

STATE OF CALIFORNIA
NATURAL RESOURCES AGENCY
DEPARTMENT OF FISH AND WILDLIFE

STEELHEAD REPORT AND RESTORATION CARD PROGRAM

Report to the Legislature 2020-2021



June 2023

EXECUTIVE SUMMARY

The purpose of the California Department of Fish and Wildlife's (Department) Steelhead Report and Restoration Card is to gather angler data to support the Department's responsibility to manage steelhead populations and fisheries. Revenue generated from report card sales is dedicated to administering the program and funding projects that contribute to the conservation, monitoring, or recovery of steelhead populations. This report summarizes angler information gathered by the Department from 2020 to 2021. All data used to summarize angling effort and catch information in this report are based on complete report card data only. Report cards returned by anglers that contained incomplete or missing information are considered incomplete and not included in angling effort or catch summaries.

Between 2020 and 2021 a total of 107,977 cards were sold to 78,553 individual anglers, generating \$769,509 in revenue. The Report Card Program had an operating budget of \$573,142 between 2020 and 2021, of which \$134,823 was spent on operational costs to administer the Program, \$25,162 was spent to fund on-going projects that directly or indirectly benefited steelhead populations and steelhead anglers, and an additional \$150,000 was encumbered for future projects. All remaining funds were transferred to the steelhead trout reserve, which is made available to the Report Card Program in future years for projects that may have larger operating budgets or higher cost projects that require multiple years to complete.

Although anglers are mandated by law to return their report cards by January 31, only a small percentage (34.83%) of cards were returned. The trend of low report card returns has been consistent with the previous five-year return rate of 35.27%. The majority of cards returned by anglers were reported as "did not fish" (56.6%). Of all report cards sold, only 13.7% reported angling effort and were returned to the Department with all data fields recorded correctly.

Anglers reported making 65,664 trips and reported catching 56,891 steelhead. Anglers averaged 32,832 trips per year, which is a decrease from the prior five-year average of 38,896 trips. Anglers averaged 0.87 steelhead per trip, which is similar to the previous five-year average of 0.82. Anglers reported a harvest rate of 24.4% of hatchery origin steelhead, which compares similarly to the previous five-year average of 25.3%. The majority of steelhead fishing took place in the Klamath River (14.6%), followed by the Trinity River (13.6%), American River (12.2%), Sacramento River (9.16%), Mad River (8.9%), and Russian River (8.9%). Seventy-seven percent of the steelhead caught were wild origin which is an increase to the prior five-year average of 71%.

The detail of the Report Card Program is outlined in the 2023 California Fish and Game Code in Division 6, Part 2, Chapter 2, Article 6. Steelhead Trout (Sections 7380-7382), which states that the program shall remain in effect only until January 1, 2025, and as of that date is repealed. The Department recommends that Article 6. Steelhead Trout [7380-7382] remain operative.

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INTRODUCTION

Pursuant to state legislation (AB 2187), the California Fish and Game Commission implemented the Steelhead Trout Report and Restoration Card Program (Report Card) in 1991. AB 2187 established Fish and Game Code Sections 7380 and 7381 requiring anglers fishing for steelhead in anadromous waters to purchase a report card, record their fishing information, and return their catch information to the Department during the designated reporting period, January 1 through 31, of the following calendar year. Anglers are required to record the date and location where they are fishing, any adult steelhead kept or released, as well as the number of hours fished. See Appendix A, Figures A1 & A2, for an example of the report card and map of location codes.

Section 7381 states that revenue generated from the sale of the report card may be expended only to monitor, restore, or enhance steelhead trout resources and to administer the Report Card Program. Eligible project types include enforcement and protection, fish passage at stream crossings, instream barrier modification for fish passage, instream habitat restoration, riparian restoration, instream bank stabilization, monitoring status and trends, monitoring watershed restoration, project design, watershed evaluation, fish screening at diversions, private sector technical training, water conservation measures, and water measuring devices.

Section 7381 requires the Department to submit a report to the Legislature regarding projects undertaken funded by the Report Card Program, derived benefits of funded restoration projects, and its recommendations for revising the report card requirement, if any. This report summarizes Report Card Program activities from 2020 through 2021.

STEELHEAD STATUS

Anadromous rainbow trout (*Oncorhynchus mykiss*), otherwise known as steelhead, are an important ceremonial, biological, economical, and recreational resource throughout the western Pacific states. Within California, steelhead populations range from the Oregon border south to Baja California. Despite being widespread, most populations within California are declining (61 FR 41541; Moyle 2002).

The National Marine Fisheries Service organizes species into management units for the purpose of listing or delisting fishes under the federal Endangered Species Act (ESA). The management unit for steelhead is the Distinct Population Segment (DPS) which groups populations that are substantially reproductively isolated from other populations and represent an important component in the evolutionary legacy of the species (56 FR 58612). There are six steelhead DPSs in California—Northern California (65 FR 36074), Central California Coast (62 FR 43937), Central Valley (63 FR

13347), and South-Central California Coast (62 FR 43937) are listed as threatened under the ESA and the Southern California DPS (62 FR 43937) is listed as endangered (Figure 1). The Klamath Mountains Province DPS is not listed (62 FR 43937). The Klamath Mountains Province DPS is the only steelhead DPS in California that is not warranted for federal listing (71 FR 833).

