State of California Department of Fish and Wildlife

Memorandum

Date: November 9, 2020

- To: Sarah Mussulman Senior Environmental Scientist; Supervisor Department of Fish and Wildlife North Central Region 1701 Nimbus Road, Suite A Rancho Cordova, CA 95670
- Cc: CDFW North Central Region Fish Files
- From: Mitch Lockhart; Environmental Scientist Luc Mitchell; Scientific Aide Department of Fish and Wildlife 1701 Nimbus Road, Suite A Rancho Cordova, CA 95670

Subject: Pre-Stocking Evaluation at South Fork American River, Camp Sacramento, El Dorado County

Camp Sacramento is a well-known fishing spot in El Dorado County along the South Fork American River (**Figure 1**). The river segment is accessible by parking at the Ralston Trailhead along US-50, just east of Twin Bridges. The California Department of Fish and Wildlife (CDFW) has been planting Rainbow Trout (Oncorhynchus mykiss; RT) and Brown Trout (Salmo trutta; BN) since at least 1988. CDFW most recently planted 1.350 catchable-size RT on September 3, 2020 (Table 1).



Figure 1. Overview map of Camp Sacramento (pink), El Dorado Co., in relation to Lake Tahoe (CDFW BIOS Viewer, retrieved 9.15.2020).

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Species	Number of Fish Planted	Size
RT	1,400	Catchable
RT	750	Catchable
RT	1,000	Catchable
RT	1,050	Catchable
RT	950	Catchable
RT	1,000	Catchable
RT	1,100	Catchable
RT	20	Super-Catchable
RT	2,380	Catchable
RT	91	Super-Catchable
RT	880	Catchable
RT	1,850	Catchable
RT	2,150	Catchable
RT	25	Super-Catchable
RT	3,250	Catchable
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Table 1. CDFW Stocking History for South Fork American River, Camp Sacramento,2009-2020.

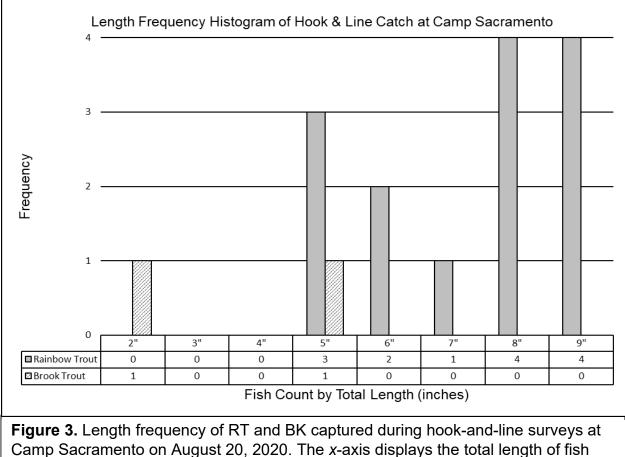
To assess the current status of the sports fishery at Camp Sacramento and determine if further fish plants are warranted, two CDFW Scientific Aides surveyed 500 meters east and west of the main Camp Sacramento access point (**Figure 2**) on August 20, 2020. The Scientific Aides sampled the sports fishery at Camp Sacramento by hook-and-line



Figure 2. Close-up map of Camp Sacramento and US-50. The red track highlights the stream reach surveyed on August 20, 2020. The blue "X" marks the CDFW stocking location. The orange circle highlights the public parking access (CDFW BIOS Viewer, retrieved 09.15.2020).

and conducted a Visual Encounter Survey (VES) of the same reach.

Two sessions of hook-and-line sampling occurred; the first of which began at 8:15 AM and ended at 9:55 AM for a combined survey effort of 3.5 hours. Three RT and one Brook Trout (*Salvelinus fontinalis*; BK) were landed. The second hook-and-line session began at 10:45 AM and ended at 1:00 PM for a combined survey effort of 5.5 hours. Eleven RT and one BK were captured. In total, 16 trout were landed (**Figure 3**) over 9 hours of survey effort, for a Catch Per Unit of Effort (CPUE) of 1.78 fish per hour.



Camp Sacramento on August 20, 2020. The *x*-axis displays the total length of fish separated into 1-inch intervals. The *y*-axis displays the number of fish captured within each total length interval.

The Scientific Aides conducted a VES of Camp Sacramento on August 20, 2020, searching for diurnal herpetofauna, specifically the Federally endangered Sierra Nevada Yellow-Legged Frog (*Rana sierrae*; SNYLF). The VES began at 10:30 AM under smokey skies, light wind, and an air temperature of 16 degrees Celsius. The survey continued until 1:00 PM for a total survey effort of 55 minutes. No herpetofauna species were encountered during the VES.

Hook-and-line data collected in 2020 show that Camp Sacramento continues to supply

recreational angling opportunities to front-country anglers for small, wild RT and BK. Individual fish were up to 9-inches in length, smaller than the average length of catchable-sized hatchery trout, suggesting all of the fish encountered were wild origin fish. The surveyors landed the most fish west, or downstream, of Camp Sacramento, which is also nearer the CDFW stocking location. Individual RT were healthy and in good body condition. One small RT exhibited a deformity; a large bulge between the dorsal fin and operculum (Figure 4). The wild RT population is abundant, provides a fishery for small trout, and is thriving alongside regular plants of hatchery RT. Similarly, VES results collected in 2020, show that special status herpetofauna are not found in the area and will not be impacted by continued plants.

CDFW should continue to plant catchable-size RT in the South Fork American River at Camp Sacramento. The location is a popular day-use destination and



Figure 4. Photograph of a deformed, wild RT landed at Camp Sacramento during a hook-and-line survey conducted August 20, 2020. (Luc Mitchell, August 20, 2020).

is frequented by Scouts of America, school groups, and other young anglers. However, catchable-sized hatchery fish do not persist at this location after planting. The hook-andline sample was conducted roughly two months after the most recent CDFW plant and no hatchery fish were captured or encountered. To enhance the fishery at Camp Sacramento, CDFW should increase the number of planting events to broaden the length of opportunity to catch a 12-inch, or larger, RT. The allotment should be increased relative to the number of events.

More monitoring is necessary to help inform an increased planting schedule. Hook-andline surveys and/or direct observation snorkel surveys should be conducted multiple times to understand how long catchable-sized RT persist and contribute to the fishery after a planting event. The conclusions drawn from additional monitoring surveys will be used to develop a more rigorous planting schedule for Camp Sacramento.

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Figure 5. Data Sheet containing hook and line data from Camp Sacramento, El Dorado Co., collected on August 20, 2020.

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