

North Group-Redwood Chapter-Sierra Club Felice Pace, Water Chair

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September 23, 2021

Siskiyou County Flood Control and Water Conservation District Via Email to: SGMA@co.siskiyou.ca.us PO Box 750 1312 Fairlane Road Yreka, CA 96097

CC: Members, Scott River Basin Groundwater Advisory Committee Lauren Foglia, Technical Consulting Team Lead Pat Vellines/DWR Scott Basin contact Other Interested Parties

SUBJECT: Comments of the North Group Water Chair and a Scott Valley landowner on the Draft Scott River Basin Groundwater Sustainability Plan (GSP) released for comment August 11, 2021.

Members of the Scott River Basin GSA:

I lived in the Scott River Basin from 1976 until 2002. I still own a plot of land in Scott Valley and I visit often. These are my comments on the Draft GSP as a landowner and as Water Chair for the North Group Redwood Chapter of the Sierra Club.

The draft Scott River Basin GSP is a disappointment because it does not deal with two key realities:

- 1. As confirmed by DWR groundwater monitoring, year-to-year groundwater elevations in the Scott River Basin have been falling for the past 20 years. The draft GSP denies this reality and claims that, while there have been a series of recent "dry years" groundwater elevations year-to-year are not dropping.
- 2. In light of the recent, current and expected future climate, groundwater extraction at current levels cannot be maintained without extending and increasing extraction-related undesirable results.

Instead of addressing these realities, the draft GSP ignores readily available DWR data¹ documenting declining groundwater levels and defines "sustainability" in a manner that would lock-in, rather than correct, undesirable results that have and will continue to threaten Coho and Chinook salmon with extirpation/extinction by dewatering streams and decreasing streamflows, thereby denying Coho and Chinook salmon and Steelhead trout access to spawning grounds and impeding their rearing and migration.

¹ DWR Data Viewer screenshot and DWR's California Groundwater Conditions Update – Spring 2020 are attached.

The GSA, has given us a cynical and non-compliant GSP. I will leave it to others better equipped to detail the legal deficiencies and multiple-failures to comply with SGMA's implementing regulations. Instead, attached are detailed comments using the GSA's form for Chapters 2 and 4, as well as the detailed comments on Chapter 3 previously submitted. Those attached detailed comments focus on the science, facts, tools and management approaches that are proposed or which, in my estimation, are needed but missing from the Draft.

In addition to the attached detailed comments, this comment letter focuses below on the Draft GSP's major flaws and inadequacies. Many of these GSP deficiencies were identified in my May 26th 2021 comment letter to the GSA titled "North Group Water Chair's comments on the 04/23/2021 Public Review Draft of the Scott Valley Groundwater Sustainability Plan (GSA) Chapter 3: Sustainable Management Criteria." That September 26 comment letter is attached and is included in these comments by reference because many of the deficiencies identified there have not been corrected in the Draft released on August 11, 2021.

The summary below identifies what I believe are major flaws which, if not corrected, will prevent the Scott GSP from achieving true sustainability. True sustainability means managing groundwater in a manner that complies with applicable laws and regulations, including reversing current undesirable results that are related to groundwater extraction. Sustainability also includes complying with other applicable laws, including the federal and state Endangered Species Acts, the state and federal Clean Water Acts and applicable Fish and Game and Water Codes. Real sustainability attends to the needs of all citizens and all valid interests, seeking inclusion and balance rather than domination of one interest or group over all others.

Major Flaws and Omissions

1. Recognizing the Problem:

One cannot solve a problem if one refuses to recognize that the problem exists. The Draft GSP denies the reality that groundwater levels and groundwater storage have been declining in the Scott Valley for two decades. This can clearly be seen in the DWR SGMA Data Viewer, and in DWR's Spring 2020 Update, including the map to the right which shows "groundwater level trend" from 2000 until 2020. Like most of the state, DWR's Scott Valley groundwater monitoring wells shows the groundwater level decreased year-to-year up to 2.5 feet since 2000. More recent trends, in line with climate expectations, are much more dire.

The GSA and the Scott Groundwater Advisory Committee need to get out of denial. They need to admit that groundwater extraction has already produced unacceptable results and they need to give the public a plan that will restore the beneficial uses of water which groundwater extraction in the Scott River Basin has damaged and threatens to destroy.

20-Year Groundwater Level Trend - Spring 2000 to Spring 2020

20-Year Groundwater Level Chargo Trend: Spring 2000 to Spring 2020

20-Year Groundwater Level Chargo Trend: Spring 2000 to Spring 2020

20-Year Groundwater Level Chargo Trend: Spring 2000 to Spring 2020

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20-Year Groundwater Level Chargo Trend: Spring 2020

20-Year Groundwater Level Chargo

FP-001

2. Failure to reverse undesirable results:

The Draft GSP proposes criteria, thresholds and triggers that will result in additional and deepening undesirable results. The thresholds and triggers will unnecessarily delay action to address undesirable results and that will result in additional damage to the beneficial uses of water, groundwater dependent ecosystems and the Public Trust in water.