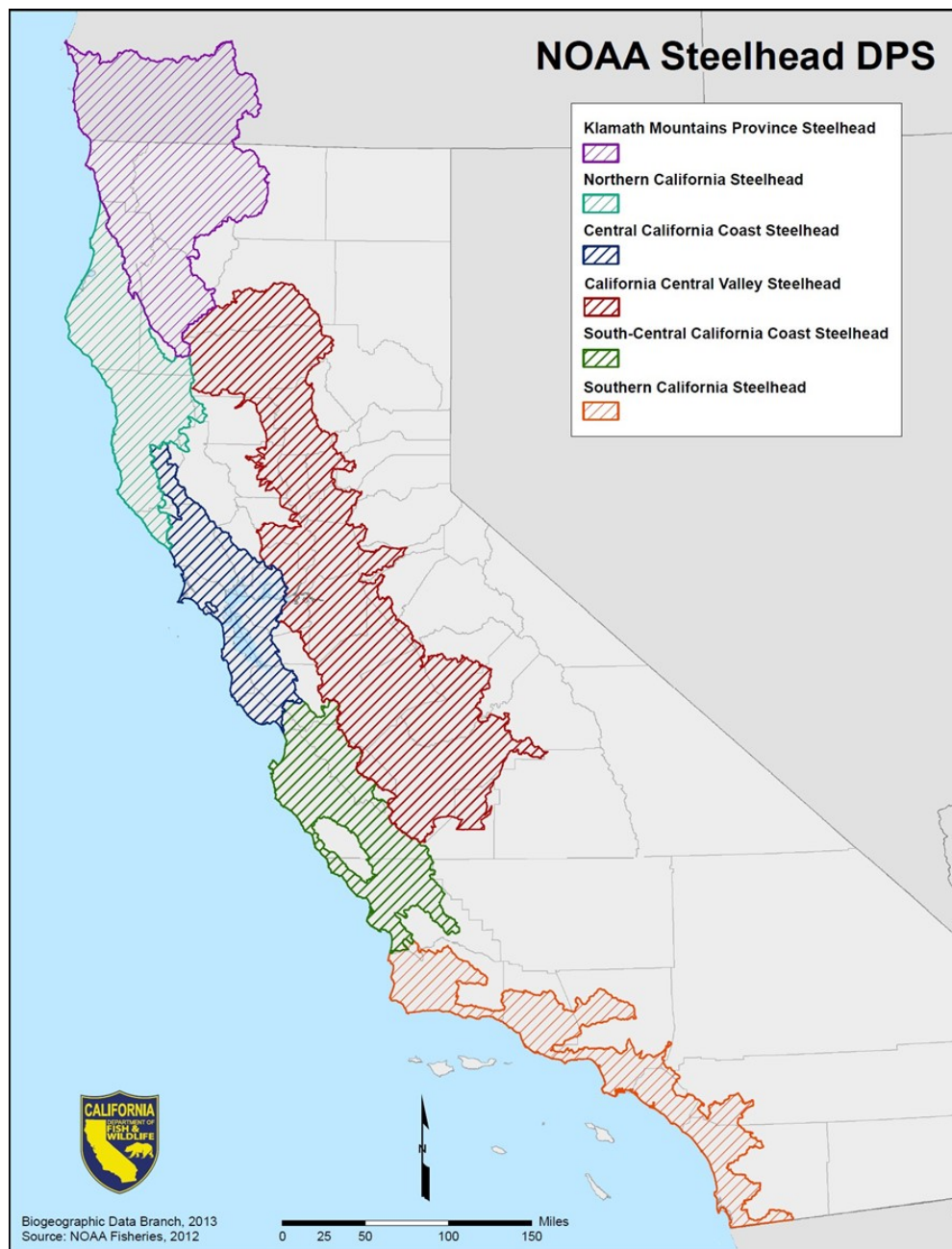


Figure 1. Steelhead distinct population segments within California as delineated by National Oceanic Atmospheric Administration.

REPORTING

The quantity and quality of the steelhead catch-and-harvest data the Department gains from the report card is dependent on anglers returning their cards. Although anglers are mandated by law to report their angling data by January 31 of the following year, only a small percentage of anglers comply with this requirement (approximately 35%). From 2020 to 2021 a total of 107,977 report cards were sold and 37,613 report cards were returned to the Department (Table 1). The annual number of report cards sold were 53,164 in 2020 and 54,813 in 2021, averaging 53,989, which is a slight increase compared to the previous five-year average of approximately 50,000. Of all returned report cards, 86% were returned online, which is an increase from the previous five-year average of 74%. From 2020 to 2021, less than half of report cards returned were reported with fishing effort (39.3%) and only 13.7% of all report cards sold reported fishing effort (Table 1).

Table 1. The total number of report cards sold and reported to the Department from 2020 through 2021.

Year	Total Report Cards Sold	Total Reported	Total Reported with Fishing Effort
2020	53,164	19,074 (35.9%)	7,900 (14.9%)
2021	54,813	18,539 (33.8%)	6,879 (12.6%)
Grand Totals	107,977	37,613 (34.8%)	14,779 (13.7%)

REPORT CARD PROGRAM REVENUE AND SPENDING

Report cards sold between 2020 to 2021 generated \$769,509 in revenue. Annual revenue in 2020 was \$367,266 and \$402,244 in 2021. The annual cost of a report card in 2020 was \$7.25 and increased to \$7.50 in 2021. The cost of the report card adjusts in response to the Implicit Price Deflator (IPD) which measures economic inflation experienced by consumers. Fluctuation of the IPD accounts for why Report Card Program revenue may increase when report card sales have not.

Of the \$769,509 revenue generated, the Report Card Program received \$573,142 between 2020 and 2021 for the Program's operating budget. The Report Card Program spent \$134,823 on operational costs to administer the program and \$25,162 on projects that directly or indirectly benefited steelhead populations and steelhead anglers within anadromous watersheds (Table 2). An additional \$150,000 was encumbered from the operating budget which was dedicated for two future projects (Table 2). All projects that receive funding via the Report Card Program are required to address direct or indirect benefits to both steelhead populations and anglers.

The Report Card Program can encumber funds from the current fiscal year's operating budget to be dedicated for spending on projects for up to two additional years. The encumbrance process allows the Program the flexibility to dedicate funds when the operating budget is larger as well as to fund higher cost projects that require multiple years to complete. Projects that receive the encumbered funds sometimes do not spend it all which causes an accrual of unspent funds and Program spending to be lower than expected. However, all unspent funds from the Program operating budget and additional revenue accrued over the specified operating budget are transferred to the Steelhead Trout reserve and made available to the Report Card Program in future years.

Table 2. Report Card Program funds spent on or encumbered for restoration projects between years 2020 through 2021.

