Mid-Kaweah Groundwater Sustainability Agency

Advisory Committee Special Meeting

October 15, 2019 – 3:00 pm

City of Visalia Wastewater Treatment Plant – 7579 Ave 288
Visalia, CA

1. Call to Order
2. Public Comments
3. Approval of Minutes – Regular Meeting on September 3 and Special Meeting on October 4, 2019
4. Draft GSP Comments
    a. Incorporation of Admin. Comments
    b. GSA Board Comments
    c. Comment Grouping Matrix
        i. Staff Implementation/Editorial
        ii. Manager Review
        iii. Advisory Committee/Technical
        iv. Drafting Assignments by GSP Section Authorship
5. Committee Member Reports, Updates or Other Items of Interest
6. Adjourn: Next Meetings: Special – October 29, 2019; Regular – November 5th

MID-KAWEAH GROUNDWATER SUSTAINABILITY AGENCY
ADVISORY COMMITTEE MEETING

MINUTES

October 4, 2019 – 3:00 p.m.
City of Visalia Wastewater Treatment Plant
7579 Ave 288 – Visalia, CA

MEMBERS PRESENT: Richard Garcia, Ed Henry, Blake Wilbur, Mike Lane, Eric Furtado, James Nichols

MEMBERS ABSENT: Soapy Mulholland, Jessi Snyder, Lee Johnson, Mark Boyes

BOARD MEMBERS PRESENT: None

GSA MEMBER STAFF PRESENT: Paul Hendrix (GSA Manager), Aaron Fukuda, Trisha Whitfield, Jeremy Barroll, Craig Moyle (Stantec)

PUBLIC ATTENDEES: Wayne Scott, Mike Wiley, Liesbet Olaerts, Tamara Kelly, Michael Tharpe

1. CALL TO REGULAR ORDER
   The meeting was opened by Chairman Wilbur at 3:05 p.m. Self-introductions of the Committee members, GSA member staff and general public were made.

2. PUBLIC COMMENT
   No comments from any members of the public were provided.

3. PUBLIC DRAFT GSP – REVIEW OF COMMENTS
   P. Hendrix first discussed the ensuing process to consider comments and seek a Committee recommendation for their incorporation into the draft GSP. He brought up the need for one or two more Committee meetings in October, legal input and future work by GEI. J. Barroll next summarized his categorization of the comments submitted by topic. C. Moyle further elaborated on the comment groupings, noting that the specific DWR Regulation applicable to each would be identified. He also pointed out that comments applicable to Kaweah Subbasin issues would also be identified.

   Two comment topics receiving considerable Committee and public attendee discussion were interconnected surface waters and water quality/access by small-system and domestic well owners. At the conclusion of Committee discussion, Mr. Moyle summarized the input, and it was agreed that all comments would be grouped into one of three headings – technical, editorial, and policy-related.

4. P. Hendrix summarized GSA Member processes in reviewing/critiquing the draft GSP as it was being3written, making note of Visalia's consultant serving on the Technical Sub-Committee and Tulare ID's use of a consultant in reviewing the draft GSP. A. Fukuda then commenced to summarize his agency's review and pending discussion with GSA staff and GEI as to recommended modifications. He indicated that any such modifications would be brought before the Committee in its deliberations over GSP content.

P. Hendrix stated that no substantive comments have been submitted thus far on the draft GSP. He added that Tulare County may be submitting some comments soon, and that their consultant's review of the Plan called attention to its description of county and city general plans and water rights issues.

5. CONSIDERATION/INCORPORATION OF COMMENTS AND PROCESS
   Matter adequately addressed under agenda item 3.

6. COMMITTEE MEMBER REPORTS, UPDATES
   M. Lane noted that he has been asked to provide a GSP overview presentation to the Consulting Engineers and Land Surveyors of CA (CELSOC) and to the Visalia Lions Club in the near future.

7. ADJOURN
   Chair Wilbur sought input on dates for the3next special meetings of the Committee, and it was concluded that such would be held at 3:00 pm on October 15th and 29th. There being no other matters to come before the Committee, Mr. Wilbur adjourned the meeting at 3:00 p.m.

_____
Advisory Committee Chair

Attest:

_____
GSA Board Secretary

Mid-Kaweah GSA

Board of Directors Meeting

10.8.19

Stantec

Agenda

1. Regulatory Setting
2. Approach to Comment Management

Public Comment Management

Regulatory Requirements

§ 355.4. Criteria for Plan Evaluation (b)

- Does the Plan satisfy the requirements of Subsection (a) to determine whether the Plan, either individually or in coordination with other Plans, complies with the Act and substantially complies with the requirements of this Subchapter.
- Substantial compliance means:
  - *Supporting information is sufficiently detailed and the analyses sufficiently thorough and reasonable*
  - *The Department determines that any discrepancy would not materially affect the ability of the Agency to achieve the sustainability goal for the basin, or the ability of the Department to evaluate the likelihood of the Plan to attain that goal.*

Public Comment Management

Regulatory Requirements

§ 355.4.(b)(10)

Whether the Agency has adequately responded to comments that raise credible technical or policy issues with the Plan.

Public Comment Management

Public Comment Organization

- 12 comment letters, totaling 181 pages, received between the July 31 and Sept. 16 public comment period:
  - Bill Huott, 8/10/19
  - Kevin Layne, 8/13/19
  - Edward Henry, 9/3/19
  - The Nature Conservancy, 9/9/19
  - California Department of Fish and Wildlife, 9/12/19
  - Westchester Group, 9/13/19
  - California Water Service, 9/16/19
  - Richard Garcia, 9/16/19
  - Kings County Water District, 9/16/19
  - Leadership Counsel for Justice and Accountability, 9/16/19
  - Self-Help Enterprises, 9/16/19
  - Various Non-Profit Organizations, 9/16/19

  (TNC, Community Water Center, Audubon Society, Local Government Commission, Union of Concerned Scientists, Clean Water Action)

Public Comment Management

Public Comment Summary

- Summary of Public Comments to included as an appendix to the GSP.
- Appendix will include:
  - Overview of public comment period and methods to comment
  - Overview of the comment categories and the process to respond to comments.
  - Comment matrix including each individual comment, the response to comment, and the location where – if applicable – the GSP was amended.
  - Copies of each comment submitted during the public comment period.

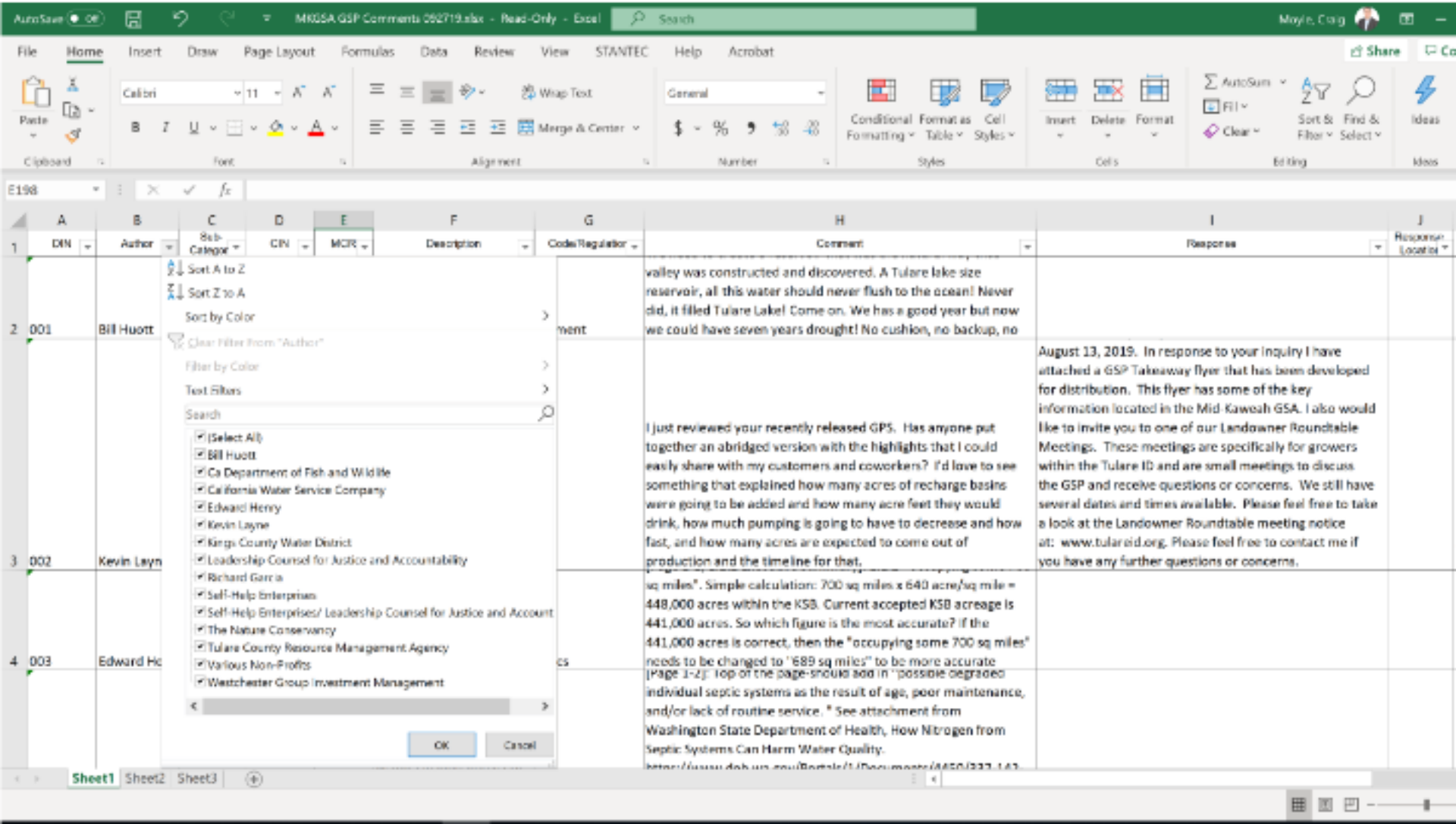
Public Comment Management

Public Comment Database

- Applied detailed comment/response process similar to studies developed consistent with the California Environmental Quality Act and the National Environmental Policy Act
  - Categorization of individual comment
  - Match comment to appropriate GSP section(s)
  - Record response to comment
- Initial categorization completed by Tulare Irrigation District
  - Currently 197 individual comments

Public Comment Management

Comment Database



Public Comment Management

Database Categorization

20 Categories, including

- Disadvantaged Communities
- General, Document Organization
- Groundwater Dependent Ecosystems
- Groundwater Levels and storage
- Hydrogeologic Modeling Water Quality
- Interconnected Surface Water
- Management Areas
- Municipal Land and Water Use
- Pumping Allocations
- Public Outreach
- Water Allocation
- Water Budget

Public Comment Management

Next Steps

- MKGSA Advisory Committee – Special Meetings
  - Review and Assess Comment Categories
  - Provide advice to Board of Directors on substantive technical and policy issues.
- Time and Date:
  - 3-5 p.m., Oct. 15, 2019
  - 3-5 p.m., Oct. 29, 2019
- Location:
  - Visalia Wastewater Treatment Plant, 7579 Avenue 288, Visalia.

DIN	Author	Sub-Category	CIN	MCR	Priority	Description	Code/Regulation	Comment	Response Location	Responder	Support	Delgated to
001	Bill Huott	GE	BH-001		1	Surface Water Supply Management		We need to create a reservoir that was the natural way thus valley was constructed and discovered. A Tulare lake size reservoir, all this water should never flush to the ocean! Never did, it filled Tulare Lake! Come on. We has a good year but now we could have seven years drought! No cushion, no backup, no reservoir!		CM		
002	Kevin Layne	GE	KL-001		1	Summary of GSP		I just reviewed your recently released GPS. ***Has anyone put together an abridged version with the highlights*** that I could easily share with my customers and coworkers? I'd love to see something that explained how many acres of recharge basins were going to be added and how many acre feet they would drink, how much pumping is going to have to decrease and how fast, and how many acres are expected to come out of production and the timeline for that.		AF		JAB
003	Edward Henry	SB	EH-001	MCR-5	1	Kaweah Subbasin Characteristics		Simple calculation: 700 sq miles x 640 acre/sq mile = ***448,000 acres within the KSB. Current accepted KSB acreage is 441,000 acres. So which figure is the most accurate?*** If the 441,000 acres is correct, then the "occupying some 700 sq miles" needs to be changed to "689 sq miles" to be more accurate (441,000 acres divided by 640 acre per sq mile = 689 sq miles).		CP		
003	Edward Henry	WQ	EH-002		1	Water Quality- Impact of septic systems		Top of the page-***should add in "possible degraded individual septic systems as the result of age, poor maintenance, and/or lack of routine service. "*** See attachment from Washington State Department of Health, How Nitrogen from Septic Systems Can Harm Water Quality. https://www.doh.wa.gov/Portals/1/Documents/4450/337-142-Nitrogen-Removal-from-OSS-FactSheet.pdf (See Attachment A). Would add in "minimum" threshold (MT) and "measurable" objective (MO).		SH	JT	
003	Edward Henry	SB	EH-003	MCR-5	1	Kaweah Subbasin Characteristics		Kaweah Subbasin (696 sq miles). By calculation: 696 sq miles x 640 acres/sq mile = 445,000 which is different than section 1.1.2 at "700 sq miles" which calculates/equates to 448,000 acres in the KSB. ***There needs to be agreement and accuracy on the total acreage within the KSB.***		CP	TN	
003	Edward Henry	WI	EH-004		1	Well Density		Figures 1-6 (Domestic)and 1-7 (Production). Both of these figures show these two types of wells within the jurisdictional boundaries of Tulare and Visalia. With specific regard to Figure 1-7 (Production), ***it is surprising that there are agriculture production wells within the jurisdictional boundaries of both of these cities. Is this data accurate?***		CP	TN	
003	Edward Henry	MU	EH-005		1	Municipal Water Use- Landscaping		***Simple calculation: 700 sq miles x 640 acre/sq mile = 448,000 acres within the KSB. Current accepted KSB acreage is 441,000 acres. So which figure is the most accurate? If the 441,000 acres is correct, then the "occupying some 700 sq miles" needs to be ch***		TN		

003	Edward Henry	OR	EH-006		1	Public Outreach/GSP Organization		At the bottom of the page, " ... Communication & Engagement (C&E) Plan, developed by Stantec for MKGSA and adopted on August 14, 2018 and included as Appendix 1C." ***The posted document in Appendix IC has a date of August 7, 2018, Draft: Version 4, rather than the August 14t date cited in the above quoted text. There should or must be a later version to reflect the noted date of August 14, 2018, as the database of the August 7, 2018 document is definitely not up-to-date. The last entry in that database of August 7, 2018, is the Waksache Tribe.*** Also it's probably too late for this version of the MKGSA GSP draft, but in the future ***it would be very helpful when a Figure, Table, Appendix, etc. is referenced that one could move the cursor to that item and click on it and it would take you directly to that item. Right now, one has to get out of a document and search in the Table of Contents in order to go to the referenced item(s)*** -- Also the last sentence of the last paragraph. "All outreach efforts and engagement activities were tracked in a Community Engagement and Activities Database (CE & AD) that was continuously monitored and updated, consistent with DWR Emergency Regulations §354.10 (b) and §354.10 (d)." ***As noted above, the Communications and Engagement Activities Database is not up-to-date.***		CM		
003	Edward Henry	GE	EH-007		1	MKGSA Characteristics		Municipal and Industrial Well Operators: "The City of Tulare and the City of Visalia account for about 20 and 30 percent of the land area within the MKGSA, respectively." More accurately, Tulare's land area within the MKGSA is 12.7% (13,631acres divided by 107,000 acres in MKGSA) and Visalia's land area is 21.7% (23,197 acres divided by 107,000 acres in MKGSA) for a total urban acreage of approximately 37,000 acres or 35% (~37,000 acres divided by 107,000 acres) of the MK GSA acreage.		CP		
003	Edward Henry	OR	EH-008		1	Internal referencing/GSP Organization		In the first sentence of the second paragraph starting with " ... Section 6 of this GSP ... " - after "Section 6" should insert reference to Table 6.2 so as to read " ... Section 6 in Table 6.2 of this GSP ... ". By adding in Table 6.2 makes for better clarity. Also see (Section 6 Water Supply Accounting) in the last sentence, " ... Yet, as acknowledged in Section 2 of this Plan, ... ", reference to Table 2-1 should be inserted after "Section 2" so as to read " ... Yet, as acknowledged in Section 2 in Table 2-1 of this Plan, ... ". By adding in Table 2-1 makes for better clarity.		CP		
003	Edward Henry	WB	EH-009	MCR-19	3	Water Budget Accounting		***Can further explanation be given as to how the "water [supply] accounting framework" (WSAF), Table 6-2 in Section 6, will define the "water budget", Table 2-1 in Section 2? How are they related?*** I thought each one was independent of the other-the WSAF being based on a legal construct concept/definition whereas the water budget is the physical movement of water? It is curious that by combing those two figures for the MKGSA there is essentially a 50,000 AF range (swing) from a +38,000 AF surplus in the WSAF (Table 6-2) to a-13,000 AF deficit in water budget (Table 2-1). So is/are WSAF data/inputs considered the independent variable (driver), and then the water budget would then be considered the dependent variable of the WSAF? With the approximate -13,000 AF deficit in the water budget is this the more realistic figure/calculation that should be used by the three management areas (Tulare, Visalia, & TID) when establishing Minimum Thresholds and Measurable Objectives?		CP	TN	
003	Edward Henry	OR	EH-010		1	Undesirable Results/GSP Organization		At the end of the first sentence should add after " ... interconnected surface waters ... " the 6th Undesirable Result which is "seawater intrusion". All 6 Undesirable Results (UR) should be listed in this opening sentence as seawater intrusion is the last listed UR in section 3.2.1.6 Seawater Intrusion at the bottom of the page.		CP		

003	Edward Henry	GL	EH-011		2	Minimum Thresholds- Drought Impacts		BMP document, November 2017, page 4, under the heading Sustainability Indicators, the first indicator, "Chronic lowering of groundwater levels ... " ***I would like to add a direct quote from there to the end of the sentence at the top of Page 3.4 from this section of the BMP*** which states, "Overdraft during a period of drought is not sufficient to establish a chronic lowering of groundwater levels if extractions and groundwater recharge are managed as necessary to ensure that reductions in groundwater levels or storage during a period of drought are offset by increases in groundwater levels or storage during other periods. " A lot of people on these GSA boards, committees, etc. are not aware of the above "wiggle room" statement allowed by the State--this is a very important point. To me, the State recognizes that agriculture may have to overdraft during a declared drought period in order to be economically sustainable but then it must make-up for that overdraft in normal and wet years. After all, the primary purpose of SGMA is to stop the chronic lowering of our groundwater, and we have until 2040 to bring our groundwater into sustainability. In Section 3.2.1.1 Groundwater Levels should now read, "Undesirable results associated with groundwater level declines are caused by over-pumping or nominal groundwater recharge operations during drought periods such that groundwater levels fall and remain below minimum thresholds. Over-pumping and lack of recharge is area specific, and some GSA Management Areas experience greater adverse impacts than others. [However], Overdraft during a period of drought is not sufficient to establish a chronic lowering of groundwater levels if extractions and groundwater recharge are managed as necessary to ensure that reductions in groundwater levels or storage during a period of drought are offset by increases in groundwater levels or storage during other periods.". (Note: The bold, italic insert above is from the Sustainable Management Criteria- BMP document, November 2017, page 4) Also note that ***Undesirable Results has the complete text for the definition of undesirable results for groundwater elevations (including the " ... Overdraft during a period of drought ... " caveat sentence for additional clarification):*** "Chronic lowering of groundwater levels indicating a significant and unreasonable depletion of supply if continued over the planning and implementation horizon. Overdraft during a period of drought is not sufficient to establish a chronic lowering of groundwater levels if extractions and groundwater recharge are managed as necessary to ensure that reductions in groundwater levels or storage during a period of drought are offset by increases in groundwater levels or storage during other periods. "		CP	TN	
003	Edward Henry	LS	EH-012		3	Land Subsidence- Correlation with Groundwater Levels		It states, " ... Over-pumping during drought periods, which may result in new lows in terms of groundwater elevations, is of particular concern based on current scientific understanding of subsidence trends in this region. Regional correlations of water levels v. subsidence trends remain difficult to ascertain ... " and yet on Page 4-6, Section 4.2.3 Representative Monitoring, in the second sentence of the second paragraph it states, " ... The USGS and DWR have utilized changes in groundwater elevations to estimate changes in storage and have demonstrated a correlation between groundwater elevation and subsidence ... ". This appears to infer a stronger correlation of groundwater elevations and subsidence than what was stated in Section 3.2.1.3 where is states, " ... Regional correlations of water levels v. subsidence trends remain difficult to ascertain ... ". ***So for the Kaweah Subbasin, in general, and the MKGSA, in particular, how strong is the correlation? Because of differential subsidence and regional affects on critical infrastructure, groundwater elevations may or may not have a good or strong correlation with_ land subsidence-it that correct? It's my understanding that within the KSB there are some regions of strong correlations for groundwater elevations and land subsidence, and for other regions the correlations are quite weak? Is the language in those two sections in conflict with each other?*** Also see where is states, " ... Additionally, there was not sufficient data to find a good correlation between pumping and land surface subsidence ... ". ***With this text there is some conflicting information to the casual reader on the relationship between groundwater elevations [due to pumping] and land subsidence.*** (NOTE: Perhaps I'm "beating a dead horse" here with semantics and parsing words in those three above referenced sections on the correlation between groundwater elevations and land subsidence. What will DWR accept here? As noted there are data gaps and perhaps by 2025 with better monitoring sites and technology there will be a better understanding of that relationship between groundwater elevations and subsidence whether for better or worse-meaning a more positive correlation or a less positive one, or good in one region and not good in another.)		MN		
003	Edward Henry	GL	EH-013		1	Minimum Thresholds- Groundwater Levels Measurement		In the third sentence of the first paragraph should be inserted "minimum threshold (MT)" before "... groundwater .." so as to read, "... If any of the representative monitoring wells fall below the minimum threshold (MT) groundwater elevation in its respective zone, undesirable results could occur ...".		CP	TN	
003	Edward Henry	GL	EH-014		1	Measurable Objectives- Groundwater Levels		In the first row under the heading of Well ID, KSB-0922, and under the Measurable Objective heading, ***the fmsl figure/number is listed as a minus 19 (-19) which is incorrect as it should be positive 19 fmsl.*** In Appendix SB Groundwater Level Sustainable Management Criteria Hydrographs the first hydrograph is for well KSB-0922 which definitely shows a Measurable Objective of+ 19 fmsl and not a negative figure. Of the 42 listed Well IDs in Table 5-3, well KSB-0922 is the only well I compared or cross-checked the numbers to the hydrographs shown in Appendix 5-B. (Due to the tediousness of going completely through each well in that table and comparing/cross-checking them to the hydrographs, and the time constraints of thoroughly going though this GSP, I did not examine the data for each of the other 41 wells listed. Hopefully well KSB-0922 is the only well in Table 5-3 in incorrect data.)		CP	TN	
003	Edward Henry	GS	EH-015		1	Interim Milestones- Graphing		[Section 5 Appendices]: Although the following comments may be out of contextual order but while in Section 5 Appendices (from above), I also looked at Appendix 5D: Water Storage Additions - An Alternative Approach. ***In Figure 1: Hypothetical Representation of Measurable and Optimal Objectives (on the last page), the four Interim Milestone numbers in parenthesis are shown as positive numbers. Shouldn't they be listed as negative numbers as all are below zero (0) with regards to storage depletion on the y-axis?*** They should be -21, -33, -40, & -42 TAF. Also the Storage Depletion label/units in parenthesis should be (TAF) rather than the (AF) as currently shown.		CP		

