

2016/17 Russian River adult coho salmon PIT tag detections and redd observations, CA Sea Grant

Table 1. Minimum, expanded, and estimated counts of adult coho salmon returning to the Russian River mainstem at Duncans Mills between September 15, 2016 and March 1, 2017. Minimum count= number unique PIT tag detections on lower antenna array; expanded count= minimum count/percent PIT-tagged; estimated count= expanded count/estimated antenna efficiency. Note that the Willow Creek and Duncans Mills estimates were summed to estimate the total number of adult hatchery coho salmon returning to the Russian River.

Age	Release Tributary	Release Group	Minimum Count	Percent PIT-tagged	Expanded Count	Estimated Antenna Efficiency	Estimated Count
4	Austin Creek	smolt	1	15%	1.0	69%	1.0
3	Austin Creek	fall	1	15%	6.5	69%	9.4
3	Dry Creek	fall	4	54%	7.4	69%	10.6
3	Dry Creek	smolt	13	15%	86.9	69%	125.4
3	Dutch Bill Creek	spring	1	100%	1.0	69%	1.4
3	Dutch Bill Creek	smolt	4	15%	26.0	69%	37.5
3	East Austin Creek	fall	1	15%	6.7	69%	9.6
3	Grape Creek	fall	1	15%	6.6	69%	9.5
3	Green Valley Creek	presmolt	5	15%	33.4	69%	48.1
3	Green Valley Creek	smolt	1	15%	6.6	69%	9.6
3	Mark West Creek	fall	1	15%	6.7	69%	9.6
3	Mill Creek	fall	3	15%	20.0	69%	28.9
3	Mill Creek	smolt	4	15%	26.8	69%	38.7
3	Pena Creek	fall	4	15%	26.7	69%	38.5
3	Willow Creek	presmolt	5	15%	33.5	69%	48.3
2	Dry Creek	smolt	4	30%	13.1	69%	19.0
2	Dutch Bill Creek	smolt	2	30%	6.6	69%	9.6
2	Gray Creek	fall	1	30%	3.3	69%	4.8
2	Green Valley Creek	fall	4	30%	13.2	69%	19.1
2	Green Valley Creek	smolt	3	31%	9.8	69%	14.1
2	Mill Creek	fall	4	30%	13.3	69%	19.1
2	Mill Creek	smolt	2	31%	6.4	69%	9.2
2	Willow Creek	fall	1	30%	3.3	69%	4.8

Estimated adults passing Duncans Mills (age-4)¹: 1

Estimated adults passing Duncans Mills (age-3): 425

Estimated adults passing Duncans Mills (age-2): 100

Estimated adults returning to Willow Creek that were not detected at Duncans Mills (age-3): 7

Total estimated hatchery adult returns: 533

¹ Because age-4 returns are an anomaly, we did not expand to the proportion PIT-tagged for this fish.

Table 2. Total salmonid redds observed per species during 2016/17 spawner surveys in Russian River tributaries.

Tributary	Coho Salmon	Steelhead	Chinook Salmon	Unknown Salmonid	Total
Austin Creek	0	2	0	2	4
Crane Creek	1	6	0	0	7
Dutch Bill Creek	5	7	0	2	14
East Austin Creek	0	0	0	0	0
Felta Creek	4	1	0	2	7
Freezeout Creek	0	0	0	0	0
Gilliam Creek	1	1	0	2	4
Grape Creek	4	22	0	4	30
Gray Creek	2	3	0	2	7
Green Valley Creek	13	2	0	4	19
Grub Creek	0	0	0	0	0
Harrison Creek	1	0	0	0	1
Hulbert Creek	1	2	0	1	4
Kidd Creek	0	0	0	1	1
Little Green Valley Creek	2	0	0	0	2
Mark West Creek	0	1	0	2	3
Mill Creek	17	9	0	5	31
Mission Creek	0	0	0	0	0
Nutty Valley Creek	0	1	0	0	1
Palmer Creek	0	0	0	0	0
Pechaco Creek	0	3	0	0	3
Pena Creek	3	85	58	17	163
Perenne Creek	0	0	0	0	0
Porter Creek	4	12	0	0	16
Press Creek	0	0	0	0	0
Purrrington Creek	2	2	0	0	4
Redwood Creek	0	3	2	4	9
Santa Rosa Creek	0	3	0	1	4
Schoolhouse Creek	0	0	0	0	0
Sheephouse Creek	0	0	0	0	0
Wallace Creek	0	0	0	0	0
Willow Creek	8	1	0	2	11
Wine Creek	3	19	0	6	28
Woods Creek	4	12	8	7	31
TOTAL	75	197	68	64	404

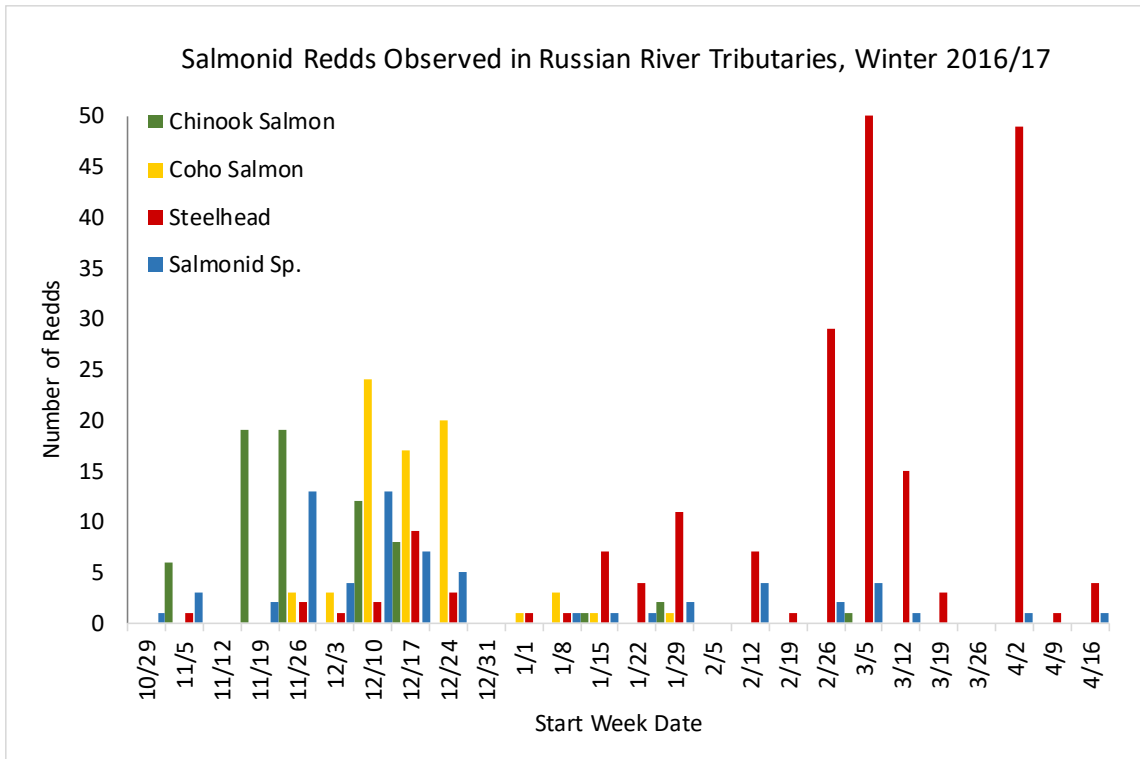


Figure 1. Number of new salmonid redds observed each week in Russian River Coastal Monitoring Program survey streams, winter 2016/17.