Napa River Steelhead and Salmon Monitoring Program
2024-2025 Report

NAPA RCD

November 2025

Prepared by

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Acknowledgments

RCD would like to thank Laird Family Estate, the USDA Natural Resources Conservation Service, Pam Smithers, the Napa County Flood Control and Water Conservation District, the California Department of Fish and Wildlife, and NOAA Fisheries for their technical assistance and support.

Funding

- State of California Wildlife Conservation Board
- California State Coastal Conservancy
- Napa County Planning, Building, and Environmental Services
- Private donations

Executive Summary

This update covers Napa County Resource Conservation District's fish monitoring efforts for our 2024 and 2025 sampling seasons. The program utilizes a rotary screw trap to sample fish on the Napa River mainstem, ideally operated Monday through Friday between March 1 and May 31 for a total of approximately 65 potential sampling days. In 2024, the trap was operated for 44 days, and in 2025, for 46 days. Although both seasons started approximately three weeks late due to high flows, these seasons were characterized by relatively favorable flow conditions, allowing for more consistent sampling compared to previous years.

In 2024, the rotary screw trap captured 32 steelhead smolts and 1,037 Chinook salmon parr/smolts, while in 2025, catches increased to 107 steelhead smolts, 4 adult steelhead, and 2,178 Chinook parr/smolts. Steelhead catch-per-unit-effort (CPUE) rose from 0.7 in 2024 to 2.3 in 2025 (tied for the fourth highest on record) while Chinook CPUE was 23.6 in 2024 and 47.3 smolts/day in 2025, the second highest since monitoring began. These results point to strong outmigration for both species in 2025, likely driven by improved environmental conditions. Median steelhead smolt size remained within the program's historical range despite environmental variability, measuring 200 mm in 2024 and 185 mm in 2025.

Native fish species continued to dominate the catch, comprising over 95% of all individuals sampled in both years. In total, 10 native and 7 non-native species were recorded in 2024, and 10 native and 6 non-native species in 2025.

In total, 31 steelhead smolts were PIT tagged in 2024 and 101 in 2025, the second-highest annual total since the program's inception, contributing data to long-term monitoring efforts focused on characterizing steelhead life history. Our program has tagged a total of 702 steelhead smolts, with six having been re-detected in subsequent years by the Napa River PIT tag antenna. These tagging data represent the first known confirmation of steelhead returning to the Napa River.

Four Chinook salmon spawner surveys were conducted during each of the 2024 and 2025 water years, covering approximately 19.8 miles (31.9 km) of the Napa River mainstem. In 2024, surveys documented 13 live Chinook, 30 carcasses, and 68 redds while 2025 surveys recorded 97 live Chinook, 3 carcasses, and 157 redds, indicating strong reproductive activity. These results highlight substantial interannual variation in observed spawning.

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Introduction

In 2009, the Napa County Resource Conservation District (RCD) began the Napa River Watershed Steelhead and Salmon Monitoring Program with the goal of better understanding steelhead trout and Chinook salmon populations in the Napa River watershed. Since the program's inception, the RCD has consistently monitored smolt abundance and adult returns. Additionally, the RCD has opportunistically gathered data on salmonid genetics and juvenile distribution.

This monitoring program is intended to provide science-based information to all stakeholders involved in steelhead and salmon management and recovery. In addition to generating data on steelhead and salmon, the monitoring program also provides information about other native fishes and tracks ecological responses to ongoing habitat restoration.

In this update, we provide results from our spring downstream migrant trapping (smolt trapping), winter spawner surveys, and operation of our Passive Integrated Transponder (PIT) tag detection system located in the Napa River for the years 2024 and 2025. Additional information and previous years' reports can be found at NapaRCD.org.

Smolt Trapping

Methods

An 8-foot diameter rotary screw trap (RST) was used to capture fish in the Napa River during the spring seasons of 2024 and 2025 (**Figure 1**). Year 2025 represented the 17th year the RCD has operated the RST at the same location, approximately 3.2 kilometers (2 miles) downstream of the Oak Knoll Avenue Bridge (**Figure 2**). The RST site was selected based on accessibility, landowner cooperation, and its location just upstream of tidal influence. Approximately 67% (~188 stream kilometers) of the total anadromous salmonid spawning and rearing habitat in the Napa River watershed is located upstream of this site.

Hydrographs for the 2024 and 2025 water years illustrate streamflow patterns alongside the timing of monitoring activities and salmonid spawning seasons (**Figure 3)**. Generally, the target RST operating period begins on March 1 and extends through early June, or until catch and/or flows diminish.

The 2024 and 2025 sampling seasons began about three weeks later than planned due to high flows but overall represented an improvement over recent years. After installation, several storms caused

temporary shutdowns for a few days at a time. Despite these interruptions, the rotary screw trap operated for 44 days in 2024 and 46 days in 2025 (**Figure 4**).

While in operation, crews checked the trap at least once per day to process the catch and remove debris. The trap was operated Monday through Friday for the spring 2024 and 2025 seasons. Fish captured in the trap were processed according to the procedures described in **Appendix A**.

A sub-sample of steelhead and Chinook smolts captured each week was marked with a small fin clip, and a PIT tag in the case of steelhead, then transported in buckets upstream approximately 1 kilometer (0.6 miles) for release. The number of marked fish that were subsequently recaptured was used to generate season-long trap efficiency estimates. Upstream releases were conducted Monday through Thursday. The number of fish that were marked and released each week was variable based on catch rates.