003	Edward Henry	OR	EH-016		1	Internal referencing/GSP Organization		In the paragraph beginning with the sentence, " ... The results of this well impact analysis ... ", there is reference to " ... Figure 5-2 is an example plot showing 144 domestic wells in Hydro geologic Zone 2 ... ". ***None of the plots and statistical well summaries categorized by zone (1-10) have listings by Figures which makes it difficult to locate what is listed as Figure 5-2. Can this be corrected to add a Figure x.x, accordingly, to each of the plot and statistical well summaries?*** Also not seeing the well impact evaluation summaries referred to in the following sentence, " ... The well impact evaluation summaries for all zones (Appendix SC) indicate that 18 percent of agricultural wells, 9 percent of public wells, and 21 percent of rural residential wells including domestic wells ... ". ***There is no summary for all zones-only plots by each zone without Figure x.x assignments.***		CP		
003	Edward Henry	WQ	EH-017	MCR-6	1	Mimimum Thresholds- Water Quality		While in the process of doing an extensive word search on “projects’ and “management actions”, a second identical sentence to the one on Page 5-21, section 5.4.3 Water Quality Measurable Objectives was found (obviously an oversight on my part when I first read this GSP) which states, “…All future projects and management actions implemented by the MKGSA will be designed to avoid causing further groundwater quality degradation…”. As stated then in my initial GSP comments (submitted on September 3, 2016), this sentence should be stricken from this GSP in the final document version for submission to DWR. I’ll refer the reader of these GSP comments back to my original comments on Page 5-21 which will apply here also.		SH	JT	
003	Edward Henry	WQ	EH-018		1	Minimum Thresholds- Water Quality		In the next to the last sentence of the last paragraph of this section on degraded water quality (Page 5-13) it states, " ... The relationship between groundwater levels and degradation trends, if any, is site-specific. ". At the June 14, 2019, meeting of the GKGSA's Combine Meeting of the Rural Communities Committee and Stakeholder Committee, Agenda Item 4 (handout), there were a total of 13 data graphs presented from various HZs in the KSB: 3 for Arsenic and 10 for Nitrates. ***All 13 graphs showed either a very poor correlation and/or no correlation between groundwater levels and water quality for those 2 constituents/substances. It is paramount that all GSAs in the KSB are not in some way or another held "hostage" to [degraded] water quality issues.*** This lack of correlation may perhaps be unique to the KSB (but doubtful), and water quality issues should not be the driver of projects and management actions that would have a positive outcome on preventing the undesirable results of other sustainability indicators, particularly groundwater levels, groundwater storage, and land subsidence.		SH	JT	
003	Edward Henry	MA	EH-019		1	Water Budget/Management Areas		In the third to the last sentence in the last paragraph on Page 5-20, it states, " ... MKGSA anticipates that coordination will focus on the Management Areas where water budgets remain in deficit, depending on degree ... ". Obviously there is a water budget for the MKGSA but are there also individual waters budgets for the 3 Management Areas-City of Tulare, City of Visalia, and TID? ***If there are separate water budgets for each Management Area, when will they be published?*** This is the first I've heard of additional water budgets [within the MKGSA], and I may be totally mis-reading that sentence.		CP		
003	Edward Henry	GS	EH-020		1	Optimal Objective- Groundwater Storage		In the second sentence of the paragraph following the bullet points it states, " ... Figure 5-3 shows the results of this analysis indicating that the measurable objective has 641,000 AF in storage at 2040, and the optimal objective has 1,356,000 AF in storage at 2040 ... ". When going back to Figure 5-3 on Page 5-10, that figure shows the Optimal Objective at 1,340,000 AF rather than the number of 1,356,000 AF cited above-that's a difference of 16,000 AF (which is almost the amount of groundwater pumped annually by the City of Tulare at roughly 18,000 AF). Which number is correct?		CP		
003	Edward Henry	WQ	EH-021	MCR-6	2	Measurable Objectives- Water Quality		In the second sentence of first paragraph under the heading, 5.4.3 Water Quality Measurable Objectives it states, " ... All future projects and management actions implemented by the MKGSA are designed to avoid causing further groundwater quality degradation ... ". It's my firm understanding that the primary charge of SGMA is to stop the chronic lowering of groundwater which will be accomplished through projects and management actions. Projects and management actions most likely will always benefit groundwater quality but there's also a small risk that somehow it (water quality) may be negatively impacted such as unintentional plume migration. ***I'm very concerned that stating " ... all future projects and management action ... are designed to avoid causing further groundwater water degradation ... " could be a potential segue into litigation through misinterpretation, and that sentence should be stricken from this GSP in the final document version for submission to DWR.*** Again, the design of future projects and management actions should be heavily geared towards the sustainability indicators of chronic lowering of groundwater levels, loss of groundwater storage, and land subsidence through preventing or eliminating those undesirable results-hopefully groundwater quality will be a [secondary] beneficiary of those projects and management actions, and not the primary focus as currently stated above. Again, it should be noted that there is a very poor correlation between groundwater levels and water quality (for Arsenic and Nitrates) as shown in the graphical data presented at the meeting of the GKGSA's Combine Meeting of the Rural Communities Committee and Stakeholder Committee on June 14,		SH	JT	
003	Edward Henry	OR	EH-022		1	Measurable Objectives- Table Formatting		In Table 5-3 in the Measurable Objective column there are no units, i.e. "inches", nor is that a timeframe. Can those additions be made to the Measurable Objective column? Also it's not clear as to how the Measurable Objective numbers were determined.		CP		

003	Edward Henry	OR	EH-023		1	Hydrogeologic Zones- Table Formatting/Internal Referencing		[Appendix 5A] The term "**hydrogeologic zone(s)**" (AKA **HZs**) is used 14 times in the MKGSA GSP, and yet there is not an actual map/figure of the KSB showing those nine (9) **HZs** of which there are four (4) **HZs** in the MKGSA—1, 2, 4, and 7. An excellent map/figure is found (at the MKGSA website) under **Documents**, **Section 5 Appendices**, **Appendix 5A** ***Overview of Application of Hydrogeologic Zones for Development of Groundwater Level Minimum Thresholds*** , **Figure 5.1** on **Page A5-1**. For easy reference by the reader of this GSP, I would suggest imbedding **Figure 5.1** into **Section 2. Basin Setting** at the bottom of **Page 2-5** and above the **Section 2 – Basin Setting** explanation box. In the first sentence of the third paragraph from the bottom on **Page 2-5**, it reads in part, "…*Each MA's minimum thresholds have been determined using the hydrogeologic zone mapping…* ", and yet there is no **HZs** map in this GSP. Since the word "*…mapping…* " is used here, this would be an excellent place to include/insert this map/figure. After the word "*…mapping…* ", should be added ***(Figure 5.1)*** , so as to read, "*…Each MA's minimum thresholds have been determined using the hydrogeologic*		CP		
003	Edward Henry	OR	EH-024		1	Hydrogeologic Zones- Internal Referencing		In [**Appendix 5B] *Groundwater Level Sustainable Management Criteria Hydrographs*** there are approximately 34 hydrographs. In the heading at the top of each hydrograph there is a well designation (plus other information), i.e. **Well KSB-0922**, but it does not identify the **HZ** where that particular well is located. After some prolonged looking, **Well KSB-0922** can be found in **HZ1**. It would be more convenient if the **HZ** for each hydrograph were to be labeled with the **HZ** in the heading as shown in the example below: **Well KSB-0922 – HZ1 Mid Kaweah GSA Well ID: CID_038 Aquifer System: Unknown – Model Layer 3** Also, none of the 34 hydrographs listed in **Appendix 5B** have a **Figure** designation, i.e. **Figure x.xx**, in their lower left-hand corner as do other **Figures** and **Tables** in this GSP and the accompanying **Appendices** at the MKGSA website. Having all **Tables** and **Figures** labeled as such would be more convenient for referencing and cross-checking when needed.		CP		
003	Edward Henry	OR	EH-025		1	Hydrogeologic Zones- Internal Referencing		In the last sentence of the second complete paragraph down from the top of **Page 5-19** of this GSP it states, "…*This approach is summarized in the* ***bullet list*** *that follows and is illustrated on* ***Figure 5.1*** *of* ***Appendix 5A*** *:…* ". There is a definite inaccuracy here related to "…***Figure 5.1*** *of* ***Appendix 5A*** *:* …" as ***Figure 5.1*** is a map/figure (not a hydrograph) of the **Hydrogeologic Zones** in the KSB (see map/figure below). Could you be referring instead to **Figure 5.2** through **Figure 5.5** in **Appendix 5A**, OR RATHER is it in **Appendix 5B** where the first hydrograph (unlabeled—no **Figure** designation) is shown as **Well KSB-0922**? In looking further at the "…***bullet list*** …" and in the discussions that follow about the minimum thresholds, measurable objectives, and interim milestones, it seems logical that **Well KSB-0922** is the well being referred to here as the example illustration. But since **Well KSB-0922** does not have a **Figure** designation attached to it, it was confusing initially. (See hydrograph of **Well KSB-0922** on **Page 2 of 2** below.) In the second sentence of the next to the last paragraph on **Page 5-19** it states, "…***Figure 5-1*** *shows these criteria at a* ***single well*** *in the southwest area of MKGSA and* ***Appendix 5B*** *includes these criteria for each well …*". That "…***single well*** …" is **Well KSB-0922** which is in **HZ1** (the southwest area of the MKGSA) but it does not have a ***Figure 5-1*** designation (confusing). All 34 hydrographs in ***Appendix 5B*** need to be updated with a **Figure** designation, i.e. **Figure x.xx**, in the lower left-hand corner (below the hydrograph) of the each hydrograph for a more concise and easier referencing process. As mentioned earlier on **Page 2 of 2**, **Addendum #4** (of these GSP comments) where the example for **Well KSB-0922 – HZ1** is shown (to include the **HZ** number), it is first of all suggested here that the "well title headings" include the **HZ** for all 34 hydrographs. Secondly, it also would be very convenient to have all hydrographs grouped by **Hydrogeologic Zones** for easier referencing in this GSP. Although on **Page 5-2** it states, "…*one-third of the Subbasin's representative monitoring sites exceeding minimum thresholds for water levels would constitute an undesirable result …*", it would be very helpful to know if those exceedances are random within the KSB or even the MKGSA or if one **HZ** is statistically more heavily impacted than another **HZ**. If those exceedences were isolated to a particular **HZ**, then possibly Projects and Management Actions could be		CP		

003	Edward Henry	OR	EH-026		1	Sustainable Yield/Internal Referencing		A general comment on the term "sustainable yield" as it is used in the MKGSA GSP. ***The term "sustainable yield" is used a total of 10 times in this GSP but it does not indicate or state an actual numerical value for the "sustainable yield" in any of the text.*** At many of the KSB's GSA meetings over the past 6 months it's been stated by the 3 GSA managers and others, and shown in tabular form that the "sustainable yield" is 659,999 AF (660,000 AF rounded up) for the KSB. This is depicted on Page 6-3, Table 6-2: GSA Apportionment, of this GSP. (NOTE: This table is also known as the Water [Supply] Accounting Framework, and also referred to as the "Three Buckets" accounting method) In that table in the lower right-hand comer is ***the figure of 659,999 which is oftened referred to as the "sustainable yield" but not specifically labeled as such. I would suggest putting a double asterisks(**) after the 659,999 number. Then below the table add this additional footnote (to the ones already there) with a double asterisks (* *).*** The footnote would then read, " ... **Sustainable Yield for KSB ... ". Although "sustainable yield" is used 10 times, ***there is no concise definition of the term "sustainable yield" found anywhere in this GSP.*** At the MKGSA website under Documents in Section 3 Appendices, 3B Sustainable Management Criteria Best Management Practices, 5. KEY DEFINITIONS, Page 34, it gives the definition of "sustainable yield" as follows: (w) "Sustainable yield" means the maximum quantity of water, calculated over a base period representative of long-term conditions in the basin and including any temporary surplus, that can be withdrawn annually from a groundwater supply without causing an undesirable result. ***Perhaps this definition should be inserted in parenthesis the first time the term "sustainable yield" (last bullet point) is used in the 1. Introduction, General Information, 1.1.1 Purpose of GSP on Page 1-1.*** That last bullet point would now read in part, "... the sustainability goal and ensure that the Subbasin is ultimately operated within the sustainable yield. ("Sustainable yield" means the maximum quantity of water, calculated over a base period representative of long-term conditions in the basin and including any temporary surplus, that can be withdrawn annually from a groundwater supply without causing an undesirable result.)...".		CP		
003	Edward Henry	WB	EH-027	MCR-20	1	GSA Water Budget, GSA Water Budget Table Formatting		In the third sentence of the first paragraph it states, " ... Whereas the average water accounting framework water balance is positive, the comparable hydrogeologic water budget is negative by about 13,000 AF ... ". ***After the word "positive" should insert "at around 38,000 AF", in order to be consistent with the negative "13,000 AF".*** With the insert "at around 38,000 AF" that sentence would now read, " ... Whereas the average water accounting framework water balance is positive at around 38,000 AF, the comparable hydro geologic water budget is negative by about 13,000 AF ... ". This would help the reader to see both the positive and negative number for better clarity. ***With regard to Figure 6.1, several additions would make this figure more understandable.*** First the label on the y-axis needs to be Groundwater Storage, and the "Change in Acre-Feet" needs to be in parenthesis, "(Change in Acre-Feet)". Lastly, to the right of the two horizontal lines, in the upper line, Shared/Owner Ave, put in the 38,000 AF figure to reflect what is in the text above, and for the lower line, Hydrogeologic Ave, put in the negative/minus -13, 000 AF, again to be consistent with the text description above on Page 6.4 and give		TN		
003	Edward Henry	PM	EH-028		1	Management Actions		In the first sentence (4th line) of the second paragraph on Page 7 .1 it states, " .. .future urban and agricultural conservation, ... " and yet on Page 7.2, in the Table/Chart under the column heading, Management Actions:, for the bullet point, Agricultural Water Conservation and Management Program, none of the four boxes are checked for the 4 Sustainability Indicators and states, Not Applicable, whereas the bullet point, Urban Water Conservation Program, 2 of the Sustainability Indicators, GW Levels and Reduction in Storage, are checked. ***Why does the Agricultural Water Conservation and Management Program get a pass on conservation?*** I would have thought that all 4 Sustainability Indicator boxes for the Agricultural Water Conservation and Management Program would have been checked-after all agriculture is by far and away the largest extractor of groundwater. This is not to pit ag versus urban but putting an unrealistic burden on urban areas (cities) is counter productive. I'll refer you back to my comments on Pages 2 through 4 regarding the "urban forest" and the actual urban water usage. Also under the heading of Extraction Measurement Program it states Not Applicable. ***Although SGMA doesn't require "metering", the regulatory agencies will never fully have an accounting of groundwater extraction until there is metering. All the "players" who have "straws in the punch bowl" need to be metered at some point-realistically by 2025.*** Meters will be part of the costs of doing business. Those "players" who are designated or self-designated as "de minimis" (less than 2 AF annually) need to prove they are truly de minimis, and the only accurate and reliable way to demonstrate that is by being metered. Yes, one could argue that the de minim is user's groundwater extraction is probably less than 5% of the total groundwater pumped but again if the regulatory agencies want to know ALL extractors and to have equality, then metering is the only answer. Right now the small 3-5 acre "ranchettes" will get a pass on SGMA whereas a city resident (and I'm a definite de minimis user) may		PH		
003	Edward Henry	WB	EH-029	MCR-20	1	Water Budget/Water Accounting Framework		In the first sentence of the first paragraph it states, " ... As identified in GSP Section 6.1, the MK GSA 's water budget shortfall is estimated to be fairly negligible .. ". ***After "fairly negligible" consider inserting "by about -13,000 AF. .. "*** so as to read, " ... As identified in GSP Section 6.1, the MKGSA 's water budget shortfall is estimated to be fairly negligible by about -13, 000 AF. ... ". Then in the second sentence of the same paragraph ***after the word " ... surplus ... " consider inserting "at around 38,000 AF"*** so as to read, " ... a surplus at around 38,000 AF is in fact inferred based on preliminary water accounting framework ... " By inserting those figures/numbers in those two sentences would give the reader more clarity regarding the actual numbers, and would spare [the reader] the need and time to refer back to Section 6.1 in order to verify those numbers-just makes for an easier read. ***In the third sentence of that same paragraph there is a major typo reference/category-water budget versus water accounting framework.*** It states in part, " ... hydrogeologic evaluations will continue to determine the reason for the differences between the water budget surplus and the conditions of decline..". That's incorrect as it's not the " ...water budget surplus ... " which in fact has a deficit by about -13,000 AF but rather it's the " ... water accounting framework ... " that has a 38,000 AF surplus. With the correction that portion of the sentence should now read, hydrogeologic evaluations will continue to determine the reason for the differences between the water accounting framework surplus and the conditions of decline..".		TN		

003	Edward Henry	WB	EH-030		2	Water Budget/Water Accounting Framework		In the third sentence of the first paragraph there is an additional correction which was missed in my original comments' submission on September 3, 2019, and it states, "…Despite the water budget surplus, as evidenced in Section 2 (Basin Setting Appendix 2A), groundwater levels and storage have been in decline within the Mid-Kaweah area…". ***In fact, there is not a water budget surplus as stated above (go to the MKGSA website and see Section 2 Appendices 2A, Page 109, Table 32, which shows a -77.6 TAF deficit for the entire Kaweah Subbasin), but rather it's the water accounting framework which shows a surplus within the MKGSA of around 38 TAF in Section 6 – Water Supply Accounting (on Page 6-3, Table 6-3 of this GSP).*** Later in that same sentence it states, "…and hydrogeologic evaluations will continue to determine the reason for the differences between the between the water budget surplus and the conditions of decline…". Again, it's the water accounting framework which shows a surplus (~38 TAF) and not the water budget (~ -13 TAF—see Page 2-3, Table 2-1 of this GSP). With those corrections that sentence should now read as follows, "…Despite the water accounting framework surplus, as evidenced in Section 6 – Water Supply Accounting (on Page 6-3, Table 6-3) of this GSP, groundwater levels and storage have been in decline within the Mid-Kaweah area and hydrogeologic evaluations will continue to determine the reason for the differences between the water accounting framework surplus and the conditions of decline…". ***I'm concerned that there is incorrect interchangeable usage of the terms water budget and water accounting framework and will confuse the causal reader.*** On Page 2-2, 2.3 GSA Water Budget, there's a good definition and the current estimate of the MKGSA water budget: "…This localized water budget represents the estimated physical movement of water in and out of the MKGSA area on an annual basis and provides an average for the 21-year period. During that period, average groundwater storage depletions were 12.6 thousand acre-feet (TAF) per year due to a combination of water management activities within the GSA as well as influences from neighboring GSAs both in the Kaweah Subbasin and in neighboring subbasins…". Also on Page 2-2 there is a good definition of the water accounting framework [which is specifically addressed on Page 6-3, Table 6-2 and Table 6-3 of this GSP] and shows an Imputed Balance (Table 6-3) surplus within the Mid-Kaweah area of approximately 37.8 thousand acre-feet (TAF) per year: "…To apportion responsibilities for the development of projects and management actions (extraction reductions), Section 6 of this GSP segregates groundwater inflows based on a legal construct of native, foreign, and salvaged components. These components are proportionately assigned to each of the three Subbasin GSAs. This construct and		TN		
003	Edward Henry	AL	EH-031		2	De Minimus Extractors		In the second sentence of the first paragraph it states, " ... this initial phase of an allocation program shall exclude those well owners who extract less than two AF per year (i.e., de minimis extractors) ... ". Again, I will challenge ***how a de minimis extractor will be identified?*** So if one lives in the county (not within the jurisdictional boundaries of a city-i.e. Tulare or Visalia) on a 2-3 acre parcel with a half-dozen head of beef cattle, a couple of horses, irrigated pasture(s), some fruit and nut trees, a vegetable garden, a½ acre green lawn, etc. that will be declared a de minimis extractor-there's no way that parcel/residence is a de minimis extractor? I live in Tulare on just under 1/3 of an acre, and I am definitely a de minimis user of groundwater. But because I'm within the jurisdictional boundary of Tulare, I won't have the same rights [to use that groundwater] as a de minimis extractor. Granted I don't have the risks of a well going dry or potentially degraded water quality or other well associated operation and maintenance concerns as one who has a domestic well in the county but something is wrong with this picture. Make de minimis extractors prove they are truly de minimis-keep the playing field level and equitable. Meter the de		PH		
003	Edward Henry	MU	EH-032		1	Urban Water Management Plans		In the third line of that paragraph it states, " ... mandates of a 20 percent reduction in urban per capita water usage by 2020 ... ". ***What is the base year for the reduction?*** During the drought years 2012-2016, cities were mandated by the governor to cut the water usage by 28-32% from the base year of 2013: ***Will 2013 be used again as the base year?***		TN		
003	Edward Henry	AL	EH-033		1	De Minimus Extractors		The last bullet point at the bottom of the page states, "... A determination by the GSA to not regulate any de minimis extractor, i.e., any well owner pumping two acre-feet or less annually ... ". Again, I'll voice my concern that in fact ***a "... de minimis extractor ... " should have to prove the de minimus extractor designation or classification- metering will be the only way to validate such a claim.***		PH		
003	Edward Henry	WB	EH-034	MCR-20	1	Water Budget/Accounting Framework		In the first sentence of the first paragraph on Page 7-46 (below Figure 7-5) it states, " ... coupled with this GSA 's assigned share of the Subbasin water budget as articulated in Section 6 of this Plan ... ". ***Isn't it the water accounting framework which present in Section 6?*** Instead of referring to the "water budget" shouldn't replacing the term water budget with the term water accounting framework be more correct/accurate as it is articulated on Page 6-3 in Section 6 of this Plan, in Table 6-2 and Table 6-3.		CP	TN	
003	Edward Henry	OR	EH-035		1	Internal Referencing		In the first paragraph below Table 7-1, the third sentence states, " ... This range of recharge accomplishments is depicted in the "Cumulative Added Storage" bandwidth on Figure 7-5…" It should read Figure 7.6, not Figure 7-5.		CP		
003	Edward Henry	OR	EH-036		1	Water Resources- Typo		At the bottom 1/3 of Table 7.2 under the heading, Combined, it has "SVP Surplus"- shouldn't read "CVP Surplus"?		CP		
003	Edward Henry	OR	EH-037		1	Internal Referencing		In the paragraph below Table 7-3 in the second sentence of that paragraph it states, " ... Technical Memorandum (I'M) "Estimate of Future Friant Division Supplies For Use in Groundwater Sustainability Plans," Friant Water Authority, December 2018, included as an appendix to the Basin Setting report ... ". ***To facilitate easier location of this Technical Memorandum (TM), it should be noted or referenced that this document is in Appendix D.*** Friant Water Authority Future Water Supply Study, of Section 2 Appendices- 2A Kaweah Subbasin Basin Setting Components. At the MKGSA website the Basin Setting Components document, due to its MB size, is split-Pages 1- 200 (23.2MB) and Pages 200-373 (20.4MB). The Friant document, referenced, above is in the second half, Pages 200-373, and is the very last		CP		
003	Edward Henry	OR	EH-038		1	Annual Reporting- Typo		In the first paragraph note that September only has 30 days. " ... which will be WY 2019 (October 1, 2018 to September 31, 2019) ... "		CP		