The GSA alleges that it has no ability to manage groundwater extraction in that part of the Scott River Valley in which groundwater was adjudicated as part of the Scott Stream Adjudication. Others have pointed out that allegation is unfounded. Managing all groundwater in the basin is necessary to achieve sustainability as defined in SGMA and its implementing regulations. Therefore, if the GSA believes it cannot manage a significant amount of groundwater and that will prevent it from realizing the promised benefits of SGMA, it should refer the basin to the State Water Board for a full groundwater adjudication.

FP-002

3. Reliance on the Scott Valley Integrated Hydrologic Model (SVIHM):

The GSP relies on the SVIHM to inform, manage and evaluate the results of groundwater management. It is a heavy burden and one which I believe is not appropriate for a model that has not been validated and which has high mathematical sensitivity. High sensitivity means that small errors in model generated and other inputs can result in large errors in results. Such models can be wildly right but they can also be wildly wrong. That is why validation will be a process designed to render the model more reliable over time. However, for the time being, model results must be complemented by actual measurements and metrics, and compared to alternative results from other models and approaches, in FP-003 order to properly guide management and evaluate results.

Just relying on the SVIHM to inform, guide and evaluate groundwater management going forward is imprudent, dangerous and, for that reasons, unacceptable.

4. Undesirable results on streamflow and stream ecosystems, including salmonids, must be assessed, monitored and evaluated based on flow metrics and flow needs as determined by best available science and the judgment of expert agencies, including DFW and the State and North **Coast Water Boards:**

There is no need to rely on a sensitive and unvalidated model to evaluate past, current and future undesirable results to streamflow and stream ecosystems which depend on adequate streamflow. Rather those things should be evaluated using actual flow data, flow needs as determined by expert agencies and scientists and by using the tools developed by those agencies and scientists, including the California Environmental Flows Framework.

The GSP must result in the adjudicated flow right for fish in Scott River being met. If the GSA cannot or will not deliver a GSP that results in the flow right being met within a reasonable time frame, all groundwater extraction will need to be adjudicated and the State Water Board will need to proceed on petitions to make the water right changes needed to protect the Public Trust in water.

The Scott GSP is the last chance for locals to retain control of groundwater management in the Scott River Basin. Only a GSP that fully complies with SGMA and its implementing regulations will result in local control. The current path, if followed, leads inexorably to state management of ground and surface water.

5. The GSP must look to upland management's impact on water supplies and streamflow using the best available science and, at minimum, commit to addressing upland management at the FP-004 first GSP revision:

The uplands and how they have been managed is much too important to both the hydrograph (and therefore inputs into the SVIHM) and to future water supplies, including groundwater recharge, to not at least begin to address it in this first GSP. Furthermore, there are radically different stakeholder and citizen views on how past and current forest, fire, grazing and other management has and will impact water supplies and the hydrograph. There is competing relevant science as well. This all needs to be sorted out if we are going to get anything near the support needed to advance upslope management for "favorable conditions of flow" which is, after all, a main reason the national forests were created. Favorable conditions of flow serves the interests of all water users and all citizens.

6. The Draft GSP does not protect the interest of domestic well owners. It will cause more drinking water wells to go dry more of the time and for longer periods of time:

By allowing even more decline of groundwater elevations before any corrective action is even contemplated, the Draft GSP will assure that more and more domestic drinking water wells go dry for longer and longer periods. The Draft GSP does not adequately analyze or disclose those impacts. This issue is addressed in more detail in the attached detailed comment forms.

7. The Draft GSP does not adequately assess or address groundwater quality:

The GSP fails to adequately assess groundwater quality. It does not establish a monitoring network which is capable of detecting deterioration of groundwater quality in those portions of the Basin where groundwater quality is most at risk. Therefore, the GSP does not comply with SGMA regulations which require groundwater quality to be adequately assessed and adequately monitored going forward. This Draft GSP failure is more extensively addressed in my attached prior comment letter and also in the attached comment forms.

8. The offer of collaboration:

So far the Groundwater Sustainability Agency, the Siskiyou County Flood Control and Water Conservation District, has chosen to stack the Scott Groundwater Advisory Committee with individuals who are major groundwater extractors, including some who have played a major role in expanding groundwater extraction in recent years. In the same vein, you have now given us a draft Groundwater Sustainability Plan which seeks to mask the impacts of increasing groundwater extraction and to avoid dealing with the undesirable results of that groundwater extraction.

The GSA's implementation of SGMA so far has favored one interest – groundwater extractors – over all other interests and has sought to bend SGMA to serve that interest. Please recognize that approach must and will fail. Instead, I and others offer collaboration which seeks to respect all interests and to balance needs and desires with the capabilities of our land and water.

Will you choose collaboration?

