

Author	CIN	Description	Location in GSP	Comment
K Tanner	Tanner-001	Grammar/typos	Ch 2	Portola Reporter no longer extant. Incorporated into Plumas News (www.plumasnews.com)
K Tanner	Tanner-002	Grammar/typos	Ch 2 (line 2359)	quadriperforata rather than Quadriperforata
K Tanner	Tanner-003	PMA's	4.3.7-4.3.7.1	What is written is clear & makes sense but there seems to be a disjunction between this & statements made by at least one SVGWMD board member at the 11/03/21 meeting. The board member repeatedly stated "curtail and cut pumping is the only way" to reduce the lowering of ground water levels. Given that sentiment, perhaps this should be addressed as a primary management action. Also, if drought conditions persist, it may not be reasonable to wait 5 years to reassess this as a primary management action.
Feather River Trout Unlimited	FRTU-001	GDEs, ISW		Historically, Sierra Valley provided high quality habitat for native fishes, with abundant wetlands providing excellent rearing habitat. Much of Sierra Valley's surface water is currently diverted for agricultural use during low flow periods, this has led to a reduction in the amount and quality of habitat. The plan is silent on the potential impacts of proposed groundwater levels on fish or fish habitat. Analysis of the proposed groundwater Sustainable Management Criteria (SMC) essentially says that impacts to beneficial users (including fish habitat) will be no worse than those which may have occurred when these levels previously occurred. This analysis is lacking in at least two important ways. First, no data is presented that documents these conditions. How for instance, did these groundwater levels influence surface water conditions in and downstream of the Valley? Second, there is no consideration of how groundwater levels at or near the SMC over long time periods might affect beneficial users.
Feather River Trout Unlimited	FRTU-002	Climate Change		There is very little, if any consideration of likely future changes to Sierra Valley hydrology. FRTU's basin assessment, referenced above, incorporated projections of future hydrologic conditions as one factor in identifying priority subwatersheds. Using two climate change prediction models (ccsm4_rep85 and GFDL_A2), projections showed reductions in April 1 snowpack for both the Badenaugh (18 to 42 percent) Bonta (14 to 25 percent) subwatersheds. Both models projected slight increases in runoff (~5%) for both subwatersheds, though timing of flows would be earlier than at present. August 1 air temperatures were projected to increase by about 2 degrees F by 2040 for both areas. We are not proposing that these figures be used in the plan. They are provided only to illustrate that changes to the amount and timing of runoff to the Valley are likely to change in the future. Changes to evaporation and transpiration are nearly certain to occur. Such changes are likely to impact fish habitat in negative ways, especially if groundwater contributions to surface flows are reduced. In particular, we are concerned how cumulative changes to flow and water temperature will impact habitat in the Middle Fork Feather River. Not including consideration of such changes appears short-sighted.
Feather River Trout Unlimited	FRTU-003	ISW		Due to lack of data, numerous uncertainties in the plan (including delineation of Interconnected Surface Water, ISW) are addressed by calling for increased or targeted monitoring to fill data gaps. In the face of uncertainty, we feel this is a reasonable approach. We are concerned that commitment to following through on these needs is not evident in the plan. The monitoring tasks outlined in Table 3.4.4, do not include monitoring of GDE or additional hydrologic data needed to validate the initial delineation of ISW and GDE. If monitoring proposed to validate plan assumption will not be conducted, then those elements of the plan should be revised.
Feather River Trout Unlimited	FRTU-004	Draft Plan Content		Several key components of the plan, such as the hydrologic model for the basin, were not complete when the plan was released. Additionally, numerous tables are not included, and several Appendices were incomplete or not available. The lack of a complete, coherent document made the draft plan very difficult to review.
Tom Dotta	Dotta-001	Outreach		I agree that more people should have input. I gave up on meetings after years of going and finding that the minds were already made up prior to the meeting and my input was a joke. There are very good devices to measure the ground sinking, if something is not done to stop this not only will the valley go dry, someone will be hurt in a sinkhole. This needs action, not lip service.

Tom Dotta	Dotta-002	PMA's	Ch 4	Sierra Valley has a serious problem. Let's make it simple, more water is taken out than put in. To solve the problem 1. more dams are needed and irrigate with stored rain water 2. The ground is recharged by ponds or forced wells 3. Quit taking the water out for irrigation.
Plumas Audobon Society	PAS-001	Draft Plan Content		It is hard to understand why we are being asked to review a draft of an extremely complex and detailed GSP at this point. As you must be well aware, the draft is challenging to adequately comment on because there are so many data gaps and critical pieces of information that are missing. It is also our understanding that the District Board has neither decided nor released for public comment what will be put forward as the actual GSP that will be submitted to the state. We feel that the public will be better served when there is an opportunity to review the complete GSP, without data gaps, that will be approved by the District Board.
Plumas Audobon Society	PAS-002	GDEs, ISW		The areas of critical concern to our organization are how all of the Beneficial Users will be impacted by the GSP. Specific concerns include adequate identification of and plans to monitor all Interconnected Surface Waters (ISW) and related Groundwater Dependent Ecosystems (GDE) as well as an accurate accounting of all Sensitive Species in Sierra Valley. As you are aware, one of our board members, Jill Slocum, was asked to serve on the Technical Advisory Committee and she has kept our chapter informed of the process. She has repeatedly expressed concern about the methodology used to determine Sensitive Species, particularly bird species, in Sierra Valley as well as their dependence on ISW and accurately identifying GDE's. To date the information in the GSP remains inaccurate and incomplete. The National Audubon Society has designated Sierra Valley as an Important Bird Area; it includes critical habitats for migrating and breeding bird populations. There are excellent sources available for an accurate assessment of Special Status Species in Sierra Valley. It seems that all of the resources listed in the document were not fully reviewed and included in the findings. This is unacceptable.