Figure 1. Napa River rotary screw trap

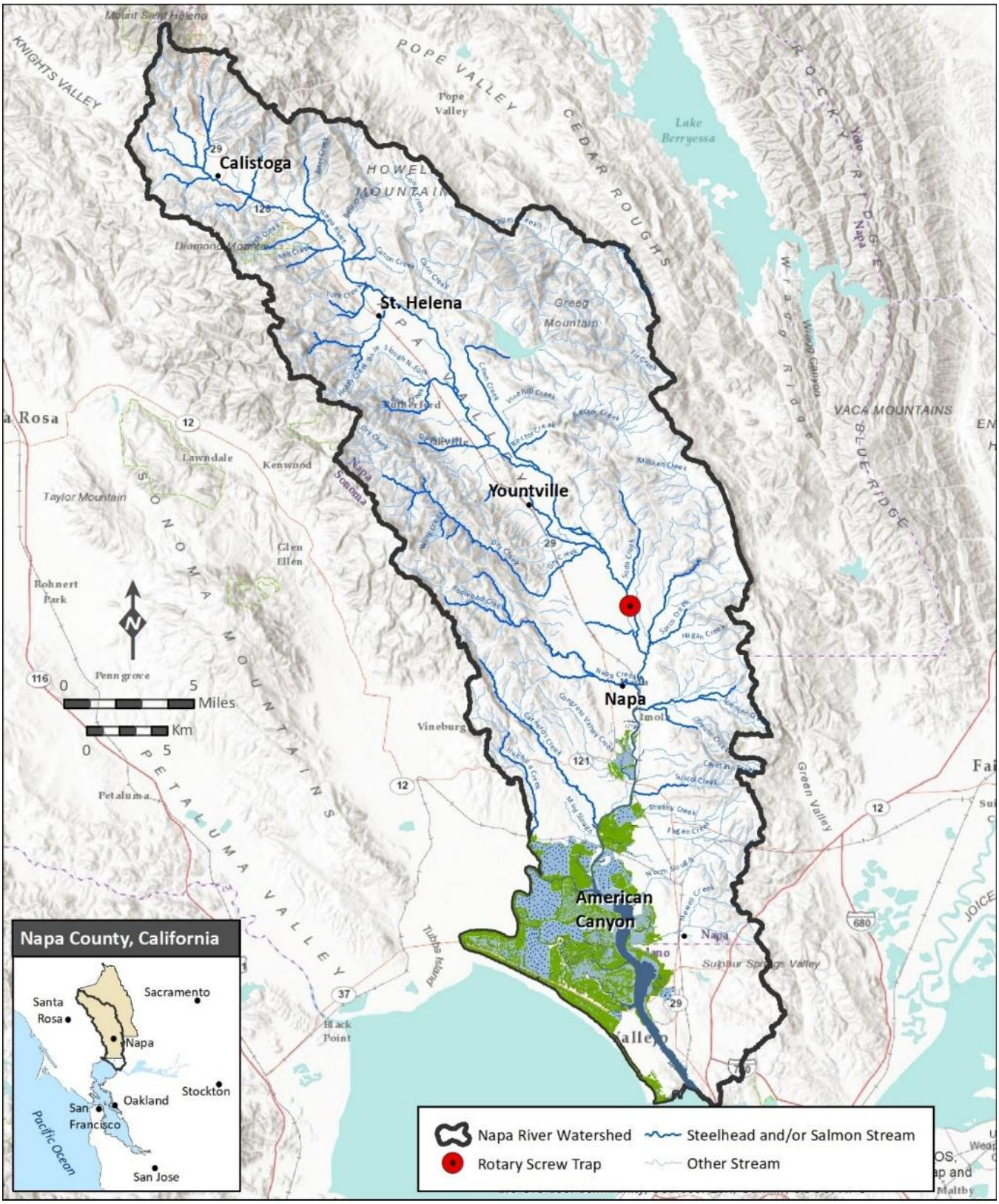


Figure 2. Napa River rotary screw trap location.

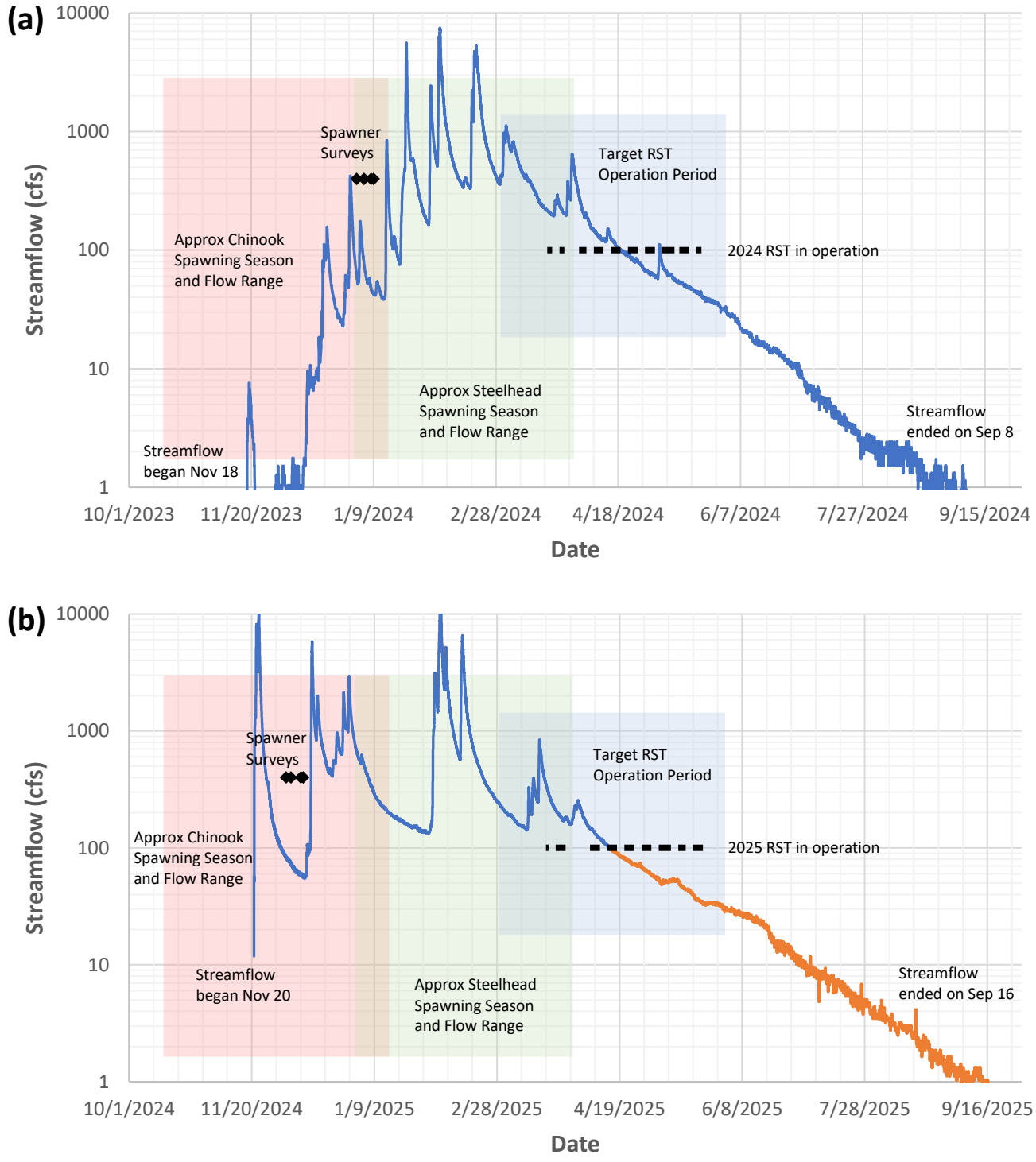


Figure 3. (a) Water Year (WY) 2024 and (b) WY 2025 hydrographs from USGS gaging station 11458000 (Napa River near Napa, CA), showing storm events and fieldwork timing. Black diamonds (◆) mark spawner surveys, and black lines (—) indicate rotary screw trap (RST) operation periods. The blue line represents approved discharge data; the orange line shows provisional discharge data at the time of reporting.