Sincerely,

Felice Pace

List of attachments:

- DWR Dataviewer screenshot showing falling year-to-year groundwater levels in Scott Valley
- California Groundwater Conditions Update Spring 2020
- Completed review form for Chapter 2
- Completed review form for Chapter 3
- Completed review form for Chapter 4
- May 26, 2021 letter with comments on Draft GSP Chapter 3

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Review Form

Scott Groundwater Sustainability Plan

Reviewer name: Submission date:

GSP sections reviewed:

Chapter	Page	Section	Line/Table/Fig#	Comment (please delete example text below once you submit)	
2			1292 et seq	This section should disclose all purposes of the SVID groundwater recharge experiment and the results. The intent was also to evaluate impact of groundwater recharge on flows in Scott River. The conclusion was that recharge on the eastside of Scott Valley can help flows but only in early summer, not critical fall and late summer flows	FP-0
					1
2		Climate	2.2.1.2	This section should discuss relevant climate change predictions and how those changes are likely to impact surface and groundwater supplies, flows, groundwater levels, etc. because all that is critical information for managing water going forward.	FP-0
2			1701-1703	The increase in irrigate acreage since 1964 is 6500 acres which is a 20% increase and not "similar to today's irrigated acreage." This is another among many places the draft downplays the increase in agricultural water use increases. That is wrong and should change.	FP-0
					1
2			1736 - 1747	The section on Land Use fails to note how much more water alfalfa uses as compared to small grains. That should be fixed and the total increase in groundwater use due to the transition from small grains to alfalfa should be quantified and displayed because that is important information to inform management decisions.	FP-00

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Review Form

	30011	Groundwater Sustamability Flan
2	1759 et seq	Y'all do not mention the Shakleford and french Adjudication Decrees. That should be fixed and the season of irrigation for each should be included. Also, there should be a discussion of diversion for stockwatering.
2	1795, et seq	The discussion of westside alluvial fans fails to mention the major springs which emerge within these fans and which are a major source of flows for the Valley section of Scott River. This section should also mention that these springs dry up as the groundwater level declines.
2	1994 - 2001	The Scott Valley Integrated Hydrologic Model (SVIHM) is a highly sensitive model that has not been validated. These facts and their implications need to be noted here where and anywhere its use is described. Because highly sensitive models can give widely wrong results, the model should not be used alone but in combination with (or with results compared to) the results from other models including the SWRCB E Flows Framework methodology and the TNC natural flows database. Wherever possible actual measurements, rather than models, should be used to guide management. The model has built in bias and as a result its predictions understate the impact of groundwater extraction on streamflow. That should be corrected.
2	2002 et seq	This section discloses some of the assumptions that are made by the SVIHM. It is the large number of assumptions that make it a poor tool to guide management. Until it can be improved, it alone can not be relied upon to guide management decisions. Real data should guide management, not models.
2	2309 et seq	In the section on Priority Habitat Identified in the Basin: Y'all need to consult the maps which show where Critical Habitat for Coho have been designated by NOAA NMFS. It would be good to include a map of Coho designated CH because intrinsic habitat was used to designate it. Y'all need to at least mention that

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		dataset: designated Coho CH and why it was not used, if indeed it is not used. Table 10 is a good summary.	FP-013 contd.
2	2426 et seq	The section on "Threats to Prioritized Fish and Aquatic Species in the Basin" is grossly inadequate. It fails to identify the problem of low flows and stream dewatering that impacts and kills juvenile Coho and Chinook Salmon and Steelhead trout and impedes outmigration. It fails to mention temperature and nutrients as water quality problems, which they are. This section needs to reference and extensively quote from the Basin Plan and other documents which detail the water quality problems and impairments in the basin and how those impairments impact beneficial uses. In addition, how flows, and in particular low flows, impact water quality and the specific Scott CWA-designated impairments needs to be disclosed and discussed. This section needs major revision.	FP-014
2	2499 et seq	Y'all continue to assert that "groundwater levels in Scott Valley remained relatively consistent, with seasonal cycling of lowered groundwater levels in the summer followed by increases in the winter months (Harter and Hines 2008)". That is a false statement. It contrasts with what DWR has found, that is, recent declines in minimum annual groundwater level and failure to fully recover historic maximum elevation levels. DWR is the expert agency in this regard so you need to consult and cite their information which finds a trend of decline in groundwater levels in Scott Valley wells, some going back to 2010. Here is the link to DWR's latest groundwater report which includes historic trend data and maps: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Data-and-Tools/Files/Maps/Groundwater-Level-Change/DOTMAP_Reports/Spring-2020-Groundwater-DOTMAP-Report.pdf. Y'all need to admit that groundwater has been declining over the most recent decade and is predicted to decline farther if groundwater extraction is not cut.	FP-015