Plumas Audobon Society	PAS-003	GDEs, ISW		More rigorous work needs to be done on this. The proposed management actions are a good start, but it is necessary to specify which Integrated Surface Waters as well as Groundwater Dependent Ecosystems will be monitored, when and how this will begin, what the ongoing commitment will be, and how data for each selected site will be reported. This is critical and the monitoring should start at the beginning of the implementation phase, i.e. February, 2021.
Mike and Jennifer Blide	JMB-001	Outreach, Equal representation		From what I understand, this process has been flawed in that there has been little representation from domestic well users in the Valley. As far as I know, there have been few public meetings; one exception was a ZOOM offering a few weeks ago that I joined and was dismayed that there were only six persons in attendance.
Mike and Jennifer Blide	JMB-002	Shallow GW Wells		Clearly, if the numbers regarding annual overdrafts of our groundwater are correct, it is only a matter of time before some domestic wells start to fail. If the only solution is to dig a deeper well at a huge cost, it occurs to me that this does nothing to solve the problem. Also, if the trigger for any kind of mitigation measures happens only after 8-10 wells fail, then we would be seriously behind in attempting to resolve the problem. It is my opinion that a crisis management plan be implemented NOW, so that we can begin to address the annual overdrafts of water.
Mike and Jennifer Blide	JMB-003	PMA's		I am also aware that SPUD is trying to get a well drilled to serve as a secondary water source for the Town, as the current source is a surface water spring and some level of redundancy is needed for the future, especially in light of the current escalating drought cycles. This well would fill and maintain two large tanks that serve as the domestic water supply for over one hundred commercial and residential customers representing many times that number of individuals. They had better dig deep, it seems.
Mike and Jennifer Blide	JMB-004	GDEs, ISW		I am also concerned that the focus on deep water wells for irrigation of crops does not give proper import to the protection of habitat for the myriad of wildlife that call Sierra Valley home. As a major stopover for the Pacific Flyway migratory path for so many different species of birds, I am concerned that not enough attention is being paid to the maintenance of surface water habitats.
Mike and Jennifer Blide	JMB-005	GSA Rate Structure		Finally, the costs of operating the Groundwater Management District, as well as the future costs of mitigating the overdraft problems, should be borne using some sort of pro-rata system whereby those property owners who are utilizing the most water should be paying the most money.

Kim McKinney	KM-001	PMA		My first concern is that there is little in the Plan to address constraints on groundwater overdrafting. The very title of the proposed Plan contains the word sustainability and yet the Plan provides minimal, if any triggers to prevent or reduce chronic overdrafting.
Kim McKinney	KM-002	Outreach		My second concern is ancillary to my first in that chronic overdrafting could result in domestic wells running dry. Because of this concern I feel that all members of the Sierra Valley Groundwater Management District need to be briefed regularly on the status of water usage in the basin in an easily digestible format. Many members work and are unable to attend meetings, but I would think a quarterly newsletter could disseminate information. This would give members, who pay a District Management fee in their property taxes an informed voice at the table.
NGO Consortium	NGO-001	DACs		The GSP states that there are three Disadvantaged Communities (SDACs) in the basin, but these areas are not mapped nor is the population of each provided. Provide a map of the DACs in the basin. The DWR DAC mapping tool can be used for this purpose.
NGO Consortium	NGO-002	DACs		While the plan describes the historical and cultural affiliations of several tribes in the subbasin, the plan fails to map the locations of tribal lands or tribal interests in the subbasin.
NGO Consortium	NGO-003	Shallow GW Wells		The GSP provides a map of domestic well density in Figure 2.1.1-7, but fails to provide depth of these wells (such as minimum well depth, average well depth, or depth range) within the basin. Include a map showing domestic well locations and average well depth across the basin.
NGO Consortium	NGO-004	DACs		The GSP fails to identify the population dependent on groundwater as their source of drinking water in the basin. Specifics are not provided on how much each DAC community relies on a particular water supply (e.g., what percentage is supplied by groundwater). Identify the sources of drinking water for DAC members, including an estimate of how many people rely on groundwater (e.g., domestic wells, state small water systems, and public water systems).
NGO Consortium	NGO-005	ISW		Figure 2.2.2-12 presents the map of interconnected surface water in the subbasin. The map labels areas with groundwater elevation data gaps, but it is unclear whether these reaches in these areas are retained as potential ISWs in the GSP. Use seasonal data over multiple water year types to capture the variability in environmental conditions inherent in California's climate, when mapping ISWs. We recommend the 10-year pre-SGMA baseline period of 2005 to 2015. Overlay the subbasin's stream reaches on depth-to-groundwater contour maps to illustrate groundwater depths and the groundwater gradient near the stream reaches. Show the location of groundwater wells used in the analysis. Consider any stream segments with data gaps as potential ISWs and clearly mark them as such on maps provided in the GSP.
NGO Consortium	NGO-006	GDE		Clarify the legend labels used on the GDE map (Figure 2.2.2-13). Clarify the data source for GDE polygons. For example, label polygons retained, removed, or added to/from the NC dataset (include the removal reason if polygons are not considered potential GDEs, or include the data source if polygons are added).
NGO Consortium	NGO-007	GDE		Provide further description of the groundwater data used in the GDE analysis, including the location of monitoring wells and their screening depth. Ensure the wells are monitoring the shallow principal aquifer.
NGO Consortium	NGO-008	GDE		If insufficient data are available to describe groundwater conditions within or near GDE polygons, include those polygons as "Potential GDEs" in the GSP until data gaps are reconciled in the monitoring network. Label the potential GDEs on the GDE map.
NGO Consortium	NGO-009	GDE		Use depth-to-groundwater data from multiple seasons and water year types (e.g., wet, dry, average, drought) to determine the range of depth to groundwater around GDE polygons. We recommend that a baseline period (10 years from 2005 to 2015) be established to characterize groundwater conditions over multiple water year types.

NGO Consortium	NGO-010	GDE		Provide the depth-to-groundwater contour maps discussed in the GSP text. Show the location of groundwater wells used to create the map, and further discuss the screening depths of the groundwater wells to ensure they are monitoring the shallow principal aquifer. Refer to Attachment D of this letter for best practices for using local groundwater data to verify whether GDE polygons are supported by groundwater in an aquifer.
