

Gold Ridge Resource Conservation District

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To: Salmon Creek Technical Advisory Committee

From: Sierra Cantor, Ecologist Date: December 1, 2011

Subject: Salmon Creek Watershed - 2011 Juvenile

Coho Salmon Snorkeling Survey

Update

Gold Ridge RCD (GRRCD) staff, Michael Fawcett (Fawcett Environmental Consulting), and Jennifer Michaud (Prunuske-Chatham, Inc.), have been snorkeling select reaches of Salmon Creek and its tributaries to determine the presence or absence of juvenile coho salmon and their relative abundance and distribution. From June 30 to October 12, 2011, approximately 52,586 feet (9.3 miles) of stream have been surveyed including 5 reaches of main stem



Salmon Creek, Finley Creek, Coleman Valley Creek, Fay Creek, Tannery Creek, and Nolan Creek; a cumulative total of 880 coho salmon have been observed. Please see the map on page 3 for reach locations.

Below is a quick summary of the coho observed by stream reach (all reaches are ordered from downstream to upstream).

Creek / Stream Reach	Reach length (mile)	# Coho Observed	# Coho/Mile of stream
SAL-01 (lower mainstem)	1.220	Survey aborted due to poor visibility	n/a
FIN (midFinley creek due to limited access)	0.664	134	201.9
COL (lower Coleman Valley Creek)	1.104	12	10.9
FAY (Fay Creek from Salmon Creek confluence to limit of anadromy)	2.095	135	64.4
TAN (Tannery Creek from Salmon Creek Road bridge to presumed limit of anadromy)	1.534	272	177.3
NOL (Nolan Creek from Salmon Creek confluence to limit of anadromy)	0.960	160	166.6
SAL-02 (mid-main stem)	0.470	0	0
SAL-03 (mid-main stem)	0.745	0	0
SAL-04: (upper main stem)	0.469	37	79.0
SAL-05 (upper main stem to the presumed limit of anadromy)	0.699	130	186.0

With the exception of lower Thurston and upper Finley Creeks, we have completed surveying all of the areas to which we currently have access.

Coho were observed in every reach snorkeled except two of the mainstem reaches (SAL-02 and SAL-03). SAL-01 was not surveyed due to the lack of visibility (the reach has a number of deep pools, 3-4' deep, and the visibility was approximately 1'). Next year, the mainstem reaches will be prioritized earlier in the snorkeling season in an effort to avoid this decreased visibility issue that worsens throughout low flow condition. The highest density of coho (# of fish/stream mile) was observed in Finley Creek, the lowest density in Coleman Valley Creek.

All coho salmon observed were naturally spawned fish (no fin clips), so it is unknown whether they're wild stock, offspring of broodstock adults released last December, progeny of the small number of broodstock juveniles released into the main stem in 2008, or some combination of sources. Tissue samples have been collected from Tannery Creek and mainstem Salmon Creek (SAL-05), and Michael Fawcett and Manfred Kittel are still planning to collect some more samples this year, from Fay Creek and/or Nolan Creek.. The tissue samples will be delivered to Carlos Garza at SWFSC for DNA analysis.

Spawning and redd surveys will be conducted as soon as weather and flow conditions conducive to spawning occur.