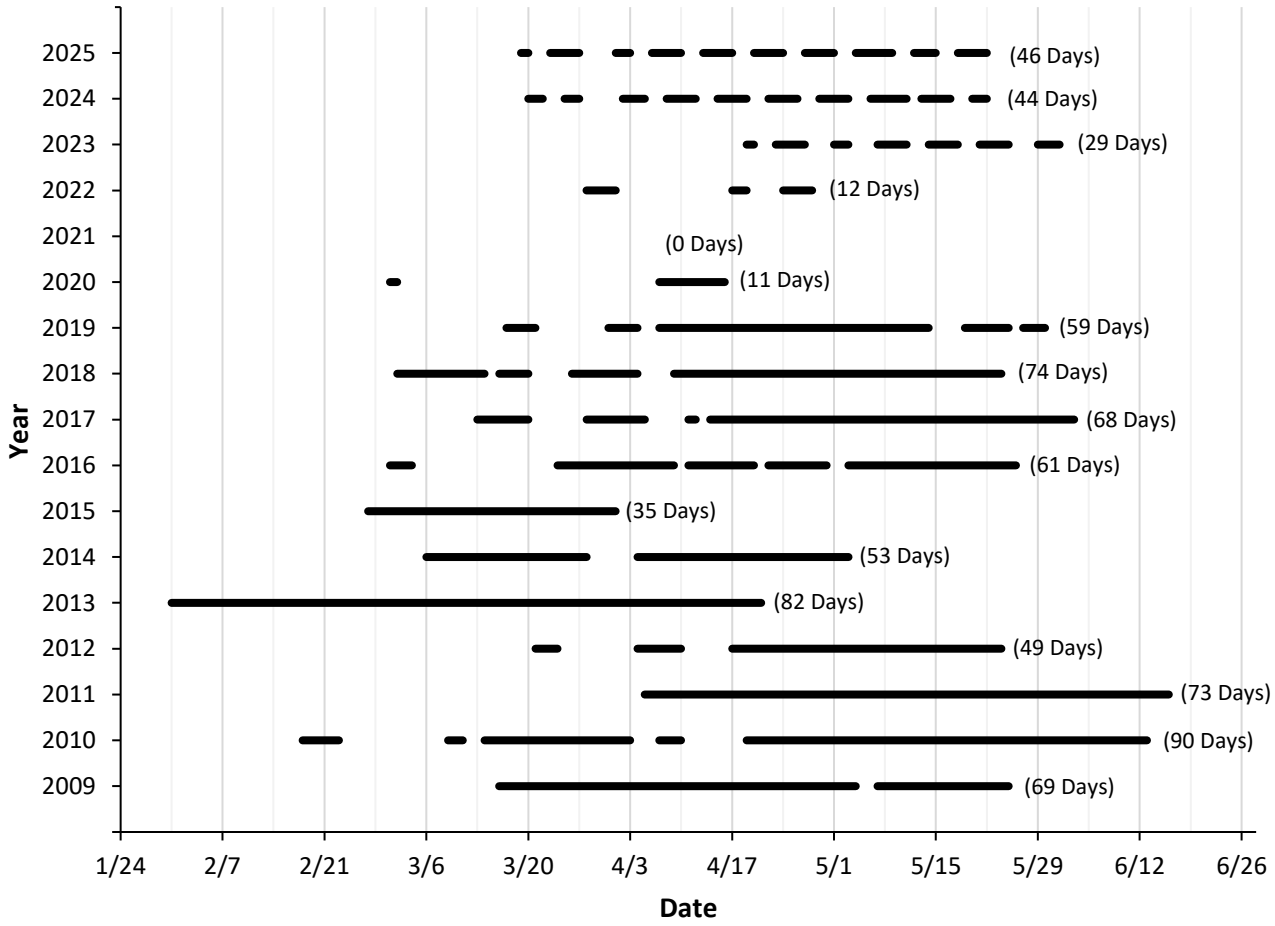
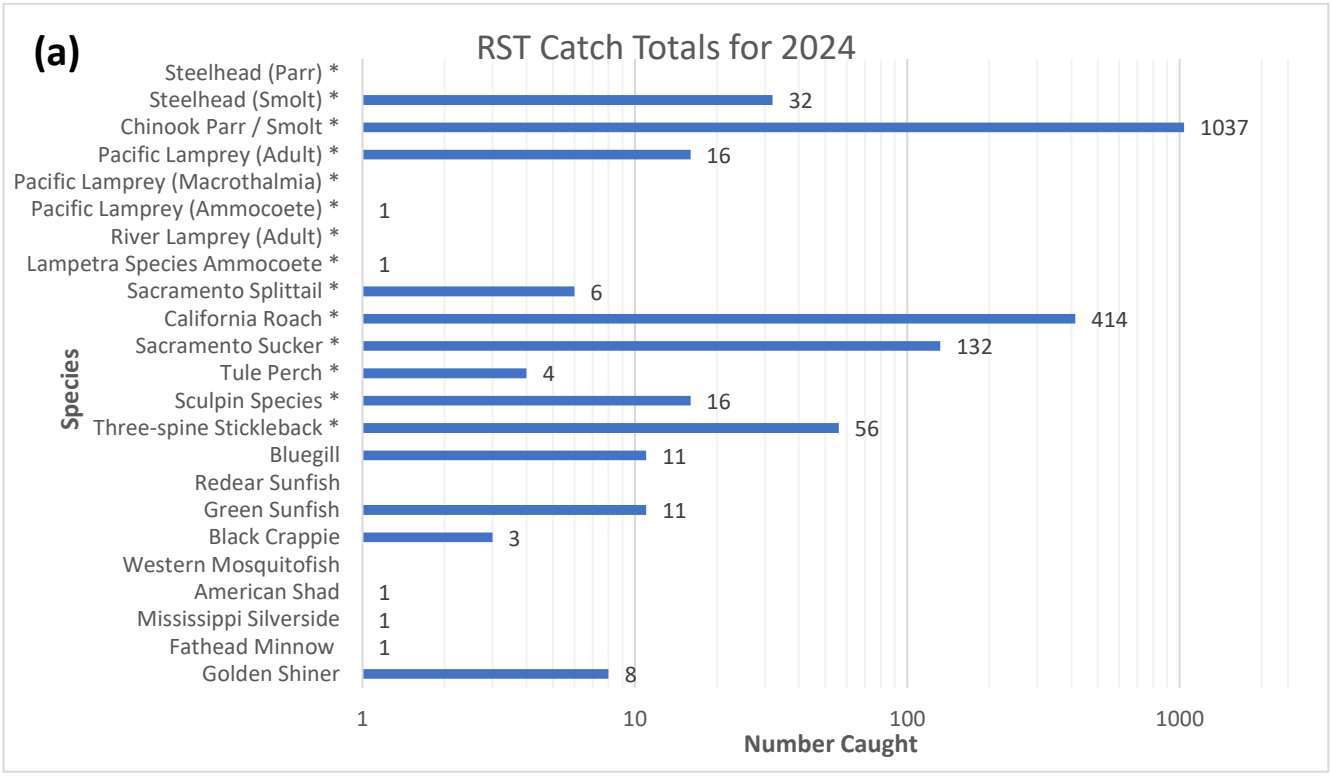


Figure 4. Dates of operation for the Napa River rotary screw trap from 2009-2025. The total number of sampling days per year is shown in parentheses. Gaps within each sampling year represent periods when the trap was not operational due to high flows, low flows, weekends, or other factors such as staff/funding availability. The 7 days a week sampling schedule was modified to Monday through Friday beginning in 2021.

Results and Discussion

In spring 2024 and 2025, we captured a total of 1,751 and 2,965 fish, respectively. In 2024, we sampled 10 native and 7 non-native species (**Figure 5a**), while in 2025, we sampled 10 native and 6 non-native species (**Figure 5b**). As with previous years, native species made up over 95% of the total catch. Note that this count excludes the larval stages of some species, such as the Sacramento sucker, three-spine stickleback, and California roach, which were often too numerous to be accurately counted, as has been the case in previous years. **Appendix B** provides count totals for each fish species as well as incidentally captured non-fish taxa from 2009-2025.



