

Memorandum

Ref 90734

To: Files and Distribution List

Date: March 14, 2005

From: **Colleen Harvey Arrison**
Northern California-North Coast Region
Department of Fish and Game

Subject: 2004 Antelope Creek Spring-run Chinook Salmon Survey

On July 26, 2004 Antelope Creek, Tehama County, was snorkel-surveyed to count holding adult spring-run Chinook salmon. **Three adult salmon were observed.** A total of 14 miles of stream was surveyed including: the North Fork from Judd Creek confluence to the South Fork confluence, the South Fork from the South Antelope Gun Club to the North Fork confluence, and the main stem from the North and South Fork confluence to Little Grapevine Creek, (Figure 1). The areas surveyed encompass the known holding habitat of adult spring-run Chinook salmon in Antelope Creek. The three salmon observed were holding between the forks confluence and Paynes crossing. No salmon were observed in the other reaches (Figure 1 and Table 1). Water temperatures during the surveys (1000 hrs to 1500 hrs) ranged from 63°F to 76°F. Water temperatures within the reach salmon were holding ranged between 63°F and 67°F (1000 hrs to 1245 hrs).

One spawning survey was completed on 27 September from the North and South fork confluence to Paynes crossing. One complete redd and seven "practice" redds were observed. No salmon carcasses were found. Ideally, additional surveys would be completed in early October, but personnel were committed to other spring- and fall-run spawning surveys.

This is the 16th year the Department has been monitoring the spring-run Chinook salmon population in Antelope Creek. Table 1 shows the areas surveyed and the holding distribution of salmon during the previous 16 years of record. From 1989 thru 2004 counts have ranged from 0 to 154 salmon. The Department has only limited historical records of spring-run Chinook salmon occurrence in Antelope Creek dating back to the 1950's. In 1953 and 1956, 127 and 253 spring-run Chinook respectively were seined below the Cone Kimball Diversion Dam. (This dam was removed in the 1960's.)

This year's survey included participants from the Department, Lassen National Forest, Sierra Pacific Industries and NOAA Fisheries (Table 2).

Attachment

Figure 1. Antelope Creek, Tehama County. Areas surveyed and adult Spring-run Chinook counted. July 26, 2004.