004	Ca Department of Fish and Wildlife	IS	DF-001	MCR-7	3	Beneficial Users- Environmental		***Environmental beneficial uses and ecosystem users of water are not adequately considered throughout the plan.*** A. Issue: Though the GSP identifies 'environmental and ecosystem interests' on the list of interest-based categories to be considered per Water Code 10723.2, these interests are not specified nor considered in a meaningful way. For example, on the bottom of page 1-23, the narrative paragraph lists beneficial users of groundwater in the basin but excludes any mention of environmental users. In Section 1.5.2.10, page 1-25, the GSP lists 'Environmental and Ecosystem Interests,' but unlike the other beneficial users, these interests are identified only as representative environmental organizations, not as the specific groundwater end user (e.g., groundwater dependent ecosystems). The lack of specificity around and consideration of environmental beneficial users perpetuates throughout the plan. For example: i. On page 3-2, first paragraph, the sustainability goal is entirely 'enterprise' focused and does not mention any environmental beneficial users of groundwater. ii. Similarly, undesirable results largely do not reflect potential impacts. to environmental beneficial uses and users of water. These users are excluded from the analysis and effects of undesirable results or their inclusion is cursory and dismissive. For example, on page 3-9, the discussion around Interconnected Surface Waters undesirable results acknowledges and accepts the potential for the temporary loss of riparian vegetation, which does not align with General Plan Open Space and Conservation Element objectives that seek to maintain or enhance riparian habitat as presented on page 1-14. iii. On page 3-8, the GSP notes that any "undesirable results caused by habitat loss within stream channels will be evaluated on a case-by-case basis and independent of other undesirable results". This statement effectively separates instream habitat undesirable results from the GSP undesirable result analysis for all other beneficial users without specifics as to how these 'cases' may be managed. Also, habitat 'loss' suggests permanence, which may mean once a 'case' is identified, it could be too late to mitigate significant impacts to environmental beneficial uses and users of groundwater. b.Recommendation: ***The Department recommends the GSP identify specific habitats and species that depend on groundwater in the subbasin and define for these beneficial users undesirable results and related causes. The Department recommends reviewing and evaluating the Critical Species Lookbook (TNC 2019) for threatened and endangered species within the basin, as well as for narrative on species and habitat groundwater dependence that can be a model for describing environmental beneficial uses and users of groundwater in the GSP.***		PH	CP, MN	
004	Ca Department of Fish and Wildlife	IS	DF-002	MCR-3	3	Undesirable Results- Interconnected Surface Waters		The GSP offers an inconsistent and incomplete analysis of interconnected surface waters and related sustainable management criteria (SMC). A. Issue: ***On page 5-1, the GSP establishes 'non-applicability' of Interconnected Surface Waters sustainable management criteria, but poorly justifies and inconsistently applies this conclusion.*** Below are a series of GSP excerpts and CDFW comments. i. On page 3-4[1] , the undesirable result analysis for Interconnected Surface Waters states, "Depletions of interconnected surface waters are minimal and, to the extent they occur, impact only vegetation along the banks of unlined channels within the forebay regions of the aquifer system where natural channels exhibit gaining reaches from time to time. Undesirable results may occur should any such groundwater-dependent vegetation disappear from locations of known historic existence." ii. On page 3-5 states "Groundwater elevations shall serve as the sustainability indicator and metric for chronic lowering of groundwater levels and, by proxy, for and interconnected surface waters. Justification for use of groundwater elevations as a proxy in this instance is provided in Section 5." iii. On page 3-7 states, "The water level sustainability indicator is to serve, by proxy, for establishing interconnected surface waters. Periodic comparisons of surface water elevations and flowrate depletions in applicable stream channels and adjacent groundwater will be pertinent to this establishment." iv. On page 3-9 states, "Water bodies, primarily stream channels, which become temporally disconnected throughout the year from the underlying water table may experience the disappearance of adjacent vegetative habitat which may be considered as a beneficial use of groundwater. Such occurrences are generally restricted to the upper reaches of applicable channels in the fore bay region of the aquifer system near the Sierra foothills. The consensus among Subbasin GSAs and stakeholders is that the intermittent nature of this vegetative habitat is such that its temporary loss does not rise to the level of an undesirable result." Each of the above statements suggest that the basin has some surface water groundwater interconnectivity, and that groundwater elevation will serve as a proxy metric for Interconnected Surface Waters monitoring. The last sentence for page 3-9 above, suggests the consensus is more the expressed opinion of the stakeholders and not based on scientific or engineering verification. v. On page 4-14, states, "As stated previously, the interconnection of surface water and groundwater was disrupted many decades ago in the MKGSA. Therefore, a monitoring network and monitoring is not required for this GSA." vi. On page 5-18 states "Insufficient information and flow data exist with which to gauge seasonal connections and relative importance of any vegetative		PH	CP, MN	

004	Ca Department of Fish and Wildlife	GL	DF-003		3	Minimum Thresholds- Groundwater Levels		Sustainable management criteria allow for decades of continued groundwater decline in this subbasin designated as 'Critically Overdrafted.' A. ***Issue: These sustainability criteria suggest that groundwater elevations at all representative wells in the subbasin can continue to decrease for the next20 years, dropping further from historically low groundwater elevations during drought years, without witnessing undesirable results.*** The subbasin is characterized by DWR as 'Critically Overdrafted,' meaning "continuation of present water management practices [in the basin] would probably result in significant adverse overdraft-related environmental, social, or economic impacts" (CDWR 2019). However, according to statements in the GSP, the basin has not experienced undesirable results, nor will it under projected 2040 groundwater levels "barring significant and unreasonable impacts on existing wells and freshwater storage" as stated on page 5-3; therefore, minimum thresholds allow for continued groundwater depletions. Specifically, "minimum thresholds were set at the water level projections for 2040 using the same trend in groundwater levels from 2006 to 2016" as stated on page 5-3, effectively allowing for 20 years of groundwater table declining trends and mirroring trends that contributed to the subbasin's Critically Overdrafted status. Conceptually, there is a disconnect between the subbasin's 'Critically Overdrafted' designation and the GSP's claim that the basin has not experienced undesirable results, nor will continue to have undesirable results if groundwater levels continue to decrease. b. Recommendation: ***The Department recommends the MKGSA reconsider minimum thresholds and measurable objectives, accounting for undesirable results for fish and wildlife beneficial uses and users of groundwater and interconnected surface water, to design sustainable management criteria that reflect a 'Critically Overdrafted' subbasin designation by seeking to improve current groundwater conditions rather than allowing for continued aquifer depletions over the next two decades.***		CP	TN	
004	Ca Department of Fish and Wildlife	IS	DF-004	MCR-3	3	Groundwater-Dependent Ecosystems		Starting on page 146, the GOE identification section, pursuant to 23 CCR § 354.16 (g), is based on very limited information to demonstrate exclusion of ecosystems that may depend on groundwater. A. ***Issue: Methods applied to the Natural Communities Commonly Associated with Groundwater (NCCAG) dataset to eliminate potential GDE's are not robust.*** i. Depth to Groundwater: The removal of areas with a depth to groundwater greater than 50 feet in Spring 2015 relies on a single-point-in-time baseline hydrology, specifically a point in time that is several years into a historic drought when groundwater levels were trending significantly lower due to reduced surface water availability. Exclusion of potential GDEs based on this singular groundwater elevation measurement is questionable because it does not consider representative climate conditions (i.e., seasons and a range of water type years) and it does not account for GDEs that can survive a finite period of time without groundwater access (Naumburg et al. 2005), but that rely on groundwater table recovery periods for long term survival. ii. Adjacent to Surface Water: The GSP did not fully evaluate potential GDEs that depend on adjacent losing surface water bodies and a GDE's adaptability and opportunistic nature in accessing water supply. The GSP assumption that these potential GDEs are accessing and primarily dependent on surface water is based on proximity to a surface water source, but this assumption is poorly justified and there is no acknowledgement of the potential for shifting reliance between surface and ground water. Additionally, GDEs that are near interconnected surface water bodies may depend on sustained groundwater elevations that stabilize the gradient or rate of loss of surface water, meaning that ecosystems near interconnected surface waters may depend on sustainable groundwater elevations. Therefore, it is possible that any of these potential GDEs rely on groundwater during specific seasons or water year types. B. ***Recommendations: The Department recommends the MKGSA consider the follqwing for information gathering related to GDEs:*** i. Depth to Groundwater: ***Develop a hydrologically robust baseline*** which includes areas with a depth to groundwater greater than 50 feet that relies on multiple, climatically representative years of groundwater elevation and that accounts for the inter-seasonal and inter-annual variability of GOE water demand. ii. Adjacent to Surface Water: ***Re-evaluate potential GDEs that are in proximity to a losing surface water body.*** The Department recommends the GSP be more conservative and all-inclusive until there is evidence that the overlying ecosystem has no significant dependence on groundwater across seasons and water year types. The Department advises that these riparian GOE beneficial users of groundwater and surface water are		PH	CP, MN	
005	The Nature Conservancy	IS	NC-001		1	Beneficial Users- Environmental		Surface water users and the following groups were listed as Beneficial Users: "Environmental and ecosystem interests in MKGSA include representatives of the Tulare Basin Wildlife Partners, Sierra Club Mineral King Group, and Sequoia Riverlands Trust (p. 1-25)." **Please identify whether or not the following beneficial uses and users of groundwater in the subbasin are present: Protected Lands, including preserves, refuges, conservation areas, recreational areas; and other protected lands; and Public Trust Uses, including wildlife, aquatic habitat, fisheries, and recreation.** The types and locations of environmental uses, species and habitats supported, and the designated beneficial environmental uses of surface waters that may be affected by groundwater extraction in the Subbasin should be specified. **To identify environmental users, please refer to the following:** Natural Communities Commonly Associated with Groundwater dataset (NC Dataset) - https://gis.water.ca.gov/app/NCDatasetViewer/ The list of freshwater species located in the Kaweah Subbasin in Attachment C of this letter. Please take particular note of the species with protected status.		PH	CP, MN	

005	The Nature Conservancy	IS	NC-002		1	General Plans- Interconnected Surface Waters/Groundwater-Dependent Ecosystems		his section should include a discussion of General Plan goals and policies related to the protection and management of GDEs and aquatic resources that could be affected by groundwater withdrawals, rather than being limited to goals and policies directly related to groundwater resources as the Tulare General Plan does. **Please include a discussion of how implementation of the GSP may affect and be coordinated with General Plan policies** and procedures regarding the protection of wetlands, aquatic resources and other GDEs and ISWs. This section should identify Habitat Conservation Plans (HCPs) or Natural Community Conservation Plans (NCCPs) within the Subbasin and if they are associated with critical, GDE or ISW habitats. **Please identify all relevant HCPs and NCCPs within the Subbasin, and address how GSP implementation will coordinate with the goals of these HCPs or NCCPs.** The Open Space and Conservation Element of the City of Visalia's General Plan includes (p. 1-14 to 1-15): "1. Protect, restore and enhance a continuous corridor of native riparian vegetation along Planning Area waterways, including the St. Johns River; Mill, Packwood, and Cameron Creeks; and segments of other creeks and ditches where feasible, in conformance with the Parks and Open Space diagram of this General Plan. 2. Establish design and development standards for new projects in waterway corridors to preserve and enhance irrigation capabilities, if provided, and the natural riparian environment along these corridors. In certain locations or where conditions require it, alternative designs may be appropriate (e.g., terraced seating or a planted wall system) 3. Place special emphasis on the protection and enhancement of the St. Johns River Corridor by establishing extensive open space land along both sides. 4. Where no urban development exists, maintain a minimum riparian habitat development setback from the discernible top of the bank: 50 feet for both sides of the Mill, Packwood, and Cameron Creek corridors and 25 feet for both sides of Modoc, Persian, and Mill Creek ditches. Where riparian trees are located within 100 feet of the discernible top of the banks of the creek corridors and 50 feet from the banks for the ditches, the setback shall be wide enough to include five feet outside the drip line of such trees. Restore and enhance the area within the setback with native vegetation as follows: a. Where existing development or land committed to development prohibits the 50-foot setback on Mill, Packwood, and Cameron Creek corridors,		PH	CP, MN	
005	The Nature Conservancy	IS	NC-003		1	Groundwater-Dependent Ecosystems		The monitoring programs are described, but there is no mention of how GDEs are monitored and protected. **Once GDEs are identified, please describe how existing groundwater monitoring programs are protective of GDEs, or propose additional monitoring that specifically targets GDEs.**		PH	CP, MN	
005	The Nature Conservancy	IS	NC-004		2	Interconnected Surface Waters/Groundwater-Dependent Ecosystems		This section describes the programs of USACOE, Kaweah and St. Johns Rivers Association (KSJRA), and the ditch companies. Surface water sources are listed along with the group monitoring them. Small surface streams which pass through TID's service area are noted as used, but the names are not listed. There is no mention of ISWs or GDEs and how they are monitored. **Please explain how existing stream flow monitoring is protective of ISWs and GDEs.**		PH	CP, MN	
005	The Nature Conservancy	GP	NC-005		1	Well Permitting		**This section should include a discussion of the following:** Future well permitting must be coordinated with the GSP to assure achievement of the Plan's sustainability goals. The County of Tulare is currently revising their well permitting program. The City of Visalia also has a well permitting program for wells within their jurisdiction. The State Third Appellate District recently found that Counties have a responsibility to consider the potential impacts of groundwater withdrawals on public trust resources when permitting new wells near streams with public trust uses (ELF v. SWRCB and Siskiyou County, No. C083239). The need for well permitting programs to comply with this requirement should be stated in the text.		CP		
005	The Nature Conservancy	SB	NC-006		2	Kaweah Subbasin Characteristics		The base of the Subbasin corresponds with the base of freshwater. "This is generally defined as the elevation below which total dissolved solids are greater than 2,000 milligrams per liter (mg/l) (Bertoldi et al, 1991)" (p. 22 of Appendix 2A). As noted on page 9 of DWR's Hydrogeologic Conceptual Model BMP (https://water.ca.gov/LegacyFiles/groundwater/sgm/pdfs/BMP_HCM_Final_2016-12- 23.pdf) "the definable bottom of the basin should be at least as deep as the deepest groundwater extractions". **Thus, groundwater extraction well depth data should also be included in the determination of the basin bottom.** Properly defining the bottom of the basin will prevent the possibility of extractors with wells deeper than the basin boundary from claiming exemption from SGMA due to their well residing outside the vertical extent of the basin boundary.		CP	TN	
005	The Nature Conservancy	SB	NC-007	MCR-8	1	Kaweah Subbasin Characteristics-Interconnected Surface Waters/Groundwater-Dependent Ecosystems		Basin-wide cross sections provided in Figures 4 through 13 are regional, and do not include a graphical representation of the manner in which shallow groundwater may interact with ISWs or GDEs that would allow the reader to understand this topic. **Please consider including an example near-surface cross section that depicts the conceptual understanding of shallow groundwater and stream interactions at different locations, including the Upper Aquifer, as well as any potential GDEs.**		CP	TN	
005	The Nature Conservancy	IS	NC-008	MCR-8	2	Interconnected Surface Waters		**Please identify interconnected surface waters in the Basin by relying on groundwater elevation and stream gauge data, specifying any data gaps that exist so that they can be resolved in the monitoring network.** ISWs are best estimated by first determining which reaches are completely disconnected from groundwater. This approach would involve comparing groundwater elevations with a land surface Digital Elevation Model that could identify which surface waters have groundwater consistently below surface water features, such that an unsaturated zone would separate surface water from groundwater. Groundwater elevations that are always deeper than 50 feet below the land surface can be used to identify the aboveground reaches as disconnected surface waters. **Please reconcile data gaps (shallow monitoring wells, stream gauges, and nested/clustered wells) along surface water features in the Monitoring Network section of the GSP to improve ISW mapping.**		PH	CP, MN	
005	The Nature Conservancy	IS	NC-009	MCR-3	2	Interconnected Surface Waters		"Depletions of interconnected surface waters are minimal and, to the extent they occur, impact only vegetation along the banks of unlined channels within the forebay regions of the aquifer system where natural channels exhibit gaining reaches from time to time. Undesirable results may occur should any such groundwater-dependent vegetation disappear from locations of known historic existence." This discussion is inadequate and is not supported by data. **Please expand the discussion of ISWs to include the above referenced recommendations on identifying and mapping ISWs and provide discussion of the depletions on specific rivers or creeks.**		PH	CP, MN	

005	The Nature Conservancy	IS	NC-010	MCR-8	2	Groundwater-Dependent Ecosystems		All three of the above referenced sections refer to or include discussion of the identification of groundwater dependent ecosystems (GDEs). **Please consolidate and expand these sections of the document in GSP Appendix 2A Section 2.4 (Groundwater Elevation and Flow Conditions §354.16), since the identification of groundwater dependent ecosystems (GDEs) is a required element of Current and Historical Groundwater Conditions (23 CCR §354.16)**. This is a more appropriate place for the identification of GDEs, since groundwater conditions (e.g., depth to groundwater, interconnected surface water maps, groundwater quality) are necessary local information and data from the GSP in assessing whether polygons in the NC dataset are connected to groundwater in a principal aquifer. For detailed guidance on how to address GDEs, please see our publication, *GDEs under SGMA: Guidance for Preparing GSPs*[5]. In particular, note the following: **Please provide a comprehensive discussion and figure(s) for the identification of GDEs**. Figure 19 of Appendix 2A is titled "Potential Groundwater Dependent Ecosystems", however the figure does not actually present this. The NC dataset is a starting point for GSAs to identify GDEs in their basin. The NC dataset comprises 3,488 acres of potential GDEs for the entire Kaweah basin, representing a significant amount of GDEs to be considered. **Please map the original NC dataset on Figure 19 or another figure, and document which polygons were added (and what local sources were used to identify them), removed (and the removal reason), and kept (from the original NC dataset)**. The basin's GDE shapefile, which is submitted via the SGMA Portal, should also include two new fields in its attribute table denoting: 1) which polygons were kept/removed/added, and 2) the change reason (e.g., why polygons were added or removed).Please refer to Attachment D of this letter for best practices for using local groundwater data to verify whether polygons in the NC dataset are supported by groundwater in an aquifer. If insufficient data are available to describe groundwater conditions within or near polygons from the NC dataset, include those polygons in the GSP until data gaps are reconciled in the monitoring network. Specifically, please note: GDEs under SGMA: Guidance for Preparing GSPs is available at: https://groundwaterresourcehub.org/public/uploads/pdfs/GWR_Hub_GDE_Guidance_Doc_2-1-18.pdf **Please provide depth to groundwater contour maps. See Attachment D for best**		PH	CP, MN	
005	The Nature Conservancy	IS	NC-011	MCR-9	2	Groundwater-Dependent Ecosystems		**Once potential GDEs are identified, please provide information on the historical or current groundwater conditions in the GDEs or the ecological conditions present**. Refer to GDE Pulse (https://gde.codefornature.org; See Attachment E of this letter for more details) or any other locally available data to describe depth to groundwater trends in and around GDE areas, as well as trends in plant growth (e.g., NDVI) and plant moisture (e.g., NDMI). Below is a screenshot example of data available in GDE Pulse for NC dataset polygons found in the Mid- Kaweah Subbasin: Once potential GDEs are identified, provide an inventory of the vegetation types or habitat types and rank the vegetation species as having a high, moderate or low value. **Please identify whether any endangered or threatened freshwater species of animals and plants or areas with critical habitat were found in any of the GDEs**. The list of freshwater species located in the Kaweah Subbasin can be found in Attachment C of this letter.		PH	CP, MN	
005	The Nature Conservancy	WB	NC-012	MCR-1	2	Water Budget- Phreatophyte Extraction		***Please clarify what the term "phreatophyte extraction' means.*** The text states 'Phreatophyte extraction consists of removing vegetation in riparian areas to prevent consumptive water use." If phreatophytes were indeed removed from within the Subbasin, please provide further details. If phreatophyte extraction refers to the uptake of groundwater by phreatophytes, then correct this text. It should be clearly stated if the phreatophytes are referring to GDE vegetation (riparian vegetation). Also the reference is from 2007 and the acreage and ET estimation methodology may be outdated. Please clarify what assumptions and data were used to calculate the outflow term from groundwater by phreatophytes.		PH	AF	
005	The Nature Conservancy	IS	NC-013	MCR-7	2	Sustainability Goal- Interconnected Surface Waters/Groundwater Dependent Ecosystems		"The broadly stated sustainability goal for the Kaweah Subbasin as agreed to by the three GSAs therein is, for each GSA to manage groundwater resources to preserve the quality of life through maintaining the viability of existing enterprises of the region, both agricultural and urban." There is no mention of protection of ISWs or GDEs, and no indication that environmental stakeholders were consulted. **Please expand the goal to include protection of GDEs, ISWs, and critical habitats.**		PH	CP, MN	
005	The Nature Conservancy	IS	NC-014	MCR-3	2	Interconnected Surface Waters		The statement "Depletion of interconnected surface waters are minimal and, to the extent they occur, impact only vegetation along the banks of unlined channels within the forebay regions of the aquifer system…." is not backed up by evidence presented in the GSP. **Once ISWs are analyzed per our comments on Checklist Items 8, 9, and 10 above, please revise this section, noting any data gaps to be filled.**		PH	CP, MN	
005	The Nature Conservancy	IS	NC-015	MCR-10	2	Measurable Objectives- Groundwater Levels- Interconnected Surface Waters/Groundwater Dependent Ecosystems		The measurable objective was set equal to the water level at 2030 using the 2006-2016 water level trend for each of the wells selected as representative monitoring sites. The specific measurable objectives for all of the selected wells are listed in Table 5-3. **Please explain how the measurable objectives will help achieve the sustainability goal as it pertains to the environment. After GDEs and ISWs are identified, please discuss if any impacts to GDEs or ISWs are expected. Data gaps should be noted and addressed in the Monitoring section.**		PH	CP, MN	
005	The Nature Conservancy	IS	NC-016	MCR-10	2	Measurable Objectives- Groundwater Levels- Interconnected Surface Waters/Groundwater Dependent Ecosystems		The trend of the 2006-2016 water levels over time was used to set the minimum threshold at 2040 for each of the wells, used as representative monitoring sites, in each of four hydrogeologic zones within the Subbasin (shown on Figure 5.1, p. A5-1). The minimum thresholds and other sustainable criteria for each well are listed in Table 5-3 (p. 5-5). The minimum threshold derived in this manner means that it is based on a pre-SGMA level. **After GDEs are identified, please add discussion of the possible impacts to the environment. Data gaps should be noted and addressed in the Monitoring section.**		PH	CP, MN	
005	The Nature Conservancy	IS	NC-017	MCR-3	1	Interconnected Surface Waters		**Please specifically cite "periodic comparisons of surface water elevations and flowrate depletion in applicable stream channels and adjacent groundwater" as a data gap and further address in the monitoring section.**		PH	CP, MN	
005	The Nature Conservancy	IS	NC-018	MCR-9	1	Interconnected Surface Waters/Groundwater-Dependent Ecosystems		As noted above, an inventory of the vegetation types or habitat types and ranking of the vegetation species as having a high, moderate or low value will provide rational for the statement that "the intermittent nature of this vegetative habitat is such that its temporary loss does not rise to the level of an undesirable result."		PH	CP, MN	