Project Name	Year	Amount
North Cow Creek Fish Barrier Removal (BVWD)	2020	\$11,435
South Fork Eel River Adult Steelhead Monitoring Project	2020	\$8,161
South Fork Eel River Adult Steelhead Monitoring Project	2021	\$5,566
Potrero Creek Fish Passage/Lower Culvert Project	2021	\$75,000
Weston-Champagne Cachagua Creek Fish Passage Project	2021	\$75,000

ANGLING DATA

Anglers reported taking 65,664 trips to fish for steelhead and reported catching 56,891 steelhead across all steelhead report card location codes (Table 3). Of the 56,891 steelhead caught, 44,073 were of wild-origin (WO) and 12,818 were of hatchery-origin (HO) (Table 3). Of the 12,818 HO steelhead, 9,691 were released (Table 3). Anglers averaged 32,832 trips per year, which is a decrease from the prior five-year average of 38,895 trips. Anglers averaged 0.87 steelhead per trip, which is similar to the previous five-year average of 0.82. Anglers reported a harvest rate of 24.4% of hatchery origin steelhead, which is similar to the previous five-year average of 25.3%. The data evaluated by location code indicated a majority of the fishing took place in the Klamath River (14.6%); followed by, the Trinity River (13.6%), American River (12.2%), Sacramento River (9.2%), Mad River (8.9%), Russian River (8.9%), Feather River (6.4%), Eel River (6.4%), and Smith River (6%) (Table 4).

Table 3. The number of steelhead kept or released by origin and number of trips reported between 2020 and 2021.

Year	Number of Trips	Wild Released	Hatchery Kept	Hatchery Released
2020	36,993	23,530	1,834	5,252
2021	28,671	20,543	1,293	4,439
Total	65,664	44,073	3,127	9,691

Table 4. The total number of reported fishing trips taken to each location code between 2020 and 2021. Note: No report card data was recorded in Location 14, Santa Maria River to Mexican border, because fishing is closed at this location.

Location Code	River System	Number of Trips Taken
1	Smith River	3,935 (6.0%)
2	Klamath River	9,583 (14.6%)
3	Trinity River	8,945 (13.6%)
4	Other North of Klamath	121 (0.2%)
5	Mad River	5,850 (8.9%)
6	Eel River	4,187 (6.4%)
7	Gualala River	251 (0.4%)
8	Other Klamath-Russian River	2,267 (3.5%)
9	Russian River	5,830 (8.9%)
10	San Lorenzo River	740 (1.1%)
11	Other Russian-Pajaro River	617 (0.9%)
12	Carmel River	107 (0.2%)
13	Other Pajaro-Santa Maria River	321 (0.5%)
15	Sacramento River	6,015 (9.2%)
16	Feather River	4,208 (6.4%)
17	Yuba River	3,145 (4.8%)
18	American River	8,024 (12.2%)
19	Mokelumne River	851 (1.3%)
20	San Joaquin River	667 (1.0%)

Within the locations where the most fishing took place; the Klamath River reported 22,025 steelhead caught (91.4% WO), the Trinity River reported 8,442 steelhead caught (70.8% WO), the American River reported 2,540 steelhead caught (32.3% WO), the Sacramento River reported 6,157 steelhead caught (77.9% WO), the Mad River reported 2,819 steelhead caught (38.7% WO), the Russian River reported 1,091 steelhead caught (32.0% WO), the Feather River reported 3,922 steelhead caught (46.4% WO), the Eel River reported 1,854 steelhead caught (96.6% WO), and the Smith River reported 1,773 steelhead caught (90.1% WO) (Figure 2; Appendix B).

