	0	0	0								285
April									0	0	0	0	0	0								0
May									0	0	0	0	0	0								0
June									0	0	0	0	0	0	0	28						28
July		0	0	0	0	0	73	0														73
August		0	0	0	0	0	45	0														45
September		0	0	0	0	0	110	0														110
October		0	0	0	0	29	0	43														73
November		0	0	0	0	0	0	0														0
December		0	0	0	0	0	0	0														0
TOTAL:	0	0	0	0	11	29	227	43	0	285	0	0	0	0	0	28	0	0	0	0	0	623

**TOTAL ESTIMATED RELEASED**

River:	Sacramento								American			Feather			Yuba	San Joaquin	Mokelumne	Stanislaus	TOTAL			
Section No.:	1	2	3	4	5	6	7	8*	9	10	10.1	11	12	12.1	13	14	15	16	17	18		
January	0	0	0	0	55	16	1,633	1,563	0	0	0	0	0	0	31	710	0	0	0	2,313	6,321	
February																						0
March									0	253	0	0	0	0								253
April									0	54	0	0	523	0								577
May									0	31	0	0	32	0								63
June									0	0	0	0	42	0	431	2,126						2,599
July		0	0	0	0	103	1,909	4,712														6,725
August		0	0	0	0	45	436	4,507														4,987
September		0	0	0	0	62	3,982	2,277														6,321
October		0	0	0	118	368	5,948	9,018														15,453
November		0	0	0	0	442	1,199	2,808														4,250
December		0	0	0	0	0	186	5,046														5,233
TOTAL:	0	0	0	0	173	1,037	15,294	29,732	0	338	0	0	596	0	462	2,836	0	0	0	2,313	52,780	

**ESTIMATED ANGLER-HOURS**

River:	Sacramento								American			Feather			Yuba	San Joaquin	Mokelumne	Stanislaus	TOTAL			
Section No.:	1	2	3	4	5	6	7	8*	9	10	10.1	11	12	12.1	13	14	15	16	17	18		
January	0	0	0	0	374	99	2,371	4,707	0	27	0	0	154	0	496	3,021	0	0	0	1,669	12,918	
February																						0
March									12	1,297	0	0	140	0								1,450
April									0	422	0	0	1,017	0								1,439
May									0	330	0	0	167	0								497
June									103	210	0	0	249	0	910	2,154						3,626
July		0	0	0	0	224	4,778	5,765														10,767
August		0	0	0	0	22	1,471	7,913														9,407
September		0	0	0	0	638	4,957	5,886														11,481
October		0	0	0	366	980	4,875	19,407														25,629
November		0	0	0	375	1,146	2,838	9,716														14,075
December		0	0	0	0	0	569	7,304														7,873
TOTAL:	0	0	0	0	1,115	3,109	21,861	60,699	115	2,286	0	0	1,727	0	1,406	5,175	0	0	0	1,669	99,161	

**AMERICAN SHAD**

**TOTAL ESTIMATED HARVEST**

River:	Sacramento								American			Feather			Yuba	San Joaquin	Mokelumne	Stanislaus	TOTAL			
Section No.:	1	2	3	4	5	6	7	8*	9	10	10.1	11	12	12.1	13	14	15	16	17	18		
January	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
February																						0
March									0	0	0	0	0	0								0
April									117	0	0	0	0	0								117
May									229	0	0	6,880	0	0								7,109
June									77	2,562	0	114	0	0	0	0						2,752
July		0	0	0	104	483	0	0														587
August		0	0	0	0	0	0	0														0
September		0	0	0	0	0	0	0														0
October		0	0	0	0	0	0	0														0
November		0	0	0	0	0	0	0														0
December		0	0	0	0	0	0	0														0
TOTAL:	0	0	0	0	104	483	0	0	423	2,562	0	6,994	0	0	0	0	0	0	0	0	0	10,566