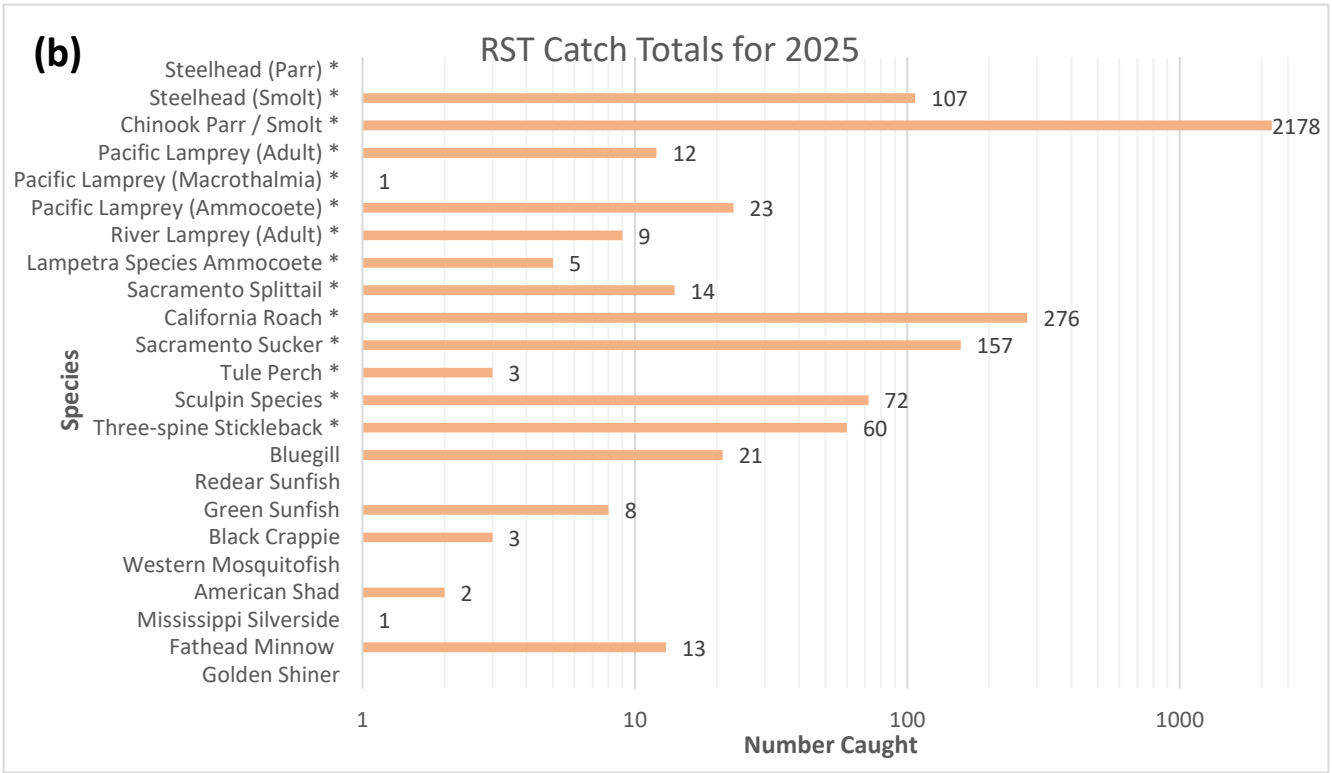


Figure 5. (a) 2024 and (b) 2025 RST season catch totals, excluding larval specimens.
*Native species

Steelhead and Salmon Smolt Catch

In the 2024 RST sampling season, a total of 32 steelhead smolts and 1,037 Chinook salmon parr/smolts were captured, while in the 2025 season, 107 steelhead smolts, 4 adult steelhead and 2,178 Chinook salmon parr/smolts were captured. Unlike previous years, no steelhead parr were observed during either season (**Appendix B**), which may reflect increased spawning opportunities in tributaries due to more favorable flow conditions. The increase in steelhead smolts captured in 2025 represents a noteworthy improvement compared to prior years and may reflect more favorable environmental conditions during the spring season.

Steelhead catch-per-unit-effort (CPUE) was 0.7 fish per day in 2024, which was well below the long-term average of 1.6. In contrast, CPUE in 2025 rose to 2.3 fish per day, which is above average and tied for the fourth-highest value since monitoring began (**Figure 6**). Because steelhead juveniles typically remain in freshwater through at least one summer, the increase in 2025 catches suggests that 2024 and 2025 provided relatively favorable conditions for steelhead spawning and rearing.

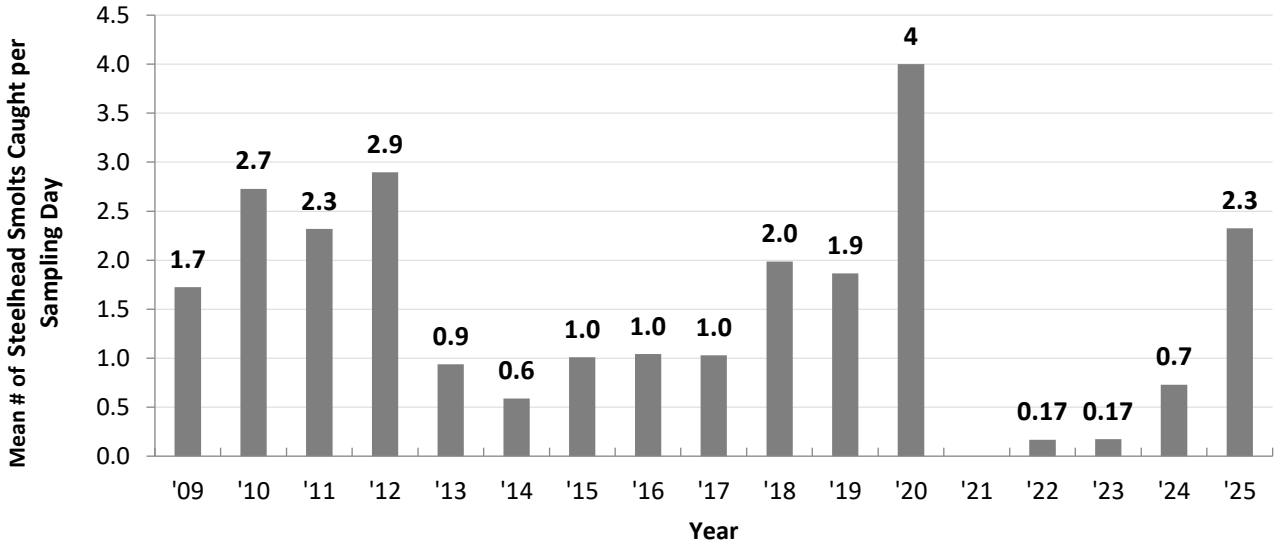


Figure 6. Steelhead smolt catch rates (CPUE) 2009-2025.

Chinook smolt CPUE from our rotary screw trap efforts was 23.6 smolts/day in 2024 and 47.3 smolts/day in 2025, which is well above our program's long-term average of 16.8 smolts/day (**Figure 7**). The 2025 season represents the 2nd highest Chinook salmon smolt CPUE since monitoring began. These results suggest that both species benefited from improved environmental conditions during these years. Despite variability in sampling duration, the data confirm that steelhead and Chinook successfully completed their freshwater life stages and migrated to the ocean.

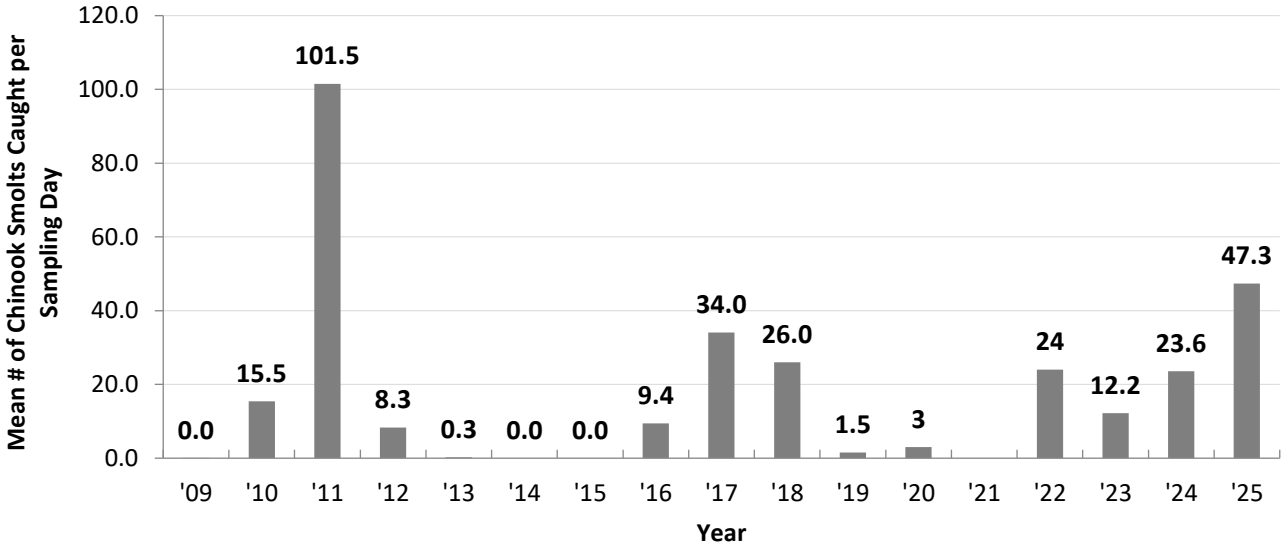


Figure 7. Chinook salmon smolt catch rates (CPUE) 2009-2025.