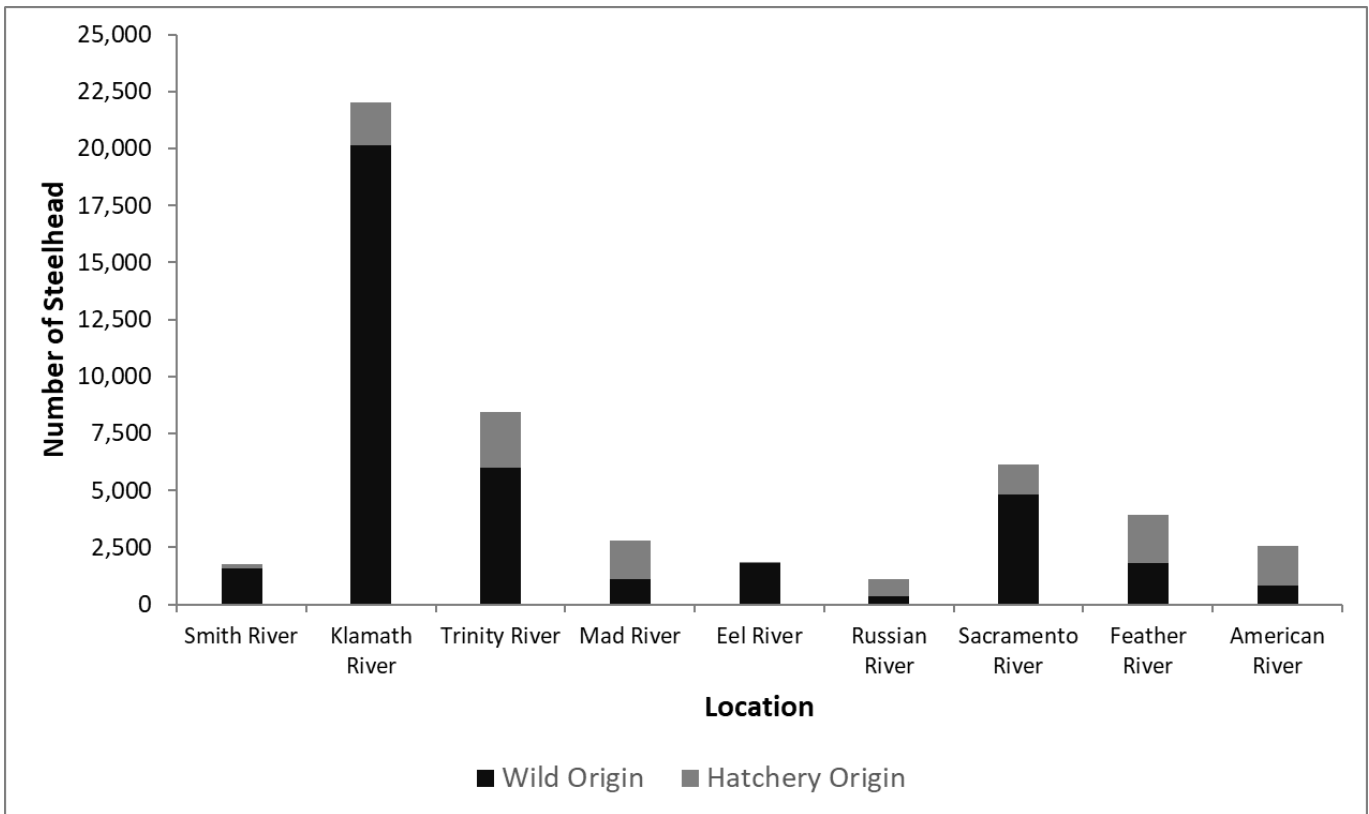


Figure 2. The number of wild origin and hatchery origin steelhead captured for locations with highest trips taken. Only locations with at least 6% of the overall trips were included. For information on other locations see Appendix B.

Among all locations the average harvest rate for hatchery steelhead was 24.4%. The highest harvest rate locations were the Russian River (56.5%), Mad River (46.8%), American River (34.1%), Smith River (33.7%), and San Joaquin River (23.8%) (Figure 3).

Among all location codes the average reported catch per trip was 0.87. The highest reported catch per trip rates were the Klamath River (2.30), Sacramento River (1.02), Yuba River (0.98), Trinity River (0.94), and the Feather River (0.93) (Figure 3).

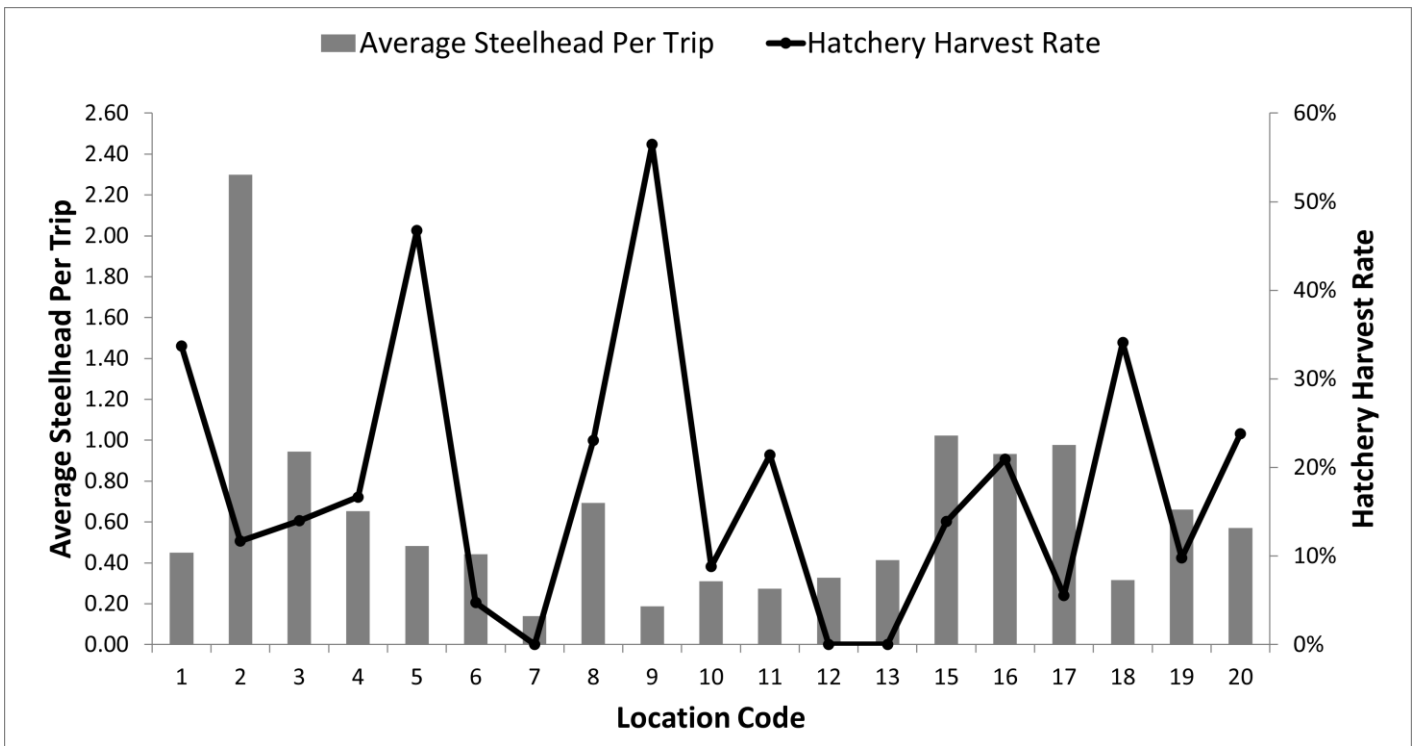


Figure 3. The average steelhead caught per trip and hatchery origin harvest rate by location code from 2020 to 2021. Note: Location code 14 is excluded because that location is closed to fishing.

It should be noted that all angling data is only representative of the 13.7% of returned report cards containing fishing effort and a large number of fishing trips were not accounted for because of the low return rate. With the low return rate, unreported catch or effort could lead to biased estimates of actual catch per trip averages. Trends depicted by report card data cannot be used to determine a scientifically defensible population status change. Instead, trends indicated through report card data may suggest additional scientifically defensible studies may be warranted to answer questions within specific watersheds. However, given the sufficient sample size of returned cards, the proportion of trips by location code, hatchery harvest rates, and proportion of hatchery to wild steelhead in each location code are likely valid representations.

Angling data reported in the 2015 to 2019 report to the Legislature contained some incomplete data and was missing additional fishing effort. An updated summary containing all complete fishing effort can be found in Appendix C.