**TOTAL ESTIMATED RELEASED**

River:	Sacramento								American			Feather			Yuba	San Joaquin	Mokelumne	Stanislaus	TOTAL			
Section No.:	1	2	3	4	5	6	7	8*	9	10	10.1	11	12	12.1	13	14	15	16	17	18		
January	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
February																						0
March									0	0	0	0	0	0								0
April									176	163	0	0	0	0								339
May									2,783	0	0	6,777	414	0								9,975
June									51	10,859	0	757	208	144	0	0						12,019
July		0	0	0	191	2,104	0	0														2,295
August		0	0	0	0	0	0	0														0
September		0	0	0	0	0	0	0														0
October		0	0	0	0	0	0	0														0
November		0	0	0	0	0	0	0														0
December		0	0	0	0	0	0	0														0
TOTAL:	0	0	0	0	191	2,104	0	0	3,011	11,023	0	7,534	622	144	0	0	0	0	0	0	0	24,629

**ESTIMATED ANGLER-HOURS**

River:	Sacramento								American			Feather			Yuba	San Joaquin	Mokelumne	Stanislaus	TOTAL			
Section No.:	1	2	3	4	5	6	7	8*	9	10	10.1	11	12	12.1	13	14	15	16	17	18		
January	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
February																						0
March									0	0	0	0	0	0								0
April									1,203	313	0	0	0	0								1,516
May									3,422	8,331	0	9,011	1,656	0								22,420
June									327	10,381	1,237	1,362	332	90	0	0						13,731
July		0	0	0	317	1,889	0	0														2,206
August		0	0	0	0	0	0	0														0
September		0	0	0	0	0	0	0														0
October		0	0	0	0	0	0	0														0
November		0	0	0	0	0	0	0														0
December		0	0	0	0	0	0	0														0
TOTAL:	0	0	0	0	317	1,889	0	0	4,953	19,025	1,237	10,373	1,989	90	0	0	0	0	0	0	0	39,873

STRIPED BASS

TOTAL ESTIMATED HARVEST

River:	Sacramento								American			Feather			Yuba	San Joaquin	Mokelumne	Stanislaus	TOTAL		
Section No.:	1	2	3	4	5	6	7	8*	9	10	10.1	11	12	12.1	13	14	15	16	17	18	TOTAL
January	519	111	0	0	0	0	0	0	14	0	0	0	0	0	0	0	131	367	0	0	1,141
February																					0
March									95	0	0	1,218	0	0							1,314
April									176	0	0	497	0	0							673
May									38	31	0	51	0	0							120
June									77	0	0	227	0	0	0	0					304
July		194	25	24	156	207	0	0													607
August		351	30	15	119	0	0	0													515
September		390	0	0	162	41	0	0													594
October		138	0	0	24	29	0	0													191
November		265	22	0	13	0	0	0													299
December		0	0	0	0	0	0	0													0
TOTAL:	519	1,448	77	40	474	278	0	0	401	31	0	1,993	0	0	0	0	131	367	0	0	5,757

TOTAL ESTIMATED RELEASED

River:	Sacramento								American			Feather			Yuba	San Joaquin	Mokelumne	Stanislaus	TOTAL		
Section No.:	1	2	3	4	5	6	7	8*	9	10	10.1	11	12	12.1	13	14	15	16	17	18	TOTAL
January	1135	301	0	0	11	0	0	0	0	0	0	0	0	0	0	0	392	244	15	66	2,164
February																					0
March									0	0	0	1,218	0	0							1,218
April									235	272	0	382	0	0							889
May									153	184	0	154	0	0							490
June									488	38	0	114	0	0	0	0					640
July		6,269	1,299	1,171	887	69	0	0													9,695
August		5,406	1,081	853	202	60	0	0													7,601
September		1,784	290	989	711	0	0	0													3,774
October		1,240	52	310	0	0	0	0													1,602
November		1,711	162	12	0	0	0	0													1,885
December		0	0	0	0	0	0	0													0
TOTAL:	1135	16,710	2,884	3,335	1,811	129	0	0	875	494	0	1,868	0	0	0	0	392	244	15	66	29,959