Steelhead Smolt Size

In 2024, the median fork length of steelhead smolts was 200 millimeters (7.9 inches), which is greater than the program's 14-year average of 189 (7.4 inches). The median size in 2025 was 185 millimeters (7.3 inches). Median steelhead smolt size has remained relatively stable during the monitoring program's history with a range of 170 - 206 millimeters (6.7 - 8.1 inches), despite considerable variation in environmental conditions within the monitoring period (**Figure 8**).

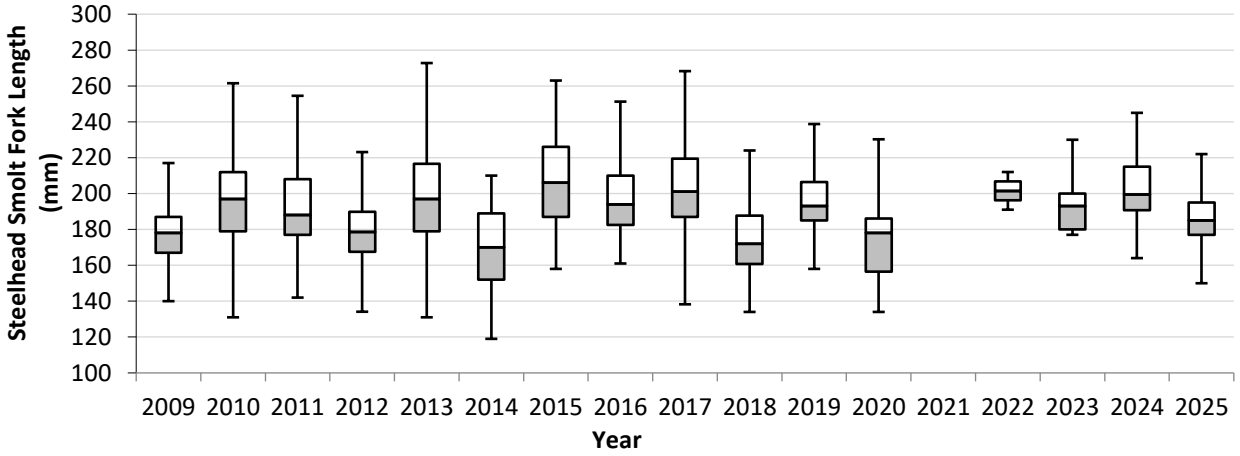


Figure 8. Steelhead smolt fork lengths from the Napa River rotary screw trap 2009-2025. The bottom and top of each box are the 25th and 75th percentiles respectively. The line near the middle of each box is the median, and the vertical lines (whiskers) represent the lowest and highest values within 1.5 times the inter-quartile range. Note: No fish were sampled in 2021.

Trapping Efficiency

During the 2024 season, a total of 25 steelhead smolts and 308 Chinook salmon smolts were marked and released upstream to generate trapping efficiency estimates (**Table 1**). Of these marked fish, 3 steelhead and 34 Chinook were recaptured, yielding season-long trap efficiency estimates of 12% for steelhead and 11% for Chinook. In 2025, 81 steelhead smolts and 485 Chinook salmon smolts were marked and released upstream. Of these, 12 steelhead and 88 Chinook were recaptured, resulting in estimated annual trapping efficiencies of 15% for steelhead and 18% for Chinook. The long-term average trap efficiency for steelhead was 10% and 25% for Chinook salmon.

Table 1. Total number of smolts captured, released upstream, and recaptured by the rotary screw trap 2010-2025. Note: Efficiency releases were not conducted for the 2009 season, and the RST was launched but not operated in 2021 due to low flows.

	Steelhead				**Chinook**			
Year	Total number of smolts captured	Number of marked smolts released upstream	Number of smolts recaptured	Estimated annual trapping efficiency	Total number of smolts captured	Number of marked smolts released upstream	Number of smolts recaptured	Estimated annual trapping efficiency
2010	242	201	23	11%	1,371	702	139	20%
2011	166	95	13	14%	7,265	914	121	13%
2012	142	84	17	20%	406	272	102	38%
2013	77	56	1	2%	19	10	1	10%
2014	31	18	1	6%	0	0	0	-
2015	34	25	5	20%	0	0	0	-
2016	64	43	4	9%	580	289	110	38%
2017	70	53	10	19%	2315	575	113	20%
2018	147	111	13	12%	1922	635	216	34%
2019	110	81	9	11%	89	56	30	54%
2020	44	36	2	6%	33	31	6	19%
~~2021~~	-	-	-	-	-	-	-	-
2022	2	2	0	0%	375	134	23	17%
2023	5	5	0	0%	354	168	27	16%
2024	32	25	3	12%	1037	308	34	11%
2025	107	81	12	15%	2178	485	88	18%

PIT Tagging

Methods

Passive Integrated Transponder (PIT) tags were used to uniquely identify and track individual steelhead in the Napa River. Steelhead smolts larger than 130 mm fork length were anesthetized and implanted with 12 mm full-duplex (FDX) tags using a Biomark injection gun. Tagged fish were then scanned with a handheld tag reader and the unique tag code was recorded in the RCD's database.

Our PIT tag system sustained damage and was non-operational during the 2023 and 2024 water years. In summer 2024, the entire PIT tag detection system was replaced, enabling monitoring to resume for the 2025 season. A new pair of stationary 6-meter-long Biomark HDPE pass-by PIT tag antennas were installed in approximately the same location in the Napa River, about 20 meters upstream of the rotary screw trap
(**Figure 9**).