BENEFITS OF THE REPORT CARD PROGRAM

The Report Card Program provides the Department with information to aid in making fisheries management and regulatory decisions for steelhead populations and fisheries. By purchasing a report card and participating in the reporting process,

steelhead anglers directly influence the way in which steelhead resources of the state are managed.

For example, analysis of report card data has been used to show that HO steelhead stray into rivers managed as WO streams absent of hatchery operations. To reduce the deleterious effect of hatchery genetics on wild populations, stream-specific take limits were standardized, increasing daily bag and possession limits of HO steelhead, state-wide. The Report Card Program also makes historical data available to state and federal agencies, non-government agencies, and the general public. Requests for report card data can be submitted directly to the program coordinator, or through a formal request for public records.

Prior to the implementation of the Report Card Program in 1993, steelhead seldom received funding for habitat restoration and monitoring projects contributing to the conservation and recovery of the species. Report Card Program revenue is dedicated, in part, to funding steelhead-centric restoration projects throughout California.

Report card revenue has been used to fund:

- Modification and removal of barriers, improving fish passage.
- Screening of diversions, protecting emigrating juvenile steelhead.
- Restoration of instream habitat, including the addition of large-woody structures, resulting in the sorting of spawning gravels, stabilization of stream banks, and increasing the frequency and depth of pools.
- Stabilization of eroding streambanks.
- Monitoring of individual populations, providing baseline and trend data to assist recovery efforts.
- Watershed education to the public and school districts.

PROGRAM CONSIDERATIONS

The Department continues to coordinate with the Steelhead Subcommittee of the California Advisory Committee on Salmon and Steelhead Trout, as outlined in California Fish and Game Code I Division 6, Part 1, Chapter 8, Article 3. Salmon, Steelhead Trout, and Anadromous Fisheries Program (Section 6920). Moving forward, the Department and Steelhead Subcommittee will evaluate and consider the following actions to potentially improve the Steelhead Report Card Program

- The development of a Steelhead Report Card Program angler satisfaction and feedback survey.

- Evaluation of angler nonresponse and low report card return rates.
- The development of a mobile steelhead report card application with real time data collection.
- The development of a data portal and dashboard on the Steelhead Report Card Program webpage to access data and visualizations.
- Draft and finalize more detailed annual season reports for the Steelhead Report Card Program.
- Examine possible incentive programs to improve report card return rates.
- Implementation of steelhead angler surveys in select tributaries having a specific management focus.
- Review of report card location codes to evaluate the most appropriate geographic boundaries for data collection.

RECOMMENDATIONS

The status of the Steelhead Report Card Program is outlined in the 2023 California Fish and Game Code in Division 6, Part 2, Chapter 2, Article 6. Steelhead Trout (Sections 7380-7382), which states that the program shall remain in effect only until January 1, 2025, and as of that date is repealed. The Department recommends that Article 6. Steelhead Trout [7380-7382] remain operative.

LITERATURE CITED

56 FR 58612. 1991. Policy on Applying the Definition of Species Under the Endangered Species Act to Pacific Salmon. November 20, 1991. Federal Register 56:58612-58618.

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APPENDICES

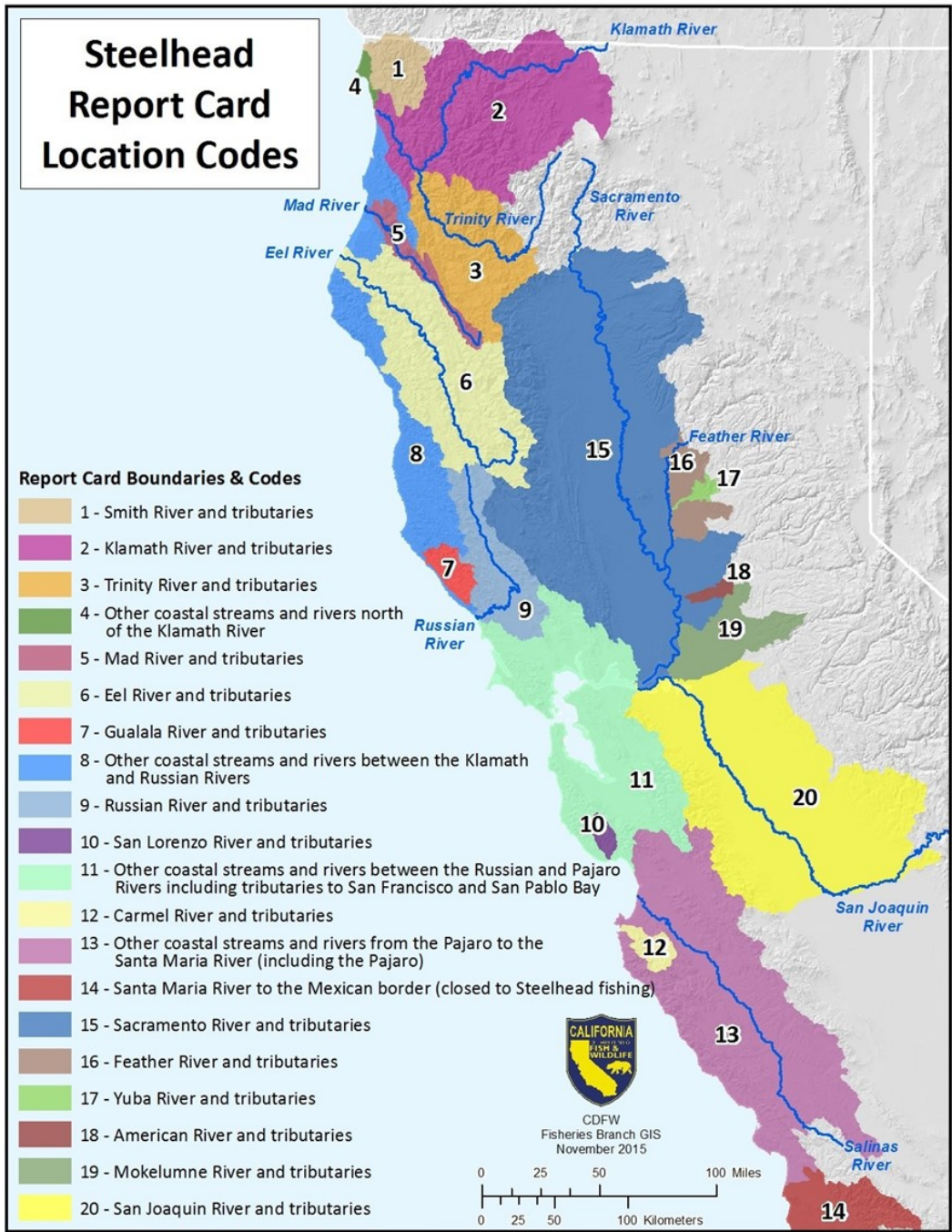


Figure A2. Spatial representation and description of Report Card location codes.

