ITEM: INFORMATIONAL ITEM/STAFF REPORT

23. CARMEL RIVER FISHERY REPORT FOR JULY 2019

Meeting Date:	August 19, 2019	Budgeted:	N/A
From:	David J. Stoldt, General Manager	Program/ Line Item No.:	N/A
Prepared By:	Beverly Chaney	Cost Estimate:	N/A

General Counsel Review: N/A Committee Recommendation: N/A CEQA Compliance: This action does not constitute a project as defined by the California Environmental Quality Act Guidelines Section 15378.

AQUATIC HABITAT AND FLOW CONDITIONS: The Carmel River continued its slow, steady decline in July but flows remained above typical mid-summer levels, provided good rearing conditions for steelhead young-of-the-year (YOY) throughout much of the watershed, including several upper tributaries.

July's mean daily streamflow at the Sleepy Hollow Weir dropped from 33 to 17 cubic-feet-persecond (cfs) (monthly mean 25 cfs) resulting in 1,530 acre-feet (AF) of runoff. Mean daily streamflow at the Highway 1 gage dropped from 28 to 6.9 cfs (monthly mean 17 cfs) resulting in 1,050 acre-feet (AF) of runoff. Los Padres Dam was barely spilling at the end of the month, but 13.1 cfs were being released through the dam's outlet works.

There were 0.00 inches of rainfall in July as recorded at the San Clemente gauge. The rainfall total for WY 2019 (which started on October 1, 2018) is 30.93 inches, or 146% of the long-term year-to-date average of 21.12 inches.

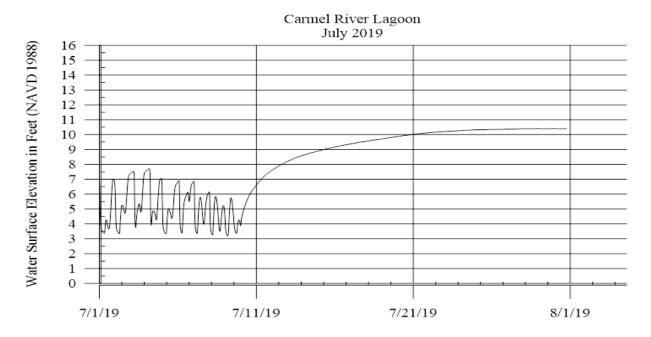
CARMEL RIVER LAGOON: The lagoon mouth was closed by Monterey County crews on July 10, 2019 by pushing beach sand across the western side of the lagoon. District fisheries staff were on-hand as the steelhead qualified biologists for the biological permit requirements. Two additional operations were conducted later in the month to strengthen the berm. After closing, the water surface elevation (WSE) rose from approximately 3.2 to 10.5 feet (North American Vertical Datum of 1988; **NAVD** 88) (see graph below) providing important additional habitat.

Water quality depth-profiles were conducted at five sites on July 19, 2019 while the lagoon mouth was closed, the water surface elevation was ~9.5 feet, and river inflow was 18 cfs. Steelhead rearing conditions were generally "fair" throughout the lagoon, salinity was <1 ppt down to 2m depth in the south arm, dissolved oxygen (DO) levels ranged from 6 - 11 mg/l, but water temperatures were higher than last month at 69 - 73 degrees F.

Over three days in late July, District staff assisted personnel from the NMFS, CRSA, CA State Parks and others, in an extensive sampling effort to catch, measure, and tag both steelhead and striped bass (SB) in the lagoon in order to estimate the overall population sizes and conditions, and

in the case of SB, to try to determine what they are feeding on. Over 100 steelhead were captured and tagged (see photo below), but unfortunately no SB were captured even though a school of \sim 35 had been observed two weeks prior. The data is being analyzed and results will be reported at a future time.

TRIBUTARIES STEELHEAD RESCUES: Staff began fish rescues in the tributaries in early May. As of July 31, a total of 9,628 fish has been rescued, including: 9,572 young-of-the-year (YOY), 11 age 1+ fish, with 45 mortalities (0.5%). The majority of the fish have been rescued from Hitchcock Creek (3,114) and Cachagua Creek (5,113).





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