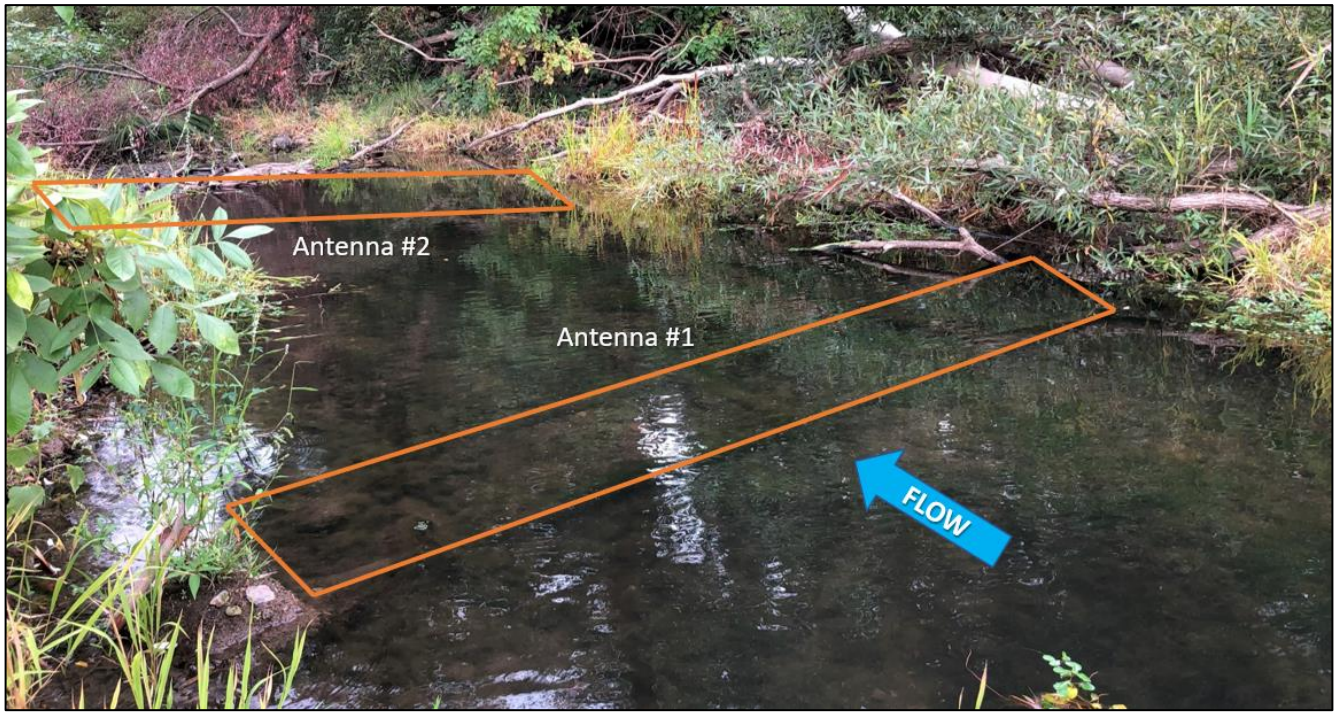


Figure 9. Paired PIT tag antennas in the Napa River.

Results and Discussion

During the out-migrant trapping seasons of 2024 and 2025, 31 and 101 steelhead smolts were PIT-tagged, respectively (**Figure 10**). The 2025 season marked the second-highest annual total since the

program's inception. From 2013 – 2025, RCD has tagged a total of 702 steelhead smolts. Of that total, six individual steelhead have been re-detected in subsequent years by the Napa River PIT tag antenna (**Table 2**). These tagging results provide direct evidence of successful steelhead reproduction and return spawning within the Napa River watershed. No returning fish have been detected since 2018, likely reflecting a combination of adverse dry conditions and scarce tagging opportunities. Additionally, our PIT tag antenna was destroyed during a high-flow event in 2023 and was not rebuilt until after the steelhead spawning season in 2025, resulting in a two-year gap in monitoring. We are optimistic about detecting returning adult steelhead in future seasons, given the improved smolt detection rate of 48% in 2025 with our newly installed PIT tag antenna. This represents a substantial improvement over the variable but lower detection rates in previous years: 34% in 2018, 20% in 2019, and 4% in 2020.

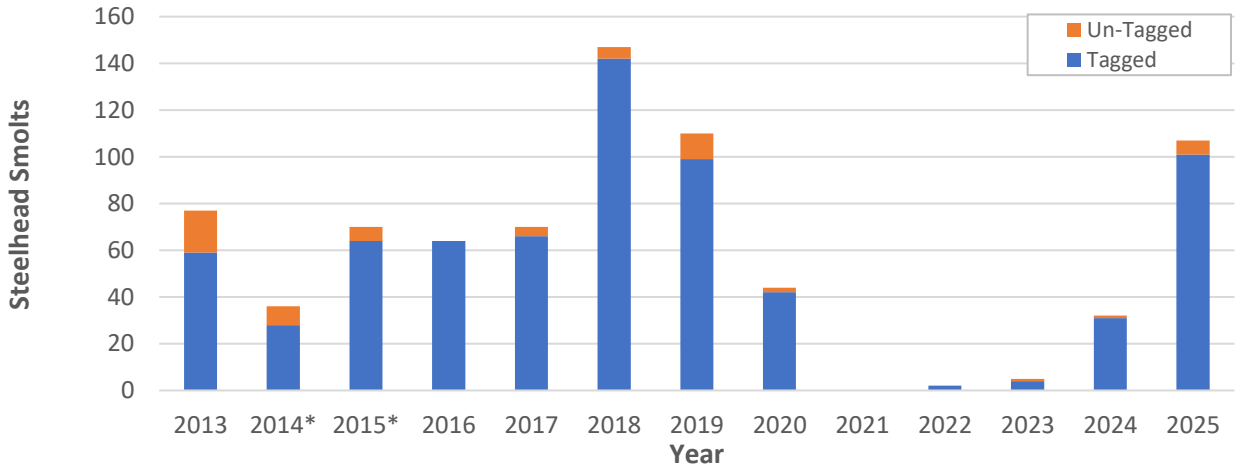


Figure 10. Number of PIT tagged steelhead smolts relative to the total catch 2013-2023. *Note: 2014 and 2015 included steelhead captured in fyke nets in Sulphur and York Creeks in addition to the RST.

Table 2. PIT tagged steelhead re-detected by the Napa River PIT tag antenna in subsequent years.

Date Tagged	Tagging Location	Length (mm)	Weight (g)	Re-Detection Date	Days between tagging and re-detection
4/1/2016	Napa River RST	192	65.1	3/1/2018	699
4/2/2016	Napa River RST	201	85.1	3/1/2018	698
5/12/2017	Napa River RST	193	68.4	2/17/2019	646
3/18/2018	Napa River RST	190	63.5	3/11/2020	724
4/17/2018	Napa River RST	185	68.1	2/17/2020	671
4/23/2018	Napa River RST	185	65.1	3/19/2019	330

Spawner Surveys

Methods

Spawner surveys were conducted according to the RCD Spawner Survey Protocol, which is based on the methodology described in the California Salmonid Stream Habitat Restoration Manual published by the California Department of Fish and Wildlife (CDFW 1998). Kayak surveys were conducted on the Napa River mainstem once sufficient rainfall had occurred and continuous base flow had been established. During each survey, the crew continuously scanned areas likely to be used by spawning salmonids. Polarized sunglasses were used to improve visibility and detection of underwater features. The following data, along with the geographic coordinates of each observation, were recorded:

- Salmon (live) - total count, species, sex
- Salmon (carcass) - count, species, sex, length, presence/absence of adipose fin, condition
- Redd - total count, species, area, habitat type, occupied/not occupied

Results and Discussion

Four spawner surveys were conducted during the 2024 water year, spanning approximately 19.8 mi (31.9 km) of the mainstem Napa River from Lincoln Avenue in Calistoga to Yountville Cross Road (**Figure 11a**). Surveys occurred between January 2 and January 9, 2024, with streamflow ranging from 42 to 66 cfs at the Pope Street USGS gage (**Table 3**). Across these surveys, observers documented 13 live Chinook salmon, 30 carcasses, and 68 newly constructed redds. The relatively low number of live fish compared to carcasses suggests that surveys were conducted late in the spawning season, after peak activity had passed. Despite this timing, the presence of numerous redds indicates that spawning opportunities were available during the 2024 water year.

In contrast, surveys conducted during the 2025 water year revealed substantially higher spawning activity. Four surveys were completed between December 4 and December 11, 2024, covering the same 19.8 mi (31.9 km) reach of the Napa River (**Figure 11b**). Streamflow during these surveys ranged from 51 to 70 cfs at the Pope Street USGS gage (**Table 4**). Observers recorded 97 live Chinook salmon, three carcasses, and 157 newly constructed redds. The high number of live fish and redds, combined with relatively low carcass count, suggests that surveys occurred during peak spawning conditions. These results indicate strong spawning opportunities for Chinook salmon during the 2025 water year.