ESTIMATED ANGLER-HOURS

River:	Sacramento								American			Feather			Yuba	San Joaquin	Mokelumne	Stanislaus	TOTAL		
Section No.:	1	2	3	4	5	6	7	8*	9	10	10.1	11	12	12.1	13	14	15	16	17	18	TOTAL
January	13856	7,895	1,011	60	155	111	0	0	432	55	0	442	0	0	0	0	8,447	2,304	808	1,570	37,145
February																					0
March									3,263	1,005	0	44,293	386	0							48,947
April									5,355	2,628	0	10,508	0	0							18,491
May									1,506	2,682	0	1,848	111	39							6,187
June									1,438	2,285	0	2,422	83	72	24	0					6,324
July		13,379	3,401	1,605	4,351	2,234	0	0													24,969
August		12,419	2,357	1,123	2,424	560	0	0													18,884
September		9,601	335	1,042	1,507	854	0	0													13,339
October		9,299	616	680	461	59	0	0													11,114
November		11,649	824	223	121	0	27	0													12,843
December		1,302	302	20	0	0	0	0													1,624
TOTAL:	13856	65,543	8,845	4,752	9,019	3,818	27	0	11,994	8,654	0	59,514	581	111	24	0	8,447	2,304	808	1,570	199,866



**CATFISH (all species)**

**TOTAL ESTIMATED HARVEST**

River:	Sacramento								American			Feather			Yuba	San Joaquin	Mokelumne	Stanislaus	TOTAL		
Section No.:	1	2	3	4	5	6	7	8*	9	10	10.1	11	12	12.1	13	14	15	16	17	18	
January	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	131	0	0	0	149
February																					0
March									0	0	0	0	0	0							0
April									0	0	0	0	0	0							0
May									0	0	0	0	0	0							0
June									0	0	0	0	0	0	0	0					0
July		1,379	100	195	0	0	0	0								0					1,674
August		1,578	270	137	36	0	0	0													2,021
September		557	179	49	0	0	0	0													786
October		459	17	149	0	0	0	0													626
November		370	775	37	0	0	0	0													1,183
December		30	31	0	0	0	0	0													61
<b>TOTAL:</b>	<b>0</b>	<b>4,374</b>	<b>1,391</b>	<b>568</b>	<b>36</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>131</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6,499</b>

**TOTAL ESTIMATED RELEASED**

River:	Sacramento								American			Feather			Yuba	San Joaquin	Mokelumne	Stanislaus	TOTAL		
Section No.:	1	2	3	4	5	6	7	8*	9	10	10.1	11	12	12.1	13	14	15	16	17	18	
January	0	0	138	0	0	0	0	0	0	0	0	0	0	0	0	0	65	0	0	0	204
February																					0
March									0	0	0	0	0	0							0
April									0	0	0	38	0	0							38
May									0	0	0	0	0	0							0
June									0	0	0	0	0	0	0	0					0
July		388	200	49	0	34	0	0								0					671
August		497	30	30	0	0	0	0													557
September		111	89	0	0	0	0	0													201
October		0	0	23	0	0	0	0													23
November		229	711	25	0	0	0	0													965
December		0	124	13	0	0	0	0													137
<b>TOTAL:</b>	<b>0</b>	<b>1,225</b>	<b>1,292</b>	<b>140</b>	<b>0</b>	<b>34</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>38</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>65</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,796</b>

**ESTIMATED ANGLER-HOURS**

River:	Sacramento								American			Feather			Yuba	San Joaquin	Mokelumne	Stanislaus	TOTAL		
Section No.:	1	2	3	4	5	6	7	8*	9	10	10.1	11	12	12.1	13	14	15	16	17	18	
January	0	47	539	80	0	0	0	0	0	0	0	394	0	0	0	0	964	12	46	0	2,083
February																					0
March									113	0	0	0	0	0							113
April									95	463	0	191	0	0							749
May									133	0	0	154	0	0							287
June									0	0	0	0	0	0	0	0					0
July		8,192	1,658	513	296	207	0	0													10,865
August		7,933	773	647	131	15	0	0													9,499
September		4,208	1,821	251	175	0	0	0													6,455
October		1,401	538	525	0	0	0	0													2,463
November		1,389	1,263	566	54	0	0	0													3,272
December		385	642	26	0	0	0	0													1,054
<b>TOTAL:</b>	<b>0</b>	<b>23,566</b>	<b>7,233</b>	<b>2,609</b>	<b>654</b>	<b>222</b>	<b>0</b>	<b>0</b>	<b>342</b>	<b>463</b>	<b>0</b>	<b>739</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>964</b>	<b>12</b>	<b>46</b>	<b>0</b>	<b>36,841</b>