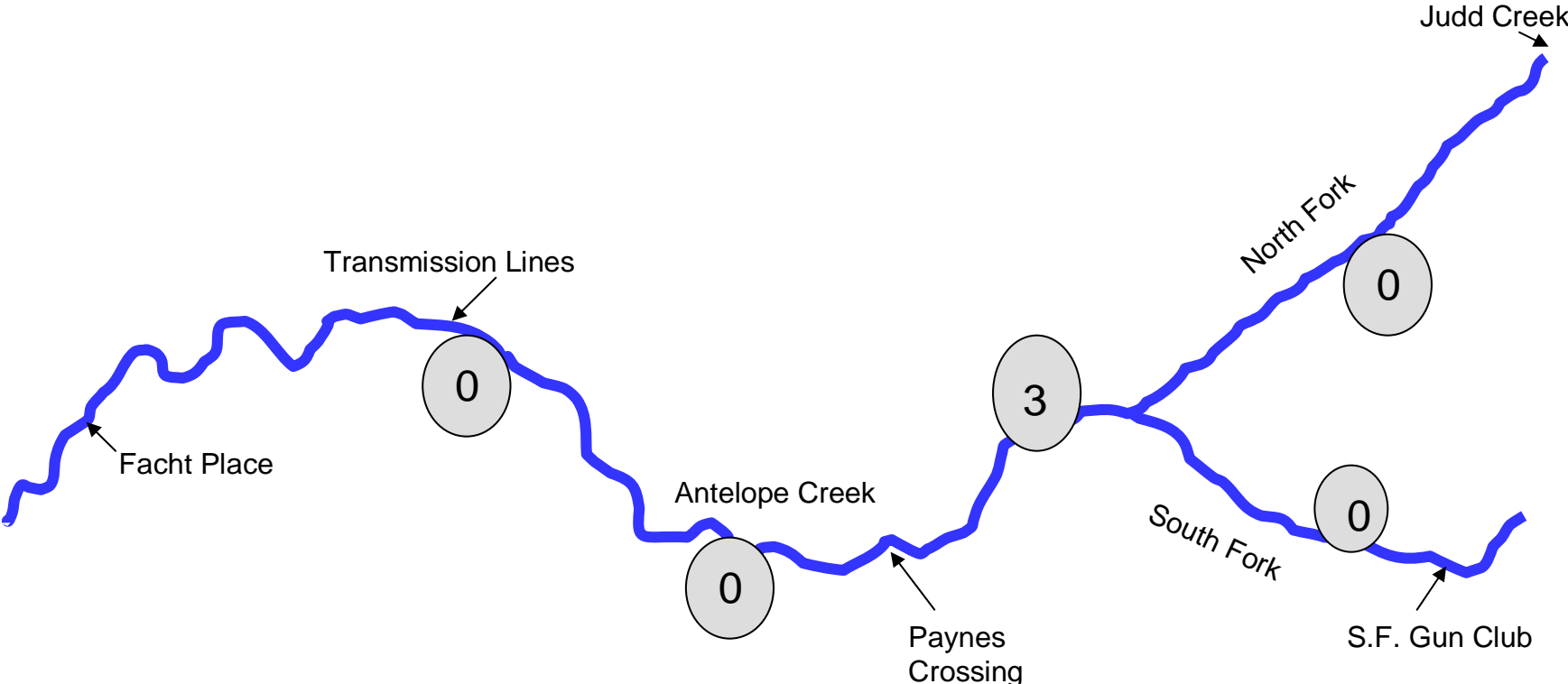


TABLE 1. Holding Distribution of Spring-run Chinook Salmon in Antelope Creek 1983-2004.

Section	1983	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
<u>North Fork</u> Judd Creek to South Fork	ns	0	ns	ns	ns	ns	ns	0	0	0	9	5	0	1	0	6	0
<u>South Fork</u> S.A. Gun Club to North Fork	ns	ns	ns	ns	ns	ns	ns	1	0	0	9	3	1	1	0	0	0
<u>Main Stem</u> Confluences to Paynes	6	2	1	0	0	3	0	2	0	0	77	19	2	4	31	29	3
Paynes to Canyon Mouth	22	0	ns	ns	ns	0	ns	4	1	0	23	6	1	1	1	7	0
Canyon Mouth to Power Lines	0	ns	ns	ns	ns	ns	ns	ns	ns	ns	25	5	4	1	8	4	0
Power Lines to Facht Place	0	ns	ns	ns	ns	ns	ns	ns	ns	ns	11	2	1	0	6	0	0
Totals	28	2	1	0	0	3	0	7	1	0	154	40	9	8	46	46	3

ns = not surveyed

TABLE 2. List of Participants in 2004 Antelope Creek Survey

<u>Date</u>	<u>Section</u>	<u>Participants</u>
7/26/04	<u>North Fork</u> (2 sections) Judd Creek to North and South confluence	Florie Consolanti - LNF Jake Alliman – LNF Susie Elkier – LNF Jennifer Robinson – LNF
7/26/04	<u>South Fork</u> S.A. Gun Club to North & South confluence	Howard Brown – NOAA Ryan Foote – LNF
7/26/04	<u>Main Stem</u> North & South confluence to Paynes Crossing	Julie Kelley – SPI Colleen Harvey Arrison – DFG
7/26/04	Paynes Crossing to Canyon Mouth	Bobette Jones – LNF Shannon Cler – LNF
7/26/04	Canyon Mouth to Facht Place	James Lyons – DFG Matt Johnson – DFG
7/15/04	Facht Place to Little Grapevine Creek	Colleen Harvey Arrison – DFG Audrey Silbernagel - DFG

2004 Distribution List

Department of Fish and Game, Redding

Randy Benthin
Steve Baumgartner
Mike Berry
Patricia Bratcher
Curt Babcock
Connie Shannon

Department of Fish and Game, Chico

Mathew Galli
Paul Ward
Tracy McReynolds
Clint Garman

Department of Fish and Game, Tehama Wildlife Area

Jim Chakarun

Department of Fish and Game, Sacramento

Dennis McEwan
Alice Low
Qinqin Liu
Jennifer Navicky

Lassen National Forest

Melanie McFarland
Ken Roby
Ryan Foote

U.S. Fish and Wildlife Service

Jim Smith
Tricia Parker

Department of Water Resources

Shiela Greene
Erin Chappell
Aric Lester

National Marine Fisheries Service

Dan Viele
Howard Brown

Sierra Pacific Industries

Julie Kelley

Los Molinos Mutual Water Company

Bill Berens

Landowners

Jim Edwards