

Scott River fisheries and flows

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to
The Board 4/9/14

The allegations that the Scott River is being sucked dry, leaving no place to spawn are not true, and neither are the allegations that we are robbing the tribe of their cultural resources.

The Scott River provided spawning grounds for a run of 2659 coho salmon last fall, despite it being the second dry year in a row. During Chinook and coho spawning season the river flowed from River Mile 53 to the mouth, which is all of the spawning areas. This is the largest documented run in the Scott River.

All long-term monitoring of coho populations in the Scott River watershed indicate that the numbers are stable or increasing.

I could also point out the majority(to all) of the spawning (coho and Chinook) occurred in stretches of the river that run through active agricultural operations. All small family, multi-generation operations, not large industrial agriculture. These families have employed best management practices (fencing the river) managing the riparian corridor, and in some places decades of replanting in the river corridor.

The local community and landowners have been proactively working to increase coho habitat and populations for decades. The Scott River Groundwater Advisory Committee, formed in 2010, has been working to identify options for water use and water supply in the Scott River. There is no need to list the Scott River because 1.) we are not ignoring the health of the river, rather working on it on a continual basis, and 2.) the extent of the problem is exaggerated. The Scott River Watershed has not yet failed to provide habitat for the fisheries. Habitat conditions in the Scott River are improving, not degrading. The Scott River channel was heavily impacted by the 1964 flood, and riparian revegetation takes a significant amount of time in a climate such as the Scott River.

Important things to note:

- Agricultural use in the Scott River Watershed is a “**beneficial use**”, as is Cold Water Fisheries, Recreation al use, sport fishing, and public health.
- The standard that is used to determine if the Scott is meeting ALL beneficial uses is Coldwater Fisheries, because it is the most sensitive to water quality.
- The Scott River is currently meeting the **Coldwater Fisheries** beneficial use.
 - The Scott River has sufficient high quality spawning and rearing habitat in the tributaries for coho salmon production. (Map attached). **These locations flow perennially.**
 - The Scott River mainstem annually provides 50+ miles of spawning and rearing habitat for chinook salmon. Scott mainstem is not suitable habitat for coho rearing (velocity, instream habitat)
 - The Scott River has never been dry during chinook and coho spawning, even in the Fall of 2013. (pictures attached.)
- Scott River Adult Coho observations for the all Brood Years. This is a WILD run, not hatchery stock.

Year	Total Redds	Total Live through Video Weir.
2001*	211	ND
2002*	17	ND
2003	7	ND
2004	728	ND
2005	30	ND
2006	12	ND
2007	250	1622

2008	24	62
2009	6	81
2010	160	911
2011	26	344
2012	24	201
2013	354 ^a	2659

*Survey reaches were expanded (more distance added) in 2003 so 2001 and 2002 data are not directly comparable.

a-superimposition was observed in all locations.

- County Groundwater Advisory Committee is currently working with Dr Harter of UC Davis to identify management scenarios to improve GW conditions in the Scott River.
- **The Scott River TMDL found that “ the primary human-caused factor affecting stream temperatures is increased solar radiation resulting from reductions of shade provided by vegetation. Groundwater inflows are also a primary driver of stream temperatures in the Scott Valley.** Diversions of surface water lead to relatively small temperature impacts in the mainstem Scott River

Scott River is a snow-melt driven system, but rainfall has an important role in recharging the aquifer.

Year	April 1 Snow Survey Data (water Content)	Oct-March Rainfall in Fort Jones (16.3 in = ave)
2011	159	18.57 (114% of ave)
2012	101	13.82 (85% ave)
2013	40% average	15.67 (96 % of ave)
2014	9% average	8.49 (52% of ave)