SUNFISH (all species)

TOTAL ESTIMATED HARVEST

River:	Sacramento								American			Feather			Yuba	San Joaquin	Mokelumne	Stanislaus	TOTAL			
Section No.:	1	2	3	4	5	6	7	8*	9	10	10.1	11	12	12.1	13	14	15	16	17	18	TOTAL	
January	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
February																						0
March									0	0	0	0	0	0	0							0
April									0	0	0	0	0	0	0							0
May									0	0	0	0	0	0	0							0
June									0	0	0	0	0	0	0	0						0
July		0	0	0	0	0	0	0														0
August		0	0	0	0	0	0	0														0
September		0	0	0	0	0	0	0														0
October		0	0	0	0	0	0	0														0
November		0	0	0	0	0	0	0														0
December		0	0	0	0	0	0	0														0
TOTAL:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TOTAL ESTIMATED RELEASED

River:	Sacramento								American			Feather			Yuba	San Joaquin	Mokelumne	Stanislaus	TOTAL			
Section No.:	1	2	3	4	5	6	7	8*	9	10	10.1	11	12	12.1	13	14	15	16	17	18	TOTAL	
January	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
February																						0
March									0	0	0	0	0	0								0
April									0	0	0	0	0	0								0
May									0	0	0	0	0	0								0
June									0	0	0	0	0	0	0	0						0
July		0	0	0	0	0	0	0														0
August		0	0	0	0	0	0	0														0
September		0	0	0	0	0	0	0														0
October		0	0	0	0	0	0	0														0
November		0	0	0	0	0	0	0														0
December		0	0	0	0	0	0	0														0
TOTAL:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ESTIMATED ANGLER-HOURS

River:	Sacramento								American			Feather			Yuba	San Joaquin	Mokelumne	Stanislaus	TOTAL			
Section No.:	1	2	3	4	5	6	7	8*	9	10	10.1	11	12	12.1	13	14	15	16	17	18	TOTAL	
January	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
February																						0
March									0	0	0	0	0	25								25
April									0	0	0	0	0	0								0
May									0	0	0	0	0	0								0
June									0	0	0	0	0	0	0	0						0
July		65	0	0	0	0	0	0														65
August		0	0	0	0	0	0	0														0
September		0	0	0	0	0	0	0														0
October		0	0	0	0	0	0	0														0
November		0	0	0	0	0	0	0														0
December		0	0	0	0	0	0	0														0
TOTAL:	0	65	0	0	0	0	0	0	0	0	0	0	0	25	0	0	0	0	0	0	0	90

BLACK BASS (all species)

TOTAL ESTIMATED HARVEST

River:	Sacramento								American			Feather			Yuba	San Joaquin	Mokelumne	Stanislaus	TOTAL			
Section No.:	1	2	3	4	5	6	7	8*	9	10	10.1	11	12	12.1	13	14	15	16	17	18	TOTAL	
January	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
February																						0
March									0	0	0	0	0	0	0	0	0	0	0	0	0	0
April									0	0	0	0	0	0	0	0	0	0	0	0	0	0
May									0	0	0	0	0	0	0	0	0	0	0	0	0	0
June									0	0	0	0	0	0	0	0	0	0	0	0	0	0
July		0	0	0	0	0	0	0														0
August		0	0	0	0	0	0	0														0
September		0	67	0	0	0	0	0														67
October		0	139	0	0	0	0	0														139
November		0	0	0	0	0	0	0														0
December		0	0	0	0	0	0	0														0
TOTAL:	0	0	206	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	206