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2		2517 - 2520	The draft states "Historic and recent water level data do not indicate overdraft or long-term declines in groundwater data. However, the past 22 years have seen a higher frequency of dry years and more frequent occurrence of low fall water levels than has been observed on few wells during the previous 40 years. The argument is that, while declines in max and min levels have been observed, that is the result of "dry years", not excessive extraction. The assertion is false. Extraction is lowering groundwater levels in dry years and, because the number of dry years has and is predicted to increase, extraction has and can be expected to continue to decrease groundwater levels and groundwater storage, that is, unless and until extraction is managed and restrained in dry years.	FP-016
2		2817 et seq	NITRATE: The assessment of nitrate levels in groundwater is inadequate because data has not been collected from the areas most at risk for nitrate groundwater contamination. At minimum, y'all must obtain and cite monitoring data from Hale Dairy required as part of their CWA permit and housed at the NCRWQCB. That data can be used as a proxy for the most at risk sites for nitrate contamination in Scott Valley. However, you MUST establish an adequate network of wells that are regularly tested for groundwater quality in order to comply with SGMA going forward. That means specifying an adequate groundwater quality monitoring network in the GSP. It is wrong to seek to just rely on those two community drinking water wells cited in the draft and call all OK with water quality throughout the Basin.	P-017
2	2.2.3.1		Summary of Model Development: The sensitivity of the model and how that sensitivity can impact the range and magnitude of error results needs to be disclosed and discussed. The limitations of the model need to be discussed and also, how limitations and errors can be checked over time using other means and	FP-018

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		other models. The lack of model validation and how that will be addressed needs to be discussed here and not relegated to an appendix.	FP-018 contd.
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2	3193 et seq	Surface Water Inflow: The Model predictions of inflow should be compared to actual gauge data (see Figure 15) where we have actual gauges and discrepancies noted going forward.	FP-019
			_
2 2.	2.4	Future Water Budget: If one looks at Figure 30, the future basecase scenario has annual rainfall that is greater than any of the actual historic periods. That seems to be highly unlikely. Is it not more likely that future precipitation will be lower on average as compared to the past? If so, that should be reflected in the basecase. Is the basecase a model output? If so, it appears that the model is not a very good predictor of future reality.	FP-020
2 2.	2.5	Sustainable Yield: This section assumes that "The Basin is not in overdraft." As noted above, the assertion is not supported by groundwater data and trends collected by DWR. Please consult with DWR about the question of whether or not the basin is in overdraft and include/quote that response in this section.	FP-021
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2	3572 et seq	interconnected surface water indicator and for the water level indicator." This is an error. In order to maintain current levels of extraction, y'all have made unrealistic assumptions about the future climate and therefore the future water	FP-022
		supply. You have also chosen to delay rectifying "undesirable results" to	

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Review Form

streamflow until 4042 and based streamflow restoration on unrealistic pie-in-the-sky "projects". That is not acceptable and, if allowed, is likely to result in extirpation of Coho and Chinook salmon from the basin. The Scott is already producing less salmon than it should and loosing more juveniles than other Klamath sub-basins. The Scott GSP should rectify that situation, not make it worse as you are proposing. This extinction GSA will not pass muster with DFW because it does not comply with SGMA but it will serve to further alienate those who depend on Klamath River Basin salmon.

FP-022 contd.

2.2.5

Sustainable Yield; The draft GSP relies on future "projects and management actions" to address undesirable results and achieve what it calls sustainability. However, the future projects and management actions are only generally described and many of them are either not realistic or their feasibility has not been assessed. This reliance on unspecified, untested and unassessed future actions and projects is not realistic, likely to result in additional and continuing "undesirable results" and, therefore, does not comply with SGMA and its implementing regulations. At best y'all propose kicking the can down the road. But SGMA requires that you deal with groundwater management and undesirable results now, in the GSP.

FP-023

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Review Form

Scott Groundwater Sustainability Plan

Reviewer name: Felice Pace

Submission date:

GSP sections reviewed: Chapter 3

Chapter	Page	Section	Line/Table/Figure	Comment (please delete example text below once you submit)
3				This chapter seeks to improperly define past conditions in order to allow continuation of current extraction levels. But the increase in groundwater extraction over the past 20 years has already resulted in undesirable results to streamflow, GDEs and domestic well owners that are unacceptable and which must be reversed. We need SMCs that will do that job. If the GSA won't give them to us we will push to have the State Water Board take over management of groundwater.
3			227- 228	Table 1: Summary of monitoring networks, metrics, and number of sites for sustainability indicators: 3 sites is not a sufficient network to monitor groundwater quality. The network needs to be expanded to cover all sections of Scott Valley and those areas most at risk for groundwater contamination which are the areas of former beaver dams in the lower Etna and Kidder Creek Areas.
3			227-228	"Stream depletion due to groundwater pumping" has already occurred and not just on the main Scott River. The GSA is responsible for reversing the dewatering that has already damaged and destroyed some of the beneficial uses of water in these waterbodies. The GSA proposes unnecessary delays in action to revere those declines. That violates SGMA and is unacceptable. Restrict extraction now to restore the beneficial uses of our streamsand not just the River but all the Valley sections of major tributaries as well. Failure to do this will involve "take" of Coho salmon and will prompt citizen action to force the GSA to comply with all applicable laws.