Scott River Tributary Flows

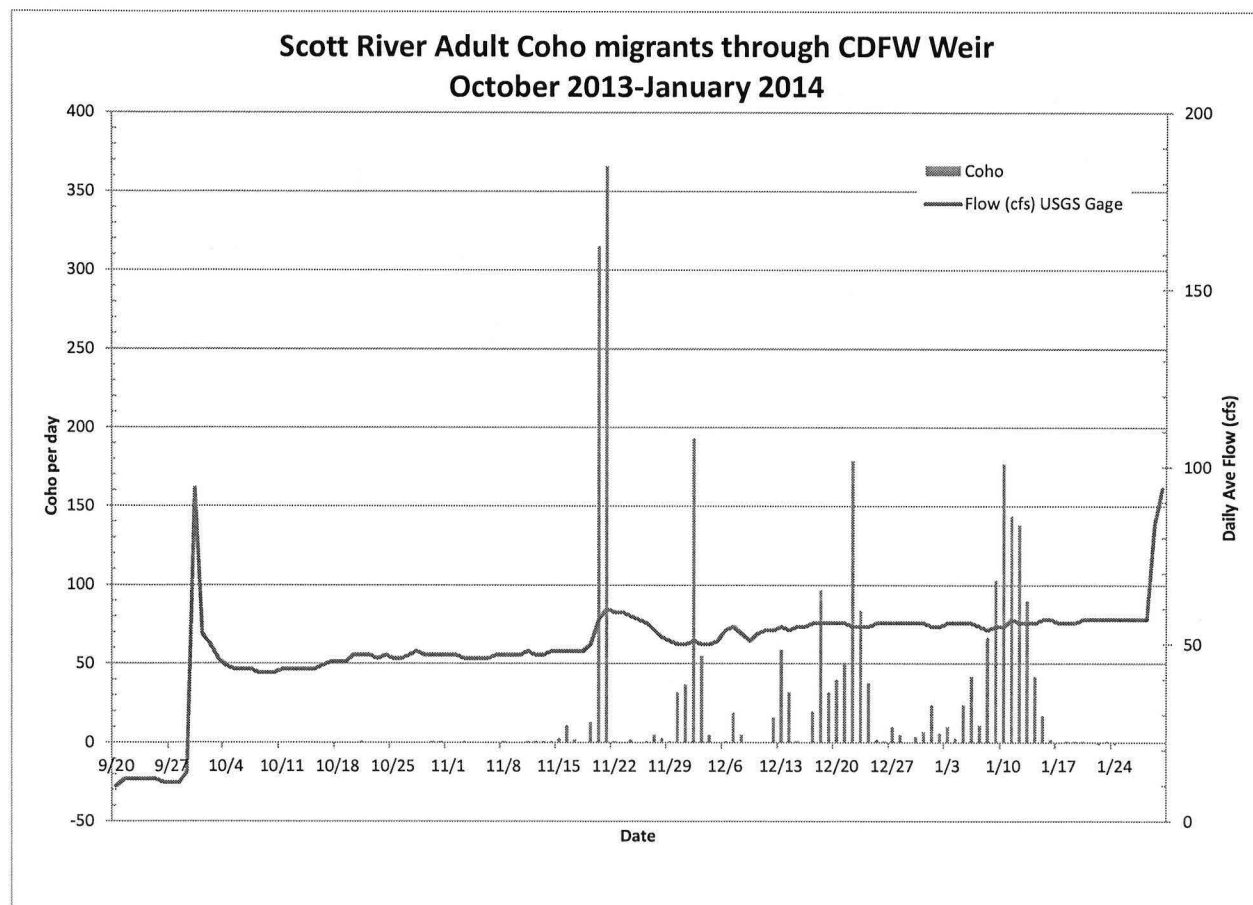
Locations measured **above** all diversions

