

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE REPORT ON CENTRAL VALLEY SPRING CHINOOK

The National Marine Fisheries Service [report \(Agenda Item D.1.a, Supplemental NMFS Report 1, November 2022\)](#) references ongoing work by the Southwest Fisheries Science Center to examine the status of Brood Year (BY) 2020 Central Valley Spring Chinook (CVSC). The Council was first alerted to this work in March 2022 ([Agenda Item D.1.a, Supplemental NMFS Report 1 March 2022](#)), with the authors noting that multiple lines of evidence point to the potential for very low abundance for BY 2020. The March report also concluded that 2023 fisheries (and to a lesser extent fisheries late in the 2022 management year) are likely to encounter a very weak BY 2020 CVSC cohort.

The California Department of Fish and Wildlife (CDFW) offers an initial examination of age-2 CVSC coded wire tag recoveries over the last five years (Table1, Table2) and the number of hatchery releases for the corresponding brood years (Figure 1). While the 2022 tag recovery data is not yet complete, in the 2022 commercial and recreational ocean fisheries, 36 CVSC BY 2020 (age-2) tags were recovered; 47 percent by number of the CVSC tags this year. Furthermore, brood year 2020 releases were substantially less than recent years totaling just over 1 million. Although raw coded wire tag recoveries provide no information about natural origin CVSC, the number of age-2 CVSC recovered this year paired with fewer releases for that BY suggest the hatchery component of BY 2020 may not be as weak as anticipated. CDFW encourages NMFS to explore the coded wire tag data further and offers to assist with additional analysis.

*Table 1. Number of CVSC coded wire tags recovered in ocean fisheries*

fishing season	age-2 BY	total CVSC tags recovered	age-2 tags recovered	% age-2
2022 <sup>a</sup>	2020	77	36	47%
2021	2019	545	19	3%
2020 <sup>b</sup>	2018	177	77	44%
2019	2017	650	57	9%
2018	2016	374	308	82%

Table 2. Age composition of CVSC coded wire tags recovered in ocean fisheries

fishing season	total CVSC tags recovered	age-2 tags recovered	age-3 tags recovered	age-4 tags recovered	% age 2	% age 3	% age 4
2022 <sup>a</sup>	77	36	34	7	47%	44%	9%
2021	545	19	523	3	3%	96%	1%
2020 <sup>b</sup>	177	77	99	1	44%	56%	1%
2019	650	57	593	0	9%	91%	0%
2018	374	308	66	0	82%	18%	0%

a preliminary; 2022 numbers are incomplete.

b ocean fisheries were not sampled in May or June due to COVID-19.

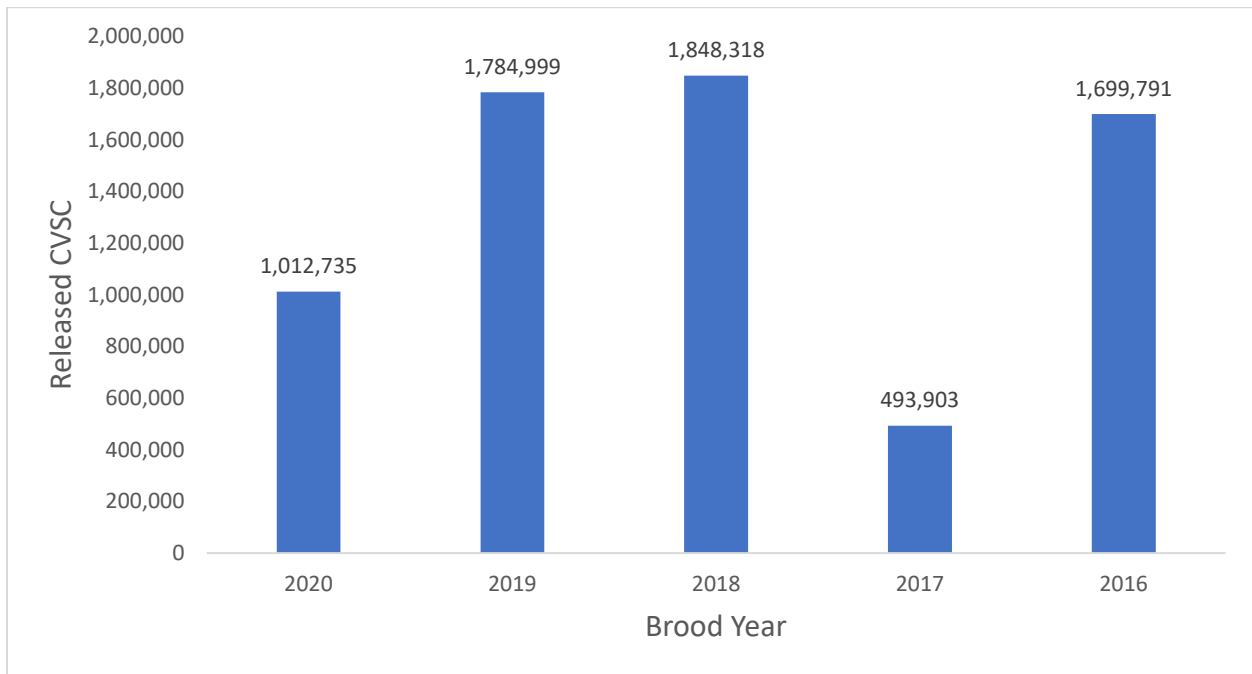


Figure 1. total CVSC released from the Feather River Hatchery for brood years 2016-2020