Flood Control & Water Conservation District

#### **Review Form** Scott Groundwater Sustainability Plan

Dear Reviewer,

Per SGMA requirements, a Groundwater Sustainability Plan (GSP) has been developed for the Scott Valley groundwater basin. The GSA has released a complete draft GSP and has initiated a 45-day public review and comment period and seeks input from all beneficial users of groundwater.

#### **REVIEWER INSTRUCTIONS:**

Given the large number of reviewers, accommodating track changes or other editing options within the original draft sections distributed to all committee members is not possible. Please consider using this reviewer form with the following instructions:

- Use the form below to provide comments. Feel free to add additional lines to the form as needed.
- For suggested text changes, please copy and paste the text you wish to change and place your suggested edits in track changes or strikethrough features in this document. What's important is that technical staff can see *both* the original draft text and your distinct suggestions.
- Note the Chapter, Page, Section, and line number—from the <u>PDF version</u> of the draft GSP section—where your comment, question or suggested text edit begins.
- Examples of how to provide feedback are listed in the review form below. <u>These examples</u> are not actual comments and are made up to show how the table should be used. Feel free to delete these examples with your submission, and only include your feedback.
- To comment on a figure or table, in the line number column on the reviewer form note the figure number *and* the page number and type your comment in the text section to the right.

Please email comments directly to (<u>sgma@co.siskiyou.ca.us</u>). Include in the subject line the basin you are commenting on. If you are making comments on multiple basins, send as separate comments.

# Please send your comments no later than end of day <u>September 26, 2021</u>. Comments will not be accepter on or after September 27<sup>th</sup>, 2021.

Please use the following file nomenclature in saving your review document: ScottGSP\_PublicReviewDRAFT\_[Your name]\_date

Thanks for contributing to the draft Groundwater Sustainability Plan for the Scott Valley Groundwater Basin

#### Flood Control & Water Conservation District

<u>Reviewer name</u>: Sari Sommarstrom, Etna, sari@sisqtel.net <u>Submission date</u>: 9/25/21 — <u>GSP sections reviewed</u>:

Chapter	Page	Section	Line/Table/Figure #	Comment (please delete example text below once you submit)
Overview				It's very frustrating to see that many corrections for Ch. 1-3 that I've
				offered over the past year are still not made in this "final draff" version
				These are factual, not opinion,
			-	changes that are needed for accuracy. Please be very careful when using
				online databases as sources without
				confirmation of accuracy by locally knowledgeable sources.
				Citations should use primary
				for groundwater topics. Example:
				Cite DWR for changes in well
				numbers over time, rather than
				SRWC's plan (which is citing
-	_			DWR).
1	7	1.4.3.1	243-249	RCDs are specifically listed here but
				are not specifically listed in the C&E
				Plan, as implied and should be.
1	0	1 4 2 2	271	Please connect the dots also in Ch. 5.
1	δ	1.4.3.2	271	Add "nurseries" to list under Ag.

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1	9	1.4.3.3	302-303	Clarify whether the GSP Committee will continue as an advisory body to County. Unclear what "working groups" status will be during implementation, which "may be formed". Implementation phase will need serious opportunities for broad engagement to reach consensus on appropriate actions. PMAs in CH. 4 did not get serious discussion during GSP process, so the difficult lifting has yet to come.	SS-005
1	9	1.4.4	321-324	Clarify that RWB is involved with GSP for the Scott's Temperature TMDL, as the Sediment TMDL is not related to groundwater management.	SS-006
1	9	1.4.4	342	State what year the tour happened.	SS-007
1	10	1.4.4	347-353	This ad hoc group seems to have been quite narrow and informal, and had no public input beyond those invited. The projects listed here were not all shared or discussed by the GSP Committee, so appear to have been developed outside the official, formal SGMA process!! Their "wish list" of projects in Ch.4 should not have precedent over a formal, public process where fact- checking could be involved. This method of "input" to the GSP just	SS-008