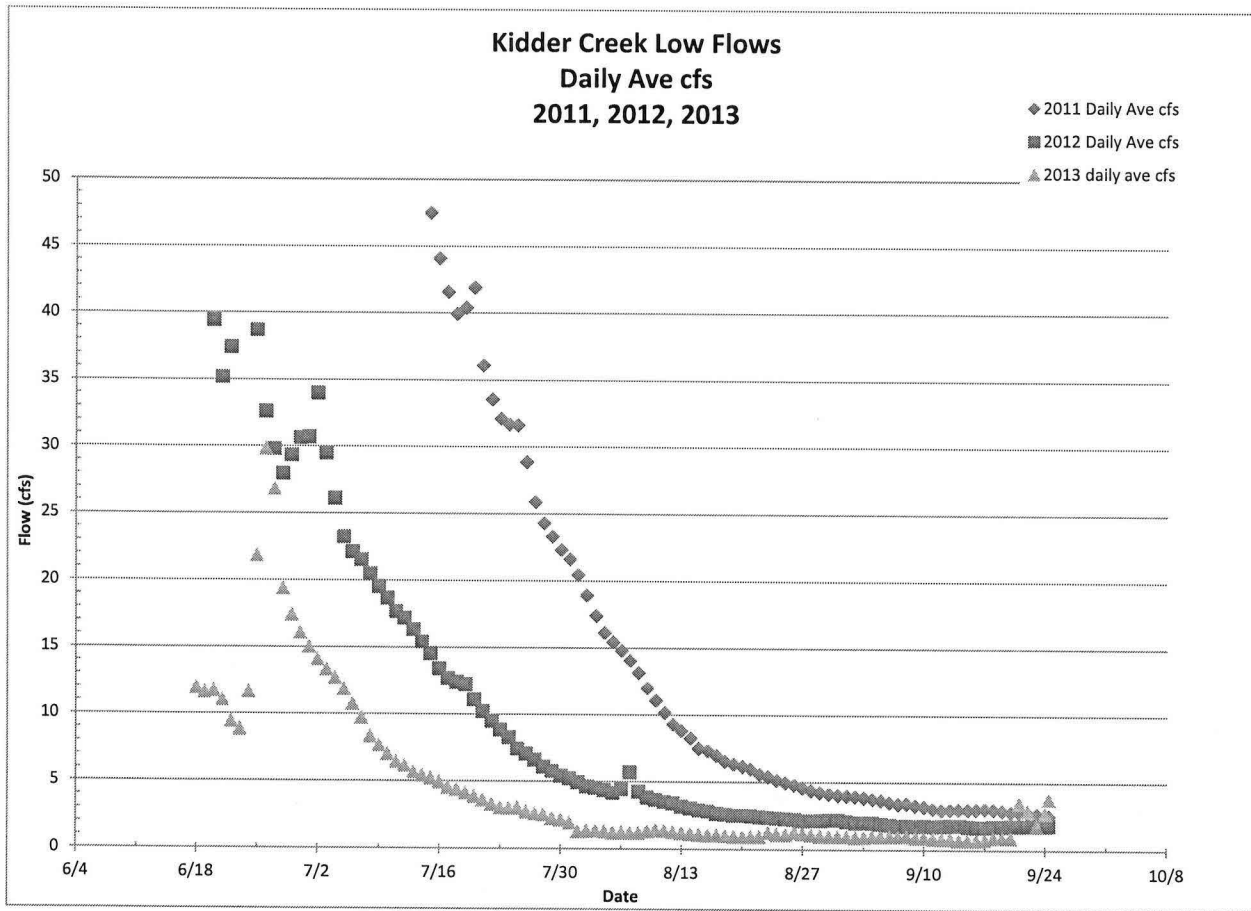
Stream	Minimum daily flow 2013
Kidder Creek	1.7
Shackleford Creek*	6.6
Mill Creek	.85
Patterson Creek	1.2
Etna Creek	<2 (estimated)
Sugar Creek	1.2

*Shackleford Creek water users have water rights out of Cliff and Campbell, releases may affect baseflow measurements.

Other measured locations, **below** surface water diversions.