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3	251	"Identification and Evaluation of Potential Data Gaps": The draft fails to recognize the groundwater quality network as deficient and therefore to plan to expand that network as needed. That should be changed. Wells that are monitored for groundwater level should also be monitored for groundwater quality.
3	3.3.3.	Groundwater Quality Monitoring Network: Here y'all do call for expansion of the network. However, at least until the network is adequately expanded, the GSA must use the best available information in constructing the GSP and that includes groundwater monitoring data for beneath the Hale Dairy which is in the possession of the North Coast Water Board.
3	554-555	"Funding has been made available through NCRWQCB for sample analysis and results of this sampling will be used to help inform the monitoring network expansion." Please display the data from sampling that has already occurred. If you haven't done any sampling, please use available funds to do so in order to inform this version of the GSP rather than waiting until a future time and future version of the GSP.
3	661	"Groundwater Levels as Proxy for Stream Depletion Monitoring – not suitable": While that may be true for Scott River, it is not true for the lower reaches of major tributaries in Scott Valley which are dewatered for longer periods as a result of the DWR documented 20 year decline in groundwater levels. To comply with SGMA, the GSA must use the best available scientific information to determine and disclose how groundwater extraction declines over the past 20 years have impacts major tributary flows as well as Scott River flows. Additional stream gauges are likely needed to be able to assess how management changes are impacting lower tributary flows. The SVIHM should

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3	724 et seq	"Streamflow as Proxy for Stream Depletion Monitoring – not suitable": The argument for not using streamflow as an indicator for stream depletion is nonsensical. Any and all conditions are the result of multiple-factors. However, because the factors impacting streamflow other than ground and surface water extraction are the same no matter how much groundwater is extracted, observed changes in streamflow are likely all or nearly all the result of groundwater extraction and surface water diversion. Because the amounts of surface diversion are now known and must be measured and reported to SWRCB, it is entirely possible to isolate the impact to streamflow resulting from groundwater extraction. This again is an example of the GSA sticking its collective head in the sand in hopes of not having to deal with impacts it claims not to see. The GSP is rife with examples of GSA management avoidance schemes and scams.	FP-031
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3	743-746	"The legal requirements for the minimum threshold allow for the use of a numerical groundwater and surface water model to quantify ("monitor" or "measure") the amount of surface water depletion due to groundwater pumping and to set the minimum threshold using the model." While the statement may be true it is also true that actual measurements are preferable to model results where the actual results can be obtained. It is feasible to monitor changes in streamflow and to adjust those for levels of precipitation and snowpack. That is the correct approach rather than using a model that is highly sensitive and unvalidated.	FP-032

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Review Form

meed to use a different method, one that has been proven to be accurate in other basins. 3		Scott	Froundwater Sustainability Plan
Modeling runs are not measurements. You keep trying to use the SVIHM for purposes for which it is not suitable or is not the best, that is, the most accurate and reliable, measurement tool. You can't get away with it and will loose the privilege of managing if you keep trying. 3 Because you seek to use the SVIHM in some many critical ways and in lieu of actual measurements, it is critical that you obtain and publish as an appendix an independent expert evaluation of the model and its suitability for each of the many purposes for which y'all are proposing to use it. 3 Y'all should use DWR groundwater and other data and data from other agencies, rather than using the SVIHM whenever possible. Actual measurements are always preferable to modeling, particularly when the model is so highly sensitive and not validated. The GSA's consultants have a material and professional interest in the SVIHM; is that why it is being proposed for so much use when better information is available by other means and from other sources? 3 1098 Figure 6 shows that the draft GSP proposes allowing further lowering of groundwater levels before any action to reverse undesirable results is taken. That is unacceptable because it does not reverse or even prevent further increases in	3	748 et seq	unacceptable because the model is too sensitive and has not been validated. Y'all need to use a different method, one that has been proven to be accurate in other
actual measurements, it is critical that you obtain and publish as an appendix an independent expert evaluation of the model and its suitability for each of the many purposes for which y'all are proposing to use it. Y'all should use DWR groundwater and other data and data from other agencies, rather than using the SVIHM whenever possible. Actual measurements are always preferable to modeling, particularly when the model is so highly sensitive and not validated. The GSA's consultants have a material and professional interest in the SVIHM; is that why it is being proposed for so much use when better information is available by other means and from other sources? FP-036 Figure 6 shows that the draft GSP proposes allowing further lowering of groundwater levels before any action to reverse undesirable results is taken. That is unacceptable because it does not reverse or even prevent further increases in	3	792 et seq	Modeling runs are not measurements. You keep trying to use the SVIHM for purposes for which it is not suitable or is not the best, that is, the most accurate and reliable, measurement tool. You can't get away with it and will loose the
rather than using the SVIHM whenever possible. Actual measurements are always preferable to modeling, particularly when the model is so highly sensitive and not validated. The GSA's consultants have a material and professional interest in the SVIHM; is that why it is being proposed for so much use when better information is available by other means and from other sources? 3 Figure 6 shows that the draft GSP proposes allowing further lowering of groundwater levels before any action to reverse undesirable results is taken. That is unacceptable because it does not reverse or even prevent further increases in FP-037	3		actual measurements, it is critical that you obtain and publish as an appendix an independent expert evaluation of the model and its suitability for each of the
groundwater levels before any action to reverse undesirable results is taken. That is unacceptable because it does not reverse or even prevent further increases in FP-037	3		rather than using the SVIHM whenever possible. Actual measurements are always preferable to modeling, particularly when the model is so highly sensitive and not validated. The GSA's consultants have a material and professional interest in the SVIHM; is that why it is being proposed for so much
undesirable results. Depth to groundwater are too low (in elevation) for the minimum threshold range, trigger and measurable objective. They violate SGMA because they will produce and exacerbate undesirable results on	3	1098	groundwater levels before any action to reverse undesirable results is taken. That is unacceptable because it does not reverse or even prevent further increases in undesirable results. Depth to groundwater are too low (in elevation) for the minimum threshold range, trigger and measurable objective. They violate