005	The Nature Conservancy	IS	NC-019	MCR-4	2	Undesirable Results- Interconnected Surface Waters/Groundwater-Dependent Ecosystems, Recreation		After the identification and evaluation of potential GDEs is completed, this section should discuss impacts to those GDEs. Specifically, For chronic lowering of water level, the GSP Committee considered that one- third of the representative monitoring sites (wells) exceeding minimum thresholds for water levels would constitute an undesirable result. There appears to be no additional guidance to protect potential GDEs or ISWs. **Please discuss how this undesirable result can be used to avoid impacts to GDEs or ISWs.** There appears to be no consideration of undesirable results on land uses that include and consider recreational uses (e.g. fishing/hunting, hiking, boating) and property interests that include and consider privately and publicly protected conservation lands and open spaces, including wildlife refuges, parks and natural preserves. **Please describe how impacts to these types of properties will be avoided.** **Please provide more specifics on what biological responses (e.g., extent of habitat, growth, recruitment rates) would best characterize a significant and unreasonable impact to GDEs.** The definition of 'significant and unreasonable' is a qualitative statement that is used to describe when undesirable results would occur in the basin, such that a minimum threshold can be quantified. Potential effects on all beneficial users of groundwater in the basin need to be taken into consideration. According to the California Constitution Article X, §2, water resources in California must be "put to beneficial use to the fullest extent of which they are capable". **Please identify appropriate biological indicators that can be used to monitor potential impacts to environmental beneficial users due to groundwater**		PH	CP, MN	
005	The Nature Conservancy	IS	NC-020	MCR-3	1	Groundwater Level Monitoring Network- Interconnected Surface Waters/Groundwater-Dependent Ecosystems		The GSP proposes to use groundwater level monitoring for chronic groundwater level. Some of the monitoring wells are missing well construction information (only 22 of 37 wells are complete). Only 14 of the 37 wells are screened in the Upper Aquifer. The missing well information is a known data gap and was acknowledged on p. 4-15. Two multi-level wells are proposed to help fill this data gap, shown on Figure 4-7 (p. 4-22). **The missing information should be obtained or a different well selected for monitoring.** "As stated previously, the interconnection of surface water and groundwater was disrupted many decades ago in the MKGSA. Therefore, a monitoring network and monitoring is not required for this GSA (p. 4-14)." Data has not been presented to substantiate this statement. **Please provide additional analysis to back-up this conclusion.** Per the GSP Regulations (23 CCR §354.34 (a) and (b)), monitoring must address trends in groundwater *and related surface conditions* (emphasis added). Groundwater level monitoring alone may be insufficient to establish a linkage between groundwater extraction and potentially resulting impacts to environmental resources associated with GDEs and ISWs. The cause-effect relationship between groundwater levels and the biological responses that could result in significant and unreasonable impacts to ISWs and GDEs depends on a number of complicated factors, and this relationship is not characterized or discussed. As such, it is not possible to determine whether the proposed monitoring, minimum thresholds and measurable objectives are sufficiently protective to ensure significant and unreasonable impacts to GDEs and ISWs will be prevented. **Please add monitoring of potential GDEs and at any locations where**		PH	CP, MN	
005	The Nature Conservancy	SB	NC-021		1	Groundwater Contour Maps- Interconnected Surface Waters/Groundwater-Dependent Ecosystems		**A groundwater elevation map should be prepared for the Upper Aquifer above the Corcoran Clay**, as that is the only way one can determine the appropriate depth relationships between the surface water and the groundwater, which are needed to designate a GDE. Mixing shallow and deep wells, particularly when confined conditions may be present, can be misleading.		CP	MN	
005	The Nature Conservancy	PM	NC-022	MCR-11	1	Projects and Management Actions- Multiple Benefit/Interconnected Surface Waters/Groundwater-Dependent Ecosystems		**Please state how ISWs and GDEs will benefit or be protected, or what other environmental benefits will accrue.** Recharge ponds, reservoirs and facilities for managed stormwater recharge can be designed to include elements that act functionally as wetlands and provide a benefit for wildlife and aquatic species. In some cases, such facilities have been incorporated into local HCPs, more fully recognizing the value of the habitat that they provide and the species they support. For projects that will be constructing recharge ponds, **please identify if there will be habitat value incorporated into the design and how the recharge ponds will be managed to benefit environmental users.**		PH	CP	
006	Various Non-Profits	DC	NP-001		1	Beneficial Users- Public Water Systems		"Beneficial users of groundwater in MKGSA include agricultural users, domestic well owners, municipal well operators, public water systems, local land use planning agencies, California Native American Tribes, disadvantaged communities, and entities engaged in monitoring and reporting groundwater elevations." DACs include "those served by private domestic wells or small community water systems (Water Code §10723.2(i)" ***The number and sizes of the public water systems within the MKGSA are not clearly described.***		PH		
006	Various Non-Profits	WQ	NP-002		2	MCLs		The draft GSP used the DWR Mapping Tool to identify DACs. The GSP only clearly identified CA MCLs as a source for developing MTs, while PHGs or Regional Water Quality Control Plan WQOs were not considered in the assessment of drinking water users.		SH	JT	
006	Various Non-Profits	IS	NP-003	MCR-7	1	Beneficial Users- Environmental/Recreation		The GSP should identify whether or not the following beneficial uses and users of groundwater in the subbasin are present: Protected Lands, including preserves, refuges, conservation areas, recreational areas; and other protected lands; and Public Trust Uses, including wildlife, aquatic habitat, fisheries, and		PH	CP, MN	
006	Various Non-Profits	IS	NP-004	MCR-7	1	Beneficial Users- Environmental		The types and locations of environmental uses, species and habitats supported, and the designated beneficial environmental uses of surface waters that may be affected by groundwater extraction in the Subbasin should be specified.		PH	CP, MN	
006	Various Non-Profits	WQ	NP-005		1	Water Quality		The GSP should clarify what criteria it uses to characterize groundwater quality as "generally good" and should ensure that, at minimum, groundwater quality conditions should include the most recent SDWIS		SH	JT	

006	Various Non-Profits	PO	NP-006		1	Public Outreach		The GSP listed venues for stakeholders to provide input and also stated that the MKGSA responded to stakeholders' comments during the development of the GSP. However, detailed information about stakeholder input and responses from the GSA to address the stakeholder input are not presented.		CM		
006	Various Non-Profits	GA	NP-007		1	MKGSA Organization- Advisory Committee		The SCEP identifies an intent to have up to 3 members representing DACs and/or environmental users, but the GSP does not identify who the actual members of the Advisory Committee were through the GSP development process and what organizations/interests were represented.		CM		
006	Various Non-Profits	WI	NP-008		1	Well inventory- Domestic/Public		(Domestic and Public Supply Well Locations and Depths) The well locations and depths are not specifically identified in the GSP.		CP	TN	
006	Various Non-Profits	IS	NP-009	MCR-8	1	Groundwater-Dependent Ecosystems		Figure 19 of Appendix 2A is titled "Potential Groundwater Dependent Ecosystems", however ***the figure does not actually present this.*** The NC dataset is a starting point for GSAs to identify GDEs in their basin. The NC dataset comprises 3,488 acres of potential GDEs for the entire Kaweah basin, representing a significant amount of GDEs to be considered.		PH	CP, MN	
006	Various Non-Profits	IS	NP-010	MCR-8	2	Interconnected Surface Waters		ISWs are best estimated by first determining which reaches are completely disconnected from groundwater. This approach would involve comparing groundwater elevations with a land surface Digital Elevation Model that could identify which surface waters have groundwater consistently below surface water features, such that an unsaturated zone would separate surface water from groundwater. Groundwater elevations that are always deeper than 50 feet below the land surface can be used to identify the aboveground reaches as disconnected surface waters.		PH	CP, MN	
006	Various Non-Profits	IS	NP-011	MCR-3	2	Interconnected Surface Waters/Groundwater-Dependent Ecosystems		"Depletions of interconnected surface waters are minimal and, to the extent they occur, impact only vegetation along the banks of unlined channels within the forebay regions of the aquifer system where natural channels exhibit gaining reaches from time to time. Undesirable results may occur should any such groundwater-dependent vegetation disappear from locations of known historic existence." ***This discussion is inadequate and is not supported by data.***		PH	CP, MN	
006	Various Non-Profits	WQ	NP-012		1	Monitoring Network- Water Quality		"Figure 4-2 (at the end of this Section) provides the current distribution of wells throughout the entire Subbasin with available data through CASGEM, local and regional agencies, and Management Areas. Figure 4-3 (at the end of this Section) shows the current groundwater level monitoring wells in the MKGSA only, with aquifer designations if known." The map of existing monitoring wells for groundwater levels is included in the Appendix 2A. ***No map of existing water quality monitoring networks is found in***		SH	JT	
006	Various Non-Profits	DC	NP-013		2	Monitoring Network- Disadvantaged Communities		The GSP does not include the identified DACs in the proposed monitoring network maps.		PH		
006	Various Non-Profits	IS	NP-014		2	Monitoring Network- Groundwater-Dependent Ecosystems		The GSP does not include the identified GDEs in the proposed monitoring network maps.		PH	CP, MN	
006	Various Non-Profits	DC	NP-015		1	Well inventory- Domestic		The GSP should include detailed information about the location and depths of domestic wells. Providing maps of the monitoring network overlaid with location of DACs, domestic wells, community water systems, GDEs, and any other sensitive beneficial users will allow the reader to evaluate the adequacy of the network to monitor conditions near these beneficial users.		PH		
006	Various Non-Profits	IS	NP-016	MCR-8	2	Groundwater-Dependent Ecosystems		***The original NC dataset should be mapped and the GSP should document which polygons were added (and what local sources were used to identify them), removed (and the removal reason), and kept (from the original NC dataset).*** TNC guidance on best practices should be used for the method to use local groundwater data to verify whether polygons in the NC dataset are supported by groundwater in an aquifer, in particular BMP #3, which emphasizes that GDEs should not be excluded due to partial reliance on surface water.. If insufficient data are available to describe groundwater conditions within or near polygons from the NC dataset, include those polygons in the GSP until data gaps are reconciled in the monitoring network. Once GDEs are identified, the GSP should describe how existing groundwater monitoring programs are protective of GDEs, or propose additional monitoring that specifically targets		PH	CP, MN, PJ	
006	Various Non-Profits	IS	NP-017		2	Interconnected Surface Waters		***The GSP should identify interconnected surface waters in the Basin by relying on groundwater elevation and stream gauge data*** , specifying any data gaps that exist so that they can be resolved in the monitoring network, and reconcile data gaps (shallow monitoring wells, stream gauges, and nested/clustered wells) along surface water features in the Monitoring Network section of the GSP to		PH	CP, MN	
006	Various Non-Profits	WB	NP-018		3	Water Budget- Other Demands		The demands by these sectors are stated to be included in the projected water budget, however, ***the demand by each of these sectors is not specifically identified*** , since they are all included in the "Other demand" by the GSP.		TN		
006	Various Non-Profits	WB	NP-019	MCR-1	2	Phreatophyte Extraction		***Please clarify what the term "phreatophyte extraction' means.*** The text states 'Phreatophyte extraction consists of removing vegetation in riparian areas to prevent consumptive water use." If phreatophytes were indeed removed from within the Subbasin, please provide further details. If phreatophyte extraction refers to the uptake of groundwater by phreatophytes, then correct this text. It should be clearly stated if the phreatophytes are referring to GDE vegetation (riparian vegetation). Also the reference is from 2007 and the acreage and ET estimation methodology may be outdated.		TN	PJ	
006	Various Non-Profits	WB	NP-020		3	Water Budget- Environmental		The GSP includes the projected agricultural demand but does not include a demand associated with native vegetation and/or wetlands.		TN		
006	Various Non-Profits	OR	NP-021		1	Internal Referencing		Most water budget information is included in the appendices. The main GSP text could provide reference or direction to the appendices where specific topics are discussed to assist readers navigate the		CP		
006	Various Non-Profits	WB	NP-022		3	Water Budget- Climate Change		Based on the data presented, it is not clear how climate change is expected to affect some specific elements of the water budget (i.e., subsurface flows, surface water and groundwater outflows, including		TN		
006	Various Non-Profits	WB	NP-023		3	Water Budget- Domestic/Public/Municipal		The GSP also does not provide specifics on drinking water demands included for large urban water systems, domestic well users, or community water systems in the historical, current or future water budgets. This information should be provided for full transparency of the assumptions, data, and results of the water budgets.		TN		
006	Various Non-Profits	WB	NP-024		3	Phreatophyte Extraction		The GSP should clarify what assumptions and data were used in the water budget to calculate the outflow term from groundwater by phreatophytes.		TN		

006	Various Non-Profits	MA	NP-025		2	Management Areas- Groundwater-Dependent Ecosystems		"MKGSA reviewed the "Natural Community Dataset Viewer" maps for the Kaweah Subbasin to evaluate the possibility of whether groundwater dependent ecosystems could exist in the MKGSA management area. The mapping system identifies stream reaches supporting habitat that may rely on groundwater." But no management areas are specifically defined to manage GDEs.		PH	CP	
006	Various Non-Profits	IS	NP-026	MCR-3	3	Interconnected Surface Waters/Groundwater-Dependent Ecosystems		"As stated previously, the interconnection of surface water and groundwater was disrupted many decades ago in the MKGSA. Therefore, a monitoring network and monitoring is not required for this GSA (p. 4-14)." ***Data has not been presented to substantiate this statement.*** Per the GSP Regulations (23 CCR §354.34 (a) and (b)), monitoring must address trends in groundwater and related surface conditions (emphasis added). Groundwater level monitoring alone may be insufficient to establish a linkage between groundwater extraction and potentially resulting impacts to environmental resources associated with GDEs and ISWs. The cause-effect relationship between groundwater levels and the biological responses that could result in significant and unreasonable impacts to ISWs and GDEs depends on a number of complicated factors, and this relationship is not characterized or discussed. As such, it is not possible to determine whether the proposed monitoring, minimum thresholds and measurable objectives are sufficiently protective to ensure significant and unreasonable impacts to GDEs		PH	CP, MN	
006	Various Non-Profits	MA	NP-027	MCR-12	3	Management Areas- Groundwater-Dependent Ecosystems		The GSP does not identify that any of the Management Areas are specifically defined to manage GDEs or DACs.		PH	CP	
006	Various Non-Profits	IS	NP-028	MCR-12	3	Figures- Groundwater-Dependent Ecosystems/Disadvantaged Communities		The GSP should include maps or information of what GDEs and DACs are in each Management Area.		PH	CP, MN, PJ	
006	Various Non-Profits	IS	NP-029	MCR-8	3	Monitoring Network- Groundwater Dependent Ecosystems/Disadvantaged		If any gaps exist in the monitoring networks for GDEs and DACs, they should be clearly identified in the GSP.		PH	CP, MN	
006	Various Non-Profits	IS	NP-030	MCR-3	3	Interconnected Surface Waters/Groundwater-Dependent Ecosystems		The GSP should provide additional analysis to back-up the conclusion that states "the interconnection of surface water and groundwater was disrupted many decades ago in the MKGSA", and add monitoring of potential GDEs and at any locations where ISWs have been or were previously present.		PH	CP, MN	
006	Various Non-Profits	DC	NP-031	MCR-17	3	Disadvantaged Communities		***DACs are not explicitly identified for purposes of developing URs, MOs and MTs, but domestic well users are discussed in terms of URs and MTs*** . "The potential effects of degraded water quality from migrating plumes or other induced effects of GSA actions include those upon municipal, small community and domestic well sites rendered unfit for potable supplies and associated uses, and/or the costs to treat groundwater supplies at the well head or point of use so that they are compliant with state and federal regulations."		PH		
006	Various Non-Profits	IS	NP-032	MCR-4	3	Undesirable Results- Interconnected Surface Waters/Groundwater-Dependent Ecosystems		For chronic lowering of water level, the GSP Committee considered that one-third of the representative monitoring sites (wells) exceeding minimum thresholds for water levels would constitute an undesirable result. ***There appears to be no additional guidance to protect potential GDEs or ISWs.***		PH	CP, MN	
006	Various Non-Profits	IS	NP-033	MCR-9	3	Undesirable Results- Interconnected Surface Waters/Groundwater-Dependent Ecosystems/Recreation		As noted above, an inventory of the vegetation types or habitat types and ranking of the vegetation species as having a high, moderate or low value will provide rational for the statement that "the intermittent nature of this vegetative habitat is such that its temporary loss does not rise to the level of an undesirable result." ***There appears to be no consideration of undesirable results on land uses that include and consider recreational uses*** (e.g. fishing/hunting, hiking, boating) and property interests that include and consider privately and publicly protected conservation lands and open spaces, including wildlife refuges, parks and natural preserves. The definition of 'significant and unreasonable' is a qualitative statement that is used to describe when undesirable results would occur in the basin, such that a minimum threshold can be quantified. Potential effects on all beneficial users of groundwater in the basin need to be taken into consideration. According to the California Constitution Article X, §2, water resources in California must be "put to beneficial use to the fullest extent		PH	CP, MN	
006	Various Non-Profits	DC	NP-034		3	Undesirable Results- Disadvantaged Communities		Based on the presented information, domestic well uses are considered under URs and for the development of water level MOS and MTs, such as the statistical summary of well impact analysis for domestic wells, but ***DAC members are not explicitly considered.*** More detail and specifics regarding DAC members, including those that rely on smaller community drinking water systems, not only domestic wells, is necessary to demonstrate that these beneficial users were adequately considered.		PH		
006	Various Non-Profits	GL	NP-035	MCR-2	2	Minimum Thresholds- Water Levels		The draft GSP identifies MTs for both hydrogeologic zones and for individual well points, but does not clearly explain which set of MTs will be applied through the implementation phase of SGMA.		PH	CP, TN	
006	Various Non-Profits	GL	NP-036	MCR-13	2	Minimum Thresholds- Water Levels		The approach of setting MOs and MTs based on a continued projected declining water level trend results in MOs and MTs that are significantly lower than current water levels, and those experienced during the drought. The MTs in some areas are nearly 200 feet below current water levels. For example, the MT for well KSB-1071, located near the community of Okieville, is over 170 feet below current groundwater levels and the MT at well KSB-1628, located in north Tulare, is over 190 feet below current groundwater levels. ***The GSP should provide maps and information clearly identifying the expected water level declines to both the MOs and MTs, and assess the effects it will have on specific areas and***		PH	CP,TN	
006	Various Non-Profits	DC	NP-037			Undesirable Results- Disadvantaged Communities		The trigger for undesirable results (⅓ of wells in all the management zones impacted) creates the potential for disproportionate impacts to disadvantaged communities; those impacts should be assessed.		PH		
006	Various Non-Profits	PO	NP-038	MCR-22	1	Public Outreach- Disadvantaged Communities		The GSP should also discuss whether and how input from DAC members was considered and incorporated into the development of URs, MOs, and MTs.		CM		
006	Various Non-Profits	IS	NP-039	MCR-7	2	Measurable Objectives- Interconnected Surface Waters/Groundwater-Dependent		The GSP should explain how the measurable objectives will help achieve the sustainability goal as it pertains to the environment. After GDEs and ISWs are identified, please discuss if any impacts to GDEs or ISWs are expected. Data gaps should be noted and addressed in the Monitoring section.		PH	CP, MN	
006	Various Non-Profits	IS	NP-040	MCR-3	2	Interconnected Surface Waters		The GSP should specifically cite "periodic comparisons of surface water elevations and flow rate depletion in applicable stream channels and adjacent groundwater" as a data gap and further address in the monitoring section.		PH	CP, MN	

006	Various Non-Profits	IS	NP-041		2	Groundwater-Dependent Ecosystems		After the identification and evaluation of potential GDEs is completed, ***this section should discuss impacts to those GDEs*** . Specifically, the GSP should: (1) discuss how this undesirable result can be used to avoid impacts to GDEs or ISWs; (2) describe how impacts to these types of properties will be avoided; (3) provide more specifics on what biological responses (e.g., extent of habitat, growth, recruitment rates) would best characterize a significant and unreasonable impact to GDEs; and (4) identify appropriate biological indicators that can be used to monitor potential impacts to environmental beneficial users due to groundwater conditions.		PH	CP, MN	
006	Various Non-Profits	PM	NP-042	MCR-11	2	Projects and Management Actions-Disadvantaged Communities		***A brief description of a project benefit to one DAC is provided in the GSP, but not discussed in detail*** . A discussion should be added for each project or management action to clearly identify the benefits to DAC drinking water users and potential impacts to the water supply. For all potential impacts, the project/management action should include a clear plan to monitor for, prevent, and/or mitigate against such impacts. The GSP should identify additional actions and funding mechanisms for potential failures of achieving the MOs by the identified actions.		PH	CP	
006	Various Non-Profits	DC	NP-043	MCR-14	2	Domestic Wells/Small Water Systems Assistance Program		***An assistance program for small water systems and domestic wells is described, but does not include an assessment of costs or a funding mechanism or clear plan of implementation.*** This program is described because the acknowledged impacts the proposed water level MTs will have on these beneficial users. Such a program needs to be robust and proactive, rather than reactive, so that clean and safe drinking water is available to these users without interruption as water levels decline. It is critical that a funding mechanism be identified and implemented to ensure that this program is successful.		PH		
006	Various Non-Profits	IS	NP-044	MCR-7	2	Interconnected Surface Waters/Groundwater-Dependent Ecosystems		The GSP should state how ISWs and GDEs will benefit or be protected, or what other environmental benefits will accrue.		PH	CP, MN	
006	Various Non-Profits	PM	NP-045	MCR-11	2	Projects and Management Actions-Multiple Benefit/Environmental		The GSP should also identify if there will be habitat value incorporated into the design of projects and how the recharge ponds will be managed to benefit environmental users.		PH		
007	Kings County Water District	GL	KC-001		1	Groundwater Levels		There did not appear to be much information or discussion on declining groundwater levels. As this is one of the primary issues the Sustainable Groundwater Management Act (SGMA) was developed to address, it seems that this historic information should be central and flow to what will be undertaken by the MK GSA to address the declines.		CP	TN	
007	Kings County Water District	HM	KC-002		2	Groundwater Inflows/Outflows		There did not appear to be a discussion of historic groundwater flow directions and whether recent groundwater flow directions are a departure from historic norms. This would seem critical to any evaluation of groundwater flows across GSA or Subbasin boundaries.		TN		
007	Kings County Water District	WR	KC-003		2	CVP Deliveries- Drought		There did not appear to be any discussion or evaluation of the lack of Friant Division CVP surface water deliveries in Water Yeats 2014 or 2015 and how that unique changed condition impacted local groundwater levels, groundwater storage or subsidence.		PH	AF	
007	Kings County Water District	AL	KC-004		2	Extraction across Subbasin Boundary		The District did not find any information or estimate of groundwater pumping in the MK GSA that is being used outside of the MK GSA area by landowners that have ranches that cross GSA or Subbasin boundaries.		PH		
007	Kings County Water District	GE	KC-005		1	Executive Summary		The Executive Summary appears to be a placeholder and does not seem to be developed enough or meet DWR requirements about helping laymen.		CP		
007	Kings County Water District	HM	KC-006		2	Hydrogeologic Modeling		There is a listing of how the Sustainability Goal will be achieved, which includes this statement " Application of the Kaweah Subbasin Hydrologic Model (KSHM) - incorporating the- initial selection of projects and management actions by the Subbasin GSAs - and its simulation output is summarized in the Subbasin Coordination Agreement to help explain how the sustainability goal is to be achieved within 20 years of GSP implementation." The District views that the referenced simulation is only an indication of what may result if certain actions are taken. Please consider revising.		TN		
007	Kings County Water District	GS	KC-007	MCR-15	2	Undesirable Results- Groundwater Storage		includes this statement "Given assumed hydrogeologic parameters of the Subbasin, direct correlations exist between changes in water levels and estimated changes in groundwater storage. " The District views that this statement is misleading. In order to relate groundwater levels to change in storage, many significant regional assumptions must be made to develop the estimates. The District views that a reliable correlation can only be developed with significantly more information about local aquifer properties than is currently available. Also, this statement ignores the reality that some groundwater amounts may be somewhat bound in formations while other amounts may be more available for extraction. Please consider revising.		CP		
007	Kings County Water District	LS	KC-008		2	Undesirable Results- Land Subsidence		[3.2.1.3 - Land Subsidence, page 3-4] The section does not mention the connection between subsidence and dewatering saturated clay formations. This could lead to the misunderstanding that subsidence can occur everywhere that groundwater levels fall below minimum thresholds. Please consider revising.		MN		
007	Kings County Water District	WQ	KC-009		2	Undesirable Results- Degraded Water Quality		includes this statement, " Undesirable results associated with water quality degradation can result from pumping localities and rates, as well as other induced effects by implementation of a GSP, such that known migration plumes and contaminant concentrations are threatening production well viability are causes of Undesirable results. " This statement is very confusing. Please revise to clarify.		SH	JT	
007	Kings County Water District	WQ	KC-010		2	Undesirable Results- Degraded Water Quality		includes this statement, " Well production depths too may draw out contaminated groundwater, both from naturally occurring and man-made constituents which, if MCLs are exceeded, may engender Undesirable results. " Many local geologic formations contain aquifers with naturally concurring substances like Arsenic and Uranium. The District views that groundwater quality issues relating to local geologic properties, regardless of State MCLs, cannot be viewed as contamination or indicators of Undesirable Results. Please consider revising.		SH	JT	