Stream	Minimum daily flow 2013
East Fork	3.0
South Fork	1.2
French Creek	.5

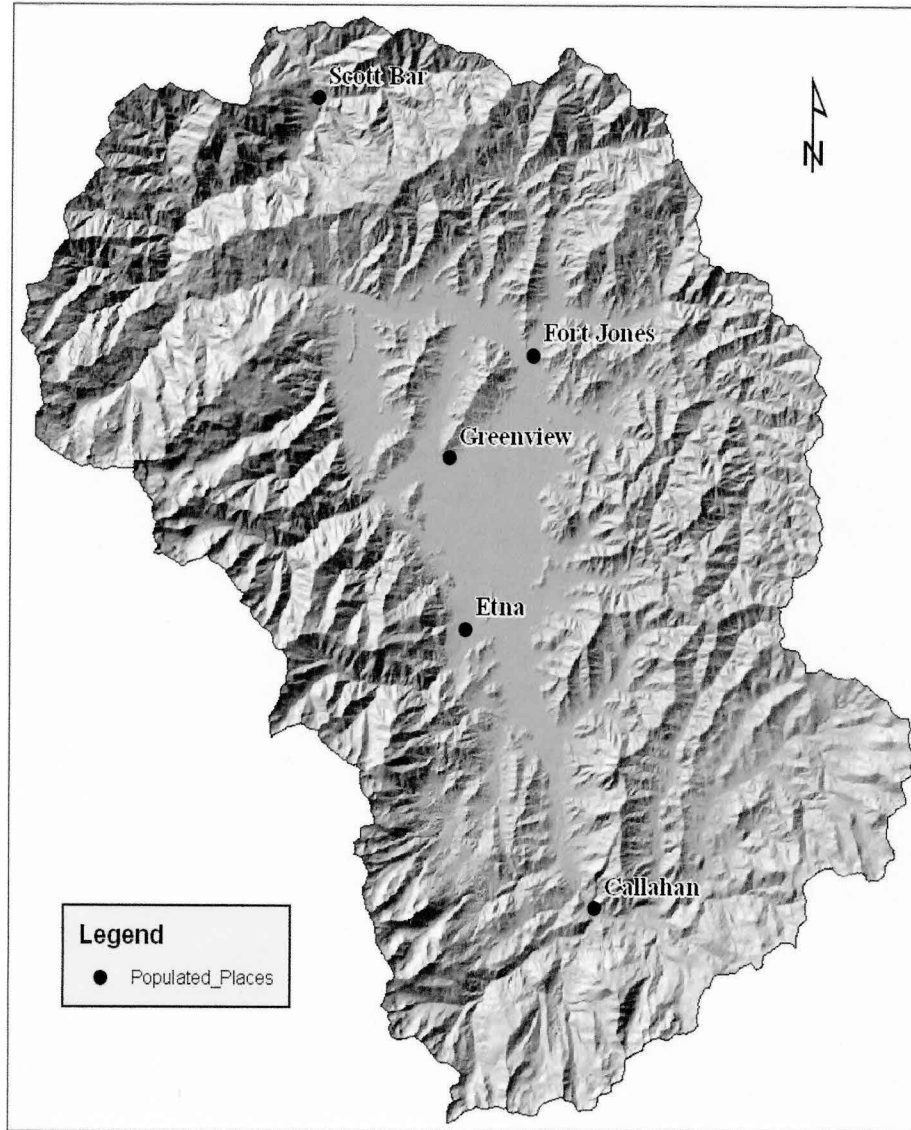




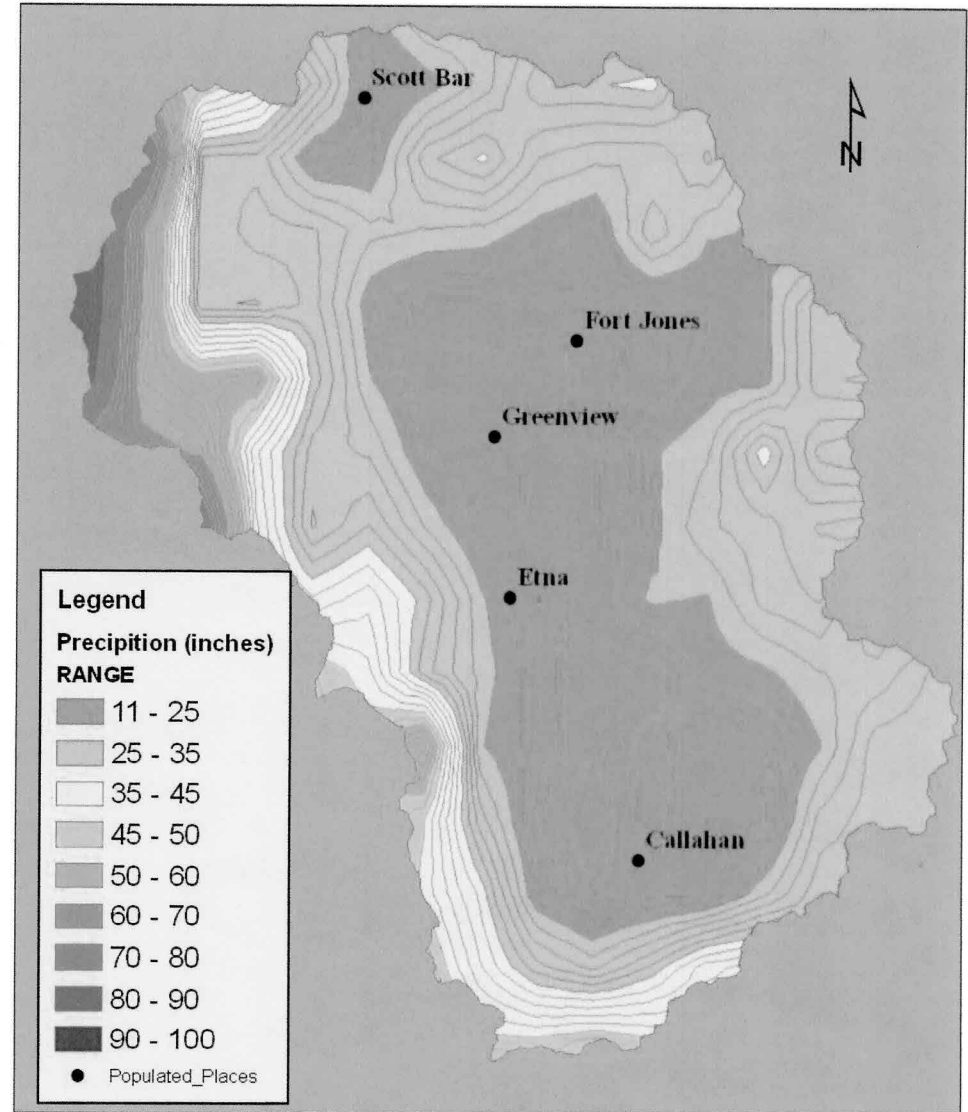
This station is located above all diversions in Kidder Creek, in a Bedrock reach.