APPENDIX B: Angling Data

Table B1. All steelhead catch and recorded trips within the Smith River & Tributaries location code from 2020 to 2021.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2020	1,027	40	61	1,128	2,217	9,426	4.25	0.51
2021	571	19	55	645	1,718	7,953	4.63	0.38
2020-2021	1,598	59	116	1,773	3,935	17,379	4.42	0.45

Table B2. All steelhead catch and recorded trips within the Klamath River & Tributaries location code from 2020 to 2021.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2020	9,976	107	763	10,846	5,291	25,931	4.90	2.05
2021	10,150	115	914	11,179	4,292	22,052	5.14	2.60
2020-2021	20,126	222	1,677	22,025	9,583	47,983	5.01	2.30

Table B3. All steelhead catch and recorded trips within the Trinity River & Tributaries location code from 2020 to 2021.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2020	2,973	157	972	4,102	4,790	22,566	4.71	0.86
2021	3,000	188	1,152	4,340	4,155	20,668	4.97	1.04
2020-2021	5,973	345	2,124	8,442	8,945	43,234	4.83	0.94

Table B4. All steelhead catch and recorded trips within the Other North of the Klamath River location code from 2020 to 2021.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2020	47	0	3	50	67	248	3.70	0.75
2021	20	2	7	29	54	227	4.20	0.54
2020-2021	67	2	10	79	121	475	3.93	0.65

Table B5. All steelhead catch and recorded trips within the Mad River & Tributaries location code from 2020 to 2021.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2020	753	524	670	1,947	3,806	14,243	3.74	0.51
2021	338	284	250	872	2,044	7,528	3.68	0.43
2020-2021	1,091	808	920	2,819	5,850	21,771	3.72	0.48

Table B6. All steelhead catch and recorded trips within the Eel River & Tributaries location code from 2020 to 2021.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2020	1,315	2	47	1,364	2,503	11,824	4.72	0.54
2021	476	1	13	490	1,684	8,298	4.93	0.29
2020-2021	1,791	3	60	1,854	4,187	20,122	4.81	0.44

Table B7. All steelhead catch and recorded trips within the Gualala River & Tributaries location code from 2020 to 2021.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2020	21	0	0	21	149	709	4.76	0.14
2021	13	0	1	14	102	396	3.88	0.14
2020-2021	34	0	1	35	251	1,105	4.40	0.14

Table B8. All steelhead catch and recorded trips within the Other between Klamath and Russian River location code from 2020 to 2021.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2020	789	10	18	817	1,155	5,408	4.68	0.71
2021	730	2	22	754	1,112	5,396	4.85	0.68
2020-2021	1,519	12	40	1,571	2,267	10,804	4.77	0.69

Table B9. All steelhead catch and recorded trips within the Russian River & Tributaries location code from 2020 to 2021.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2020	255	322	272	849	3,627	13,922	3.84	0.23
2021	94	97	51	242	2,203	7,791	3.54	0.11
2020-2021	349	419	323	1,091	5,830	21,713	3.72	0.19

Table B10. All steelhead catch and recorded trips within the San Lorenzo River & Tributaries location code from 2020 to 2021.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2020	127	1	13	141	384	1,305	3.40	0.37
2021	68	2	18	88	356	1,189	3.34	0.25
2020-2021	195	3	31	229	740	2494	3.37	0.31

Table B11. All steelhead catch and recorded trips within the Other between Russian and Pajaro Rivers location code from 2020 to 2021.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2020	72	0	2	74	275	893	3.25	0.27
2021	83	3	9	95	342	1,049	3.07	0.28
2020-2021	155	3	11	169	617	1942	3.15	0.27

Table B12. All steelhead catch and recorded trips within the Carmel River & Tributaries location code from 2020 to 2021.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2020	6	0	0	6	53	191	3.60	0.11
2021	29	0	0	29	54	200	3.70	0.54
2020-2021	35	0	0	35	107	391	3.65	0.33

Table B13. All steelhead catch and recorded trips within the Pajaro River to the Santa Maria River location code from 2020 to 2021.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2020	94	0	1	95	188	623	3.31	0.51
2021	38	0	0	38	133	507	3.81	0.29
2020-2021	132	0	1	133	321	1130	3.52	0.41

Table B14. All steelhead catch and recorded trips within the Sacramento River & Tributaries location code from 2020 to 2021.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2020	2,381	108	635	3,124	3,135	16,726	5.34	1.00
2021	2,417	81	535	3,033	2,880	15,472	5.37	1.05
2020-2021	4,798	189	1,170	6,157	6,015	32,198	5.35	1.02

Table B15. All steelhead catch and recorded trips within the Feather River & Tributaries location code from 2020 to 2021.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2020	1,105	288	1,015	2,408	2,566	9,711	3.78	0.94
2021	713	152	649	1,514	1,642	6,691	4.07	0.92
2020-2021	1,818	440	1,664	3,922	4,208	16,402	3.90	0.93

Table B16. All steelhead catch and recorded trips within the Yuba River & Tributaries location code from 2020 to 2021.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2020	1,511	6	90	1,607	1,658	7,676	4.63	0.97
2021	1,291	9	166	1,466	1,487	7,211	4.85	0.99
2020-2021	2,802	15	256	3,073	3,145	14,887	4.73	0.98