NGO Consortium	NGO-011	Native Vegetation/Managed Wetlands	WB Sections	Quantify and present all water use sector demands in the historical, current, and projected water budgets with individual line items for each water use sector, including native vegetation.
NGO Consortium	NGO-012	Native Vegetation/Managed Wetlands	WB Sections	State whether or not there are managed wetlands in the subbasin. If there are, ensure that their groundwater demands are included as separate line items in the historical, current, and projected water budgets.
NGO Consortium	NGO-013	Outreach		Lack of outreach to some groups. In the Stakeholder Communications & Engagement Plan, describe active and targeted outreach to engage DACs, drinking water users, tribes, and environmental stakeholders throughout the GSP development and implementation phases. Refer to Attachment B for specific recommendations on how to actively engage stakeholders during all phases of the GSP process. Utilize DWR's tribal engagement guidance to comprehensively address all tribes and tribal interests in the subbasin within the GSP.
NGO Consortium	NGO-014	Shallow GW Wells		In the well impact assessment, include well data from older wells (>31 years old) to better represent minimum threshold impacts to wells across the subbasin.
NGO Consortium	NGO-015	DACs		Describe direct and indirect impacts on DACs, drinking water users, and tribes when describing undesirable results and defining minimum thresholds for chronic lowering of groundwater levels.
NGO Consortium	NGO-016	Degraded Water Quality		Describe direct and indirect impacts on DACs, drinking water users, and tribes when defining undesirable results for degraded water quality.14 For specific guidance on how to consider these users, refer to "Guide to Protecting Water Quality Under the Sustainable Groundwater Management Act.
NGO Consortium	NGO-017	Degraded Water Quality		Evaluate the cumulative or indirect impacts of proposed minimum thresholds (expressed in the GSP as maximum thresholds) for degraded water quality on DACs, drinking water users, and tribes.
NGO Consortium	NGO-018	Degraded Water Quality		Set maximum thresholds and measurable objectives for all water quality constituents within the subbasin that are impacted or exacerbated by groundwater use and/or management.
NGO Consortium	NGO-019	Degraded Water Quality		Set maximum thresholds that do not allow water quality to degrade to levels at or above the MCL trigger level.
NGO Consortium	NGO-020	GDEs, ISW	Ch 2, 3	Provide discussion that adaptive changes in SMC for GDEs will be made, if GDE groundwater or biological monitoring reveals that existing SMC are not protective of these ecosystems.
NGO Consortium	NGO-021	GDEs, ISW	Ch 2, 3	When defining undesirable results for depletion of interconnected surface water, include a description of potential impacts on instream habitats within ISWs when minimum thresholds in the subbasin are reached. The GSP 16 should confirm that minimum thresholds for ISWs avoid adverse impacts on environmental beneficial users of interconnected surface waters as these environmental users could be left unprotected by the GSP. These recommendations apply especially to environmental beneficial users that are already protected under pre-existing state or federal law.
NGO Consortium	NGO-022	Climate Change		Present calculations and descriptions (i.e., in tables, figures, and text) for the projected water budget. Ensure that the GSP incorporates climate change into all inputs of the projected water budget.
NGO Consortium	NGO-023	Climate Change		Integrate climate change, including extreme climate scenarios, into all elements of the projected water budget to form the basis for development of sustainable management criteria and projects and management actions.

NGO Consortium	NGO-024	Climate Change		Calculate sustainable yield based on the projected water budget with climate change incorporated.
NGO Consortium	NGO-025	Climate Change		Incorporate climate change scenarios into projects and management actions.
NGO Consortium	NGO-026	Data Gaps	Section 3.4	Provide maps that overlay current and proposed monitoring well locations with the locations of DACs, domestic wells, and GDEs to clearly identify monitored areas.
NGO Consortium	NGO-027	Data Gaps		Increase the number of RMPs in the shallow aquifer across the subbasin as needed to map ISWs and adequately monitor all groundwater condition indicators across the subbasin and at appropriate depths for all beneficial users. Prioritize proximity to DACs, domestic wells, GDEs, and ISWs when identifying new RMPs.
NGO Consortium	NGO-028	Data Gaps		Ensure groundwater elevation and water quality RMPs are monitoring groundwater conditions spatially and at the correct depth for all beneficial users - especially DACs, domestic wells, and GDEs.
NGO Consortium	NGO-029	Data Gaps		Describe biological monitoring that can be used to assess the potential for significant and unreasonable impacts to GDEs or ISWs due to groundwater conditions in the subbasin.
NGO Consortium	NGO-030	DACs	Section 4.3.10	For DACs and domestic well owners, include a drinking water well impact mitigation program to proactively monitor and protect drinking water wells through GSP implementation. Refer to Attachment B for specific recommendations on how to implement a drinking water well mitigation program.
NGO Consortium	NGO-031	DACs	Section 4.3.10	For DACs and domestic well owners, include a discussion of whether potential impacts to water quality from projects and management actions could occur and how the GSAs plan to mitigate such impacts.
NGO Consortium	NGO-032	PMAAs	Section 4.3.10	Recharge ponds, reservoirs, and facilities for managed aquifer recharge can be designed as multiple-benefit projects to include elements that act functionally as wetlands and provide a benefit for wildlife and aquatic species. For guidance on how to integrate multi-benefit recharge projects into your GSP, refer to the "Multi-Benefit Recharge Project Methodology Guidance Document."
NGO Consortium	NGO-033	PMAAs	Section 4.3.10	Develop management actions that incorporate climate and water delivery uncertainties to address future water demand and prevent future undesirable results.
Lucy Blake (Lemon Canyon Ranch)	Blake-001	PMAAs		While surface water helps to recharge groundwater naturally as it seeps into the ground, any attempt to artificially transfer surface water underground to augment groundwater is likely to run into strong opposition from downstream users, existing surface water users, wildlife agencies and many others.