TOTAL ESTIMATED RELEASED

River:	Sacramento								American			Feather			Yuba	San Joaquin	Mokelumne	Stanislaus	TOTAL			
Section No.:	1	2	3	4	5	6	7	8*	9	10	10.1	11	12	12.1	13	14	15	16	17	18	TOTAL	
January	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	229	0	0	0	229	
February																						0
March									0	0	0	0	0	0	0	0	0	0	0	0	0	0
April									0	0	0	0	0	0	0	0	0	0	0	0	0	0
May									0	0	0	0	0	0	0	0	0	0	0	0	0	0
June									0	0	0	0	0	72	0	0	0	0	0	0	0	72
July		0	0	0	52	0	0	0														52
August		1,549	0	0	0	0	0	0														1,549
September		334	0	0	0	0	0	0														334
October		0	0	0	0	0	0	0														0
November		0	32	0	0	0	0	0														32
December		0	0	0	0	0	0	0														0
TOTAL:	0	1,883	32	0	52	0	0	0	0	0	0	0	0	72	0	0	229	0	0	0	0	2,268

ESTIMATED ANGLER-HOURS

River:	Sacramento								American			Feather			Yuba	San Joaquin	Mokelumne	Stanislaus	TOTAL			
Section No.:	1	2	3	4	5	6	7	8*	9	10	10.1	11	12	12.1	13	14	15	16	17	18	TOTAL	
January	0	0	0	0	0	0	0	0	0	0	0	125	0	0	0	0	882	0	0	0	1,007	
February																						0
March									0	0	0	174	0	0	0	0	0	0	0	0	0	174
April									0	0	0	459	261	0	0	0	0	0	0	0	0	720
May									0	0	0	13	0	0	0	0	0	0	0	0	0	13
June									0	0	0	0	0	54	84	0	0	0	0	0	0	138
July		108	0	0	139	0	9	0														256
August		1,096	0	0	9	119	34	0														1,258
September		223	603	33	0	0	7	0														866
October		0	225	0	18	0	0	0														243
November		0	75	0	0	0	0	0														75
December		0	0	0	0	0	0	0														0
TOTAL:	0	1,426	904	33	166	119	49	0	0	0	0	770	261	54	84	0	882	0	0	0	0	4,750

STURGEON (all species)

TOTAL ESTIMATED HARVEST

River:	Sacramento								American			Feather			Yuba	San Joaquin	Mokelumne	Stanislaus	TOTAL		
Section No.:	1	2	3	4	5	6	7	8*	9	10	10.1	11	12	12.1	13	14	15	16	17	18	TOTAL
January	195	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	33	0	0	0	243
February																					0
March									0	0	0	0	0	0	0	0	0	0	0	0	0
April									0	0	0	0	0	0	0	0	0	0	0	0	0
May									0	0	0	0	0	0	0	0	0	0	0	0	0
June									0	0	0	0	0	0	0	0	0	0	0	0	0
July		0	0	0	0	0	0	0													0
August		0	0	0	0	0	0	0													0
September		0	0	0	0	0	0	0													0
October		0	0	11	0	0	0	0													11
November		0	0	0	0	0	0	0													0
December		15	0	0	0	0	0	0													15
TOTAL:	195	15	0	11	0	16	0	0	0	0	0	0	0	0	0	0	33	0	0	0	270

TOTAL ESTIMATED RELEASED

River:	Sacramento								American			Feather			Yuba	San Joaquin	Mokelumne	Stanislaus	TOTAL		
Section No.:	1	2	3	4	5	6	7	8*	9	10	10.1	11	12	12.1	13	14	15	16	17	18	TOTAL
January	1038	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	33	0	0	0	1,076
February																					0
March									0	0	0	0	0	0	0	0	0	0	0	0	0
April									0	0	0	0	0	0	0	0	0	0	0	0	0
May									0	0	0	0	0	0	0	0	0	0	0	0	0
June									0	0	0	0	0	0	0	0	0	0	0	0	0
July		0	0	0	0	0	0	0													0
August		0	0	0	0	0	0	0													0
September		0	0	0	0	0	0	0													0
October		0	0	0	0	0	0	0													0
November		0	0	0	0	0	0	0													0
December		60	0	0	0	0	0	0													60
TOTAL:	1038	60	0	5	0	0	0	0	0	0	0	0	0	0	0	0	33	0	0	0	1,135