007	Kings County Water District	IS	KC-011	MCR-16	2	Interconnected Surface Waters		includes this statement, "Depletions of interconnected surface waters are minimal and, to the extent they occur, impact only vegetation along the banks of unlined channels within the forebay regions of the aquifer system where natural channels exhibit gaining reaches from time to time. " The District views that depletions of interconnected surface water would also negatively impact deliveries of surface water to right holders due to the increased losses to groundwater. Please consider revising.		PH	CP, MN	
007	Kings County Water District	GL	KC-012		2	Undesirable Results- Groundwater Levels		includes this statement, "With respect to water-level declines, undesirable results occur when one-third of the representative monitoring sites in all three GSA jurisdictions combined exceed their respective minimum threshold water level elevations. Should this occur, a determination shall be made of the then-current GSA water budgets and resulting indications of net reduction in storage. Similar determinations shall be made of adjacent GSA water budgets in neighboring subbasins to ascertain the causes for the occurrence of the undesirable result. " This approach, depending on implementation, would appear to be detrimental to areas that rely on groundwater recharge during wet years to justify needed pumping in dry years. For instance, an area that has no available surface water in a drought year would be viewed differently than one that had a little available if only the water budget for the one year was involved in the evaluation. Please consider revising.		CP	TN	
007	Kings County Water District	GS	KC-013	MCR-15	2	Undesirable Results- Groundwater Storage		contains a statement about there being a direct relationship between change in storage and groundwater levels. Please see the District's previous comment on Section 3.2.1.2. Please consider		CP		
007	Kings County Water District	GS	KC-014		2	Undesirable Results- Groundwater Storage		The District would view that reduced groundwater storage also impacts beneficial users by reducing the amount of supply potentially available during a drought (when very little surface water is available for existing uses). This section does not seem to address this potential effect. Please consider revising.		CP		
007	Kings County Water District	LS	KC-015		1	Undesirable Results- Land Subsidence		The District would view that continued land subsidence would also increase the flood risks to residents and critical facilities (hospitals, prisons, domestic and municipal wells, etc.) in and around flood zones. Please consider revising.		MN		
007	Kings County Water District	HM	KC-016		3	Data Gaps- Groundwater Levels/Groundwater Storage		The District would view the following as additional data gaps: 1) aquifer characteristics to inform the assumptions currently being made, 2) well construction information for many existing wells and related information on how much water is being pumped in the confined aquifer versus the unconfined aquifer , 3) direct measurements of the amount of groundwater being pumped in agricultural areas, 4) information on bound versus more recoverable groundwater, 5) more accurate information on the base of fresh groundwater across the subbasin, 6) information to validate or criticize the HCM and aquifer descriptions from recent SkyTEM efforts. Please consider revising.		TN		
007	Kings County Water District	WQ	KC-017		3	Data Gaps- Water Quality		The District would view the following as additional data gaps: 1) regionally, there is very little data on water quality at specific depths because of current well construction (screens across hundreds of feet), 2) The groundwater quality of many rural residential home owners is not understood by local GSAs. Please consider revising.		SH	JT	
007	Kings County Water District	LS	KC-018		3	Data Gaps- Land Subsidence		The District would view the following as additional data gaps: 1) there is almost no information on what geologic zone is subsiding in this area, 2) the number of well compression failures, 3) the impact of subsidence to local flood zones, and 4) if land subsidence has any correlation to groundwater quality. Please consider revising.		MN		
008	California Water Service Company	GE	CW-001		1	General		As noted in the draft GSP, there are a number of significant management actions to be undertaken by the affected parties in the coming years to implement the plan. In particular, the development of the pumping allocation program, refinement of the Water Accounting Framework, and the cost allocation process for basin-wide management and project implementation activities will require significant coordination among and input from the impacted parties. Cal Water looks forward to being a direct participant in the management of the GSA as we ensure the sustainable management of the Kaweah		CP		
009	Richard Garcia	IS	RG-001	MCR-16	1	Interconnected Surface Waters/Waterways		In my opinion the current M-KGSA Groundwater Sustainability Plan is an incomplete document that fails to monitor and protect the basin's natural streams and waterways. Throughout the plan ***statements are made minimizing the importance of protecting interconnected waterways*** that support and feed the underground aquifers we are tasked to sustain. The Kaweah River, Saint Johns River and Visalia's many beautiful creeks are all interconnected parts a working delta that deserver's protection and better management. Below is an example of the dismissive language used repeatedly throughout the plan: "Water bodies, primarily stream channels, which become temporally disconnected throughout the year from the underlying water table may experience the disappearance of adjacent vegetative habitat which may be considered as a beneficial use of groundwater. Such occurrences are generally restricted to the upper reaches of applicable channels in the forebay region of the aquifer system near the Sierra foothills. The consensus among Subbasin GSAs and stakeholders is that the intermittent nature of this vegetative habitat is such that its temporary loss does not rise to the level of an undesirable result. As stated previously, the interconnection of surface water and groundwater was disrupted many decades ago in the MKGSA. Therefore, a monitoring network and monitoring is not required for this GSA" Neighboring Kaweah River Sub-Basin GSA's such as the Eastern Kaweah, Greater Kaweah and several Kings County GSAs are also serviced by flows from the Tule and Kings Rivers. If a solution is to be found, neighboring intra-basin GSAs must cooperate and coordinate with each other to monitor and protect these shared waterways if sustainability plans are to succeed. A comprehensive Groundwater Sustainability Plan must consider its impact on our rivers, creeks, canals and ditches. If they are not valued and protected, what is to keep avaricious agencies from proposing upstream pipeline projects to curtail seepage and "save" water for downstream surface water customers at the expense of the entire basin's water table?		PH	CP, MN	
009	Richard Garcia	HM	RG-002		1	Hydrogeologic Modeling/Stakeholder Involvement- KDWCD & USACE		Using new technologies the Agency's consultants have collected an impressive amount of new geological and hydrological data. Water audits and "Water Budget" discussions are interesting exercises, and the airborne geophysical data collection efforts are intriguing. This new data will build upon the existing work of the Kaweah Delta Water Conservation District, an entity that should perhaps play a bigger role in formulating the basin's plans. They have been working on the problem for a long time and they are the connection to the ***U.S. Army Corps of Engineers. Ideally, the Corps should be part of this discussion.*** Flood control and recharge efforts are not exclusive.		TN		

009	Richard Garcia	GL	RG-003		1	Groundwater Level Modeling		I would like to see better computerized graphics. Use the well log data from cities, public water agencies and public schools to create the dynamic 3D models that will show the public how bad reality is.		CP	TN	
010	Self-Help Enterprises	DC	SH-001	MCR-17	2	Well Inventory- Domestic/Public		In order to develop a GSP that addresses the needs of all beneficial users, it is critical that the location and groundwater needs of these communities are explicitly addressed early on in the GSP. In order to improve this section, we recommend the following: ***Include a map indicating the location of public water systems serving SDACs and/or DACs as well as domestic well communities.*** In order to contextualize the subsequent sections of the GSP, it is critical that the geographic locations of these communities be included. ***Maps overlaying the location of these communities*** should also be included in subsequent sections of the GSP, including but not limited to when describing management areas, threshold regions, or potential recharge locations. ***Include a description of the amount of groundwater that each public water system serving SDACs and DACs is dependent on.*** In addition to better quantify groundwater usage by each community, ***include a description of the amount of domestic wells located within the MKGSA and the estimated amount of total groundwater used by domestic well***		PH	CP	
010	Self-Help Enterprises	PO	SH-002	MCR-22	1	Public Outreach- Disadvantaged Communities		Public Engagement, when done well, goes far beyond the usual participants to include those members of the community whose voices have traditionally been left out of political and policy debates . (DWR. (2018) Stakeholder Communication and Engagement).It invites citizens to get involved in deliberation, dialogue, and action on public issues that are important to them. More importantly, it helps leaders and decision-makers have a better understanding of the perspectives, opinions, and concerns of citizens and stakeholders, especially the underrepresented ones. This section of the GSP is generally in accordance with SGMA regulations and adequately captures beneficial uses and users of groundwater. Please consider the following recommendations to ensure more effective public engagement: Within the GSP ***include a high level summary of strategies included in the plan.*** The draft GSP currently only mentioned plan goals and requirements and would benefit from a more expanded description. ***Revise Section 1.5.2 to include water supply for Soults Tract, Lone Oak Tract, and the water systems of Waukena Elementary, Buena Vista, Oak Valley and Liberty School. Provide more information about stakeholder input and responses from the GSA to address the stakeholder input.*** ***Account for S/DAC outreach, engagement and translation services when applying for state funding, establishing and approving operating budgets and enacting groundwater fees:*** In order to ensure proper engagement of underrepresented groundwater users or the next 20 years of GSP implementation, (disadvantaged communities, residents relying on domestic wells and other Spanish speaking users), MKGSA should account for S/DAC outreach, engagement and translation services when applying for state funding, establishing and approving operating budgets and enacting groundwater fees. The GSA should hire qualified consultants who have a record of proven demonstrated success and clear qualifications for working with thesestakeholders. Effective community outreach and engagement includes, but is not limited to, conducting direct community outreach, hosting local community meetings, providing bilingual information, and making interpreting services available at meetings and workshops.		CM		
010	Self-Help Enterprises	PO	SH-003	MCR-23	1	Public Outreach		The current ***draft GSP provides limited information regarding how communication and updates related Plan implementation will take place and how this will be accomplished*** . Please consider the following suggestions: Utilize existing community venues for community meetings, workshops and events to provide information. For example, consider conducting short presentations during water board and school district board meetings. Venues should be carefully selected in order to meet the needs of the targeted audience. Identify community social media (Facebook, Instagram, etc.) groups, pages and websites and post information. Continue to develop media advisories, press releases and work with local media outlets, such as local radio stations, television stations, and local newspapers to captivate a broader audience that are not being reached via the electronic-based outreach currently used. Identify, and work with key community leaders /trusted messengers to distribute information and encourage community participation. Provide bilingual (English and Spanish) information and materials on the website, via email and consider inserting short notices (notices can include key messages, visuals and information that is relevant to the average water user) in water bills and/or community newsletters. At a minimum, this information should be provided during plan updates, and prior to critical decisions. In particular, the draft GSP released during the formal comment period should include materials highlighting key summaries of the GSP. Critical decision points can also include the adoption of groundwater fees, development and adoption of the potential Assistance Program as well as the Groundwater Allocation Framework, and the Pumping Restriction Program. Partner with other educational programs to leverage resources and explore opportunities to educate different generational groups.		CM		
010	Self-Help Enterprises	SB	SH-004		1	Kaweah Subbasin Characteristics		The GSP basin setting requirements are intended to describe the hydrological and groundwater historical changes that have affected the six sustainability indicators. Ultimately, this information is intended to document conditions and quantify the water budget in sufficient detail in order to build local understanding of how it will be used to predict how these same variables may affect or guide future management actions . (DWR, 2016. Best Management Practices for the Sustainable Management of Groundwater, Modeling (BMP #5), December 2016.) The ***current GSP draft does not include information about local groundwater conditions for MKGSA*** , yet it encourages the reader to review Appendix 2A to understand the hydrogeologic and groundwater conditions within the context of the entire Subbasin. However, ***Appendix 2A is not specific to the MKGSA area*** and it is difficult to readily understand what parts of this assessment are specifically applicable to the MKGSA. Moreover, the ***lack of a summary highlighting the main conditions affecting groundwater use and users within MKGSA boundaries*** creates a challenge in understanding how the data will be further utilized in other sections of the GSP. It is therefore recommended to: Include specific information of the Basin Setting and trends within the MKGSA area, in particular as it pertains to the groundwater conditions in section 2 of the GSP. Providing context of local challenges in a single section within the Mid-Kaweah GSP draft GSP would improve the ability of the public to evaluate the basin setting assumptions for reasonableness and completeness to prevent and mitigate for undesirable results.		CP	TN	

010	Self-Help Enterprises	DC	SH-005	MCR-17	1	Hydrogeologic Modeling/Disadvantaged Communities		In order to better depict the hydrogeologic considerations for vulnerable groundwater users, we recommend the following changes: Summarize and highlight important information for the MKGSA from Appendix 2A. Include a description of how groundwater quality considerations also impact the potential of recharge suitability under the description of Potential Recharge Areas. Include the location of SDACs and DACs and domestic wells in Figure 16 and 18 of Appendix 2A. By adding the spatial distribution of communities, stakeholders will be better able to assess which of these communities could benefit from future recharge projects.		PH	CP	
010	Self-Help Enterprises	DC	SH-006		2	Water Quality/Disadvantaged Communities		SHE strongly encourages that the Groundwater Conditions section be improved in order to better achieve the objectives described in the GSP regulations and be more aligned with the guidance provided in DWR's GSP Emergency Regulations Guide. In particular, ***it is of utmost importance that information specific to the MKGSA area from Appendix 2A is discussed in this section, and that data regarding the water issues affecting groundwater sources of S/DACs and households relying on domestic wells is improved.*** As part of GSP Regulations Section §355.4, DWR is required to evaluate whether the interests of the beneficial uses and users of groundwater in the basin, as well as the land uses and property interests potentially affected by the use of groundwater in the basin, have been considered DWR. January 2018. Guidance Document for Groundwater Sustainability Plan Stakeholder Communication and Engagement. S/DACs and rural families relying on shallow domestic wells are extremely vulnerable to changes in groundwater conditions. As such, impacts to their drinking water sources caused by changes in groundwater levels, plume migration, increased degradation of groundwater quality, and subsidence should not be overlooked and these impacts deserve a more in-depth evaluation. A description of the current issues affecting these vulnerable users is key to demonstrating that the MKGSA is taking proactive actions to protect their human right to water. Without adequate characterization of current and historic challenges that communities dependent on groundwater face, MKGSA will not be able to effectively plan to quantify or avoid potential impacts related to groundwater management. Specific recommendations on how this section can be improved are provided in the forthcoming sections.		PH		
010	Self-Help Enterprises	DC	SH-007	MCR-13	2	Groundwater Levels/Disadvantaged Communities		changes in groundwater elevation can result in significant impacts to vulnerable communities, including: increased energy costs associated with additional lift pump costs; costs associated with cleaning of the well screen; cost of lowering well pumps; costs of drilling deeper wells; complete dewatering of wells; movement of contaminant plumes; and the financial, emotional, and physical costs associated with having to rely on bottled water. This section can be improved by including a description of the groundwater level conditions in and around S/DACs and by showing whether changing groundwater levels in these communities have led to dry wells or a decrease in water production. SHE recommends the following changes: Include information of the groundwater conditions and trends that are specific to the MKGSA area from Appendix 2A. Identify communities burdened by or susceptible to changes in groundwater levels. S/DACs and domestic well owners are extremely vulnerable to changes in groundwater levels. Therefore, it is imperative that the GSP properly identify vulnerable communities that have a higher risk of being affected by changes in groundwater levels to understand: (1) where drinking water wells that are more vulnerable to groundwater level changes are located, and (2) whether changes in groundwater levels may be exacerbated in specific areas by pumping volume or location, conjunctive management or other forms of active management as part of GSP implementation. Based on the Focused Technical Analysis and extensive work with S/DACs, we believe that the following communities are susceptible to changes in groundwater levels with the risk of having their water access impaired: -Okieville-Highland Acres: The community of Okieville-Highland Acres consists of approximately 100 homes located in Tulare County, five miles west of the City of Tulare. An unknown number of private wells which serve the remaining 20 homes not connected to the recently constructed water system (based on 3.76 people per household4, the population is assumed to be 76) are susceptible to changes in groundwater levels and at risk of having their water access impacted. The depth of these wells are unknown, but typical domestic wells in the area are drilled to a depth of 130 to 225 feet. More recent domestic wells have been drilled to a depth of 360 feet in a preventive effort to declining groundwater levels. -Waukena: A severely disadvantaged private well community with a population of 175 residents. Private well communities face unique challenges and are more susceptible than most community water systems to changes in groundwater conditions, drought impacts, and water quality concerns. This is primarily due to the shallow nature of most private wells. -High density of domestic wells northwest of the City of Tulare: Similar to other private well communities,		PH	CP, TN	

010	Self-Help Enterprises		SH-008		1	Groundwater Quality/Disadvantaged Communities		The current ***characterization of groundwater quality conditions in Appendix 2A fails to recognize that several public water systems within the GSA have experienced challenges remaining in compliance for safe drinking water standards.*** Further, because of these data gaps in measuring groundwater quality, the extent of groundwater quality contamination for domestic wells or state small water systems is not fully quantified or accounted for in the draft GSP. This section can be improved by including a better description of groundwater quality conditions near or within S/DAC communities as well as an improvement in understanding how potential groundwater management actions could potentially impact the extent of groundwater contamination. We recommend the following changes: Summarize and highlight important information for the MKGSA from Appendix 2A and include local knowledge of the groundwater conditions affecting groundwater use and users in MKGSA area. This is particularly important considering that Appendix 2A, page 125, states that a "groundwater quality discussion" in the Basin Setting for the context of the entire Subbasin "is largely generalized, although constituents of concern are identified geographically." As such, the current characterization of groundwater quality conditions fails to adequately provide a narrative of issues affecting the supply and beneficial uses of groundwater as required by GSP Regulations Section §354.16. Include a description of historical groundwater quality conditions for each public water system. Cities, communities and schools within the MKGSA have historically had challenges meeting safe drinking water requirements. In order to prevent further degradation of groundwater quality conditions, it is important to adequately capture current challenges. At a minimum, consider including in the Mid-Kaweah GSP, section 2, information regarding cities and communities that have fluctuated in and out of compliance. According to the Human Right to Water portal, the water system of Buena Vista School has fluctuated in and out of compliance for Nitrates. The water system of Waukena Elementary School has been in and out of compliance for Uranium and Nitrates. The water system for Oak Valley School has also been in and out of compliance for Arsenic. Moreover, the water well recently drilled for Okieville only found water that meets primary water quality standards at the depth range between 894 ft to 1005 ft. Water depth less than 894 ft exceeds MCLs for Arsenic and Aluminium. Furthermore, SHE recommends providing a summary of the information regarding water quality for the City of Visalia and Tulare, including the city-wide PCE plume in Visalia. Include an assessment of current 10-year average concentrations of contaminants of concern. The maps depicting current groundwater quality conditions in Appendix 2-E only include		PH		
010	Self-Help Enterprises	LS	SH-009		1	Land Subsidence/Disadvantaged Communities		The GSP's current evaluation of land subsidence states general impacts, such as impacts to infrastructure, in particular to the Friant Kern Canal, but ***fails to describe previous and potential impacts to vulnerable communities*** . Land subsidence could result in many direct and indirect impacts to vulnerable communities. Direct impacts can include damages to community infrastructure including bridges, pipe crossings, roads; collapsing of of well casings, that result in well rehabilitation or replacement; and the mobilization and release of arsenic from clay layers into the groundwater aquifer. Indirect impacts can include flooding and long-term environmental effects. Since S/DACs, public water systems, and domestic well communities often lack the resources to address these damages, it is important to document and describe previous and potential impacts in order to prevent them from occurring or mitigate impacts if they occur. Please consider the following recommendations: Summarize and highlight important information for the MKGSA from Appendix 2A and include local knowledge of the groundwater conditions affecting groundwater use and users in MKGSA area. Include a description of possible impacts of land subsidence for S/DACs, public water systems, and domestic well communities. Include documentation of any historical impacts of land subsidence for S/DACs, public water systems, and domestic well communities in Past Land Subsidence.		MN		
010	Self-Help Enterprises	DC	SH-010		3	Water Budget-Domestic/Public/Municipal		The GSP water budget requirements are intended to quantify the water budget in sufficient detail in order to build local understanding of how historical changes have affected the six sustainability indicators in the basin. Ultimately, this information is intended to be used to predict how these same variables may affect or guide future management actions . Another important reason for providing adequate water budget information is to demonstrate that the GSP adheres to all SGMA and GSP regulation requirements and can demonstrate the ability to achieve the sustainability goal within 20 years, and maintain sustainability over the 50 year planning and implementation horizon. 10 Galloway, D., Jones, D, and Ingebritsen, S.E. Land Subsidence in the United States. U.S. Geological Survey Circular 1182. 11 DWR, 2016. Best Management Practices for the Sustainable Management of Groundwater, Modeling (BMP #5), December 2016. ***The water budget made available to the public is incomplete*** , and a full hat Appendix 2A, page 125, states that a "groundwater quality discussion" in the Basin Setting for the context of the entire Subbasin "is largely generalized, although constituents of concern are identified geographically." As such, the current characterization of groun***dwater quality conditions fails to adequately provide a narrative of issues affecting the supply and beneficial uses of groundwater a*** s required by GSP Regulations Section §354.16. Include a description of historical groundwater quality conditions for each public water system. Cities, communities and schools within the MKGSA have historically had challenges meeting safe drinking water requirements. In order to prevent further degradation of groundwater quality conditions, it is important to adequately capture current challenges. At a minimum, consider including in the Mid-Kaweah GSP, section 2, information regarding cities and communities that have fluctuated in and out of compliance. According to the Human Right to Water portal, the water system of Buena Vista School has fluctuated in and out of compliance for Nitrates. The water system of Waukena Elementary School has been in and out of compliance for Uranium and Nitrates. The water system for Oak Valley School has also been in and out of compliance for Arsenic. Moreover, the water well recently drilled for Okieville only found water that meets primary water quality standards at the depth range between 894 ft to 1005 ft. Water depth less than 894 ft exceeds MCLs for Arsenic and Aluminium. Furthermore, SHE recommends providing a summary of the information regarding water quality for the City of Visalia and Tulare, including the city-wide PCE plume in Visalia. Include an assessment of current 10-year average concentrations of contaminants of concern. The maps depicting current groundwater quality conditions in Appendix 2-E only include individual		PH		