Table 3. WY 2024 Chinook salmon kayak spawner survey details and results.

Date	1/2/2024	1/5/2024	1/8/2024	1/9/2024
Water Year	2024	2024	2024	2024
Stream	Napa River	Napa River	Napa River	Napa River
Flow (cfs)	52	66	44	42
Flow source	Pope Street USGS gage	Pope Street USGS gage	Pope Street USGS gage	Pope Street USGS gage
Survey Extent	Lincoln Ave in Calistoga to Bale Lane	Bale Lane to Pope Street	Pope Street to Rutherford Road	Rutherford Road to Yountville Cross Road
Survey Length (mi)	4.77	4.95	4.57	5.54
Survey Length (km)	7.69	7.97	7.36	8.91
Live Chinook	5	5	3	0
Chinook carcasses	15	10	6	0
Redds	20	18	16	14

Table 4. WY 2025 Chinook salmon kayak spawner survey details and results.

Date	12/4/2024	12/6/2024	12/10/2024	12/11/2024
Water Year	2025	2025	2025	2025
Stream	Napa River	Napa River	Napa River	Napa River
Flow (cfs)	70	65	54	51
Flow source	Pope Street USGS gage	Pope Street USGS gage	Pope Street USGS gage	Pope Street USGS gage
Survey Extent	Lincoln Ave in Calistoga to Bale Lane	Bale Lane to Pope Street	Pope Street to Rutherford Road	Rutherford Road to Yountville Cross Road
Survey Length (mi)	4.77	4.95	4.57	5.54
Survey Length (km)	7.69	7.97	7.36	8.91
Live Chinook	64	21	10	2
Chinook carcasses	0	2	1	0
Redds	69	41	27	20

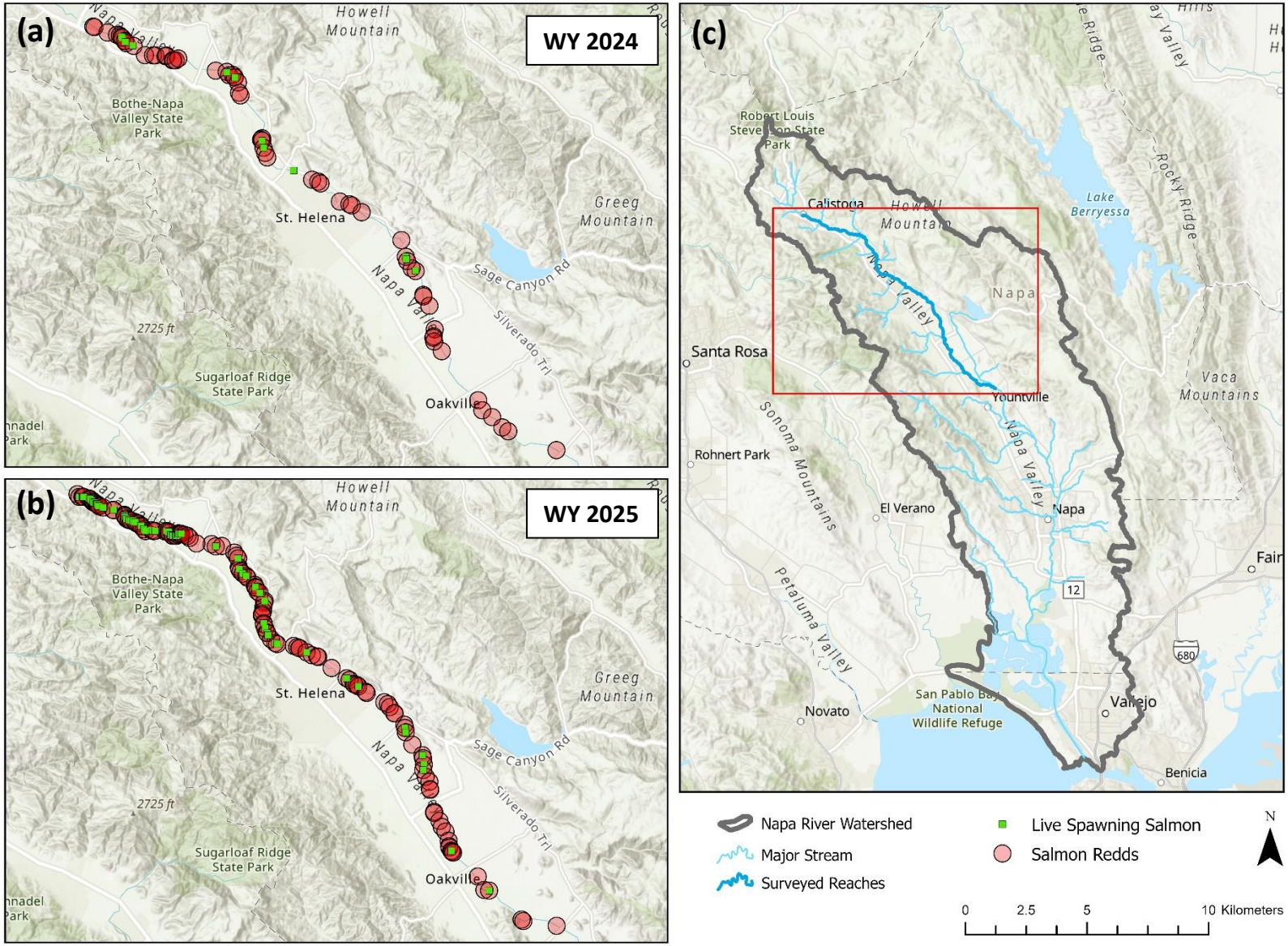


Figure 11. Panels (a) and (b) display the spatial distribution and relative abundance of Chinook salmon spawning activity observed during spawner surveys in Water Years (WY) 2024 and 2025, respectively. Panel (c) provides an overview of the Napa River watershed and the extent of the surveyed reaches during the monitoring period.

Anticipated Monitoring in 2025 and 2026

At the time of reporting, the RCD has funding from the State of California Wildlife Conservation Board to continue Napa River rotary screw trap monitoring and spawner surveys through 2026.

References

California Department of Fish and Wildlife (CDFW). 1998. California Salmonid Stream Habitat Restoration Manual. http://www.dfg.ca.gov/fish/Resources/HabitatManual.asp.

Appendix A: Smolt Trap Processing Procedure

Species	Life Stage	Mark/ Recapture	Number per day	Processing Procedure	Release location
Steelhead	**FRY** ≤ 40mm	-	All	Count and release	Downstream
	PARR 40 - 130 mm	-	All	Count and release	Downstream
	SMOLT ≥ 130 mm	NEW	First 30	1. Anesthetize and record length / weight 2. Apply pelvic fin clip and record **unique genetics ID #** 3. Insert PIT tag and record tag #	Upstream (Mon-Fri) Downstream (Sat, Sun)
			31+	Count and release	Downstream
		RECAP	All	1. **Do not anesthetize** 2. Scan for PIT tag and record tag # if detected 3. Record fin clip location, life stage, and notes on condition	Downstream
	ADULT ≥ 300mm	-	All	1. **Do not anesthetize** 2. Scan for PIT tag and record tag # if detected 3. Record sex, estimated length, and any fin clips observed 4. Collect caudal fin clip and record **unique genetics ID #** 5. Take pictures of fish while holding in water	Downstream
Chinook	**FRY** ≤ 40mm	-	All	Count and release	Downstream
	PARR / SMOLT ≥ 40 mm	NEW	First 20	1. Anesthetize and record length / weight 2. Apply upper caudal fin clip and record **pooled genetics ID #**	Upstream (Mon-Fri) Downstream (Sat, Sun)
			21+	Count and release	Downstream
		RECAP	All	Count and release	Downstream
River Lamprey	Adult	-	All	1. Anesthetize and record total length, sex, and maturity 2. Take photo on measuring tray	Downstream
Pacific Lamprey	Adult	-	All	Record maturity, sex, and notes on condition	Downstream
All other species	All	-	All	Count and release	Downstream