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	Scott G	roundwater Sustainability Plan	\uparrow
		streamflow. Give us the range, trigger and measurable groundwater objectives that will keep the Scott River and major lower tributaries running at key periods for salmonids.	FP-037 contd.
3	1117 et seq	Use of the word "excessive" without defining what constitutes excessive or how that criteria was developed is patently unscientific and unacceptable.	FP-038
3	1306 et seq	The GSP asserts that "Historical water levels indicate that there is no overdraft and no long-term decline in water levels." As we have pointed out, the statement is false as shown by the 20 year decline in groundwater levels in Scott Valley found by DWR and displayed in their SGMA Tracker interactive map. The GSA uses this false claim to justify setting minimum thresholds at levels that will sustain and augmented undesirable results while allowing current rates of extraction to continue. They do this in order to maintain current levels of extraction. But the reality is that current extraction amounts cannot be maintained without producing undesirable results in violation of SGMA.	FP-039
3	1930	"No additional undesirable results have occurred since January 1, 2015 (Section 2.2.1.6)." The statement is false as shown by DWR's groundwater measurement and change database. As detailed in DWR's 2020 Groundwater Update, groundwater levels in Scott Valley have declined over the period 2000-2020, the period 2005-2020, 2010- 2020 and 2015-2020. What is it about this data that y'all don't get? The GSP is required to use the best available information. In this case that is DWR's groundwater data.	FP-040

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3	1950	"The portion of the Scott Valley Basin within the area included in the Scott River Stream System is not subject to SGMA." While the statement is true it is also true that Siskiyou County, the GSA, has the authority to manage groundwater anywhere within the county, including the Scott Adjudicated Groundwater Zone. Furthermore, SGMA instructs SisCo/the GSA to use that authority to prevent undesirable results. You have the ability and authority to manage groundwater, all y'all lack is the will.
3	1989 et seq	The county seeks to avoid identifying target flows needed to avoid undesirable
3	1989 et seq	The county seeks to avoid identifying target flows needed to avoid undesirable results to streamflow so that it can avoid responsibility for managing groundwater in order to meet those target flows. However, SisCo/the GSA has an affirmative responsibility to manage ground and surface water to meet the Forest Service right to flows in Scott River. The County/GSA has not met its responsibility but that does not negate the responsibility. SGMA requires use of the best information available to evaluate undesirable results to streamflow. Y'all have not done that and so major revision is needed in this section.
	20.40	
3	2048	While its SGMA enforcement responsibilities are narrowly focused on groundwater extraction outside of the Adjudicated Zone, the GSA nevertheless has the authority to regulate all Scott Valley groundwater and can choose to do so in order to reverse undesirable results. Not managing for that purpose is, therefor, not a result of SGMA but rather a choice by SisCo, which is the GSA, to not manage groundwater to reverse the destruction of the beneficial uses of our river other and streams. Sad.
3	2054	"For the sustainability indicator of Interconnected Surface Water (ISW), this GSP makes a distinction between Undesirable Result (which must be attributable to groundwater use outside of the Adjudicated Zone) and overall challenges related to insufficient environmental flows in Scott River." The