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				makes the SGMA process seem irrelevant.	SS-008, Cont'd
2	4	2.1.1	120	State the entire size of the Scott River watershed here (804 sq.mi.), so context of the Basin can be	
				understood, including basin's 15.3% of watershed above the USGS gage (653 sq. mi.). Decree's interconnected zone represents 10%	SS-009
				of the total gw basin.	
2	5	2.1.1	Fig. 1	Legend would be clearer if reworded to: "Scott River Valley Groundwater	
				Basin and Adjudicated Groundwater Zone in Scott River Decree". Cite	SS-010
				references for figure's info: DWR 2004 and Superior Court 1980.	
2	6	2.1.1.1	155-161	The Scott Decree covered the Scott River Stream System (not already adjudicated) and "interconnected groundwater" in a defined zone along	
				the mainstem river was considered	SS-011
				the statement that this was a	
				"groundwater adjudication" (unlike	
				other solely groundwater	
				adjudications in CA). And correct the sentence about the extent of the 1980	
				decree, as all other tribs were	
				included too.	
2	8	2.1.1.2	218-226 / Table 1	State clearly that the USFS - Klamath National Forest is the major	SS-012

				/	$\Lambda$
				landowner in the Scott watershed at 35% of the total, with 63% private. Table needs to have acreage TOTAL on the bottom from the DWR survey, as total only comes to 40,688 acres of the 64,000 acres (100 sq. miles) of the basin. What is the other land use? "native vegetation" perhaps? Please amend this table so totals match.	SS-012, Cont'd
2	9	2.1.1.2	Fig. 3	"Selected roads" cannot be seen, only river and Hwy 3. Eastside and Scott River Road at least should be indicated as lines distinct from river.	SS-013
2	11	2.1.1.3	238	Add an intro sentence to state when well drilling reports became required to submit to DWR, as well as the County. Earlier wells would not be included in OSWCR. Check with Co. Env. Health – was in after 1990?	SS-014
2	13	2.1.2	293-298	Eliminate redundancy about Scott Valley Area Plan	SS-015
2	14-15	2.1.2	340-342	Update public trust court case: In 2018, the California Court of Appeal (Third Appellate District) opinion in <i>Environmental Law Foundation v.</i> <i>State Water Resources Control</i> <i>Board</i> case decided that the public trust doctrine applies to California's groundwater resources; and the application of that doctrine has not been displaced and superseded by the	SS-016

					$\wedge$
				California Legislature's 2014 enactment of SGMA.	SS-016, Cont'd
2	17	2.1.3	Table 2	Caption should state "Groundwater- related Monitoring, Plans, Programs and Tools in Scott Valley" to reflect actual contents of table. DWR is <u>not</u> regulatory for monitoring and other programs. Add CDFW's regulatory 1602 permi process for diversions. Add SWRCB: Monitoring – Required annual measuring and reporting of water use > 10af/y under SB 88 for all diversions. Wells within Decree's interconnected zone required to report annually since 1980 (Cummings 1980).	t SS-017
2	18	2.1.3		Monitoring: Add both UCCE and County NR as doing well monitoring monthly. Data for CASGEM & UCD model.	' SS-018
2	20	2.1.3	416-418	Include a new table listing the USFS instream rights in the Scott Decree, which as 1 <sup>st</sup> priority right are equal to other 1 <sup>st</sup> priority rights (such as riparian and well rights). Very important to acknowledge here, and more directly relevant than Table 3's wish list by CDFW (see p. 21). The USFS flows do have a regulatory role.	SS-019

2	22	2.1.3	496-499	Add: Chinook salmon adult counts	-
			510	CDFW would also be involved in	SS-020
			510	permitting for MAR diversions	
				during winter.	
2	23	2.1.3	553-561	State how frequently the CASGEM	
				wells are monitored and by whom	55-021
				(UCCE and County NR)	
2	24	2.1.3	595-597	Who, if anyone, is implementing this	00.000
				monitoring plan? RCD used to get	55-022
				grants for this but not done in years.	
2	20	212	760	DATA GAP.	
2	20	2.1.5	/00	streams from the 1950s until 2012	SS-023
2	31	2.1.3	897	UCCE is currently monitoring x	
_				number of wells monthly for input	
				into UCD model. Add: Orloff	SS-024
				measured applied water use on 7-8	
				alfalfa farms in Scott Valley,	
_				important data for the SVIHM.	-
2	32	2.1.3	925	Add: In 2005-06, the RCD partnered	
				with others to develop the	SS-025
				Dragrom (see balaw)	
2	33	213	970	"The monthly data" Note that this	-
2	55	2.1.5	510	effort discontinued in 2018(?)	
			986	Reword: "The diversion dam at	
			993	Young's Point, east of Etna at river	
				mile 46, has a large fish ladder to	55-026
				provide passage for adult and	
				juvenile salmon and steelhead.	
				· · · · · · · · · · · · · · · · · · ·	$\checkmark$

