

Preliminary Report

Project Title: **BUTTE CREEK SPRING-RUN CHINOOK SALMON LIFE HISTORY INVESTIGATION**

Grantee: **California State University, Chico Research Foundation**

Activities Performed from October 1 – December 31, 2013:

The Butte Creek spring-run Chinook salmon (*Oncorhynchus tshawytscha*) (SRCS) life history investigation funded by Grant Agreement No. F12AP00453 via the U.S. Fish and Wildlife Service and administered by the CSU Chico Foundation (Project No. 60569) initiated juvenile trapping activities at Parrott Phelan Diversion Dam on 11/20/2013.

Both traps located at Parrott-Phelan Diversion Dam were deployed and fished 38 of the 41 available trap days during the quarterly period from October 1- December 31, 2013. A total of 293 and 197 juvenile spring-run Chinook salmon were captured in the Rotary Screw trap and Side Diversion trap respectively for a total catch of 490. Of the total number of fish captured, 26 were yearling sized fish between 75-140mm FL.

See tables for each individual trap catch and associated data.

Task 1 – Juvenile Monitoring

1-a. Rotary Screw Trap Monitoring (RSTR)

ROTARY SCREW TRAP (RSTR)

Trapping Period	Mean FL (mm)	Standard Deviation	Range FL (mm)	Total No. Captured	No. Trapping Days
October	-	-	-	-	-
November	99.2	40.9	30-132	5	10
December	37.7	5.2	28-115	192	28

Total Number Captured 197

1-b. Side Diversion Trap Monitoring (DSTR)

DIVERSION SIDE TRAP (DSTR)

Trapping Period	Mean FL (mm)	Standard Deviation	Range FL (mm)	Total No. Captured	No. Trapping Days
October	-	-	-	-	-
November	61.8	43.2	27-120	10	10
December	36.9	17.0	31-139	283	28

Total Number Captured 293

Activities Performed from January 1 – March 31, 2014:

Greater caution was used in determining trap status during storm events. If forecasted rain events exceeded 2" in the upper watershed, traps were pulled to minimize mortalities that occur during this time frame. Both the RSTR and DSTR traps located at Parrott-Phelan Diversion Dam were deployed and fished 78 and 82 days respectively of the 90 available trap days during the quarterly period from January 1 - March 31, 2014. A total of 179,042 and 195,425 juvenile spring-run Chinook salmon were captured in the Rotary Screw trap and Side Diversion trap respectively for a total catch of 374,467. Of the total number of fish captured, 5 were yearling sized fish between 75-140mm FL.

See tables for each individual trap catch and associated data.

Task 1 – Juvenile Monitoring

1-a. Rotary Screw Trap Monitoring (RSTR)

**ROTARY SCREW TRAP
(RSTR)**

Trapping Period	Mean FL (mm)	Standard Deviation	Range FL (mm)	Total No. Captured	No. Trapping Days
January	34.9	3.6	30-123	72,502	27
February	35.8	3.3	32-128	79,262	23
March	37.4	6.1	30-70	27,278	28

Total Number Captured 179,042

1-b. Side Diversion Trap Monitoring (DSTR)

**DIVERSION SIDE TRAP
(DSTR)**

Trapping Period	Mean FL (mm)	Standard Deviation	Range FL (mm)	Total No. Captured	No. Trapping Days
January	34.9	2.4	31-110	38,847	29
February	35.7	2.2	30-65	44,003	22
March	37.0	5.4	30-77	112,575	31

Total Number Captured 195,425