Table B17. All steelhead catch and recorded trips within the American River & Tributaries location code from 2020 to 2021.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2020	528	255	586	1,369	4,132	13,856	3.35	0.33
2021	292	332	547	1,171	3,892	13,978	3.59	0.30
2020-2021	820	587	1,133	2,540	8,024	27,834	3.47	0.32

Table B18. All steelhead catch and recorded trips within the Mokelumne River & Tributaries location code from 2020 to 2021.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2020	296	13	92	401	563	2,274	4.04	0.71
2021	114	2	46	162	288	1,177	4.09	0.56
2020-2021	410	15	138	563	851	3,451	4.06	0.66

Table B19. All steelhead catch and recorded trips within the San Joaquin River & Tributaries location code from 2020 to 2021.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2020	254	1	12	267	434	1,874	4.32	0.62
2021	106	4	4	114	233	1,077	4.62	0.49
2020-2021	360	5	16	381	667	2,951	4.42	0.57

Table B20. All steelhead catch and recorded trips within all location codes from 2020 to 2021.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2020	23,530	1,834	5,252	30,616	36,993	159,406	4.31	0.83
2021	20,543	1,293	4,439	26,275	28,671	128,860	4.49	0.92
2020-2021	44,073	3,127	9,691	56,891	65,664	288,266	4.39	0.87

APPENDIX C: Updated 2015-2019 Angling Data

Table C1. All steelhead catch and recorded trips within the Smith River & Tributaries location code from 2015 to 2019.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2015	1,260	61	115	1,436	3,073	12,170	3.96	0.47
2016	2,423	147	156	2,726	4,314	19,282	4.47	0.63
2017	2,114	100	148	2,362	4,063	17,882	4.40	0.58
2018	1,030	48	64	1,142	2,858	11,359	3.97	0.40
2019	1,038	29	67	1,134	2,256	9,689	4.29	0.50
2015-2019	7,865	385	550	8,800	16,564	70,382	4.25	0.53

Table C2. All steelhead catch and recorded trips within the Klamath River & Tributaries location code from 2015 to 2019.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2015	9,057	275	913	10,245	6,978	32,859	4.71	1.47
2016	3,608	120	550	4,278	4,708	22,010	4.68	0.91
2017	6,079	102	750	6,931	4,094	18,865	4.61	1.69
2018	12,128	147	1,208	13,483	5,975	26,275	4.40	2.26
2019	9,088	108	883	10,079	5,889	28,154	4.78	1.71
2015-2019	39,960	752	4,308	45,016	27,644	128,163	4.64	1.63

Table C3. All steelhead catch and recorded trips within the Trinity River & Tributaries location code from 2015-2019.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2015	5,716	1,035	4,078	10,829	8,920	44,377	4.98	1.21
2016	2,517	311	1,252	4,080	6,642	33,997	5.12	0.61
2017	2,991	479	2,087	5,557	6,664	32,331	4.85	0.83
2018	3,730	363	1,451	5,544	6,902	32,178	4.66	0.80
2019	3,073	217	1,076	4,366	5,256	24,715	4.70	0.83
2015-2019	18,027	2,405	9,944	30,376	34,384	167,598	4.87	0.88

Table C4. All steelhead catch and recorded trips within the Other North of the Klamath River location code from 2015-2019

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2015	104	5	2	111	124	613	4.94	0.90
2016	21	2	1	24	138	504	3.65	0.17
2017	42	6	9	57	162	486	3.00	0.35
2018	78	6	31	115	148	470	3.18	0.78
2019	47	1	4	52	122	348	2.85	0.43
2015-2019	292	20	47	359	694	2,421	3.49	0.52

Table C5. All steelhead catch and recorded trips within the Mad River & Tributaries location code from 2015-2019.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2015	1,159	762	1,150	3,071	4,146	16,353	3.94	0.74
2016	596	492	534	1,622	3,040	11,833	3.89	0.53
2017	385	208	290	883	1,761	6,103	3.47	0.50
2018	433	240	235	908	2,658	9,333	3.51	0.34
2019	255	256	300	811	1,979	7,088	3.58	0.41
2015-2019	2,828	1,958	2,509	7,295	13,584	50,710	3.73	0.54

Table C6. All steelhead catch and recorded trips within the Eel River & Tributaries location code from 2015-2019.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2015	1,407	14	60	1,481	2,962	13,935	4.70	0.50
2016	669	19	50	738	1,989	8,768	4.41	0.37
2017	305	2	8	315	1,149	4,629	4.03	0.27
2018	890	3	34	927	2,020	9,102	4.51	0.46
2019	458	4	23	485	1,235	5,490	4.45	0.39
2015-2019	3,729	42	175	3,946	9,355	41,924	4.48	0.42

Table C7. All steelhead catch and recorded trips within the Gualala River & Tributaries location code from 2015-2019.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2015	97	1	10	108	305	1,351	4.43	0.35
2016	103	0	9	112	418	1,716	4.11	0.27
2017	99	0	2	101	389	1,713	4.40	0.26
2018	121	1	5	127	350	1,484	4.24	0.36
2019	251	1	8	260	405	1,950	4.81	0.64
2015-2019	671	3	34	708	1,867	8,214	4.40	0.38

Table C8. All steelhead catch and recorded trips within the Other between Klamath and Russian River location code from 2015-2019.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2015	1,993	14	119	2,126	2,444	12,274	5.02	0.87
2016	988	23	25	1,036	2,129	9,058	4.25	0.49
2017	662	5	5	672	1,221	5,203	4.26	0.55
2018	898	8	12	918	1,436	6,363	4.43	0.64
2019	1,206	6	42	1,254	1,503	7,031	4.68	0.83
2015-2019	5,747	56	203	6,006	8,733	39,929	4.57	0.69

Table C9. All steelhead catch and recorded trips within the Russian River & Tributaries location code from 2015-2019.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2015	574	720	612	1,906	5,592	21,125	3.78	0.34
2016	205	384	316	905	4,062	15,336	3.78	0.22
2017	143	140	119	402	1,886	6,518	3.46	0.21
2018	485	686	388	1,559	5,172	19,964	3.86	0.30
2019	158	151	118	427	1,902	6,706	3.53	0.22
2015-2019	1,565	2,081	1,553	5,199	18,614	69,649	3.74	0.28