				$\wedge$	
				Clarify: "must avoid impacting the SVID water right, <u>which is a post-</u> <u>1914 appropriate right.</u> " Add: In 2015-2016, a groundwater recharge study was done with SVID and UCD on a small piece of property within the district (Dahlke 2016 – her brief report needs to be added to References). It is anticipated that more Managed Aquifer Recharge projects will be performed with SVID during GSP implementation.	26, 'd
2	37	2.1.4.2	1162	Add: The Town's water supply is solely dependent upon groundwater, with its primary well located within the Scott Piver Decree's	27
				interconnected zone.	
2	38	2.1.4.2	1182	Add: The city's water source is solely surface water from a diversion off of Etna Creek above town.	
		2.1.4.4	1194	Add new section: "Siskiyou Land Trust: Conservation Easements": Several large ranches in Scott Valley, primarily on the eastside, have entered into conservation easements with the Siskiyou Land Trust. Primary restrictions pertain to further limits on non-agricultural development beyond existing	28
				exchange for financial compensation.	

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2	38	2.1.5.1	1200	Add at end of sentence, "based on	SS-029
2	42	2.2.1	1325-26 1340	Double check watershed size at 714 sq. mi., as other sources state 804 sq mi. Correct: Highest point in the watershed is China Mountain at 8,551 ft. (in the Scott Mountains),	SS-030
2	44	2.2.1.2	1368 1373 1384	not Boulder Peak.Cite original source for these figures, not secondary source of SRWC.Average (mean) annual rainfall at Callahan since 1943 is 20.5 inches, not 18 inches. Correct this number, to be in agreement with Fig. 7A. The reason the USFS-Fort Jones data has days missing is because they rarely read their gage on weekends or holidays, so daily totals can be skewed though monthly totals are usually accurate. NOTE: Getting accurate daily precipitation data at Fort Jones is a Data Gap to be filled, as a priority.Give citation for source of snowpack data.Link text to Table 5 for CDEC snow stations	SS-031
				50010115.	
2	45	2.2.1.2	Table 4	Fort Jones weather station data did	
				<u>not</u> end on 4-17-20, nor did the Yreka station. You mean that date is	SS-032

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				/	$\wedge$
				when you last downloaded the data for your analysis of Record Length	SS-032
				and No. Missing Days. Correct the	Cont'd
				Caption to clarify.	
2	49	2.2.1.2	Table 5	KNF- Ranger District measures Scott	
				Mountain, not BuRec. Also Marble	
				Valley and Log Lake, when feasible.	
				Add Length of Record for these sites,	
				like you did for Table 4, which vary	
				considerably. Describe range and	
				mean of snow depths for each	<u>88-033</u>
				station. For April I and May I dates,	00-000
				which influence spring runoff flows	
				and groundwater storage. (cite Deas	
				and Tanaka 2000 for earlier data.)	
				bydrology of orrected to the Shorte's	
				invalorogy, as opposed to the Shasta's	
				spring-red hydrology. Important to	
2	62	2215	Missing	Important to state somewhere the	
2	02	2.2.1.3	Missing	Total Water Use in Scott Valley	
				DWR's Land and Water Use Surveys	
				have that data (2017 most recent?	
				Need use in acre-feet by type of use	
				reed use in dere reet by type of use.	SS-034
			1691	The $\sim$ 5 mile Tailings Reach is a	
				significant perturbation in the river	
				system and needs to be clearly	
				identified as such here and	
				elsewhere! The loss of fines means	
				that the soil profile for water storage	
				has been lost and this large reach	