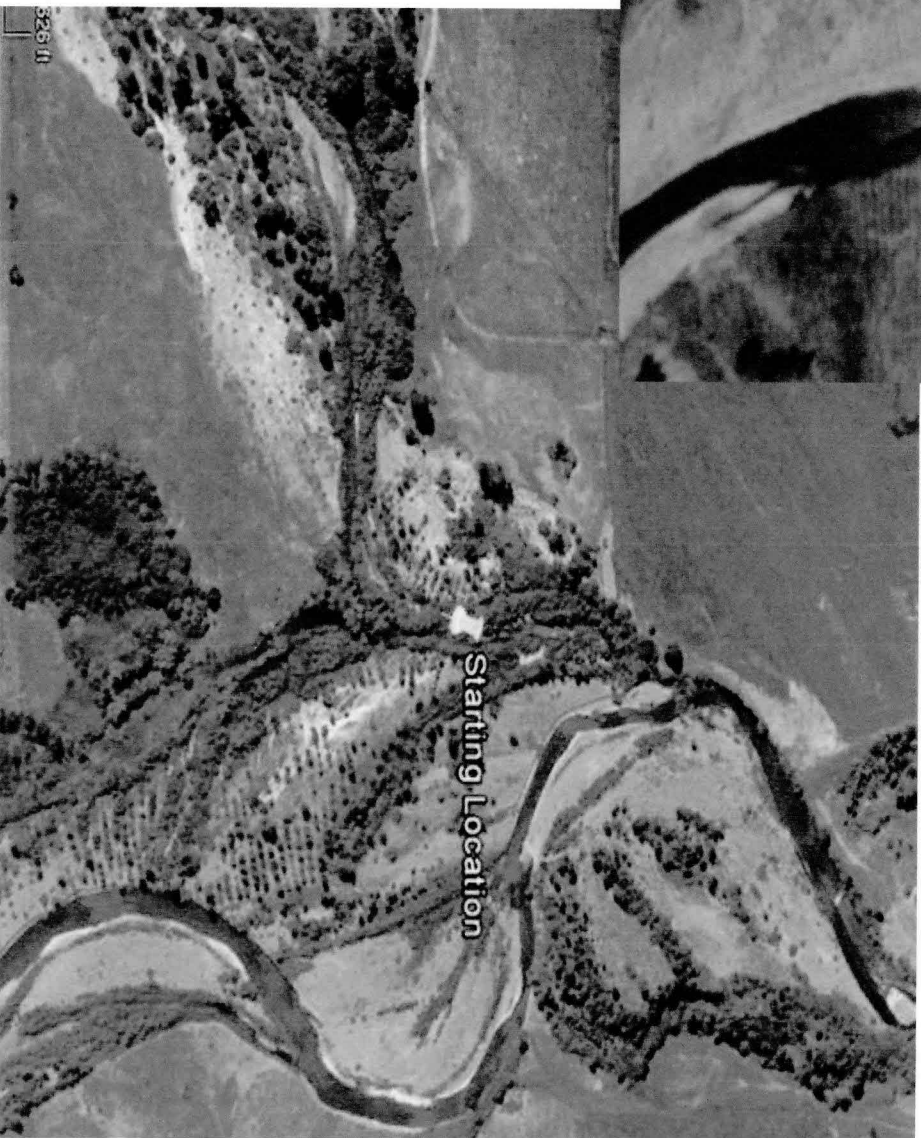
The unique nature of Scott Valley

Scott River Watershed - Hill shade



Scott River Watershed - Precipitation inches





Mouth of French Creek entering on left
8/13/1998 versus 7/7/2012