Lucy Blake (Lemon Canyon Ranch)	Blake-002	PMAAs		For instance, could there be a market-based program for limiting the number of agricultural wells in Sierra Valley and gradually reducing the number of wells over a 20-30-year period) Similar strategies have been used to reduce air pollutants and carbon. For roe, the specific strategy selected is less important than the discussion and adoption of a meaningful, legally enforceable and equitable way to reduce pumping in Sierra Valley.
Lucy Blake (Lemon Canyon Ranch)	Blake-003	PMAAs		In short, while I am hopeful that Sierra Valley groundwater purnpers can achieve some efficiencies through improvements in irrigation technology, plant propagation or crop selection, I do not think it is either realistic or responsible to count on "new" water supplies to solve our severe groundwater overdraft problem.
Lucy Blake (Lemon Canyon Ranch)	Blake-005	Climate Change		I was also disappointed not to see any real discussion about the likely impacts of climate change on water supply in Sierra Valley. The northern Sierra is projected to get both warmer and drier over the coming decades. This will reduce the amount of water stored in snowpack and accelerate the Spring run-off, reducing the total flow of water into the basin, as well as its availability for irrigation in summer. These climate change impacts, which we are already experiencing, are not something we can wish away. They are real and they must be incorporated into any assumptions used in the GSP about future water supplies in Sierra Valley. For instance, clearly the level of pumping I(len Schmidt considered "safe yield" in 2003 must be adjusted downward to reflect the amount, timing, and kind of precipitation Sierra Valley will be getting 10-20 years from now.

Lucy Blake (Lemon Canyon Ranch)	Blake-006	Outreach		I am also concerned about the level of stakeholder involvement in the process. Most people in Sierra Valley depend on groundwater for their drinking water and yet most of the stakeholder opinions referenced in the draft report are heavily skewed toward individuals with large agricultural wells. Where are the other voices? Declining groundwater levels are everyone's concern. If groundwater levels drop significantly, domestic wells could run dry. That is not just a theoretical problem but one that has occurred all over California in places where agricultural pumping had been allowed to proceed unchecked. It would be unethical for us to let that happen in Sierra Valley, where we are blessed with an abundance of water.
Lucy Blake (Lemon Canyon Ranch)	Blake-007	GSA Rate Structure		The last concern I want to raise today is the question of who should pay to fix the problem. In the Funding Options Technical Memorandum, there is a suggestion that the cost of addressing the groundwater overdraft problem be split between people with high-capacity wells and property owners throughout the valley, whether they pump groundwater, or not. Where is the equity in that? Why should people who had no role in causing the problem be asked to fund its resolution? The cost of addressing the groundwater overdraft problem should largely be borne by those who created the problem, with whatever financial assistance is available from the State of California. Unfortunately, according to the memorandum (see p.9), property owners all over Sierra Valley are already paying more to cover the operating costs of the Sierra Valley Groundwater Management District than high capacity well owners.
John Preschutti (Plumas Forest Project)	PFP-001	Outreach		As a 48-year resident of Mohawk Valley, who has been active in promoting the environmental and social health of all of eastern Plumas County, I feel that I should be considered a "stakeholder" (as anyone with these interests living in this area would be — primarily due to declining groundwater storage capabilities of the Sierra Valley Groundwater Basin and its subsequent effect on the surface water of the Upper Middle Fork of the Feather River Watershed — including Mohawk Valley.) As such, I was surprised that I was not made aware of this planning process and potential opportunity for public involvement from any official source. The lack of a physical local newspaper for almost two years due to Covid has probably contributed to this deficiency. I used to subscribe to the Feather River Reporter and would look through every issue with an eye toward articles or notices about these kinds of things. For some reason, like many others, I imagine, I didn't make the switch to reading the newspaper online in the same manner. The "outreach" part of the documentation doesn't address this huge hole in public outreach capabilities. Therefore, I ask that you extend the comment period due to the insufficient time I have had to review the plan, bring myself up to speed on the issues, and adequately comment. It should also be extended to such a time that a sufficient outreach program has been instituted. Additionally, the area of potential stakeholder status should be expanded to include areas of Eastern Plumas County outside the immediate groundwater basin (particularly downstream), such as Mohawk Valley.
John Preschutti (Plumas Forest Project)	PFP-002	Subsidence		In conclusion, what I do know about existent Sierra Valley subsidence, and the associated permanent loss of the aquifer's storage capacity, the plan should have adequate provisions for timely measuring and preventing of any groundwater overdraw.
Steven Roberts	Roberts-001	PMAs		I believe that the habitats the ranchers use for agriculture is important; the history of our valley is all about ranching. However, at the expense of Sierra Valley property owners, the "well is running dry" and I believe that the State, the Sierra Valley Groundwater Management District Board and the public must address and implement a sustainable groundwater plan before there is no water to split between the domestic users and the high capacity well owners. Unlike the 'olden days' when our water was free, I foresee a cost to water usage for all parties. The Sierraville Utility Water District recently (September 2021) implemented a substantial rate/fee increase and reduced the maximum gallon usage per household and I am monitored for usage; over-usage fees are significant. The high capacity, high volume water users should also be adequately monitored, and overdraft usage charged particularly in drought years.