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			1704	does not retain water as well as other parts of the alluvium. "Timber harvest", not just "timber".	SS-034, Cont'd
2	63	2.2.1.5	1713-1715	Roads of all types, including USFS, county and residential, on steep and erodible soils created the majority of the sediment impacts, not just "logging" roads (Sommarstrom et al. 1990). The sediment data from our study was cited by the RWB as the basis for listing the Scott River as "impaired" for sediment, resulting in the Sediment TMDL.	SS-035
2	63	2.2.1.5	1746-47	Cite original source for groundwater use changes (i.e., DWR Land and Water Use Surveys), not a secondary reference. <b>Much more credible</b> <b>source about this very important</b> <b>point related to SGMA!</b>	SS-036
2	64	2.2.1.5	1756-1758 1766	LESA-type systems can offer significant water savings and are increasing in use. Delete "not common" and get a quote from UCCE crop advisor in Yreka (Giuliano Guida) about their current and potential use, including % water savings. Very important for later PMAs! Very little irrigation diversions during the fall, after last cutting and	SS-037
				during the fall, after last cutting and	

<ul> <li>when crops go dormant (cite UCCE again, even if pers. comm.). Refer reader back to "Scott River Adjudication" section on pp.26-27 for more information. This description here is too brief for "Water Diversions". State that there is only on permanent diversion dam on the Scott River system, which is SVID's at RM 46. Other diversion astructures (gravel push-ups) are temporary and removed at end of the season. You don't need to cite DWR 1991 for the fact about the USFS right, just cite "Superior Court1980" that you already have used. Go to the direct source whenever you can. PLEASE.</li> <li>64 2.2.1.6 1780 Someplace in this paragraph (and maybe in intro to the GSP), please state that the Scott River is one of the few undammed major rivers left in California. It's a relevant point when talking water management! And most outsiders don't get it.</li> <li>1793 Thank you for finally stating that removed is can be increated the there.</li> </ul>						Δ
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Showpack is an important water					snowpack is an important water	
source! It took a while for this plan to					source! It took a while for this plan to	
say it, but snowpack is a					say it, but snowpack is a	
distinguishing feature for the Scott's					distinguishing feature for the Scott's	
					hydrology. Hence, why you need to	
					hydrology. Hence, why you need to	

				/	<b>∧</b>
				at least spend more time under	SS-038,
				Climate on p. 48-9, Table 5, etc.	Cont'd
2	65	2.2.1.6	Figure 15	Not cited in text. Gages noted on map are not all active, so legend should distinguish between Current and Historic. Only 1 USGS gage. RCD had pressure transducer gages on Kidder, Patterson, Etna for awhile too, but not on CDEC. This map is <u>misleading</u> unless you correct it. Add a Table with the gage names and numbers and years active, including RCDs, to be helpful. Would be very relevant for Ch. 3 Monitoring later. <u>See below also about gages.</u>	SS-039
2	66	2.2.1.6	1804-1844	These descriptions (all from SRWC 2005) don't really add much to the hydrology discussion but would fit better maybe under Geography 2.2.1.1 as an overview of the watershed.	SS-040
2	67	2.2.1.6	1848-1872	Add a bar graph to show these 5 flow periods, or at least mean flows by month for USGS gage. More graphs would help here. Add citations for data in last 2 paragraphs: just look at USGS Station Description. Error in peak discharge: NOT 39,500 Maximum discharge, 54,600 ft <sup>3</sup> /s, Dec. 22, 1964.	SS-041
2	68	2.2.1.6	Figure 16	Top graph is not helpful, especially without text describing what may be	SS-042
				N	

