

## Russian River Salmon and Steelhead Monitoring Update: 12/21/17

Following the rains in November, we documented a total of 42 unique PIT-tagged coho salmon entering the Russian River, with an expanded count of 197 (see tables 1-3 below for more detail). The majority of these fish were jacks (95%), and all of the age-3 hatchery adults were from Dutch Bill Creek. So far, nearly all of the PIT tag detections have been either in the mainstem of the Russian River or in Dry Creek, likely because of the extremely low flows in the tributaries. A couple of adults were detected near the mouths of Dutch Bill and Mark West creeks but then swam back downstream within a few hours.

This is the first year that the Russian River CMP program has started surveying steelhead habitat in the upper Russian River watershed. Water Agency and UC crews are surveying reaches on 48 streams this winter (see map below) and have almost completed two rounds of spawner surveys. We have observed very little spawning activity so far. As of December 14, the crews observed a total of six redds: three on Forsythe, two on Pena and one on Mill. All of the redds were either Chinook, steelhead or unknown salmonid species.

Like everyone else in coastal California, we are anxiously awaiting some real rain. As in the winter of 2013/14, many of the adults have entered the river but do not have access to the tributary spawning habitat because of the low flows. Many of the spawning tributaries that reconnected with the November rains have become dry again at the mouths. To add insult to injury, the flows in the mainstem of the river at Hacienda have remained just above 300 cfs since mid-November, which means adults in the river are subject to steelhead angling pressure and we have heard of several accounts of incidental capture of coho salmon. We are keeping our fingers crossed for what looks like some rain coming in the first week of January that will hopefully open up the tributaries.

**Table 1. Number of unique 3-year-old hatchery coho salmon detections on Russian River PIT tag antenna arrays, and expanded counts through 12/14/17.**

Release Tributary	Release Group	Number Unique PIT Tag Detections	Proportion PIT Tagged	Expanded Count
Dutch Bill Creek	fall	1	0.30	3
Dutch Bill Creek	spring	1	1.00	1
Dutch Bill Creek	smolt	1	0.30	3
<b>Totals:</b>		<b>3</b>		<b>7</b>