Carl Butz	Butz_001	GDE		<p>Adaptative management of the watershed, the very laudable goal of the SGMA, therefore, requires the Groundwater Sustainability Plan to include measures insuring all the data hydrologists need to evaluate the situation is to be gathered.</p> <p>As it stands, I am particularly concerned about the fragile Groundwater Dependent Ecosystem (GDE) of the Sierra Valley. With droughts likely to increase in frequency and duration due to climate change, I want to know if the freshwater marsh and meadow system is going to be sacrificed because of the deep wells used to produce alfalfa. Currently there simply isn't enough data to make an intelligent guess.</p>
Michael Hogan	Hogan-001	Draft Plan Content		<p>□The Plan did not contain critical information on which to base assumptions or interpretations of the potential problems or solutions since the functional water balance model was not complete at the time of the posting of the Plan. Without that information, it is impossible to analyze the validity of statements and claims in the Plan, let alone the proposed Actions.</p>
Michael Hogan	Hogan-002	Draft Plan Content		<p>□A critical chapter of the plan, Chapter 3, was re-posted 2 weeks before comments were due. I am not a legal expert but I believe that from the standpoint of both the State and County requirements, at least 30 days are required as an adequate posting period.</p>
Michael Hogan	Hogan-003	Outreach, Equal representation		<p>According to the SGMA legislation, Plans should be based on broad stakeholder input in order to reflect actual stakeholder interests and values. During preparation of the Sierra Valley Groundwater Sustainability Plan, there was NO stakeholder group convened. The main stakeholder groups by actual numbers of members in the Sierra Valley are as follows:</p> <ol style="list-style-type: none"> 1) Domestic well users, 2) Cattle ranchers (their use of surface waters make them a significant stakeholder group) and 3) Agricultural pumpers. <p>By volume of water used, as well as by greatest impact to overdrafting, agricultural pumpers are the most significant group. However, NONE of these stakeholder groups were present in developing this plan. A Technical Advisory Committee (TAC) was formed that had some members who were members of one or more of the stakeholder groups. However, this was not a stakeholder group nor were stakeholder interests discussed in depth. For instance, in terms of domestic well users, who depend on groundwater for their very existence in the Sierra Valley, the only question put before the TAC was how many domestic wells drying up would be 'too many'. That question itself is improper and was not asked of domestic well users but of the TAC in general, which, as I said, is not a stakeholder group, and was only partially made up of residents of the Sierra Valley. The TAC was not used as a stakeholder group.</p> <p>Lack of communication between TAC and GSA Board</p>
Donna Lindquist	Lindquist-001	Draft Plan Content		<p>I found the report to be cumbersome, longer than needed, full of confusing acronyms and difficult to follow. There are many important gaps in the analysis that I will mention below. The technical information and long-winded discussions should be moved to appendices to avoid overwhelming the non-technical reader. An executive summary that is less than 3 pages is needed to CLEARLY summarize background, objectives, studies to date, and the recommended long-term solutions. The existing summaries are too long and complicated for the lay-reader to understand or to keep their attention.</p>
Donna Lindquist	Lindquist-002	Equal representation		<p>The TAC is composed of major stakeholders but has no official representation from domestic well users who represent the largest part of the community in Sierra Valley. There are domestic well users on the TAC but they have competing interests that conflict with small or non-ag producers. Broadening the TAC to include more small domestic well users is needed as well as more continuous outreach to educate water users on overdraft issues and consequences.</p>
Donna Lindquist	Lindquist-003	Data Gaps		<p>The SVGPS, along with other technical data, indicate significant aquifer overdraft in certain parts of the valley but this report concludes any chronic long term impacts are manageable. I find that hard to believe since both technical and physical evidence does not support this conclusion which indicates that additional analysis is needed to better understand the sustainability of current extraction practices.</p>

Donna Lindquist	Lindquist-004	Subsidence		Many technical reports (including the recent Cal Trans report on damages to Highway 70) document serious levels of subsidence especially in the NE end of the valley. The SVGSP largely ignores these data and concludes that the situation is manageable over the long term, even with the current rate of subsidence. The Plan has missed the mark on this point and a more in depth study and analysis needs to be done. Groundwater pumping needs to be reduced to protect natural resources in the valley and the livelihood of residents.
Donna Lindquist	Lindquist-005	GDEs, ISW		Groundwater and surface waters are hydrologically connected yet the Plan includes little data on surface waters and how they interact with aquifers. This is a large data gap that needs to be addressed. There is already evidence of surface water and springs declining or even disappearing in the northern part of the valley. Surface waters also support ecological values that are unique and critical to Sierra valley, including wetland plants, fish, wildlife and an amazing and diverse bird population. The beneficial uses of these resources needs to be protected and factored in to any decisions on groundwater extraction.
Donna Lindquist	Lindquist-006	PMAs		There is minimal mention of the impact of subsidence, aquifer depletion and surface water reduction on stock water and ranching operations. Ranching is important to the Sierra Valley economy and lifestyle. This needs to be addressed since it will significantly impact this industry over time. As surface water dries up, those beneficial users will be adversely affected.
Donna Lindquist	Lindquist-007	Outreach		Not enough effort has been put into engaging the public on the overextraction and subsidence issues that could seriously affect their financial standing and quality of life. I talked with several Sierra Valley residents who still are not aware of the issues and how they might be impacted. It seems a few large ag producers are spearheading this Plan, while other users are unaware of the potential consequences. More educational work is needed.
Kristi Jamason	Jamason-001	Grammar/typos	Section 1.3.1 (lines 219-220)	Add "agricultural" before "wells" (SVGMD only meters big ag wells.
Kristi Jamason	Jamason-002	Draft Plan Content	Section 1.3.3 (line 228)	this should say "associated with large-capacity wells metered by the District..." The municipal wells may well be large-capacity, active and metered, but they are not charged this fee.
Kristi Jamason	Jamason-003	Draft Plan Content	Section 3.3.1.1 (lines 120-121)	Where did this sentence come from? Please remove. Totally subjective to say "minor and manageable"
Kristi Jamason	Jamason-004	SMC	Section 3.3.1.1 (line 124)	25% is too high. There is too much variability between the RPMs - locations, depths. Serious issues could arise in discreet areas without reaching a 25% threshold.
Kristi Jamason	Jamason-005	Draft Plan Content	Ch 3 Figure 3.3.1-2	Clarify Figure title/heading. Suggest: Groundwater elevation minimum thresholds are not substantially below lowest recorded values (Fall 2015) and maintain...
Kristi Jamason	Jamason-006	GSA Rate Structure	Table 5.3.2	Funding column needs to tease out installation funding vs ongoing tasks - monitoring/reading and data analysis
Cindy Noble	Noble-001	Subsidence		I am not sure residents of Sierra Valley are aware of the large-scale subsidence in the northeast corner near the town of Vinton. This information was presented to the SGMA process by the CA Department of Transportation and should be of great concern to both Agricultural water users and domestic well owners in the area.