					4
				seen, like more extremes since 1980	
				or so?? Add text to describe why 2 <sup>nd</sup>	SS-042,
				graph is focusing on just these 4	Cont'd
				water years.	
2	69	2.2.1.6	1878-1888	Refer to Fig. 15 here, though gage	
				info would be better in a table.	
				Correct the "end date" for ongoing,	
				active gages: Shackleford (QVIR)/	
				French / Sugar / East Fk / South Fk,	
				all operated by DWR. Footnote does	
				not help clarify.	SS-043
			1889	There is no "strong" correlation	
				between trib & river flows during	
				summer. Distinguish someplace	
				between perennial and ephemeral	
				streams. Include Figure of 1882	
				USGS map, showing ephemeral tribs.	
				I can re-send if needed.	
			1891-1904	Redundant with lines 1845-1857,	
				though here is more detail.	
•	- 0		1907-1910	<u>Give citation for this finding.</u>	-
2	70	2.2.1.6	1911-1918	This paragraph needs significant	
				rewording. Again, a good place to	
				talk about <u>naturally</u> perennial and	
				ephemeral streams! The 1882 map	
				helps here. These alluvial fan reaches	SS-044
				were called "arroyos" in 1852	
				(Gibbs). You're giving the strong	
				impression that these alluvial fans	1
				would never dry out naturally, which	1
				is not accurate. Add that South Fork	1
				and East Fork are perennial in all	
					¥

				years. And it's in very dry years, or
				multiple drought years, when few
				tribs flow at confluences with Scott,
				though still contributing sub-surface SS-04
				to groundwater ("cold springs" felt in Cont'd
				river). Upper reaches of all of the
				westside tribs have continuous
				flows, even during drought years,
				which is where the juvenile coho and
				steelhead rear in colder waters. Fig.
				18 indicates these upper reaches too.
				Cite SRWT for such flow data,
				which is where it leases water.
2	70	2.2.1.6	1919-1929	What "previous section"? Add graph
				to depict change in baseflow. Here
				you're moving beyond just the
				existing Hydrology of the Basin and
				into "it would be nice" expectations
				of others, which are debatable. Cite
				USFS flow minimums as from
				Decree, with some legal legitimacy.
				CDFW flows were from an in-house
				report that was never publicly 55-04
				reviewed and had a lot of flaws, in
				my opinion. But not of the same legal
				standing as the decree's flow for
				USFS, which is a 1 <sup>st</sup> priority right
				equal to all other 1 <sup>st</sup> priority rights
				(i.e., wells and riparian). So please be
				careful how you depict these. Based
				on CDFW's flows, the Scott would
				almost never have received any coho

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				or Chinook adult spawners in the fall, yet the fish data show that's not true. Scott has had improving coho runs for 20 years, and average Chinook runs when precip is >50%. Again, this paragraph does not objectively describe the hydrology. This subjective description needs to be moved to a later section, so the fish data can be balanced with the hydrology data.	SS-045, Cont'd
2	70	2.2.1.6	1936-1941	Here you're talking about precipitation patterns "below average and dry" years, which needs its own graph to depict. Fig. 16 only refers to flows and the top graph is too busy to see well. Overlaying WY type bar graph with line graph of mean annual flows between 2000 and 2020 might help show this pattern, which is really very relevant to GSP. You do conclude that low precip has led to lower baseflows, yet you need to present a graph of precip. Also, much less rainfall during September in past decades. I'll attach a spreadsheet I have of this data. Connecting the dots between precip and flows is helpful here.	SS-046
2	71		Figure 17	As noted above, this graph of "desired flows" misrepresents actual	SS-047
				fish passage during the fall months.	$\checkmark$

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				So it shouldn't be here in this section, but later when comparing Expected vs Actual vs Fish Access. The Scott's Chinook spawning numbers usually have mimicked the pattern of the entire Klamath River's, with the exception of a few extreme drought years. That indicates access was not usually the barrier (see Knechtle 2021).
2	73	2.2.1.7	1960	Fig. 18 as intended is missing, as text does not describe the actual Fig. 18 presented. An important figure to include!
			1981	Figures 25 and 26 are missing too.
			Missing	Location and size of wells seems to be an important indicator of stream depletion. Somewhere in this section, it would seem appropriate to cite the
				USGS report by Barlow & Leake (2012): <u>Streamflow depletion by</u>
				<u>Wells.</u> "When discussing stream depletion of a well with a cyclic
				pumping rate (daily or annually) the
				calculated stream depletion from a well within 300-500 feet of the
				stream is about 33% of the pumping
				rate. The further the well is from the
				(Page 28). Using a simulation, with a
				well pumping about 700 gpm and a