ESTIMATED ANGLER-HOURS

River:	Sacramento								American			Feather			Yuba	San Joaquin	Mokelumne	Stanislaus	TOTAL		
Section No.:	1	2	3	4	5	6	7	8*	9	10	10.1	11	12	12.1	13	14	15	16	17	18	TOTAL
January	32188	2,769	963	3,581	109	403	0	0	0	0	0	0	0	0	0	0	1,487	0	0	0	41,500
February																					0
March									0	0	0	0	0	0	0	0	0	0	0	0	0
April									0	0	0	0	0	0	0	0	0	0	0	0	0
May									0	0	0	0	0	0	0	0	0	0	0	0	0
June									0	0	0	0	0	0	0	0	0	0	0	0	0
July		194	0	0	0	0	0	0													194
August		0	0	0	0	0	0	0													0
September		0	0	0	0	0	0	0													0
October		0	0	207	0	0	0	0													207
November		3,100	97	919	0	0	0	0													4,116
December		19,209	646	3,282	246	0	0	0													23,383
TOTAL:	32188	25,271	1,705	7,989	355	403	0	0	0	0	0	0	0	0	0	0	1,487	0	0	0	69,399

ANY (anglers fishing for any species)

TOTAL ESTIMATED HARVEST

River:	Sacramento								American			Feather			Yuba	San Joaquin	Mokelumne	Stanislaus	TOTAL		
Section No.:	1	2	3	4	5	6	7	8*	9	10	10.1	11	12	12.1	13	14	15	16	17	18	TOTAL
January	0	348	74	0	0	0	139	0	0	0	0	0	0	0	0	0	131	0	0	0	691
February																					0
March									72	158	0	0	35	0							265
April									235	54	0	76	0	0							366
May									76	31	0	0	0	0							107
June									0	0	0	38	0	0	0	0					38
July		431	100	24	0	0	0	0													555
August		818	105	61	0	0	45	0													1,029
September		446	22	33	0	0	0	0													501
October		138	17	0	24	0	0	0													179
November		18	0	0	0	0	0	0													18
December		224	15	0	0	0	0	0													240
TOTAL:	0	2,423	334	118	24	0	184	0	383	243	0	114	35	0	0	0	131	0	0	0	3,988

TOTAL ESTIMATED RELEASED

River:	Sacramento								American			Feather			Yuba	San Joaquin	Mokelumne	Stanislaus	TOTAL		
Section No.:	1	2	3	4	5	6	7	8*	9	10	10.1	11	12	12.1	13	14	15	16	17	18	TOTAL
January	0	0	0	0	33	0	0	0	0	41	0	0	0	0	0	0	0	0	0	0	74
February																					0
March									24	95	0	0	0	0							119
April									29	0	0	0	0	0							29
May									0	5,886	0	0	32	0							5,918
June									0	0	0	0	0	0	48	0					48
July		1,099	412	268	0	0	55	0													1,834
August		906	961	594	0	179	0	0													2,640
September		948	0	115	37	0	55	0													1,155
October		230	35	126	24	0	0	0													414
November		53	75	0	13	0	0	0													142
December		0	0	0	0	0	0	0													0
TOTAL:	0	3,235	1,483	1,104	107	179	109	0	53	6,022	0	0	32	0	48	0	0	0	0	0	12,372

ESTIMATED ANGLER-HOURS

River:	Sacramento								American			Feather			Yuba	San Joaquin	Mokelumne	Stanislaus	TOTAL		
Section No.:	1	2	3	4	5	6	7	8*	9	10	10.1	11	12	12.1	13	14	15	16	17	18	TOTAL
January	211	336	730	142	180	71	408	8	308	443	226	87	0	0	31	7	65	0	0	0	3,253
February																					0
March									674	1,701	145	2,806	255	51							5,632
April									3,572	2,587	0	707	915	340							8,121
May									3,308	797	604	1,900	56	0							6,664
June									1,066	612	1,505	785	540	234	922	0					5,664
July		6,905	1,508	3,069	143	776	205	14													12,620
August		6,195	2,508	742	113	119	218	79													9,973
September		5,490	653	428	221	149	206	51													7,200
October		4,590	993	740	1,157	295	46	108													7,919
November		1,261	1,061	566	57	40	109	119													3,214
December		920	178	155	142	0	0	6													1,400
TOTAL:	211	25,688	7,631	5,843	2,014	1,451	1,192	384	8,928	6,139	2,481	6,285	1,765	625	953	7	65	0	0	0	71,661