Cindy Noble	Noble-002	Outreach		I believe that the process that produced the current draft plan did not meet the standard of "Community Based" inclusion. I attended a single community meeting where there were maps and as I remember a group of consultants who worked on this process provided a great deal of very interesting information. Sadly, there was zero follow up and I never heard of any other Community engagement in the Sierra Valley Sustainable Groundwater planning process.
Cindy Noble	Noble-003	Groundwater Overdraft		As early as 2006 the Sierra Valley Groundwater District was told that Overdraft of the aquifer was a problem. This information was published in Ken Schmidt's study that was produced on behalf of the district. Sadly, it appears nothing has been done to address this problem.
Ceci Dale-Cresmat	Cresmat-001	PMA's		The document clearly shows that there is a ground water over-drafting problem in Sierra Valley. The plan shows that approximately 6,000 ac ft would be sustainable, yet over twice that amount is being drafted in an average year. This is not sustainable and a target of 6,000 ac ft should be placed in the plan as a limit, with no further drafting. An assessment should be made of all the landowners' water uses and those that are using more than is sustainable should be required to reduce water use. There is technology available to use less water in crop production and those include irrigation water management, (there is a host of practices included in this such as soil moisture monitoring in fields and only applying what a crop needs, updating and improving irrigation systems so the lowest use systems are used, etc.) Other measures could include using alfalfa crop varieties that use less water or switching to dryland crops or just using the land currently under production for high water use crops to rangelands where little to no water is used.
Ceci Dale-Cresmat	Cresmat-002	Shallow GW Wells		<input type="checkbox"/> Effects of high production ag wells on domestic wells and livestock wells (6-8" casing size) is not addressed in the document. When surface water dries up, livestock are dependent on livestock wells and springs for water sources. Over-drafting the ground water will have a direct effect on both livestock wells and domestic wells throughout Sierra Valley by dropping the water table. There was a reference in the document that if 6 of 10 domestic wells dry up, this would be a trigger to change ground water use by large agricultural wells (10-12" casing). What happens to landowners of those 6 wells? Does that include livestock wells? Who is going to monitor that? Bottom line is, if one dries up then that should be a trigger to change things or better yet, set a limit to ag well pumping to 6000 ac ft per year.
Ceci Dale-Cresmat	Cresmat-003	ISW, GDEs		<input type="checkbox"/> There was little if any sections of the document that address what the effects will be on streams, springs, artesian wells and wetlands from over-drafting ground water. As we all know Sierra Valley is a critical part of the Pacific Flyway and negative effects to the wetlands and other surface waters could be devastating to this resource. These resource should be addressed in the plan and assurances made that no negative effects to this resource occur in the future.
Ceci Dale-Cresmat	Cresmat-004	Outreach		<input type="checkbox"/> There has been a lack of public input in this process. The effects of this plan are broad and input from residents of Sierra Valley and surrounding areas should be sought. The effects of long term over-drafting will be felt in Sierra Valley and beyond. There are many recreational users that come to Sierra Valley and generate income to local businesses. This could be lost if desertification occurs in the area due to ground water over-drafting and the effects on streams, wetlands, domestic and livestock wells.
Kevin Starr	Starr-001	Outreach		•A plan of this scope and size should be a multi-year process with numerous opportunities for public engagement- not just something I hear about in passing with neighbors.
Kevin Starr	Starr-002	Subsidence		•Overdrafting by large scale agriculture operations in the Sierra Valley are contributing to subsidence, which should be heavily weighted in the management plan and continued abuse should come with commensurate punitive actions.
Kevin Starr	Starr-003	ISW, GDEs		•Has impact to surface water been thoroughly studied and the water dependent ecosystems that rely on it?
Kevin Starr	Starr-004	Shallow GW Wells		•The benchmark to trigger an amendment to the plan by having a certain number of domestic wells run dry would have severe, negative economic impacts to property owners.
Kevin Starr	Starr-005	GSA Rate Structure		•The proposed payment structure to fund and implement the plan to fall on every property owner is not fair and should reflect a structure based on use.

TAC	TAC-001	GSA/TAC Roles and Responsibilities	Section 2.1.5.3	While we were provided with information regarding various aspects of the plan, the TAC essentially reviewed plan elements as they were prepared. With very few exceptions, the TAC was not engaged in collaborative planning. Our feedback was primarily provided in writing. Comments of individual TAC members were not shared with other TAC members, issues and concerns raised in written comments were not discussed by the group. Disposition of the comments were not shared with either the commenters or the group. In short, we feel the TAC essentially served as a group of individual plan reviewers, not a Technical Advisory Committee.
TAC	TAC-002	Draft Plan Content		Perhaps due to deadlines, we find that the draft plan we have been asked to review is incomplete and difficult, if not impossible to review. Many sections are incomplete. Some sections are completely absent. Additionally, the Groundwater Basin Model, which is required by SGMA, was not completed by the time of the Public Review Draft was released, and did not inform many critical pieces of the plan.
TAC	TAC-003	GSA/TAC Roles and Responsibilities		The role of the TAC needs to be clarified. The GSAS are responsible for development and implementation of the GSP. In effect, the TAC serves at their request. We think a logical first step would be for the GSAs to articulate what they desire and expect from a TAC. This would hold for both revisions to the draft Plan and potentially, assistance in monitoring, implementing and revising the final plan. It could be that the GSAs do not wish to use a TAC, and would instead rely on their own experience and expertise.
CDFW	CDFW-001	ISW	Section 2.2.2.6	Comment #1 – Interconnected Surface Water Systems (2.2.2.6 Identification of interconnected surface water systems; starting page 2-87): The GSP does not include an estimate of the quantity and timing of depletions of interconnected surface water systems as required by 23 CCR § 354.16(f). a. Issue: The GSP identifies interconnected and disconnected surface waters within the subbasin and assesses vertical hydraulic gradients to identify where reaches are likely gaining, losing, or mixed. However, the GSP does not include information related to the quantity and timing of depletions from these interconnected surface waters as required by 23 CCR § 354.16(f).