010	Self-Help Enterprises	MA	SH-011	MCR-12	2	Management Areas/Disadvantaged Communities		The proposed three management areas consist of the respective jurisdictional areas of MKGSA's three Members, i.e., the City of Visalia, City of Tulare, and the Tulare Irrigation District. Our main concern is that ***the current proposal for management areas and threshold regions has limited consideration for vulnerable communities dependent on groundwater and does not adequately describe how the area will operate under different minimum thresholds.*** We recommend the following changes: Revise the description of the management areas to describe the S/DACs and number of domestic well users within each boundary. As described in the draft GSP, management areas are responsible for implementing projects and management actions within their area. Without a clear understanding of the S/DACs and domestic well users within the management area boundaries, the current draft GSP does not adequately describe conditions in these areas as required by Reg 354.20. Consider developing management areas or threshold regions around vulnerable communities. Vulnerable communities within the MKGSA do not have access to surface water and are dependent on groundwater. In order to develop more protective thresholds for vulnerable communities, it would be important to consider developing a protective buffer, management area, or threshold region around them. This recommendation can also be considered under projects and management actions. Key communities that could benefit of such protection include Okieville and Waukena and the water systems serving Waukena Elementary, Buena Vista, Oak Valley and Liberty School. Revise the description of the Monitoring and Analysis to better describe how the management areas will operate to avoid undesirable results. As currently drafted, the description of management areas could be improved by better clarifying how the different management areas can operate under different minimum thresholds and measurable objectives without causing undesirable results. The chart indicates which threshold regions are within each management area, but there is no description of how each management area will address the different water surface elevation conditions. Since S/DACs and domestic well users are the most vulnerable beneficial users within the MKGSA, it is important to clearly indicate how undesirable results will be avoided.		CP		
010	Self-Help Enterprises	WQ	SH-012	MCR-7	2	Sustainability Goal/Water Quality		The Kaweah subbasin sustainability goal draft included in ***the draft GSP focuses on protecting groundwater for industry uses, which does not satisfy SGMA's intention, and does not reflect the collaborative stakeholder-driven process that took place over the course of several MKGSA Advisory Committee and Kaweah Subbasin Management Team meetings.*** Beginning in November 2018 and continuing over the course of several meetings, the MK Advisory Committee spent a great deal of time discussing what should and should not be included in the Sustainability Goal statement. While perspectives were varied, there was general support among committee members to set a Sustainability Goal that includes a protective stance toward groundwater quality. SHE would like to see more proactive steps taken to improve groundwater quality and tools necessary. This needs to be clearly stated in the language in the MKGSA final draft. Including human consumption in the language will make the statement stronger and demonstrate to residents they their water needs are a priority. Water quality is another important component to strengthening the Sustainability Goal. This will help the GSP meet SGMA standards. SGMA further requires a transparent and inclusive process; therefore it is critical that all GSAs within the subbasin respect guidance and recommendations previously provided by various stakeholders. Revising the sustainability goal without proper explanation or discussion with the public is not appropriate nor is it in accordance with SGMA. Additionally, upon reviewing the draft GSP, community participants at a SHE workshop in Okieville brought attention to the lack of mentioning the need for drinking water in the proposed GSP's Sustainability Goal. At the workshop, participants were provided information about SGMA, their local GSA and presented general information about the draft GSP. Participants were asked to share their vision for sustainability and provide recommendations for what should be included in the Subbasin's sustainability goal. Participants primary question if agricultural enterprises should be prioritized over human consumption. Other feedback provided at the workshop included the importance of ensuring preserving drinking water supplies and addressing groundwater quality. Based on participants' feedback and SHE involvement at several MKGSA Advisory Committee meetings and Kaweah Subbasin Management Team meetings where sustainability goal for Kaweah were discussed, SHE recommends considering the revision of the current Sustainability Goal in order to fully integrate stakeholders' vision for groundwater management. We recommend the following: Adopt the sustainability goal that was previously and extensively discussed during public meetings. The sustainability goal should include language that demonstrates MKGSA's intent to support the protection		SH	JT	

010	Self-Help Enterprises	GL	SH-013	MCR-2	2	Groundwater Levels- Minimum Thresholds/Measurable Objectives	354.16	The Focused Technical Review of the July 2019 Draft MKGSA GSP identified several data gaps and potential significant impacts to public water systems and domestic wells. As expressed by our organizations during MKGSA meetings, ***the current GSP does not adequately consider the groundwater impacts that may affect the supply and beneficial uses of groundwater as required by GSP Regulations Section 354.16.*** Additionally, during the previously mentioned community GSP review workshops, participants were asked to share their opinions and provide recommendations for what should be included in the Subbasin's sustainable management criteria. Participants were concerned with the proposed MT/MOs and what it could mean to their access to water. Feedback provided at the workshop included ensuring preserving drinking water supplies and addressing groundwater quality. Though we are pleased that MKGSA is considering providing assistance to small-system and domestic well owners without the financial wherewithal to service or replace their pump and well facilities, particularly those that provide potable water, we would like to highlight the following concerns and recommendations: Conflicting information: The draft GSP presents water level MTs by: (1) hydrogeologic zones that reportedly share similar groundwater conditions and hydrogeologic behavior (Table 5-2); and (2) by Representative Monitoring Wells (RMWs) (Table 5-3). According to the draft GSP, the hydrogeologic zone MTs are based on the average of the RMW MTs for a particular area. As stated in Section 5.3.1.3, "Consistent with this requirement, the minimum elevation thresholds in this Plan are set at specific levels based on four different hydrogeologic zones as defined herein." However, well impact analyses are performed based on the MTs developed for each individual RMW, and the MOs are only established at the RMWs (i.e., not by hydrogeologic zones). Based on the conflicting information presented in the draft GSP, it is not clear which set of MT values will be used for compliance purposes through the GSP implementation phase. Please ensure that the Sustainable Management Criteria, including MTs and MOs, be clearly identified and applied consistently in the GSP. Minimum thresholds are established without regard to well depths or other potential impacts: With a collective population of over 63,000 people, communities within the MKGSA area are entirely dependent on groundwater for drinking water purposes. The MKGSA includes 13 community water systems, 11 of which have less than 300 service connections but collectively serve over 5,300 people. Despite the broad and diverse dependence on groundwater for drinking water use, the approach to setting water level MTs/MOs and URs does not explicitly take these drinking water		CP		
010	Self-Help Enterprises	WQ	SH-014	MCR-19	2	Groundwater Quality- Monitoring/Minimun Thresholds/Maximum Contaminant Levels		We are pleased that the draft GSP establishes MTs/MOs based on maximum contaminant levels (MCLs) for contaminants of concern for municipal use. However, ***the water quality monitoring network and analysis presented does not clearly illustrate how the MOs/MTs will adequately ensure that the water quality UR of impacting the long-term viability of the groundwater resource will be avoided, particularly for domestic water users and S/DACs.*** The proposed MT to allow contaminants to further degrade appears to be inconsistent with state water quality laws and policies. We recommend the following changes: Include an assessment of the concentrations of COCs at all monitoring wells to establish MT baseline conditions. The draft GSP indicates COC concentrations will be evaluated for compliance with water quality MTs in the future and where MCLs are already exceeded prior to GSP implementation, this will be considered a baseline condition that MKGSA is not responsible for remediating. It is critical that the GSP draft includes an assessment of the current concentrations in order to present the baseline conditions relative to the proposed MOs/MTs. For transparency and completeness, clearly identify on maps and in tables which set of MTs/MOs will be applied to which RMWs. These maps should clearly identify the location of DACs, small water systems, and other sensitive users so that the public is able to review and evaluate the proposed sustainability approach. The draft GSP identifies a methodology used to distinguish between the applicability of either MCLs or agricultural WQOs as the MTs for a given RMW. As stated in Section 5.3.3.3, "If the majority of the beneficial use (greater than 50% of the pumping within a determined area) was agriculture and there were no public water systems (including schools) the minimum threshold would be a host of agricultural water quality constituents" and "If a monitoring well is located within an urban area, or near a public water system (e.g., within a mile), which includes schools, then the minimum threshold would be set at the MCL for drinking water." However, the draft GSP does not clearly identify on a map or otherwise which RMWs will use MCLs and which will use agricultural WQOs. The document also does not identify which monitoring wells are located within an urban area or near a public water system. Per 23 CCR §354.28, the draft GSP should provide a detailed explanation as to how the proposed water quality MTs may affect the interests of beneficial uses and users of groundwater or land uses and property interests. Expand groundwater quality monitoring network near Okieville. Figure 3 from the Focused Technical Review shows that there are no Representative Monitoring Wells (RMWs) with established water quality minimum thresholds set at the MCL for drinking water near the community of Okieville. We recommend		CP	TN, SH, JT	
010	Self-Help Enterprises	LS	SH-015		1	Land Subsidence/Disadvantaged Communities		As mentioned previously, land subsidence could have significant impacts on vulnerable community infrastructure. In communities that do not have the financial capacity to address costly infrastructure damages, ***impacts of land subsidence should be evaluated more closely*** . We recommend the following changes: Expand the description of potential impacts for S/DAC communities and rural domestic well users under the description of the Potential Impacts on Beneficial Uses and Users. Clarify the relationship between groundwater quality and land subsidence. Researchers have found that there is a relationship between land subsidence caused by overpumping and increases in contaminants like arsenic15. The section on the Relationship for each Sustainability Indicator needs to be revised to clarify that this is not applicable to the MKGSA. 15 Smith, R., Knight, R., & Fendorf, S. (2018). Overpumping leads to California groundwater arsenic threat. Nature communications, 9(1), 2089.		MN		

010	Self-Help Enterprises	GL	SH-016	MCR-17	2	Groundwater Levels-Monitoring/Drinking Water		Robust monitoring networks are critical to ensuring that the GSP is on track to meet sustainability goals. As currently developed, ***the monitoring network can be improved to adequately monitor how groundwater management actions related to groundwater levels could impact vulnerable communities.*** We recommend the following changes: Include drinking water sources susceptible to groundwater level changes as a criteria in selecting wells for the representative groundwater level monitoring program. Identify which monitoring wells will be used to assess impacts to drinking water wells caused by changes on groundwater levels and describe how that assessment will be conducted. As required by 23 CCR § 354.28, DWR will evaluate the ability of the proposed monitoring program to properly assess impacts to beneficial users of groundwater and to protect beneficial users within the subbasin. In particular, it is important to clarify how MKGSA plans to monitor and assess drinking water wells at risk of dewatering. Include the location of S/DACs, areas with high density of domestic wells, and GDEs in Figure 4-3 and 4-4. Maps overlaying the location of these communities will allow stakeholders to evaluate the adequacy of the network to monitor		SH	JT	
010	Self-Help Enterprises	WQ	SH-017	MCR-18	2	Groundwater Quality-Monitoring/Minimun Thresholds/Maximum Contaminant Levels		For the reasons identified below, ***the water quality representative monitoring wells (RMWs) are inadequate for determining if the actions of the MKGSA degrade the beneficial use of water and for ensuring that the stated water quality UR of impacting the long-term viability of the groundwater resource will be avoided —particularly for domestic water users and S/DACs.*** GSAs undertaking recharge, significant changes in pumping volume or location, conjunctive management or other forms of active management as part of GSP implementation, must consider the interests of beneficial users, including domestic well owners and S/DACs. For these vulnerable groups, GSAs should avoid disproportionate impacts. The draft GSP lacks representative monitoring wells in areas where drinking water users may be particularly vulnerable to groundwater supply and quality issues, leaving MKGSA with no ability to adequately measure and avoid significant and unreasonable impacts to those users. It is critical that MKGSA develop sufficient monitoring networks, capable of detecting changes in groundwater quality conditions related to groundwater management. We recommend the following changes: Identify which monitoring wells will be used to assess impacts to drinking water wells caused by groundwater quality degradation and describe how that assessment will be conducted. As required by 23 CCR § 354.28, DWR will evaluate the ability of the proposed monitoring program to properly assess impacts to beneficial users of groundwater and to protect beneficial users within the subbasin. In particular, it is important to clarify how MKGSA plans to monitor and assess drinking water wells at risk of further contamination. In specific: -For transparency and completeness, the GSP should clearly identify on maps and in tables which set of MTs/MOs will be applied to which RMWs. These maps should clearly identify the location of DACs, small water systems, and other sensitive users so that the public is able to review and evaluate the proposed sustainability approach. - Provide a focused and detailed explanation of how the proposed water quality MT approach and monitoring network will result in the protection of groundwater for S/DACs and other drinking water beneficial users in the subbasin, as required by 23 CCR § 354.28. Expand groundwater quality monitoring network near Okieville. Based on the spatial distribution of the wells dedicated to monitoring water quality presented in Figure 4-6 and 4-7 of the draft GSP, the network is not spaced evenly across the area. The water quality RMWs are located in the northern and eastern portions of the MKGSA area and the monitoring well density varies by two orders of magnitude across the MKGSA. Although the western portion of the MKGSA, including the communities of Okieville and Waukena, are more sparsely		SH	JT	
010	Self-Help Enterprises	PM	SH-018	MCR-11	1	Projects and Management Actions-Multiple Benefit/Disadvantaged Communities/Water Quality		We are pleased with the inclusion of Okieville Recharge Basin Project. A partnership has been established between Okieville and TID in order to construct the recharge basin upstream from the community that can bring mutual benefits. Indeed, groundwater recharge projects can have multiple benefits such as increasing groundwater storage and levels, as well as diluting contaminant plumes and improving groundwater quality. Carefully designed and implemented recharge projects, dry wells, on-farm recharge and storage projects type can simultaneously provide benefits to communities, farmers, and ecosystems. Moreover, these types of partnerships can enhance community engagement in projects, increase community awareness of the issues being addressed and establish a framework to support communities in their efforts to secure safe and reliable water. However, if not properly designed, recharge projects may mobilize nitrates, pesticides, and fertilizers, as well as naturally occurring contaminants, and can lead to the further degradation of groundwater quality, impacting drinking water wells. Currently, ***it is unclear if recharge, injection wells, and on-farm recharge proposed projects include precautions of groundwater quality degradation or if groundwater quality is included in the monitoring plan of these projects.*** In order to develop recharge projects that move the subbasin towards sustainability, avoid the further degradation of groundwater, and improve drinking water conditions, we recommend the following considerations and changes: Strengthen partnerships between Okieville and other DACs such as Waukena. MKGSA and TID should continue to partner with communities for the development of projects with multiple benefits that addresses overdraft while ensuring the protection and viability of important drinking water sources. When feasible, MKGSA should continue to prioritize and provide additional recognition for recharge projects near or up gradient to drinking water systems that have shared benefits: increase groundwater baseflow while at the same time addressing drinking supply needs, including improving GW quantity and quality. Include a map that overlays all of the potential recharge projects onto one map and include the location of S/DAC, domestic wells, and public water systems. As currently described, stakeholders are unable to effectively evaluate the collective potential benefits or impacts of recharge projects for drinking water users in the MKGSA. Develop criteria for recharge projects that prevent unintended impacts to drinking water. We recommend providing security considerations to ensure that all recharge and storage projects do not cause nor increase groundwater contamination. Attention should be placed on monitoring water quality, avoiding the use of contaminated soils through which water will percolate or use of surface water that is		PH		

010	Self-Help Enterprises	AL	SH-019		1	Groundwater Allocations		of the Mid-Kaweah Groundwater Extraction Allocation Framework such that well owners will be afforded the opportunity to provide input on the proposed implementation of the program. We are also pleased that MKGSA also plans to exclude those well owners who extract less than two AF per year (i.e., de minimis extractors) at least for this initial phase of an allocation program. Nonetheless, ***we recommend the GSP provide stronger clarification regarding provisions that the GSA plans to implement and consider to ensure that drinking water users will continue to have access to drinking water.*** When developing a groundwater allocation framework, consider the following measurements to ensure that the framework is protective of the Human Right to Water (AB 685): Sustainable yield allocation: In order to best protect drinking water needs we recommend that GSAs establish an allocation amount of groundwater as part of the calculation for the sustainable yield to adequately meet drinking water needs for public health and safety, both now as well into the future. Small water systems serving disadvantaged communities, domestic well owners, and water systems serving schools should be excluded from an allocation program. In order to determine this baseline for drinking water, GSAs will need to work with small community water systems, cities, and/or the county to determine current and future daily drinking water needs. Fees: The draft GSP indicates that it will not impose pumping restrictions on well owners that extract less than two AF per year. However, it does not address small water systems that may extract over two AF per year and serve critical drinking water needs, such as the Okieville/Highland Acres Mutual Water Company, and the Waukena Elementary School system. When developing a groundwater user fee structure, please consider that small communities have fewer economic resources. Additional fees increase families' water bills that are frequently already above the California water affordability threshold of 1.5% of MHI. Moreover, it is important to recognize and value other ways DACs and low-income residents contribute to the implementation of SGMA. For example, the Kaweah Subbasin, like many others around the State, was granted a DAC waiver and qualified for $1.5 million in grant funds to offset the costs of developing the GSP. The DAC waiver was granted by demonstrating the number of DACs that are located within the subbasin. Additional grants were obtained to construct monitoring wells and a recharge basin. For these reasons, we recommend exempting small drinking water systems managed by DACs and De Minimis Extractors from any GSAs fees (use permits and penalty fees) to support their efforts to provide affordable safe water. Financial		PH		
010	Self-Help Enterprises	AL	SH-020		1	Water Marketing		groundwater market as a possible tool for groundwater management. Changing where and when groundwater is pumped or the place, method, timing, or purpose of its use, can significantly change the impacts experienced by people and ecosystems. Whether a groundwater market leads to harmful or beneficial impacts all depends on how the market is designed, governed, implemented, and what feedback mechanisms are included and utilized throughout the life of the market. ***Groundwater markets are not a viable option where the potential impacts of trading are not well understood— which is the case in areas that have significant data gaps and data uncertainties— where trading rules cannot sufficiently address negative externalities, or where the expected benefits of a market do not outweigh the burdens and uncertainties associated with designing and implementing a market .*** The foundation of a well-designed trading program requires a fair and adequate allocation of groundwater for drinking water uses, an additional margin for future growth prior to allocating water for trading purposes, and trading rules that avoid undesirable results as well as avoid or mitigate potential impacts to communities dependent on groundwater supplies. If these components are missing, the market can have significant negative impacts upon a community's drinking water supply. Some impacts include, but are not limited to: localized drying of community and domestic wells, increased contamination levels, or unaffordable water rates. Before considering a groundwater market framework, consider the following: Establish a non-tradeable allocation for drinking water: A non-tradable allocation amount of groundwater should be included as part of the calculation for the sustainable yield to adequately meet current and future drinking water needs for public health and safety. Ensure that monitoring networks are in place to detect the status and trends of groundwater conditions, and to ensure that the market is running well and is not resulting in adverse impacts to groundwater quality and/or groundwater levels. Implement an early warning system utilizing data collected through the monitoring network that helps identify at-risk groundwater users and anticipate potential negative impacts, such as groundwater level declines or worsening groundwater quality. Provide security considerations to ensure that transfers do not individually or cumulatively cause or contribute to violations of water quality standards. Implement interim and long-term solutions to mitigate for negative impacts to drinking water users caused by the groundwater trading. Outreach and engagement: Devise ways to help engage, communicate and translate technical		PH		

010	Self-Help Enterprises	DC	SH-021	MCR-14	1	Groundwater Levels-Domestic/Public		SHE appreciates MKGSA and stakeholder interest in providing assistance to small water systems and domestic well owners without the financial impacts to service or replace their pump and well facilities. As the assistance measures described in the draft GSP have not yet been approved to be carried out, we would like to further express the importance in providing such an assistance program to prevent and mitigate for impacts to drinking water users. The draft GSP identifies an impact to 21% of rural/domestic wells and, based on our Focused Technical Review, the actual impacts could be much higher. Moreover, rural domestic and small water system demand does not contribute substantially to the overdraft conditions, yet the risks imposed on these drinking water users are overlooked, creating a disproportionate impact on already vulnerable communities. With the decision of postponing the implementation of a groundwater allocation program or addressing reductions in groundwater pumping, drinking water users could face significant impacts, particularly if the region faces another drought. If MKGSA defines its sustainability criteria in a way that allows for the dewatering of drinking water wells, it is critical that MKGSA develops a robust drinking water assistance program to prevent impacts to drinking water users and mitigate the drinking water impacts that occur. ***The draft GSP presents a couple of mitigation measures that are being considered by the GSA's Advisory Committee and Governing Board. We would like to provide a set of additional considerations for establishing such an Assistance Program.*** Mainly, we recommend that mitigation measurements are tied back to a monitoring network and an adaptive management framework (trigger system) to evaluate groundwater conditions and predict potential groundwater impacts to drinking water wells. The framework should forecast how groundwater levels and quality could change based on potential project impacts, identify at-risk domestic wells, identify areas for additional monitoring, and determine if monitoring triggers have been met. Please consider the following for the development of an Assistance Program: Drinking Water Wells Monitoring Network: Expand and improve the monitoring network described by the GSP draft to assess impacts to drinking water wells caused by changes on groundwater levels and quality, in particular for groundwater conditions near the Okieville and Waukena communities, areas with high density of private domestic wells, and water systems serving schools. This will allow MKGSA to better comply with GSP regulations section 354.34, which requires GSAs to describe how potential impacts to groundwater users and uses will be monitored, ensure the success of the Assistance Program, and take a proactive approach to protect S/DACs and domestic well owners access to safe and affordable drinking		PH		
010	Self-Help Enterprises	GA	SH-022		1	Interagency Collaboration		SHE appreciates MKGSA and stakeholder proposal to further collaborate and partner with other regulatory agencies during GSP implementation to ensure that its minimum thresholds and measurable objectives are maintained and that the water quality objectives of these other entities are achieved. As expressed previously, SHE believes that the strategic governance structure of GSAs can uniquely leverage resources, provide local empowerment, centralize information, and help define a regional approach to groundwater quality management unlike any other regional organization. When implemented effectively, GSAs have the potential to be instrumental in reducing levels of contaminants in their regions, thus reducing the cost of providing safe drinking water to residents. GSAs are the regional agency that can best comprehensively monitor and minimize negative impacts of declining groundwater levels and degraded groundwater quality that would directly impact rural domestic well users and S/DAC within their jurisdictions. ***When potential projects are proposed, MKGSA should consider taking leadership in***		PH		
011	Self-Help Enterprises/ Leadership Counsel for Justice and Accountability	GL	SL-001	MCR-2	2	Groundwater Levels- Minimum Thresholds/Measurable Objectives		The draft Groundwater Sustainability Plan (GSP) developed by the Mid-Kaweah Groundwater Sustainability Agency (MKGSA) sets the minimum thresholds (MTs) for groundwater levels as the groundwater levels projected through 2040 based on the average groundwater level decline observed over the 2006-2016 time period. Similarly, the MKGSA sets the measurable objectives (MOs) for groundwater levels as the groundwater levels projected through 2030 using the same declining water level trend. This approach is intended to represent continued long-term drought conditions. The draft GSP defines the undesirable result (UR) for chronic lowering of water levels as being when one-third of the representative monitoring sites in the Kaweah Subbasin (subbasin), across all three GSAs, exceed their respective MTs. ***This approach is consistent with the approach used in the East and Greater Kaweah GSPs and leaves key beneficial users in the subbasin, specifically domestic well users and members of disadvantaged communities (DACs), potentially vulnerable to impacts. While an assistance program is identified in the draft GSP, that program currently lacks key details that would make it a robust mitigation measure for these beneficial users.*** The draft GSP presents water level MTs by: (1) hydrogeologic zones that reportedly share similar groundwater conditions and hydrogeologic behavior (Table 5-2); and (2) by Representative Monitoring Wells (RMWs) (Table 5-3). According to the draft GSP, the hydrogeologic zone MTs are based on the average of the RMW MTs for a particular area. As stated in Section 5.3.1.3, "Consistent with this requirement, the minimum elevation thresholds in this Plan are set at specific levels based on four different hydrogeologic zones as defined herein." However, well impact analyses are performed based on the MTs developed for each individual RMW, and the MOs are only established at the RMWs (i.e., not by hydrogeologic zones). Based on the conflicting information presented in the draft GSP, it is not clear which set of MT values will be used for compliance purposes through the GSP implementation phase. Sustainable Management Criteria (SMC), including MTs and MOs, should be clearly identified and applied consistently in the GSP. As shown on Figure 1, the MKGSA area includes over 750 domestic wells, three DWR-designated DACs1 (i.e., Tulare, Matheny Tract, Okieville, and Waukena) with a collective population of over 63,000 people, and two additional small communities adjacent to Tulare that are dependent on groundwater for drinking water purposes (i.e., Soults Tract, and Lone Oak Tract). The MKGSA also includes 13 community water systems, 11 of which have less than 300 service connections but collectively serve over 5,300 people. Despite this broad and diverse dependence on groundwater for drinking water use, the approach to		PH	CP, TN	