Appendix B: Rotary Screw Trap Season Totals 2009-2025

Native Fishes

Common Name	Scientific Name	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Steelhead / Rainbow trout	*Oncorhynchus mykiss*																		
Fry / Parr (<130 mm)		941	94	7	152	3,025	303	35	11	6	32	1	6	-	281	0	0	0	**4,894**
Smolt (>130mm)		119	251	175	160	77	31	34	64	70	147	110	44	-	2	5	32	107	**1,428**
Adult or Resident (>300 mm)		0	3	4	0	3	0	0	3	6	3	2	0	-	0	0	0	4	**28**
Chinook Salmon	*Oncorhynchus tshawytscha*																		
Parr / Smolt		1	1,520	7,377	488	19	0	0	580	2,315	1,922	89	33	-	388	354	1037	2178	**18,301**
Kokanee/ Sockeye Salmon	*Oncorhynchus nerka*																		
Parr / Smolt		0	342	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	**342**
Pacific Lamprey	*Entosphenus tridentatus*																		
Adult		25	11	38	64	9	14	11	143	31	26	12	0	-	2	8	16	12	**422**
Macrothalmia[1,2]		-	-	-	-	1	0	0	3	0	7,203	0	964	-	6	0	0	1	**8,178**
Ammocete[1]		-	-	-	9	4	7	30	54	45	314	121	2	-	10	1	1	23	**621**
River Lamprey	*Lampetra ayresi*																		
Adult[1]		-	2	21	9	3	0	0	86	46	1	21	0	-	0	9	0	9	**207**
Macrothalmia[1]		-	-	-	-	15	0	0	1	0	5	1	1	-	0	0	0	0	**23**
Brook Lamprey (Adult[1])	*Lampetra richardsoni*	-	0	64	7	174	120	87	77	38	63	20	20	-	0	0	0	1	**671**
Lampetra Sp. Ammocete[1]	*Lampetra sp.*	-	-	-	19	108	46	40	136	70	74	148	8	-	78	0	1	5	**733**
Sacramento Splittail	*Pogonichthys macrolepidotus*	2	6	0	1	26	0	6	0	6	39	0	0	-	2	3	6	14	**111**
Hardhead	*Mylopharodon conocephalus*	0	0	1	0	0	1	1	0	0	0	0	0	-	0	0	0	0	**3**
Sacramento Pikeminnow	*Ptychocheilus grandis*	28	87	192	191	33	12	4	27	200	512	63	53	-	0	0	59	32	**1,493**
California Roach[2]	*Hesperoleucus symmetricus*	4,744	3,571	336	330	498	691	253	548	249	260	347	112	-	25	112	414	276	**12,766**
Sacramento Sucker	*Catostomus occidentalis*	82	419	207	33	78	42	61	166	284	1,060	148	188	-	18	149	132	157	**3,224**
Tule Perch	*Hysterocarpus traski*	6	28	30	20	17	8	6	78	51	27	7	1	-	0	1	4	3	**287**
Sculpin sp.	*Cottus sp.*	242	124	62	66	329	184	20	51	53	84	215	14	-	322	43	16	72	**1,897**
Three-spine Stickleback	*Gasterosteus aculeatus*	116	76	273	50	34	37	14	3,329	465	78	89	3	-	816	33	56	60	**5,529**

[1] Juvenile and larval lamprey as well as adult river and brook lampreys were only differentiated consistently beginning with the 2012 season.

[2] Includes estimated numbers during periods of high abundance.

Non-Native Fishes

Common Name	Scientific Name	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Bluegill	*Lepomis macrochirus*	29	100	86	41	11	107	24	221	130	52	21	0	-	15	7	11	21	**876**
Redear Sunfish	*Lepomis microlophus*	0	8	0	0	0	1	9	8	2	1	0	0	-	1	2	0	0	**32**
Pumpkinseed	*Lepomis gibbosus*	0	0	1	0	0	0	0	0	0	0	0	0	-	0	0	0	0	**1**
Green Sunfish	*Lepomis cyanellus*	0	2	5	0	0	19	2	10	15	9	4	1	-	2	4	10	8	**93**
Black Crappie	*Pomoxis nigromaculatus*	1	0	1	1	1	0	1	1	7	1	21	0	-	0	2	3	3	**43**
Largemouth Bass	*Micropterus salmoides*	2	1	4	3	0	0	1	1	2	47	3	0	-	0	0	2	0	**66**
Western Mosquitofish	*Gambusia affinis*	1	0	2	3	1	1	0	4	1	2	3	1	-	3	1	0	0	**23**
Wakasagi	*Hypomesus nipponensis*	0	9	0	0	0	0	0	0	0	1	0	0	-	0	0	0	0	**10**
Threadfin Shad	*Dorosoma petenense*	0	2	3	1	0	0	0	4	0	0	0	0	-	0	0	0	1	**11**
American Shad	*Alosa sapidissima*	0	0	0	0	0	0	0	0	6	6	1	0	-	0	2	1	2	**18**
Mississippi Silverside	*Menidia beryllina*	0	12	1	0	0	0	0	14	11	0	8	0	-	0	1	1	1	**49**
Fathead Minnow	*Pimephales promelas*	2	4	20	0	2	2	12	11	74	189	43	6	-	13	9	1	13	**401**
Common Carp	*Cyprinus carpio*	1	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	**1**
Golden Shiner	*Notemigonus crysoleucas*	1	11	18	1	22	2	14	6	27	58	28	0	-	15	4	8	0	**215**
White Catfish	*Ameiurus catus*	0	1	0	1	0	0	0	0	0	0	0	0	-	0	0	0	0	**2**
Brown Bullhead	*Ameiurus nebulosus*	2	3	3	3	0	2	0	3	3	0	0	0	-	0	0	0	4	**23**
Channel Catfish	*Ictalurus punctatus*	1	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	**1**
Striped Bass	*Morone saxatilis*	3	2	0	1	0	0	0	8	3	2	1	0	-	0	0	0	1	**21**

Non-Fish Taxa

Bullfrog	*Lithobates catesbeiana*																		
Larvae		500	1,401	632	111	54	255	368	560	1,457	832	61	12	-	3	159	140	15	**6560**
Adult		1	2	5	2	0	1	9	9	3	7	1	0	-	0	0	3	2	**45**
Pacific Chorus Frog (Larvae)	*Pseudacris regilla*	0	32	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	**32**
California Toad (Adult)	*Anaxyrus boreas*	0	0	0	0	0	0	0	6	11	21	3	0	-	2	3	5	9	**60**
Signal Crayfish	*Pacifastacus leniusculus*	3	103	79	128	123	307	41	64	44	129	47	3	-	0	0	1	0	**1072**
Red Swamp Crayfish	*Procambarus clarkii*	40	233	78	46	13	103	25	151	40	283	9	4	-	57	3	9	5	**1099**
Red-eared Slider Turtle	*Trachemys scripta elegans*	0	3	1	1	1	0	1	17	1	6	6	0	-	1	4	3	8	**53**
Western Pond Turtle	*Actinemys marmorata*	2	1	1	1	1	1	2	4	2	3	4	0	-	1	0	0	1	**24**