Table C10. All steelhead catch and recorded trips within the San Lorenzo River & Tributaries location code from 2015-2019.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2015	76	0	16	92	361	1,405	3.89	0.25
2016	116	2	60	178	653	2,389	3.66	0.27
2017	128	1	47	176	494	1,607	3.25	0.36
2018	258	2	33	293	641	2,320	3.62	0.46
2019	180	6	35	221	673	2,349	3.49	0.33
2015-2019	758	11	191	960	2,822	10,070	3.57	0.34

Table C11. All steelhead catch and recorded trips within the Other between Russian and Pajaro Rivers location code from 2015-2019.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2015	81	5	5	91	237	700	2.95	0.38
2016	94	1	2	97	410	1,345	3.28	0.24
2017	195	6	7	208	494	1,705	3.45	0.42
2018	147	8	23	178	414	1,330	3.21	0.43
2019	158	18	8	184	567	1,996	3.52	0.32
2015-2019	675	38	45	758	2,122	7,076	3.33	0.36

Table C12. All steelhead catch and recorded trips within the Carmel River & Tributaries location code from 2015-2019.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2015	0	0	0	0	24	59	2.46	0.00
2016	10	1	5	16	105	265	2.52	0.15
2017	3	0	0	3	92	198	2.15	0.03
2018	6	0	2	8	37	113	3.05	0.22
2019	14	0	0	14	107	343	3.21	0.13
2015-2019	33	1	7	41	365	978	2.68	0.11

Table C13. All steelhead catch and recorded trips within the Pajaro River to the Santa Maria River location code from 2015-2019.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2015	57	4	1	62	184	530	2.88	0.34
2016	102	2	0	104	176	518	2.94	0.59
2017	95	0	2	97	241	741	3.07	0.40
2018	181	1	4	186	202	637	3.15	0.92
2019	89	0	1	90	207	703	3.40	0.43
2015-2019	524	7	8	539	1,010	3,129	3.10	0.53

Table C14. All steelhead catch and recorded trips within the Sacramento River & Tributaries location code from 2015-2019.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2015	3,605	127	623	4,355	3,421	16,897	4.94	1.27
2016	3,765	77	558	4,400	3,282	17,503	5.33	1.34
2017	2,552	253	675	3,480	2,891	14,010	4.85	1.20
2018	3,229	248	883	4,360	3,769	18,391	4.88	1.16
2019	2,371	203	882	3,456	2,906	15,348	5.28	1.19
2015-2019	15,522	908	3,621	20,051	16,269	82,149	5.05	1.23

Table C15. All steelhead catch and recorded trips within the Feather River & Tributaries location code from 2015-2019.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2015	1,315	119	582	2,016	2,530	9,559	3.78	0.80
2016	1,239	100	563	1,902	2,250	8,806	3.91	0.85
2017	1,148	399	1,197	2,744	2,045	7,982	3.90	1.34
2018	1,531	551	2,169	4,251	3,203	11,698	3.65	1.33
2019	1,085	389	1,376	2,850	2,529	9,463	3.74	1.13
2015-2019	6,318	1,558	5,887	13,763	12,557	47,508	3.78	1.10

Table C16. All steelhead catch and recorded trips within the Yuba River & Tributaries location code from 2015-2019.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2015	1,590	3	128	1,721	1,800	8,071	4.48	0.96
2016	621	5	48	674	966	4,180	4.33	0.70
2017	205	5	45	255	483	1,963	4.06	0.53
2018	506	3	49	558	928	3,620	3.90	0.60
2019	696	7	40	743	848	3,660	4.32	0.88
2015-2019	3,618	23	310	3,951	5,025	21,494	4.28	0.79

Table C17. All steelhead catch and recorded trips within the American River & Tributaries location code from 2015-2019.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2015	372	285	821	1,478	3,721	13,244	3.56	0.40
2016	401	432	1,384	2,217	4,552	16,208	3.56	0.49
2017	437	242	472	1,151	2,621	8,977	3.43	0.44
2018	868	259	938	2,065	3,998	13,464	3.37	0.52
2019	601	367	1,224	2,192	3,996	14,021	3.51	0.55
2015-2019	2,679	1,585	4,839	9,103	18,888	65,914	3.49	0.48

Table C18. All steelhead catch and recorded trips within the Mokelumne River & Tributaries location code from 2015-2019.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2015	398	13	133	544	476	2,018	4.24	1.14
2016	290	21	99	410	437	1,795	4.11	0.94
2017	249	15	226	490	276	1,000	3.62	1.78
2018	516	23	230	769	734	2,890	3.94	1.05
2019	297	7	76	380	397	1,569	3.95	0.96
2015-2019	1,750	79	764	2,593	2,320	9,272	4.00	1.12

Table C19. All steelhead catch and recorded trips within the San Joaquin River & Tributaries location code from 2015-2019.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2015	113	1	66	97	313	1,491	4.76	0.31
2016	77	3	8	125	324	1,377	4.25	0.39
2017	176	0	33	268	256	986	3.85	1.05
2018	214	3	29	246	425	1,815	4.27	0.58
2019	209	7	12	228	347	1,411	4.07	0.66
2015-2019	789	14	148	964	1,665	7,080	4.25	0.58

Table C20. All steelhead catch and recorded trips within all location codes from 2015 to 2019.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2015	28,974	3,444	9,434	41,769	47,611	209,031	4.39	0.88
2016	17,845	2,142	5,620	25,644	40,595	176,890	4.36	0.63
2017	18,008	1,963	6,122	26,152	31,282	132,899	4.25	0.84
2018	27,249	2,600	7,788	37,637	41,870	172,806	4.13	0.90
2019	21,274	1,777	6,175	29,226	33,124	142,034	4.29	0.88
2015-2019	113,350	11,926	35,139	160,428	194,482	833,660	4.29	0.82