011	Self-Help Enterprises/ Leadership Counsel for Justice and Accountability	WQ	SL-002	MCR-18	2	Groundwater Quality- Monitoring/Minimun Thresholds/Maximum Contaminant Levels		The draft GSP sets the MTs for water quality at Maximum Contaminant Levels (MCLs) or the Agricultural Water Quality Objectives (WQOs) at each RMW based on the dominant beneficial use for that monitoring well. The MOs for water quality were set at 75% of the MCLs or WQOs. The draft GSP further defines the UR for degraded water quality as being when one-third of the RMWs in the subbasin exceed an MT. Section 2.2 of the draft GSP identifies arsenic, nitrate, certain volatile organics, and 1,2,3-trichloropropane (TCP) as Constituents of Concern (COCs) for the MKGSA due to concentrations near MCLs or due to increasing trends. The draft GSP further identifies the following constituents to be measured where applicable (Section 3.2.2.4): arsenic, nitrate, chromium-6, dibromochloropropane (DBCP), TCP, tetrachloroethylene (PCE), sodium, chloride, perchlorate, total dissolved solids (TDS). For the reasons identified below, the water quality monitoring network and analysis presented in ***the draft GSP does not clearly illustrate how the MOs/MTs will be sufficient to ensure that the stated water quality UR of impacting the long-term viability of the groundwater resource, particularly for domestic water users and DACs, will be avoided.*** The draft GSP identifies a methodology used to distinguish between the applicability of either MCLs or agricultural WQOs as the MTs for a given RMW. As stated in Section 5.3.3.3, "If the majority of the beneficial use (greater than 50% of the pumping within a determined area) was agriculture and there were no public water systems (including schools) the minimum threshold would be a host of agricultural water quality constituents" and "If a monitoring well is located within an urban area, or near a public water system (e.g., within a mile), which includes schools, then the minimum threshold would be set at the MCL for drinking water." However, the draft GSP does not clearly identify on a map or otherwise which RMWs will use MCLs and which will use agricultural WQOs. ***The document also does not identify which monitoring wells are located within an urban area or near a public water system.*** For transparency and completeness, the GSP should clearly identify on maps and in tables which set of MTs/MOs will be applied to which RMWs. These maps should clearly identify the location of DACs, small water systems, and other sensitive users so that the public is able to review and evaluate the proposed sustainability approach. Per 23 CCR §354.28, the draft GSP should provide a detailed explanation as to how the proposed water quality MTs may affect the interests of beneficial uses and users of groundwater or land uses and property interests. Figure 3 shows the water quality monitoring network identified in Figures 4-6 and 4-7 of the draft GSP, including the new proposed multi-level monitoring wells. The water quality RMWs are focused in the northern and		SH	JT	
011	Self-Help Enterprises/ Leadership Counsel for Justice and Accountability	AL	SL-003	MCR-18	1	Projects and Management Actions- Domestic/De Minimus Extractors		The draft GSP describes a plan to develop a groundwater extraction allocation program between 2020 and 2025 (Section 7.4.2) and states that "this initial phase of an allocation program shall exclude those well owners who extract less than two AF per year (i.e., de minimis extractors)." Under Section 7.4.8.1, it is acknowledged that the early stages of planning for the assistance program will include "A determination by the GSA to not regulate any de minimis extractor, i.e., any well owner pumping two acre-feet or less annually." This provision is critical to ensure that drinking water users, including DACs and other domestic well users, will continue to have access to drinking water and therefore, ***the GSP should provide stronger clarification that this provision will be included in any allocation program through and beyond the 2025 timeframe.*** As described above, the draft GSP indicates that it will not impose pumping restrictions on well owners that extract less than two AF per year, but does not address small water systems that may extract over two AF per year, but serve critical drinking water needs, such as the Soults Mutual Water Company, Okieville/ Highland Acres Mutual Water Company, and the Waukena Elementary School system. ***The GSP should therefore clearly identify how a groundwater allocation program would be designed to protect small water systems and the beneficial users that depend on them.*** As discussed above, the draft GSP identifies an impact to 21% of rural/domestic wells, and based on our "quick and dirty" evaluation herein, the actual impacts could be much higher. Given these impacts to well owners, the draft GSP identifies assistance measures that are being considered for small water systems and domestic wells (Section 7.4.8.1). If assistance measures are planned to mitigate impacts to drinking water wells, then ***the draft GSP should provide clear funding mechanisms and implementation plans for these assistance measures.*** The GSP should also consider the following in its implementation plan: -A secure and reliable funding source and mechanism for implementation of any assistance measures needs to be identified. While grant or emergency funding could potentially be available for such a program when needed, the availability of these funds is not certain. A more secure funding mechanism could be the establishment of a reserve fund that is paid into on an annual basis and accrues funds that would then available as water levels drop in the future. -The implementation of an assistance measure program should be triggered before wells begin to become unusable, so that funding will be available, and the necessary planning and contracting will be completed such that the necessary construction will be implemented without unnecessarily leaving community members without access to drinking water. Thus, the measure		PH		
012	Tulare County Resource Management Agency	OR	RM-001		1	Internal Referencing		"It is one of the prime agricultural regions in the Central Valley and home to numerous small towns and communities, as well as the larger cities of Tulare and Visalia." ***Should reference a specific map or diagram.***		CP		
012	Tulare County Resource Management Agency	GP	RM-002		1	General Plans- Urban		"Urban land use is located within the limits of the cities of Tulare and Visalia and the surrounding unincorporated areas within the sphere of influence for the cities." ***General Plan Land Use Diagrams should be referenced or included in the GSP.*** Tulare County General Plan Land Use Diagram Figure 4-1 (page 4-5) at a minimum should be referenced or included here.		CP		
012	Tulare County Resource Management Agency	GP	RM-003		1	General Plans		"Each of the two incorporated cities in MKGSA's area have adopted General Plans. For the areas not within the limits of the incorporated cities, the Tulare County General Plan applies. The General Plans for the cities and the General Plan for the county each have land use elements which address water usage. These elements were considered in this GSP." ***General Plan Land Use Diagrams should be referenced or included in the GSP. Tulare County General Plan Land Use Diagram Figure 4-1 (Page 4-5) at a minimum should be referenced here . This statement should describe the specific general plan elements that***		CP		

012	Tulare County Resource Management Agency	GP	RM-004		1	General Plans- Water Resources		"However, the Tulare County 2012 General Plan has a Water Resources Element…" ***Note that the County's GP also has other elements that address water. These should be referenced.*** The Tulare County General Plan includes both policies and implementation measures that address water supply, wastewater treatment, adequate infrastructure, plans, programs, and funding in the following elements: Planning Framework (Chapter 2), Agriculture (Chapter 3), Land Use (Chapter 4), Economic Development (Chapter 5), Housing (Chapter 6), Environmental Resources Management (Chapter 8), Health and Safety (Chapter 10), Water Resources Chapter 11), Public Facilities and Services Chapter 14), Gen Plan Water Resources Element policies Include: Water Supply WR-1.1 Groundwater Withdrawal, WR-1.3 Water Export Outside County, WR-1.4 Conversion of Agricultural Water Resources, WR-1.5 Expand Use of Reclaimed Wastewater, WR-1.6 Expand Use of Reclaimed Water, WR 1.7 Collection of Additional Groundwater Information, WR-1.8 Groundwater Basin Management, WR-1.9 Collection of additional Surface Water Information, WR-1.10 Channel Modification, WR-3.1 Develop Additional Water Sources, WR-3.2 Develop an Integrated Regional Water Master Plan, WR-3.3 Adequate Water Availability, WR-3.4 Water Resource Planning, WR-3.5 Use of Native and Drought Tolerant Landscaping, WR-3.6 Agricultural Irrigation Efficiency, WR 3.7 Emergency Water Conservation Plan, WR-3.8 Educational Programs, WR-3.9 Establish Critical Water Supply Areas WR-3.10 Diversion of Surface Water, WR-3.11 Policy Impacts to Water Resources, WR-3.12 Joint Water Projects with Neighboring Counties, WR-3.13 Coordination of Watershed Management on Public Land PFS-2.1 Water Supply, PFS-2.2 Adequate Systems, PFS-2.3 Well Testing, PFS-2.5 New Systems or Individual Wells, Water Quality, WR-1.2 Groundwater Monitoring, WR 1.7 Collection of Additional Groundwater Information, WR-1.8 Groundwater Basin Management, WR-2.1 Protect Water Quality, WR-2.2 NPDES Enforcement, WR-2.3 Best Management Practices, WR-2.4 Construction site Sediment, WR-2.5 Major Drainage Management, WR-2.6 Degraded Water Resources, WR-2.7 Industrial and Agricultural Sources, WR-2.8 Point Source Control, WR-2.9 Private Wells, PFS-2.1 Water Supply, PFS-2.5 New Systems or		CP		
012	Tulare County Resource Management Agency	GA	RM-005		1	GSP Adoption		"…the MKGSA will address these issues with the adoption…" Might want to reference the GSA's authority to address these issues here and specifically detail how adoption of the GSP will address these issues.		CM		
012	Tulare County Resource Management Agency	GP	RM-006		1	General Plans- Agricultural Land		"…"work with the county and other organizations to protect prime farmland and farmland of statewide importance outside the city's Urban Development Boundary…" ***Should policies from the County General Plan be specifically referenced here?*** This discussion could reference County Adopted City General Plans (Visalia Area Community Plan) as the appropriate mechanism to coordinate land use and policy decisions within the UAB and UDB. See Tulare County General Plan Planning Framework Chapter 2 Section PF-4 and 4-A. In addition, groundwater recharge is not solely determined by FMMP designations (See Tulare County General Plan Health and Safety Element Figure 10-7 areas for groundwater recharge. In addition the following County General Plan policies including but not limited to primarily address farmland protection: AG-1.1 Primary Land Use, AG-1.2 Coordination, AG-1.3 Williamson Act, AG-1.5 Substandard Williamson Act Parcels, AG-1.6 Conservation Easements, AG-1.7 Preservation of Agricultural Lands, AG-1.8 Agriculture Within Urban Boundaries, AG-1.9 Agricultural Preserves Outside Urban Boundaries, AG-1.10 Extension of Infrastructure Into Agricultural Areas, AG-1.11 Agricultural Buffers, AG-1.12 Ranchettes, AG-1.13 Agricultural Related Uses, AG-1.14 Right-to-Farm Noticing, AG-1.15 Soil Productivity, AG-1.16 Agricultural Water Resources, AG-1.18 Farmland Trust and Funding Sources, AG-2.8 Agricultural Education Programs, LU- 1.5 Paper Subdivision Consolidation, LU-2.1 Agricultural Lands, LU 2.2 Agricultural Parcel Splits, LU-2.5 Residential Agriculture Uses, LU- 2.7 Industrial Development, RVLP- 1.1 Development Intensity, RVLP- 1.2 Existing Parcels and Approvals, RVLP- 1.3 Tulare County Agricultural Zones, RVLP- 1.4 Determination of Agricultural Land, RVLP- 1.5 Non Conforming Uses, RVLP-1.6 Checklist		CP		
012	Tulare County Resource Management Agency	GP	RM-007		1	Well Permitting		"The county is revising their well permit application based on GSA input. The proposed revised application is provided on the following pages." For clarification purposes, this section could clearly delineate what revisions to the well permitting application are being proposed.		CP		
012	Tulare County Resource Management Agency	GA	RM-008		1	GSA Roles		This section notes the role for the GSA's in the process that you may want noted above.		CM		
012	Tulare County Resource Management Agency	OR	RM-009		1	GSP Organization		"As shown in Figure 1-2, the MKGSA region includes three areas identified as a Census Designated Place by the 2016 U.S. Census Bureau as disadvantaged or severely disadvantaged. The City of Tulare has been identified as a Disadvantaged Community, while the community of Matheny Tract and Waukena have both been determined as a Severely Disadvantaged Community. The community of Okieville/Highland Acres is located within a 2016 U.S. Census Bureau Disadvantaged Community Tract. Stakeholders in these communities have the opportunity to consult on the plan during the agency's Board of Directors and Advisory Committee meetings and during review of this Plan." ***Seems to be a repeat of Section 1.5.2.3***		CP		
012	Tulare County Resource Management Agency	GP	RM-010		1	Public Property Permitting		"Placement of recharge projects and management of pumping regimes in each GSA/Management Area such that acceleration of contaminant plume migration that impairs domestic and municipal supply well production as induced by GSP projects and management actions is avoided." this is important for any new community, as well as for existing communities that fall under the County's purview. Acquisition of property for public purposes may require a General Plan Referral.		CP		
012	Tulare County Resource Management Agency	GL	RM-011	MCR-2	1	Groundwater Levels- Minimum Thresholds/Measurable Objectives		"…one-third of the representative monitoring sites in all three GSA jurisdictions combined exceed their respective minimum threshold water level elevations." ***Over what time period?***		CP		
012	Tulare County Resource Management Agency	GL	RM-012		1	Undesirable Results- Groundwater Levels		"…a determination has been made that the percentage of wells completely dewatered by 2040 should the minimum thresholds not be exceeded would not constitute an undesirable result." ***For clarification should that actual percentage be stated here?***		PH	CP, TN	

012	Tulare County Resource Management Agency	GL	RM-013		1	Groundwater Levels-Economic Impacts		"During this 20-year period, pumping costs will rise due to higher lifts and higher energy pricing, but this condition is considered by the MKGSA as a manageable impact that has been occurring for many years and is comparable to inflationary costs experienced by agricultural businesses, municipalities, and small-system and domestic households." Can you further detail the costs comparisons?		PH	CP, TN	
012	Tulare County Resource Management Agency	WB	RM-014	MCR-19	1	Water Budget		"Comparing these resulting groundwater inflow assignments to MKGSA to annual groundwater pumping for the same current period (1997-2017), as identified in Table 6-3, results in an imputed water balance surplus for MKGSA of about 38,000 AF on an average basis. Yet, as acknowledged in Section 2 of this Plan, MKGSA, like the balance of the Subbasin, experiences a historical decline in groundwater levels and attendant depletion of groundwater in storage within its jurisdictional region." ***This might be a good place to describe the imputed water balance in greater detail to describe the difference from the***		CP	TN	
012	Tulare County Resource Management Agency	WB	RM-015	MCR-20	1	Water Budget/Water Accounting Framework		"Whereas the average water accounting framework water balance is positive, the comparable hydrogeologic water budget is negative by about 13,000 AF. This reduction in storage is to be expected, as water levels decline in the range of 3 feet per year over much of the GSA region. The relative contributions of multiple causes of these declines is the subject of further study and hydrogeologic analyses." ***Please provide greater of the detail in regards to the cooperative agreement to help understand why groundwater levels are trending down in the overall Kaweah, even if there is 'surplus' according to the budget in the Mid-Kaweah.***		TN		
012	Tulare County Resource Management Agency	PM	RM-016		1	Projects and Management Actions-Coordination Agreement		"It is the intent of the Subbasin GSAs, as stipulated in the Coordination Agreement, to continue to discuss water balances and groundwater conditions during GSP implementation and, in so doing, manage the location, extent, and financial contributions to projects and management actions of each." ***This would be a good place to discuss the Coordination Agreement?*** Specific language or chapter/section citations in the coordination agreement should be referenced here.		PH		
012	Tulare County Resource Management Agency	WR	RM-017		1	Surface Water Rights/Recharge Operations		"As an irrigation district under Division 11 of the California Water Code, TID has authority to manage, regulate, and engage in groundwater recharge operations for the benefit of its landowners." ***Can you state here that the water rights under the existing contracts?***		PH	AF	
012	Tulare County Resource Management Agency	AL	RM-018		1	Groundwater Allocations		"…a GSA has the authority to regulate groundwater extractions and impose an allocation mechanism." "…and an arrangement to apportion responsibilities…" ***Could we say this is achieved through the Coordination Agreement?***		PH		
012	Tulare County Resource Management Agency	MU	RM-019		1	Municipal Water Use		"…capped at 55 gallons per capita per day (gpcd) in 2019 and ramped down to 50 gpcd by 2030…" It might be better to say, "May be adjusted back up from 50, based on science."		TN		
012	Tulare County Resource Management Agency	AL	RM-020		1	Extraction Data		"Table 8-1: Sample Groundwater Extraction Summary" May want to add 'small community water systems' as a separate line from M&I and Domestic?		PH		
013	Westchester Group Investment Management	AL	WG-001		2	On-Farm Recharge- Groundwater Allocations		***I do have some clarifying comments regarding the Project and Management Actions in Section 7 of the Plan.*** Specifically, the concept of on-farm recharge covered in Section 7.3.4. My comments are as follows: 1. It would be helpful to understand how on-farm recharge water quantities will be credited and accounted for. Will there be any losses applied, or "leave-behind?" 2.Will individual water user accounts be created to manage the credits? 3.In addition to on-farm recharge, I would like to see some further discussion on private water user/landowner recharge projects such as recharge basins and subsurface recharge system projects. With these projects, the same questions outlined above regarding how recharge will be credited and accounted for would be applicable. ***It would be beneficial to see these items further defined in the Plan*** , but if specifics on such Projects and Management Actions cannot be quantified at this time, I would at least like to see the Plan outline a process of how such projects and actions could be developed post Plan, and		PH		
014	Leadership Counsel for Justice and Accountability	DC	LC-001		3	Disadvantaged Communities		The Draft GSP omits critical data, and does not give DWR or the public sufficient information to evaluate compliance with state law or the impact of the plan on beneficial users. Specifically, the Draft GSP has not clearly evaluated the impact of the plan on domestic well users and disadvantaged communities, which are likely to cause a disparate impact on protected groups pursuant to state civil rights law. Further, the GSP has not committed to a clear program to address those impacts. The GSP also does not contain sufficient information on groundwater contamination in the GSA area, and does not clearly show how the actions of the other GSAs in the subbasin will achieve sustainability throughout the subbasin. The GSA also does not provide adequate information about the plan for continued public engagement during GSP implementation. More information about each of these gaps in data and information is included below. The GSP cannot be adopted until this key information is made available to the public. The GSA must incorporate this information into the Draft GSP before the Draft GSP can be effectively reviewed by the public or by DWR.		PH		

014	Leadership Counsel for Justice and Accountability	DC	LC-002	MCR-21	3	Disadvantaged Communities	§ 10723.2	***will threaten GSA's ability to prioritize drinking water as an essential pillar of the proposed groundwater sustainability plan.*** The Draft GSP will cause significant, unreasonable and disparate impacts on protected groups as a result of the sustainability goals that it has set, and has not committed to a concrete plan to prevent or mitigate those impacts. Under SGMA, the GSA is tasked with managing groundwater in a way that does not cause "significant and unreasonable impacts" to the beneficial uses and users of groundwater in the subbasin. ***The GSA's activities cannot avoid impacts only on certain types of beneficial users;*** under SGMA it must "consider the interests of" an enumerated list of all types of beneficial users, including domestic well users and disadvantaged communities on domestic wells and community water systems.1 1 Water Code § 10723.2. Furthermore, state law provides that no person shall, on the basis of race, national origin, ethnic group identification, and other protected classes, be unlawfully denied full and equal access to the benefits of, or be unlawfully subjected to discrimination under, any program or activity that is conducted, operated, or administered by the state.2 2 Gov. Code § 11135 ["No person in the State of California shall, on the basis of sex, race, color, religion, ancestry, national origin, ethnic group identification, age, mental disability, physical disability, medical condition, genetic information, marital status, or sexual orientation, be unlawfully denied full and equal access to the benefits of, or be unlawfully subjected to discrimination under, any program or activity that is conducted, operated, or administered by the state or by any state agency, is funded directly by the state, or receives any financial assistance from the state."]; Gov. Code § 65008 [Any discriminatory action taken "pursuant to this title by any city, county, city and county, or other local governmental agency in this state is null and void if it denies to any individual or group of individuals the enjoyment of residence, land ownership, tenancy, or any other land use in this state…"]; Government Code §§ 12955, subd. (l) [unlawful to discriminate through public or private land use practices, decisions or authorizations]. In addition, the state's Fair Employment and Housing Act guarantees all Californians the right to hold and enjoy housing without discrimination based on race, color, or national origin.3 3 Gov. Code § 12900 et seq. Lastly, the Department of Water Resources is required to consider the Human Right to Water in its evaluation of the GSA's proposed Groundwater Sustainability Plan, so the drinking water impacts of the GSP are of utmost importance in its approval.4 4 Water Code § 106.3. ***Small disadvantaged communities of color within the San Joaquin Valley are disproportionately impacted by unsustainable groundwater use, falling groundwater tables, dry drinking water wells, subsidence,***		PH		
014	Leadership Counsel for Justice and Accountability	WQ	LC-003	MCR-17	3	Groundwater Quality/Disadvantaged Communities		The SGMA regulations require GSPs to include "[g]roundwater quality issues that may affect the supply and beneficial uses of groundwater, including a description and map of the location of known groundwater contamination sites and plumes."8 The Draft GSP does not contain information about groundwater quality issues, or a map of known groundwater contamination sites and plumes. This information is critical to ensuring that beneficial users are not harmed by increased groundwater contamination resulting from the GSA's groundwater management activities. This information is particularly important for domestic well owners and small disadvantaged communities on small community water systems, whose drinking water supply is most vulnerable to groundwater contamination. Without such information, ***the GSA cannot measure the impact of groundwater contamination, and therefore cannot protect the drinking water needs of these vulnerable groups.*** To effectively consider the interests of these types of beneficial users, and avoid a disparate impact on protected groups pursuant to state civil rights law, Mid Kaweah GSA must: Include information on groundwater quality issues that may affect the supply and beneficial uses of groundwater, including a description and a map of the location of known groundwater contamination sites and plumes. Include adequate information regarding past, current and potential drinking water issues affecting small disadvantaged communities and domestic well users in the GSA area, including drinking water contamination, dry wells, and other drinking water supply and quality issues.		SH	JT	
014	Leadership Counsel for Justice and Accountability	WQ	LC-004	MCR-18	3	Monitoring Network- Groundwater Quality	23 CCR § 354.34	***[illegible] must monitor impacts to groundwater for drinking water beneficial*** users, particularly domestic well users and disadvantaged communities,9 9 Water Code § 10723.2. and must avoid disparate impacts on protected groups pursuant to state law.1010 Gov. Code § 11135; Gov. Code § 65008; Government Code §§ 12955, subd. (l). The monitoring network as described in the Draft GSP fails to capture drinking water impacts on domestic wells. Representative monitoring wells are the only wells that the GSA will use to measure its compliance with its sustainable management criteria. The Draft GSP establishes two types of representative monitoring wells in the groundwater quality monitoring network: wells that will monitor for only three contaminants of concern that are harmful for agricultural production, and wells that will monitor for ten additional drinking water contaminants. The Draft GSP states that representative monitoring wells will only monitor for agricultural contaminants when over 50% of "pumping" nearby is for agriculture. This means that none of the representative monitoring wells will capture groundwater quality or supply impacts to domestic wells outside of public water systems. It is also unclear whether the water quality monitoring wells will capture impacts to domestic wells across the GSA areas because ***the GSP does not include well construction information for a majority of the water quality representative monitoring wells,*** so the public and DWR cannot evaluate whether the wells are sampling at the depths of the zones used for drinking water purposes by domestic well users and community water systems in the GSA area.1111 Focused Technical Report, p. 6. The GSA mentions that it may conduct domestic well sampling, which could be added into the groundwater quality monitoring network data. This program, if implemented effectively and if enough wells are tested with adequate frequency, could ensure that domestic wells are also being monitored for compliance with minimum thresholds. ***In order to avoid drinking water contamination from groundwater management activities, the GSA should include this program in its Management Actions, and provide a clear timeline and strategy for developing and implementing this program.*** As the attached Focused Technical Report shows, the water quality monitoring network does not cover a large portion in the west of the GSA area, which includes at least 200 domestic wells and several public water systems for DACs and schools.12 12 Focused Technical Report, p. 5. ***The GSP must demonstrate how the monitoring network will be able to monitor for impacts to beneficial users in this area.*** In developing this monitoring network, ***the GSA has not considered the interests of this beneficial user group and is likely to cause a disparate impact on the protected groups dependent on domestic wells.***		SH	JT	