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				/	$\wedge$
				distance of about 1,400 feet from the stream, the infiltration rate was zero. (Page 37, Fig 28)"	SS-048, Cont'd
2	74	2.2.1.7	2008	No Figure 4 is included.	SS-049
2	75	2.2.1.7	2038	Unclear what assumption is about Sept-Oct rainfall with these estimates. Please clarify.	SS-050
2	78	2.2.1.8	Table 8	Populus tricocarpa or Black Cottonwood is the common species found in Scott Valley, with Fremont found only along Moffett Creek near Hwy 3. There also is no Valley Oak in the valley. Please correct the table. Check with any local botanist, or Tom Jopson, horticulturalist.	SS-051
2	81	2.2.1.8	Figure 19	Dredger Tailings reach, a severely disturbed river bottom area, should be delineated on this map, as its existing riparian locations are not natural.	SS-052
2	82	2.2.1.8	Table 9	Bald Eagle was removed from the ESA in 2007. Delete here and in text. Clarify Status of each species as under State and/or Federal designation.	SS-053
2	84	2.2.1.8	2264-65	"several species of <u>anadromous</u> fish" It's home to many species of other fish. Redundant	SS-054
			2277-78 2280-83	Add: "during critical life stages."	

					$\Lambda$
				Coho and steelhead prefer to spawn in the coldwater tributaries, where their young can rear for one year before returning to the ocean. Steelhead use all tribs, not just those listed. Chinook prefer the larger gravels of the mainstem for spawning in the fall and their juveniles leave the system before summer. Timing is everything! PLEASE use primary sources here – like CDFW - and not SRWC. (i.e., Knechtle 2021; Maria 2006)	SS-054, Cont'd
2	85	2.2.1.8	Missing	Add heading: <b>Population Trends.</b> Insert graph of coho adult numbers from 2007-2020 from CDFW's annual report (Knechtle 2020). The Scott's coho population is the highest in the Klamath and one of the highest in the State. An important POINT!! So much emphasis on the Scott's rumored coho "going extinct", that this omission is HUGE here. Ugh.	SS-055
			2292-2299	Describe the 3 different brood years. Coho in the Scott spawn in the cold water, perennial sections of tribs, when accessible, where juveniles can survive the summer. State here under Life Cycle.	
2	86	2.2.1.8	2339	IP reaches were based mainly on GIS evaluation of slope access by	SS-056
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2366 -	spawners, not perennial flows. No field data were used, unlike RCD.Table 10Scott River Water Trust has
	prioritized trib reaches for leasing of water for coho summer rearing habitat in: French-Miners,
	Shackleford, Patterson, South Fork (SRWT website). Note which tribs are in canyon below valley in Table
missinį	g "Flow Problems": If the mainstem has sufficient flow to get coho
	spawners into Scott Valley, as it did in Fall 2013 at 50-60 cfs, there still peeds to be flow access into their
	natal tribs. In 2013, over 2,700 coho adults were stuck spawning in the
	mainstem Scott due to lack of rain creating runoff into tribs.
	higher elevations but rain in the valley, and this large brood year was
	stuck. They spawned on top of Chinook redds previously laid. With
	an extreme drought year, flow conditions in 2014 demanded a
	relocate 160,000 juvenile coho from the mainstem into the upper tribs
	where cold water habitat was available. Cite: Magranet, 2015,
	RCD (I can send to you. Excellent data and analysis.)

2	87	2.2.1.8	2375-76	Provide citation for statement that spring-run Chinook were historically found in Scott River. I've never found any credible source. If none, please delete or say "rumored"	
			2378	Chinook may enter the mouth of the Scott River in late September, but CDFW video weir data shows they do not move up until October. Outmigrant timing can also be found in CDFW's annual salmon report (Knechtle 2021). Add that outmigrants then need to navigate the Klamath River's habitat for 143 miles before reaching the ocean.	
			Missing	" <b>Population Trends":</b> add Heading. Include graphs from CDFW (Knechtle 2021). Add text.	
2	88	2.2.1.8	2390-2391	Cite RCD & USFS Chinook spawning surveys. Cite Knechtle for concerns about flow access during spawning.	
			Missing	"Population Trends" for Steelhead: Here you can see there's too little data to conclude. Outmigrant data can be found in Knechtle and other CDFW reports.	
2	89	2.2.1.8	2423	Lamprey habitat is VERY different from salmonids, as the young need lots of sand and mud to burrow.	
			2431		
				$\checkmark$	