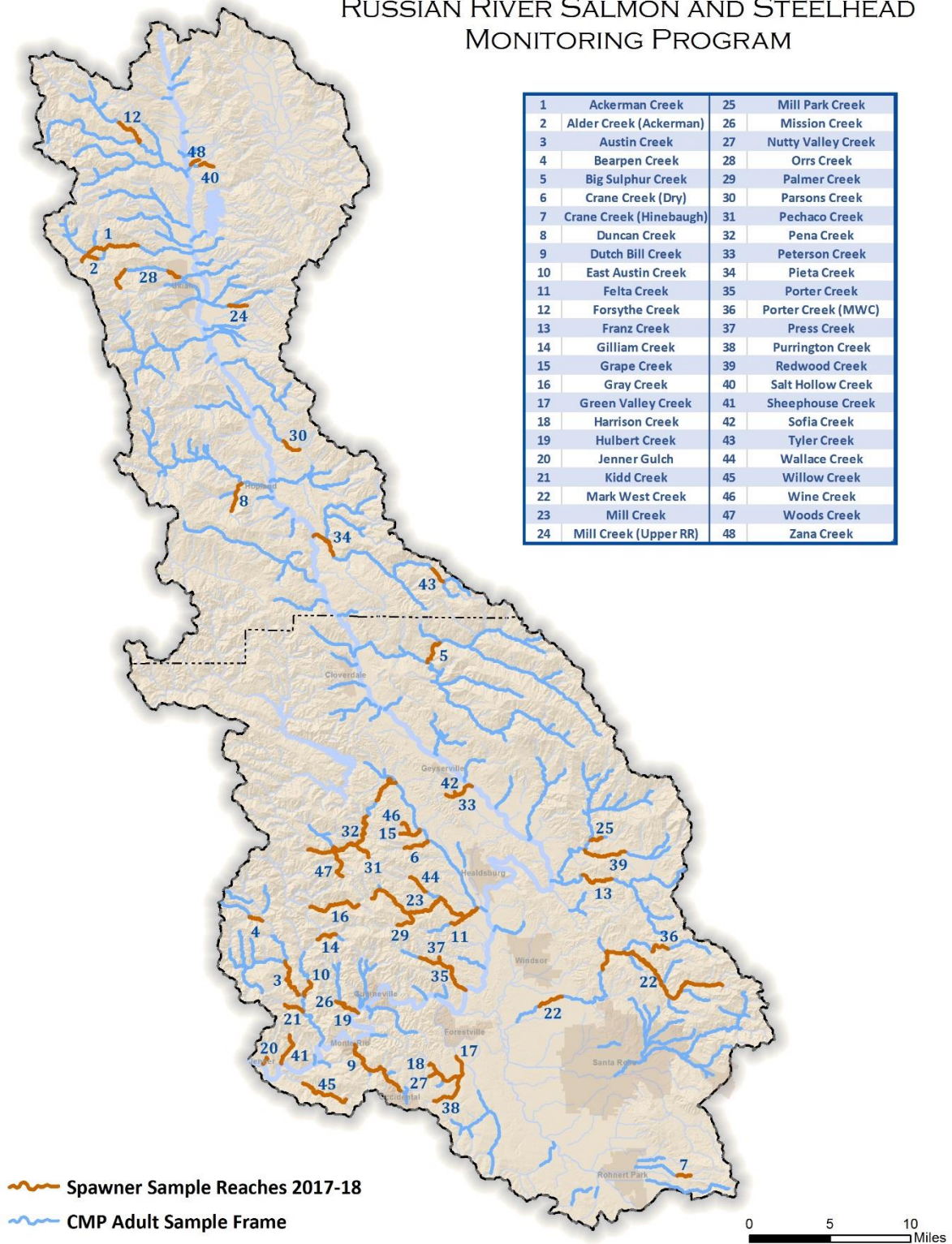
**Table 2. Number of unique 2-year-old hatchery coho salmon detections on Russian River PIT tag antenna arrays, and expanded counts through 12/14/17.**

<b>Release Tributary</b>	<b>Release Group</b>	<b>Number Unique PIT Tag Detections</b>	<b>Proportion PIT Tagged</b>	<b>Expanded Count</b>
Austin Creek	fall	1	0.15	7
Dry Creek	fall	10	1.00	10
Dry Creek	smolt	5	0.15	33
Dutch Bill Creek	fall	2	0.15	13
Dutch Bill Creek	smolt	1	0.15	7
Green Valley Creek	fall	2	0.15	13
Green Valley Creek	presmolt	4	0.15	27
Mark West Creek	fall	3	0.15	20
Mark West Creek	smolt	1	0.15	7
Mill Creek	fall	1	0.15	7
Mill Creek	smolt	1	0.15	7
Palmer Creek	spring	1	0.15	7
Porter Creek	fall	2	0.15	13
Willow Creek	fall	2	0.15	13
<b>Totals:</b>		<b>36</b>		<b>184</b>

**Table 3. Number of unique wild-origin coho salmon detections on Russian River PIT tag antenna arrays, and expanded counts through 12/14/17. Wild (unmarked) coho smolts were tagged in Willow, Green Valley, and Mill creeks as they passed through the downstream migrant traps on each of the three streams.**

<b>Tagging Tributary</b>	<b>Age</b>	<b>Number Unique PIT Tag Detections</b>	<b>Proportion PIT Tagged</b>	<b>Expanded Count</b>
Green Valley Creek	2	2	0.52	4
Willow Creek	3	1	0.52	2
<b>Totals:</b>		<b>3</b>		<b>6</b>

# RUSSIAN RIVER SALMON AND STEELHEAD MONITORING PROGRAM



**Figure 1. Russian River redd survey reaches, winter 2017/18.**