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	Scott (distinction does not prevent SisCo, which is the GSA, from managing all groundwater in order to avoid and reverse undesirable results of groundwater extraction. The decision not to manage is a free will choice that is an insult to those of use who love and depend on living rivers and streams.
3	2065 et seq	Defining getting back to a healthy river as an "aspirational goal" is, as explained above, unnecessary, cynical and insulting. By it, the GSA shows its lack of concern for those citizens who depend on healthy stream ecosystems. Sad.
3	2087 et seq	"The exact quantification of stream depletion that constitutes the Undesirable Result depends on a balancing test between public interest considerations and environmental improvements; that is, what is an "unreasonable" amount of stream depletion, which could be reframed as: what is a "reasonable" amount of avoided groundwater use?" While it "could" be reframed in that manner, it should not be reframed in that manner because that approach is backward. The amount of water necessary to maintain stream ecosystems and the fish within them in "good condition" is what "reasonable" and any amount less is "unreasonable." You must rely on the expert agency – DFW – to define minimum streamflow needs and they have done that. Y'all must manage to meet those flow or, alternately, the adjudicated flows. SisCo is the GSA and has the authority to manage in that manner. Trying to escape the responsibility will result in State Water Board taking over, that is, loss of local control.
3	2174 et seq	"Due to the climbing-path, the minimum threshold of 15% stream depletion reversal only becomes enforceable under SGMA in 2042 and thereafter, when sustainable conditions must be achieved." Deferring addressing undesirable results to streamflow until 2042 is unacceptable because by then the salmon will be extirpated.

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3	2	2211-2213	The GSA proposes to reverse undesirable results to streamflow "by the 'guiding' minimum PMA, Managed Aquifer Recharge and In-Lieu Recharge (MAR and ILR)." However, there is no analysis which indicates whether these means are capable of achieving the hoped-for result even by 2042. In fact, data and conclusions from the UCD/SVID MAR experiment indicate that those methods will not be effective in meeting the flow target. The GSA needs to take a close look at the UCD/SVID experiment and adjust its thinking in accord with the findings and conclusions drawn by the experts. MAR and ILR will not get the job done. What will? That is the question you are required to answer in the GSP.
3		2210	We want a more rapid reversal of undesirable results to streamflow from groundwater extraction than is shown in Table 7. Needed changes are needed now; they have already been deferred for far too long.
3	3.4.5.4		You are required to use the best available information to Establish Minimum Thresholds and Measurable Objectives. In the case of Scott flows that would be the most recent DFW streamflow needs assessment. Those must be the target flows and the GSA is required to manage in a manner that will achieve those flows as soon as possible but no later than 2042.

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Scott Groundwater Sustainability Plan

Reviewer name: Felice Pace

Submission date:

GSP sections reviewed: Chapter 4 and 5

Chapter	Page	Section	Line/Table/Figure #	Comment (please delete example text below once you submit)
4			116-122	The draft states: "In Scott Valley, the PMAs are designed to achieve two major objectives related to the SMC: • to achieve the thresholds and objectives for the interconnected surface water sustainability indicator (Section 3.4.5); • to prevent the lowering of groundwater levels to protect wells from outages; • to preserve ground-water dependent ecosystems; and • to avoid additional stresses on interconnected surface water and their habitat." Because the SMCs are not in compliance with SGMA and its regulations, the PMAs defined in this chapter will not lead to sustainable management. Furthermore, the PMAs are not adequately defined and many are voluntary or not under the control of the GSA. Therefore, they are inadequate to achieve even the Draft GSA SMCs. The PMAs are so poorly defined that it is impossible to tell if implementing them would result in achieving even the inadequate SMCs.
4			172-174	The Draft states: "Using the Scott Valley Integrated Hydrogeological Model (SVIHM), the effectiveness of some projects, or a combination of projects, was assessed to identify

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		Scott Gro	undwater Sustainability Plan	\uparrow
			those projects that, if implemented, will most likely bring the Basin into sustainability." For reasons noted in general comments, the SVIHM cannot be relied upon to properly evaluate PMAs. Therefore, the final GSP should use other, more reliable and proven criteria to recalculate the effectiveness of PMAs in meeting SMCs.	FP-052 contd.
4		178-179	"The ability to secure funding is an important component in the viability of implementing a particular PMA." The GSA has the responsibility of faithfully implementing SGMA whether or not "funding' is available to implement PMAs. Therefore, a compliant final GSA will identify those actions which are under the GSA's control which, based on good analysis, are likely to result in meeting the SMCs.	FP-053
4	8		"Avoiding Significant Increase of Total Net Groundwater Use from the Basin" This PMA means nothing because "significant" is not defined. That provides a loophole which SisCo and the GSA will use to allow increases in groundwater withdrawal for irrigation. Instead, to reverse the twenty year decline in groundwater levels and provide for additional domestic wells as the population grows, no new irrigation withdrawals should be allowed in the future.	FP-054
4		224	Table 1 PMA Summary Table: The PMAs in this table either have been tried already and failed to reduce groundwater declines or they rely on "voluntary' actions which can not be reasonably expected to occur. They are also, in the main, actions by other entities not controlled by the GSA. There is little or nothing in here that would allow the GSA to manage groundwater in a manner that reverses undesirable results. Therefore, the PMAs are not adequate and do not comply with SGMA and its regulations. The GSA must define PMAs	
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		which it can implement to address undesirable results and meet reasonable and SIGMA-compliant SMCs	FP-055 contd.
4		Upslope Water Yield Projects: This section ignores best science that finds that older forests protect and sustain favorable conditions of flow, that is, lower flood flows and greater baseflows. Instead, the PMAs the GSA contemplates would open the forest and lead to extensive sprouting and regeneration of small trees and brush. This will not only increased fire risk it will also increase flood flows and decrease base flows because it will lead to more and thirstier vegetation, except in the very shorty term (5-8 years). The GSA needs to rely on good science, not its political beliefs, to properly manage groundwater and comply with SGMA.	FP-056
4		The GSA proposes to "Reduce water use through voluntary managed land repurposing activities including term contracts, crop rotation, irrigated margin reduction, conservation easements, and other uses." Reducing groundwater use is needed but is very unlikely to happen through "voluntary" action. Therefore, this PMA is pie-in-the-sky. Voluntary land repurposing will not work; therefore, the GSA should define a PMA that is likely to be effective in significantly reducing groundwater use.	P-057
4		Many of the proposed PMA's are unlikely to ever occur. An example is raising the level of wilderness lakes. It is not in compliance with the wilderness act and it is not going to happen. By listing PMAs that have already been tried and have not reduced water use or which, like irrigation efficiency, have already been implemented and can not save more water and others which are highly unlikely to occur, the GSA seeks to avoid providing what is needed: real regulatory action to reduce extraction and reverse undesirable results.	P-058