		Flood Control &	Water Conservation L	District	$\wedge$
			2452	State that much more habitat and population data have been collected since 2005 (CDFW, RCD, SRWC). Note that no water quality trend data has been collected for many years on sediment and temperature, due to lack of funding. Delete bald eagle. Bank swallow's	SS-059, Cont'd
				use of river banks is seasonal: only during spring pesting	
2	90		Table 11	Delete bald eagle.	SS-060
2	91	2.2.2.1	2488	Identify source of data. Need text for	
			2494-98	Fig. 21 and relevance. Cite primary, credible source for this critical fact: DWR, not SRWC (and I wrote that section for SRWC, citing DWP's Land and Water Lise	
			2518-2520	Surveys). Valuable observation but would benefit from graph of rainfall for this time period here or earlier. Connect to Fig. 22 someplace?	SS-061
2	94	2.2.2.2	Missing	Add a map here of these 6 areas from Harter & Hines (2008) to be helpful.	SS-062
2	115	2.2.3.2	3148	Pertinent Figure 22 missing here, and previous Fig. 22 not relevant.	- SS-063
2	131	2.2.5	2574	Figure on groundwater use amount at 42,000 ac-ft. But where did that figure come from? How does it compare to current use, as estimated by DWR's Land & Water Surveys (based on AW by crop type acreage)?	SS-064
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		Flood Control &	water Conservation Dis	trict ,	↑
			Text Box	Text is fine until you get to specific examples of PMAs, which may or may not be deemed cost-effective if evaluated seriously. It seems that climate change is the Big Gorilla in the room about Input of water, yet that's not mentioned here.	SS-064, Cont'd
2	133-141	References	Missing / errors	Combine DWR refs with CDWR. Add the following: *exact titles & pdfs will be sent soon. *Dahlke. 2016. (Recharge study results with SVID). Lee. 2016. (see line 1299) Siskiyou Land Trust – website. Barlow, P.M and Leake, S.A. 2012. Streamflow depletion by wells – Understanding and managing the effects of groundwater pumping on streamflow.USGS Circular1376.84 p. Knechtle, M. 2021. "2020 Scott River Salmon Studies". CDFW, Yreka. *Maria, Dennis. 2006. "Juvenile Steelhead Surveys in French Creek: 1990-2005" CDFG, Redding. *Magranet, Lindsay. 2015. "Juvenile Coho Salmon Rescue and Relocation Cooperative Effort in 2014, Scott River". Siskiyou RCD, Etna.	SS-065
3	3	3.1	99	SGMA has a baseline date of 2015 conditions for groundwater – please clarify here or soon for this chapter.	SS-066

3	4	3.2	171	"not allowed to worsen" beyond what baseline?	SS-067
3	6	3.3	Table 1- Levels	DWR is going to start doing airborne electromagnetic technology from helicopters to survey groundwater basins in high and medium priority SGMA basins. Data creates an image of the subsurface down to depth of 1,000 feet. See DWR's website under SGMA/AEM.	SS-068
3	7	3.3	290-296	Need to add: "Well Activity", as inactive wells are much more useful than active wells due to drawdown effect on data. Our Community Well Program had this as one of its selection criteria, so their data for UCD would be useful. However, current well monitoring for CASGEM and maybe by UCCE does not appear to indicate whether the well is active at time of measurement, making data interpretation problematic. Is intent to be manually measured monthly or continually via data logger?	SS-069
3	8	3.3		Distinguish between TREND and PROJECT monitoring purposes.	SS-070
3	10-11	3.3.1.1	391-394/Table 2	My husband and I own 2 wells as RMPs: P0002M and G31. The 1 <sup>st</sup> well is actively used most days at our	SS-071
				•	7