CDFW	CDFW-002	GDE	Section 2.2.2.7	<p>Comment #2 – Groundwater Dependent Ecosystems (2.2.2.7 Identification of groundwater-dependent ecosystems; starting page 2-93): Groundwater dependent ecosystem (GDE) identification, required by 23 CCR § 354.16(g), is based on methods that risk exclusion of ecosystems that may depend on groundwater.</p> <p>a. Issues:</p> <p>i. Depth to Groundwater Threshold: The GSP relies on a groundwater level threshold of 30-feet below the ground surface (bgs) to screen potential GDEs within the subbasin. However, there is a lack of shallow groundwater monitoring data, and few wells are located near potential GDE areas (line 2297). The GSP states that the standard deviation of 2017-2020 average groundwater elevation within one half-mile of GDEs ranges from 42 to 80 ft; 9,500 acres of potential GDEs were removed based on the 30-ft bgs threshold. These removed potential GDE areas would be reclassified as GDEs if groundwater elevations increased by one standard deviation (line 2302). Given the high level of uncertainty of shallow groundwater levels throughout the subbasin and the lack of information regarding GDE rooting depths (line 2341), relying solely on a 30-ft threshold and coarse shallow groundwater extrapolations to remove potential GDE areas is not a conservative approach to GDE identification.</p> <p>ii. Special Status Species: The GSP includes a list of special-status plant and wildlife species within the subbasin “that may occur within or be associated with the vegetation and aquatic communities in or immediately adjacent to potential GDEs” (page 2-95, line 2261). The GSP does not identify which GDE areas within the subbasin were found to support the special status species listed.</p> <p>iii. Changes in Vegetation Health Assessment: The GSP uses Normalized Difference Vegetation Index (NDVI) to assess changes in vegetation health for GDE areas within the subbasin. While assessing NDVI can be a helpful tool for determining vegetation trends, the subbasin scale used for the analysis may be too broad to capture localized NDVI trends for smaller groups of GDE areas, making it difficult to inform discrete protective management actions for localized impacts.</p>
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CDFW	CDFW-003	SMC	Section 3.3.1	<p>Comment #3 – Sustainable Management Criteria (3.3.1 Groundwater Elevation, 3.3.3 Depletion of Interconnected Surface Waters; starting pages 3-6 and 3-17): Groundwater level and interconnected surface water sustainable management criteria (SMC) may not protect against undesirable results for fish and wildlife beneficial uses and users.</p> <p>a. Issues:</p> <p>i. Groundwater Level Minimum Thresholds (MTs): The GSP sets MTs for groundwater levels by linearly projecting groundwater decline through 2032, taking the lower of that value or the lowest post-2015 groundwater level, and then further reducing the MT by 10% of the range of historically observed groundwater levels. The Department appreciates that the GSP includes a specific analysis of the impact of the established MTs on environmental beneficial users of groundwater, and that the MTs at some representative monitoring points were adjusted as needed to be more protective of GDEs. However, additional discussion of the methods used to ensure avoidance of impacts to GDEs is needed.</p> <p>ii. Interconnected Surface Water MTs: MTs for ISW, using groundwater levels as a proxy, are set at the lowest groundwater level that occurred after January 2000. The GSP acknowledges that groundwater depletion is occurring within the subbasin but contends that the depletion is not significant or unreasonable. However, the GSP does not include evidence needed to support this claim. The GSP focuses on avoiding exceedance of the maximum rates of depletion that have previously occurred within the subbasin. Though a condition may have occurred within the subbasin previously, that does not necessarily mean that undesirable results were not occurring. For instance, in 2015, historically low groundwater levels led to adverse impacts to vegetated and aquatic GDEs and ISW including stressed or dying riparian vegetation, poor instream habitat availability, and increased water temperatures (DFW 2019). A GSP must first evaluate potential adverse impacts to beneficial uses and users of ISW, determine what depletions would lead to those unreasonable impacts, and then set mts accordingly. As the GSP does not quantify baseline ISW depletion conditions (See Comment #1) or present modeled depletion rates that would occur at the established MTs, there is insufficient information to assess potential impacts to environmental beneficial uses and users.</p> <p>iii. Undesirable Results and SMC Triggers: The GSP requires 25% of groundwater level and ISW representative monitoring wells in the subbasin to fall below their minimum thresholds for two consecutive years before identifying an undesirable result to GDEs or ISW. While environmental users are usually adapted to sustain short-term lowering of groundwater levels during dry periods, environmental users may not be able to sustain extended periods of reduced groundwater access that would result from allowing groundwater levels to fall to historic lows or deeper for two consecutive years. Under these MTs, by the time an undesirable result is declared and management actions are initiated in response to the undesirable result, environmental groundwater users will have already experienced significant stress and potentially irreversible mortality. The Department appreciates that the GSP identifies triggers for groundwater level MTs, and presumably will identify ISW triggers when Section 3.3.3.4.2 is completed, that would initiate GSA review when reached. However, the groundwater level triggers require groundwater levels to fall below their historic low for two consecutive years; as it is likely that environmental users were experiencing negative impacts at the historic groundwater low, this trigger definition will not initiate GSA review and potential management actions early enough to avoid adverse impacts to beneficial uses and users.</p>
CDFW	CDFW-004	Monitoring Networks	Section 3.4.1.1	<p>Comment #4 – Monitoring Networks (3.4.1.1 Groundwater Elevation Monitoring Network, 3.4.1.4 Depletions of Interconnected Surface Water Monitoring Network, 4.2.2 Monitoring and Reporting; starting pages 3-39, 3-49, and 4-13): The GSP should include a more detailed discussion of the adequacy of the monitoring network for assessing impacts to GDEs. The GSP should include additional information related to the schedule for implementation of the planned project to improve the monitoring network.</p>
CDFW	CDFW-005	PMA's	Page 4-19	<p>Comment #5 – Projects and Management Actions (PMA's) (Tier II: Potential Projects and Management Actions; starting page 4-19): The GSP should include timelines for implementation of potential PMA's related to demand management within the subbasin.</p>

Feather River Land Trust	FRLT-001	Draft Plan Content		Nonetheless, we find that several key elements of the plan are incomplete or not included in the Public Review Draft. We further understand this version of the plan has not been reviewed by the GSAs. This makes it very difficult to understand or review the plan and to provide substantive comments. We wonder if the draft we reviewed meets standards for public review.