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4	224	PMA's which have either already been tried and have proven not effective in reducing water use, increasing supply and reversing undesirable results include: MAR & ILR, Irrigation Efficiency Improvements, Beaver Dam Analogues, etc. The proposed PMAs are either already proven to be ineffective, infeasible for technical or legal reasons or contemplate vegetation management that will decrease water supplies, except in the very short term.
4	224	The one action which could reduce groundwater extraction the most would be to ban those very large rainbirds on the end of center pivot irrigation equipment. Those big rainbirds wipe out the efficiency gains from the misters. The government should never have funded irrigation efficiency equipment that does not result in water savings or more efficient irrigation on balance. Make them reimburse the feds for the equipment if they refuse to remove the wasteful rainbirds that often end up irrigating the roads.
4	297	TIER II: Planned Projects and Management Actions are all actions and activities which have either been in effect and have failed to reign in groundwater extraction or they are unlikely to ever occur for technical, cost and legal reasons. The rest are "voluntary." It is fine to ask for voluntary action but the GSA must also define other management actions which will effectively limit groundwater extraction if "voluntary" action continues to not get the job done.
4	399-400	"A dynamic equilibrium already exists between the recharge across the Basin, groundwater pumping, and net discharge to the Scott River." This is a false statement. DWR data shows a decline in groundwater levels and storage over the past 20 years, the past ten years and the past five years. What is it about this data that the GSA does not get? It is clear. You've also continued to

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		dewater streams. Maintaining the status quo does not comply with SGMA because it will continue and intensify undesirable results.	FP-062 contd.
4	413	It is good that the GSA is finally admitting what the data clearly show, that is, "Decreasing Recharge in or Runoff from the Surrounding Watershed" which is likely due to climate change and which the basin is already experiencing. But the draft GSP fails to address the future reality, preferring to stick its head in the sand so it will not have to act to restrain groundwater extraction. That meets the GSA's anti-government ideology but it does not comply with SGMA. If the GSA won't manage properly, the State Water Board will step in. Give us a responsible GSP so that we can retain local control.	FP-063
4	316	"Avoiding Significant Increase of Total Net Groundwater Use from the Basin": This is the main PMA but the discussion in the draft makes clear that the GSA has not and will not develop and use the mechanisms necessary to get the job done.	FP-064
4	444	"Collaboration with Permitting and Regulatory Agencies" is used in the draft GSP to attempt to cover the GSA's refusal to take regulatory action when needed to reverse undesirable results that have already occurred and to stem increases in undesirable results. Collaboration used as an excuse for inaction is despicable.	FP-065
4	640	PMA: "Scott Valley Managed Aquifer Recharge Project": both the limited experiment that has been conducted and the SVIHM show that this PMA has a very limited ability to reduce or prevent undesirable results. Those facts ought to be acknowledged in the GSA.	

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4	995-1042	Raising wilderness lakes and building a new dam and reservoir in the Scott River Basin face regulatory, political and funding challenges that render them highly unlikely or infeasible. Therefore they should be dropped. The GSA should stop indulging its pie-in-the-sky ideological hopes and get down to the business of regulating groundwater extraction.	FP-067
4	1052	"Strategic Groundwater Pumping Curtailment": curtailment is needed now to reverse the groundwater declines of the past 20 years which have dewatered streams and domestic wells. This should be done in an equitable manner. Delay, as proposed in the draft GSP, is not acceptable.	FP-068
4	1135	"Voluntary Well Metering": this is just one among the many "voluntary" PMAs. Like the others it is unlikely to be effective and the GSA knows ity. Therefore, this is just an attempt to use "voluntary" to avoid responsibility under SGMA. It will not work. Instead it will result in loss of local control, the State Water Board taking over groundwater management.	FP-069

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