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				/	N
			411-415	nursery, more so in recent years during the May-Sept period. Due to drawdown effect while being pumped, we're not sure the data will be as useful as you hope. County and UCCE collected data for this well need to be compared for accuracy. Monthly data seems optimum versus bi-annual (too little) and daily (too much) frequencies. Please recommend what is best for GSP monitoring.	SS-071, Cont'd
3	29	3.3.5.2	1065-1071 / Table 4	DWR gages already exist on East & South Fk, French & Shackleford!	SS-072
4	7-8	4.1	Table 1	These PMAs are quite a mish-mash	•
				and laundry list of ongoing and potential projects. "Habitat	
				Improvement" does not belong on this list as not directly relevant to	
				Improvement" does not belong on this list as not directly relevant to Demand & Supply needs, with funding available elsewhere, or put in	
				Improvement" does not belong on this list as not directly relevant to Demand & Supply needs, with funding available elsewhere, or put in a separate table as "Indirect PMAs". Much better strategy is to use <b>App</b>	SS-073
				Improvement" does not belong on this list as not directly relevant to Demand & Supply needs, with funding available elsewhere, or put in a separate table as "Indirect PMAs". Much better strategy is to use <b>App.</b> <b>5-A PMA Prioritization &amp; Scoring</b>	SS-073
				Improvement" does not belong on this list as not directly relevant to Demand & Supply needs, with funding available elsewhere, or put in a separate table as "Indirect PMAs". Much better strategy is to use <b>App.</b> <b>5-A PMA Prioritization &amp; Scoring</b> <b>System</b> sooner than later, as many	SS-073
				Improvement" does not belong on this list as not directly relevant to Demand & Supply needs, with funding available elsewhere, or put in a separate table as "Indirect PMAs". Much better strategy is to use <b>App.</b> <b>5-A PMA Prioritization &amp; Scoring</b> <b>System</b> sooner than later, as many now listed will not be cost-effective.	SS-073
				Improvement" does not belong on this list as not directly relevant to Demand & Supply needs, with funding available elsewhere, or put in a separate table as "Indirect PMAs". Much better strategy is to use <b>App.</b> <b>5-A PMA Prioritization &amp; Scoring</b> <b>System</b> sooner than later, as many now listed will not be cost-effective. Add MONITORING as a Category,	SS-073
	23			Improvement" does not belong on this list as not directly relevant to Demand & Supply needs, with funding available elsewhere, or put in a separate table as "Indirect PMAs". Much better strategy is to use <b>App.</b> <b>5-A PMA Prioritization &amp; Scoring</b> <b>System</b> sooner than later, as many now listed will not be cost-effective. Add MONITORING as a Category, or your proposed Ch.3 actions will not be funded without attention here	SS-073
	23			Improvement" does not belong on this list as not directly relevant to Demand & Supply needs, with funding available elsewhere, or put in a separate table as "Indirect PMAs". Much better strategy is to use <b>App.</b> <b>5-A PMA Prioritization &amp; Scoring</b> <b>System</b> sooner than later, as many now listed will not be cost-effective. Add MONITORING as a Category, or your proposed Ch.3 actions will not be funded without attention here. Move Irrigation Efficiency to Tier 1	SS-073 SS-074

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WHAT's MISSING MOST	as a High Priority and expand description based on UCCE Crop Advisor's input. Costs are known. Benefits are being quantified by UCCE and others. Orloff measured water use and crop yield with different center pivot emitter styles, and ongoing studies now by Yreka office. Add Measurable Objective based on well meter records, with incentive for metering (already required on Decree's wells). Incentives are there for well owners and irrigators, saving pumping costs too. Up to 30% reduction in use seems credible with best center pivot design, along with using soil moisture probes and fallowing corners.
	This GSP is lacking a key component of all effective plans – <b>POLICIES</b> . These come after Goals/Objectives and before Actions, as they direct how actions will be taken. Just because DWR's template didn't require them doesn't mean they're not needed. The County's General Plan has policies, for example. What about "Well Drilling Permits" as a PMA, for example, as an improved direction by County? Is the status

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quo fine, or are changes needed? I think most observers will say improvements are needed. Possible Policy: "County will work to improve SS-075, the quality of its well permitting program, including data storage and retrieval, identifying abandoned wells, and meeting legal requirements of the Scott River Decree and the Public Trust *Doctrine*. "Might be a tough pill to swallow, but it is what is needed.

Cont'd