Feather River Land Trust	FRLT-003	Subsidence		The draft plan identifies several sources of information indicating subsidence has occurred in the basin. The plan provides no discussion of a cause-and-effect relationship between pumping, groundwater levels and subsidence, but the depictions of groundwater levels (Figure 2.2.2-4) and estimates of subsidence from InSAR data (Figure 2.2.2-7) show remarkable alignment. In addition, CalTrans has documented damage to Highway 70 from subsidence. We understand the lack of long-term onsite ground elevation data makes a direct numerical Sustainable Management Criteria (SMC) for subsidence impractical. It appears however that the current plan (Table 3.4.4) does not commit to monitoring elevations in the future (monuments to achieve this purpose are classed as “other, based on future funding availability”). Given the evidence that subsidence has negatively impacted public infrastructure, there is potential for future impacts to agricultural practices and hydrology of wetland and aquatic habitats. We believe the plan needs to commit to more direct actions to monitor and manage for subsidence.
Feather River Land Trust	FRLT-004	SMC		It is not clear if this estimate is based on the work of Bachand, et al (2020) or on subsequent analysis that supports this work. We realize that in talking about overdraft, average values can be misleading given the variation in wet and dry years and location within the basin. Nonetheless, it appears that available information suggests over drafting has occurred in the eastern portion of the basin. Our concern is that this basic problem does not receive more focus in the plan. We believe the plan should more clearly direct analysis, discussion and attention to known problem areas.
Feather River Land Trust	FRLT-005	SMC		We believe that the SMC for groundwater elevation is problematic because it does not target areas where change is most likely to occur. The SMC for groundwater level defines an undesirable result if 25% or more of the Representative Monitoring Points (RMP) detect groundwater below their Minimum Thresholds for two consecutive years. While we agree the overall approach to this SMC is sound, we think it is flawed in practice because it does not focus on changes in the areas of the basin where reductions in groundwater levels are most likely. It appears there are perhaps twelve to fourteen wells in the areas where groundwater level reduction (and subsidence) are most likely to occur. The current standard of 25% of wells with declines may overlook substantial changes to groundwater because the 37 RMP are spread throughout the basin.
Feather River Land Trust	FRLT-006	ISW		Like subsidence, data to precisely delineate ISW is lacking. As a result, some potential ISW is classified as a “data gap”. The most conservative approach to addressing this gap would be to treat the “data gap” ISW as ISW until data were collected to determine they were not ISW. This would include reviewing groundwater levels in the areas near these “gap ISW” and adjusting SMC as needed to protect them. A less conservative approach would be to collect data in the short to mid-term to better determine the status of the potential ISW. Because the plan does not commit to this data collection, these potential surface water habitats are at risk.
Feather River Land Trust	FRLT-007	Climate Change		The basin hydrologic model was not available at the time the draft plan was presented; we understand it will consider changes to water supply from Climate Change. Unfortunately, the draft plan seems to assume that climatic and hydrologic conditions are static. Because higher air temperatures will increase evaporation and transpiration, it is likely that less water will be available for recharge, further complicating basin overdraft. A conservative approach would be to apply assumptions about these changes to the plan. At present, we see no evidence that potential fundamental changes to the hydrology of the basin are considered.
Feather River Land Trust	FRLT-008	PMAAs		The draft plan includes numerous proposed potential actions to address the supply side of the recharge-groundwater use equation. While the plan does speak to increasing irrigation efficiencies, the major factor on the use side of the equation, pumping, is not addressed. The plan explains this element is not included because it would result in reduced pumping and economic costs. This reasoning lacks context in that allocations would be instituted only if other supply side elements of the plan are ineffective in providing for groundwater sustainability. We note that not including this element may serve as a disincentive to groundwater users to devise ways to reduce or avoid economic loss through conservation, trading and other measures.

Feather River Land Trust	FRLT-009	Monitoring Networks		The plan has numerous locations where additional monitoring or studies are proposed as the means to reduce uncertainties. As mentioned earlier, this includes collecting better information on potential subsidence and Interconnected Surface Waters, but these are just two examples. Nearly every aspect of the plan calls for additional information. Our concern is that these statements are not included in a monitoring plan. Our reading of the plan (Table 3.4.4) is that the only firm commitment is for up to six additional wells, used to better assess water quality. We believe that the uncertainties in the plan, including reliance on proxies, necessitate a much more robust monitoring effort. The logical alternative is to scale back the groundwater SMC to provide for greater likelihood of sustaining groundwater values in the face of the acknowledged uncertainties.
Feather River Land Trust	FRLT-010	SMC		It is possible that the 2015 levels caused adverse effects to domestic wells, flows and water quality in the Middle Fork Feather River, springs and artesian wells and other values. There is no data presented to support the contention that values were or were not impacted. It is possible that instituting the SMC would bring about situations where groundwater is at or near the threshold elevations for longer periods of time than those which produced the 2015 elevation. The impact to beneficial uses and users from ground water at the target levels present over longer periods of time needs to be discussed.
Feather River Land Trust	FRLT-011	GDE		FRLT believes the plan's delineation of GDE is flawed because it does not include either springs or artesian wells. These features are perhaps the most likely habitats to be affected by changes in groundwater availability. Springs often provide habitat for rare species, especially invertebrates, and are also often an important source of stock water. As such, these habitats would appear to be excellent indicators of both ecological and hydrologic conditions. Our concern is heightened due to possible loss of these features over time. We are concerned that they are not included as GDE and their long-term density and distribution will not be monitored.