014	Leadership Counsel for Justice and Accountability	MA	LC-005	MCR-12	2	Management Areas- Disadvantaged Communities	13 13 23 CCR § 351	The SGMA regulations allow GSAs to establish Management Areas "based on differences in water use sector, water source type, geology, aquifer characteristics, or other factors," for the purpose of identifying "different minimum thresholds, measurable objectives, monitoring, or projects and management actions."13 13 23 CCR § 351 However, it may not do so in a way that causes disparate impacts on a group protected by state civil rights law, or has not adequately "considered the interests of" all types of beneficial users. The Management Areas that the GSA proposes to establish will likely have disproportionately negative impacts on domestic well users and disadvantaged communities. T***he Draft GSP states that the GSA will establish Management Areas along to the borders of local water and irrigation districts within the GSA, so that each district can manage groundwater its own jurisdiction. However, some districts are only accountable to the needs of agricultural pumping, and do not have representation of drinking water users on their boards.*** For example, Tulare Irrigation District will be managing a wide area that includes small communities and domestic well owners; however, the irrigation district's board and clientele only reflect agricultural pumping needs. Additionally, East Tulare Villa, a disadvantaged community that depends on drinking water from the City of Tulare, is not included in the same management area as the City of Tulare, which does not allow effective protection of the community's water resources. Therefore this division of Management Areas means that all beneficial users' interests will not be considered in the management of areas where drinking water and agricultural pumping interests are present, and will likely lead to disparate impacts on protected groups. Instead, a tool for protecting drinking water for disadvantaged communities and domestic wells is creating Management Areas around clusters of domestic wells and around disadvantaged communities, with a buffer around the area where the vulnerable drinking water users are located, and setting more protective groundwater quality and groundwater levels minimum thresholds in those areas. This ensures that there are no localized impacts to drinking water resources from groundwater levels dropping or from contaminant plumes being drawn towards large quantities of groundwater pumping. Therefore, we recommend that the GSA: Form Management Areas around clusters of domestic wells and around disadvantaged communities in the GSA area, with a buffer around the area where the vulnerable drinking water users are located, and set groundwater quality and groundwater levels		CP		
014	Leadership Counsel for Justice and Accountability	DC	LC-006	MCR-21	3	Sustainability Goal- Disadvantaged Communities/Domestic		[illegible] years."14 Undesirable results are the point at which there are "significant and unreasonable impacts" from the six sustainability indicators set out in SGMA: chronic lowering of groundwater levels, reduction of groundwater storage, seawater intrusion, degraded water quality, land subsidence, depletions of interconnected surface water.15 Also fundamental to SGMA is the obligation that GSAs must "consider the interests of" an enumerated list of beneficial users, including "holders of overlying groundwater rights, including...domestic well owners" and "disadvantaged communities, including, but not limited to, those served by private domestic wells or small community water systems."16 Therefore, the sustainability goal must be based on impacts from the six sustainability indicators, particular with respect to the impacts that they will have on beneficial users. However, ***instead of basing on impacts from any of the six sustainability indicators on beneficial users, the Kaweah subbasin sustainability goal focuses primarily on "the viability of existing enterprises of the region," the "water needs of existing enterprises," and local plans that create "economic and population growth." This sustainability goal focuses on water for industry, is counter to the intent of SGMA, and frustrates the goals of the law because it does not take into account the needs of or "significant and unreasonable" impacts on all types of beneficial users in the GSA area. This sustainability goal should not focus on economic growth, but rather must consider the interests of all beneficial user groups in the GSA area.*** The sustainability goal therefore must have co-equal quals of preserving water resources for many uses, including drinking water, environmental, urban, and agricultural. Their discussion of the Sustainability Goal also focuses on augmenting supply, and only implementing Management Actions "where necessary." Even if all projects are implemented and sustainable management criteria are complied with in the plan, many vulnerable drinking water users will still be impacted, and the GSA has not committed to implementing its domestic well and small systems management action. Instead, the GSA should focus simultaneously on projects and management actions to ensure sustainability and protect drinking water resources. Furthermore, the means by which the GSA states it will achieve this sustainability goal, through a "glidepath" approach, is geared towards protecting agricultural interests, and is likely to have severe impacts on the drinking water resources of domestic well users. T***he sustainability goal states that it will be reached by the combined efforts of all three GSAs. However, the coordination agreement does not clearly show how the sustainability***		PH		
014	Leadership Counsel for Justice and Accountability	GL	LC-007	MCR-21	2	Sustainable Management Criteria- Groundwater Levels	17 Water Code § 10723.2. 18 Gov. Code § 11135; Gov. Code § 65008; Government Code §§ 12955, subd. (l).	The sustainable management criteria for groundwater levels must be made after considering the interests of all beneficial user groups, including domestic well users and disadvantaged communities.17 These policy decisions must also avoid disparate impacts on protected groups pursuant to state and federal law.18 ***The GSA has not shown how they have considered the interests of beneficial users including domestic well owners and disadvantaged communities.*** The resulting impact from the proposed sustainable management criteria will likely lead to disparate impacts on protected groups pursuant to state and federal law. 17 Water Code § 10723.2. 18 Gov. Code § 11135; Gov. Code § 65008; Government Code §§ 12955, subd. (l). Furthermore, the Draft GSP does not show how the sustainable management criteria for groundwater levels will comply with the sustainability goal to "preserve the quality of life or support population growth."		PH	CP, TN	

014	Leadership Counsel for Justice and Accountability	GL	LC-008	MCR-13	2	Undesirable Results- Groundwater Levels	19 23 CCR § 354.26. 20 23 CCR § 354.26.	Undesirable results are the point at which "significant and unreasonable" impacts on beneficial users caused by declining groundwater levels. The SGMA regulations require GSAs to justify their undesirable results by including the "[p]otential effects on the beneficial uses and users of groundwater."19 GSAs must also describe the "processes and criteria relied upon to define undesirable results."20 ***The Draft GSP's undesirable results for groundwater levels are inadequate*** because significant and unreasonable impacts will occur without triggering an undesirable result. The Draft GSP states that "one-third of the representative monitoring sites in all three GSA jurisdictions combined exceed their respective minimum threshold water level elevations."21 Violating one-third of the minimum thresholds of the entire subbasin's representative monitoring wells would have unreasonably severe impacts on domestic well users, particularly given that reaching the minimum thresholds in the Mid Kaweah GSA alone would dewater 71% of domestic wells in the Mid Kaweah GSA area and partially dewater an additional 15% of domestic wells.22 ***The Draft GSP acknowledges the serious financial impact of having to drill deeper wells, well failures, and the increased energy costs of pumping water from lower depths, but the undesirable result for groundwater levels does not prevent either of these impacts.*** 23 Furthermore, the vast majority of wells the GSA would allow to go dry before triggering plan failure would be overwhelmingly upon domestic well users and disadvantaged communities, causing a disparate impact in violation of state law. In order to avoid these disparate impacts, the GSA must change the undesirable result or define its own local undesirable result to prevent widespread drinking water impacts to protected groups in the GSA area. In order to avoid a violation of state civil rights law and avoid causing significant and unreasonable impacts as required by the SGMA, the GSA must: Include a local undesirable results definition that makes it clear that the GSA will locally define and address an undesirable result within its service area and protect beneficial users of groundwater. 19 23 CCR § 354.26. 20 23 CCR § 354.26. 21 Mid Kaweah GSA Draft GSP p. 3-5, dated July 2019. 22 Focused Technical Report, p. 4. Our analysis shows a much larger impact on domestic wells than the evaluation of well impacts in the Draft GSP. 23 Mid Kaweah GSA Draft GSP p. 3-8, dated July 2019.		PH	CP, TN	
014	Leadership Counsel for Justice and Accountability	GL	LC-009	MCR-13	2	Minimum Thresholds- Groundwater Levels	25 23 CCR § 354.26. 26 23 CCR § 354.28. 27 23 CCR § 354.28.28 Water Code § 106. 29	The groundwater levels sustainable management criteria set by the GSA must be the point that, if exceeded, may cause undesirable results."24 Therefore it must have the purpose of avoiding 24 23 CCR § 354.28. "significant and unreasonable" impacts on beneficial users caused by declining groundwaterlevels.25 For groundwater levels specifically, GSAs must place minimum thresholds for each monitoring site at the level "that may lead to undesirable results."26 Under the SGMA regulations, the GSA should provide a description of "the information and criteria relied upon to establish minimum thresholds," an explanation of how the proposed minimum thresholds will "avoid undesirable results," and "how minimum thresholds may affect the interests of beneficial uses and users of groundwater."27 The GSA must also consider that drinking water use has been recognized as the "highest use of water" by the California legislature, and should consult with stakeholders to ensure that the minimum threshold is set is such a way as to guarantee the human right to drinking water to all individuals in the subbasin.28 ***The Mid Kaweah GSA's approach to setting minimum thresholds does not "consider the interests of" drinking water beneficial users.*** The GSA's proposed minimum thresholds would allow the current rate of pumping (established by the trend from 2006 to 2016) to continue at least until 2040, and possibly after 2040. The GSA contains an evaluation of well impacts that shows that 21% of wells will go dry, but our analysis shows a much larger impact: taking into account well screen intervals on domestic wells in the GSA, the attached Focused Technical Report shows that 71% of the domestic wells in the GSA will be fully dewatered at the minimum threshold, and an additional 15% will be partially dewatered.29 The GSA has therefore chosen to allow large amounts of pumping to occur at the potential expense of up to 86% of the domestic wells in the GSA area. Since domestic well users are de minimis pumpers and are not part of this aquifer-depleting pumping, this will be a disproportionately negative impact on domestic users, the majority of whom belong to a group protected by state civil rights law. This therefore will cause a disparate impact in violation of state civil rights law. In order to show that it has considered impacts on domestic well users and disadvantaged communities, and ensure that it is not causing a disparate impact on groups protected from such impact by state civil law, ***the GSA must conduct an analysis of how many wells will be impacted by reaching this minimum threshold, in particular domestic wells and small community system wells in disadvantaged communities.*** It should also quantify the increased pumping costs associated with the increased lift at the projected water levels. Then, it must measure whether the impacts to wells and		PH	CP, TN	

014	Leadership Counsel for Justice and Accountability	GL	LC-010		3	Measurable Objectives- Groundwater Levels		The SGMA Regulations require the GSA to set measurable objectives and interim milestones that "achieve the sustainability goal for the basin within 20 years of Plan implementation and to continue to sustainably manage the groundwater basin over the planning and implementation horizon." Measurable objectives must be more ambitious than the minimum thresholds, and must be the point at which the GSA has determined that it will not exceed its sustainable yield, and therefore avoid "significant and unreasonable" impacts on beneficial users. The GSA has taken the 2006-2016 trend line and set the measurable objective for 2040 at the groundwater elevation reached by the trend line in 2030. ***The GSA has not evaluated how this groundwater elevation will affect domestic well users and disadvantaged communities, whose critical drinking water resources will be impacted by a decline in groundwater levels.*** In fact, the attached Focused Technical Report shows that approximately 64% of domestic wells in the GSA area will be dewatered if groundwater levels reach the measurable objectives, and an additional 9% of domestic wells will be partially dewatered. The GSA cannot therefore have considered the interests of this beneficial user group in determining its measurable objectives, and is likely to have a disparate impact on a protected group if it pursues this course of action. In order to show that it has considered impacts on domestic well users and disadvantaged communities, and ensure that it is not causing a disparate impact on groups protected from such impact by state civil law, the GSA must conduct a complete analysis of how many wells will be impacted by this measurable objective, in particular domestic wells and small community system wells in disadvantaged communities. It should measure whether the impacts to wells are "significant and unreasonable" by consulting with domestic well owners and disadvantaged communities. If its current measurable objective will cause a disparate impact or cause significant and unreasonable impacts to these beneficial user groups, it must modify its measurable objective to comply with its legal obligations. ***It is also unclear how the measurable objectives will achieve the sustainable yield.*** The GSA must clarify how achieving the measurable objectives at all representative monitoring wells will cumulatively result in attaining the sustainable yield for the GSA area. The GSA must include the following in its Draft GSP to bring its measurable objectives into compliance with law: The GSA must clarify how its measurable objectives will achieve the sustainable yield. The GSA must analyze how many wells will be fully or partially dewatered at the groundwater elevation of the proposed measurable objective. The GSA must show how it has considered the needs of all beneficial users, including drinking water users, in setting its		CP	TN	
014	Leadership Counsel for Justice and Accountability	WQ	LC-011	MCR-18	2	Groundwater Quality- Disadvantaged Communities/Domestic	33 30 Water Code § 10721(w)(4); 23 CCR § 354.28(c)(4). 31 Water Code §§ 10727.2(d)(2); 10721(x)(4) 32 Water Code § 10723.2. 33 Gov. Code § 11135; Gov. Code § 65008; Government Code §§ 12955, subd. (l).	SGMA charged GSAs with the responsibility to protect water quality through groundwater management,30 and requires that the GSA consider the interests of all beneficial users including domestic well users and disadvantaged communities.31 ***This Draft GSP fails to incorporate performance measures and management criteria with respect to contaminants that impact human health including those contaminants with established primary drinking water standards, and in doing so, fails to conform with the requirements of SGMA.*** The Draft GSP leaves drinking water users in the subbasin vulnerable to increased drinking water contamination from the GSA's groundwater management activities or from the lack of adequate groundwater management in the subbasin. The GSA has not shown how it has considered the interests of beneficial users including domestic well owners and disadvantaged communities in shaping groundwater quality sustainable management criteria.32 Furthermore, as described in more detail below, the monitoring network for groundwater quality does not monitor or manage groundwater impacts for any domestic wells. The resulting impact from the proposed sustainable management criteria, will likely lead to disparate impacts on protected groups, in conflict with state and federal law.33 30 Water Code § 10721(w)(4); 23 CCR § 354.28(c)(4). 31 Water Code §§ 10727.2(d)(2); 10721(x)(4) 32 Water Code § 10723.2. 33 Gov. Code § 11135; Gov. Code § 65008;		SH	JT	
014	Leadership Counsel for Justice and Accountability	WQ	LC-012	MCR-18	2	Minimum Thresholds- Groundwater Quality		[illegible] lead to undesirable results."34 Under the SGMA regulations, the GSA should provide a 34 23 CCR § 354.28. description of "the information and criteria relied upon to establish minimum thresholds," an explanation of how the proposed minimum thresholds will "avoid undesirable results," and "how minimum thresholds may affect the interests of beneficial uses and users of groundwater."35 The GSA must also consider that drinking water use has been recognized as the "highest use of water" by the California legislature,36 and should consult with stakeholders to ensure that the minimum threshold is set is such a way as to guarantee the human right to drinking water to all individuals in the subbasin. ***The Draft GSP does not protect domestic wells from drinking water contamination resulting from groundwater management activities.*** The Draft GSP states that the number of contaminants of concern (COC) monitored at each representative monitoring well will vary by the "dominant use" of groundwater around each representative monitoring well, and that the "dominant use" is measured as "more than 50% of the pumping" around the well. Since agricultural pumping will always dominate domestic well pumping, this means that no representative monitoring wells outside of cities and community water systems will monitor for drinking water contaminants. This leaves the vast majority of domestic wells in the GSA area unmonitored and unprotected from groundwater quality impacts. This policy decision has not considered the interests of this beneficial user type, and will cause a disparate impact on protected groups pursuant to state civil rights law. The GSA should instead monitor for drinking water contaminants at all representative monitoring wells. ***Another concern is that there are only 4 representative monitoring wells detecting contamination from groundwater management activities outside of the cities of Tulare and Visalia*** .37 This will allow for contamination to occur undetected in these areas, where domestic well users and disadvantaged communities depend on groundwater for their vital drinking water resources. The GSA must immediately increase the number of representative wells in these areas of the GSA in order to avoid a disparate impact on protected groups. Also, ***the proposes minimum threshold is not sufficient to protect against significant and unreasonable impacts to drinking water*** , because it does not protect against all primary drinking water contaminants. The GSA only proposes to monitor for compliance with MCLs for six drinking water contaminants of concern "where applicable": arsenic, nitrate, chrome-6, DBCP, 123-TCP, and PCE.38 The GSA does not present a rationale to justify why these six drinking water contaminants were chosen, and why it chose not to		SH	JT	

014	Leadership Counsel for Justice and Accountability	WQ	LC-013	MCR-18	2	Undesirable Results- Groundwater Quality		Undesirable results are the point at which "significant and unreasonable" impacts on beneficial users caused by degraded groundwater quality. The SGMA regulations require GSAs to justify their undesirable results by including the "[p]otential effects on the beneficial uses and users of groundwater."43 GSAs must also describe the "processes and criteria relied upon to define undesirable results."44 The undesirable result cannot have a disparate impact on protected groups pursuant to state civil rights law. The Mid Kaweah GSA has defined a groundwater quality undesirable result as "one-third of all Subbasin designated water quality monitoring sites exhibit a minimum threshold exceedance,and those exceedances are all associated with GSA actions."45 Like the groundwater levels minimum threshold, ***this definition of undesirable results is inadequate*** because significant and unreasonable impacts will occur without triggering an undesirable result. Violating water quality standards in one-third of the minimum thresholds of the entire subbasin's representative monitoring wells would have unreasonably severe impacts on drinking water users. Furthermore, the vast majority of wells the GSA would allow to become contaminated before triggering plan failure would be overwhelmingly upon domestic well users and disadvantaged communities, causing a disparate impact in violation of state law. The GSP states that the GSA discussed these impacts with Advisory Committee members, but it cannot have held an informed discussion because it did not have data on the actual potential impact to beneficial users. In order to avoid these disparate impacts, the GSA must change the undesirable result or define its own local undesirable result to prevent widespread drinking water impacts to protected groups in the GSA area. 43 23 CCR § 354.26. 44 23 CCR § 354.26. 45 Draft GSP, p. 3-6 In order to comply with SGMA and state civil rights law, the GSA must: Define its own local interpretation of the subbasin's undesirable result. Consider the impact of its undesirable impact on all types of beneficial users in the GSA area by evaluating the potential groundwater quality impact to beneficial users. Publish this analysis in the GSP, and show how it was used to define the undesirable results. Ensure that this undesirable result does not cause a disparate impact on protected groups under state		SH	JT	
014	Leadership Counsel for Justice and Accountability	PM	LC-014	MCR-11	2	Projects and Management Actions- Disadvantaged Communities/Domestic	Water Code § 10723.2. 47 Gov. Code § 11135; Gov. Code § 65008; Government Code §§ 12955, subd. (l). 48 Gov. Code § 11135; Gov. Code § 65008; Government Code §§ 12955, subd. (l)	disadvantaged communities46 and avoid disparate impacts on protected groups.47 In light of the impacts on domestic well users and disadvantaged communities from the policy decisions discussed above, t***he GSP must therefore include Projects and Management Actions that protect domestic well users and disadvantaged communities from the drinking water impacts*** that will occur from the GSA's policy decisions. As noted above and on the attached Focused Technical Report, the minimum thresholds for groundwater levels put more than 86% of domestic wells in the GSA area at risk of full or partial dewatering, and the groundwater quality sustainability goals leave domestic wells unprotected from increased contamination. Furthermore, the GSP cannot create a disparate impact on protected groups pursuant to state law. Without proactive policies and projects to mitigate forthcoming disparate impacts, communities and homes belonging to protected groups based on race, national origin and ethnicity will experience a disproportionately negative impact in violation of state civil rights law. Because ***the GSP as written will cause a disparate impact on protected groups, and does not consider the interests of domestic well users or disadvantaged communities*** , the GSP must include projects to prevent and mitigate those impacts.48 The Draft GSP's chapter on Projects and Management Actions contains two projects that may help protect against disparate impacts, but those projects as written are not sufficient to prevent disparate impacts. The recharge basin next to Okieville is a positive step in the right direction towards protecting Okieville's drinking water supply and quantity. The Small Systems/Domestic Well Owner Assistance program could help prevent disparate impacts and show that the GSA has considered the interests of domestic well owners and small systems, but the GSA's Board of Directors has not committed to doing this program, and does not define how the assistance measures will be implemented or funded. Before adoption, the Mid Kaweah GSA must clearly commit to projects and management actions to prevent disparate impacts on vulnerable water users, and have defined timelines for those projects. The Draft GSP's potential groundwater extraction allocation program also raises 46 Water Code § 10723.2. 47 Gov. Code § 11135; Gov. Code § 65008; Government Code §§ 12955, subd. (l). 48 Gov. Code § 11135; Gov. Code § 65008; Government Code §§ 12955, subd. (l). concerns from the perspective of domestic well users and disadvantaged communities. Such a scheme could negatively impact critical drinking water resources if the GSA does not ensure that small systems, in addition to domestic wells, are exempt from pumping restrictions. In order		PH		
014	Leadership Counsel for Justice and Accountability	PO	LC-015	MCR-23	1	Public Outreach		Public outreach has been a critical part of the SGMA implementation process and will continue to be critical in implementing the GSP. The first chapter of the Draft GSP contains a brief description of community engagement during GSP implementation, stating that the GSA will continue notifying the public through email, postings, and social media about GSA board and committee meetings, and the GSA will do additional presentations as resources allow. ***does not contain adequate information regarding the plan implementation schedule and public process, annual reporting, or the potential to make amendments to the GSP.*** In the annual report outline proposed by the GSA, public outreach is not included in any of the key sections. Additionally, in the initial GSP implementation budget, there is no budget set aside for public outreach. This engagement is not enough to ensure that all beneficial user groups are considered, or that a wide diversity of stakeholders are included in GSP implementation decisions. The GSP must establish processes by which it will seek and incorporate feedback from the public on an ongoing basis through direct outreach to disadvantaged communities and public workshops that are held at convenient locations and times and accessible in multiple languages. Additionally, proposed reconsiderations must be publicly noticed and circulated for public review and comment prior to final adoption. To ensure that the GSP is implemented properly, the GSA must do the following: The GSA must include a plan for public outreach for the GSP implementation process. This plan should include translation services in order to meaningfully consult with and consider the interest of all beneficial users. Workshops and meetings must be at an accessible time and locations for all stakeholders. The GSA must include public outreach as part of the annual reporting. The GSA must budget for public outreach. The budget should include translation services in order to meaningfully consult with and consider the interest of all beneficial users. Clarify in the GSP that the plan may be modified as data becomes available, and that the GSA will seek and accept feedback from the public on an ongoing basis throughout plan implementation. Clarify that any modification to the GSP must be in writing, noticed and provide sufficient time for		CM		

014	Leadership Counsel for Justice and Accountability	WR	LC-016		1	Water Rights/Groundwater Levels	Water Code § 10720.5(b).	In enacting SGMA, the legislature found and declared that "[f]ailure to manage groundwater to prevent long-term overdraft infringes on groundwater rights."53 The test of SGMA further notes 53 AB 1739 (2014). that "[n]othing in this part, or in any groundwater management plan adopted pursuant to this part, determines or alters surface water rights or groundwater rights under common law or any provision of law that determines or grants surface water rights."54 As discussed in detail above, ***the Draft GSP allows continued overdraft above the safe yield of the basin, such that drinking water wells (especially domestic wells) will continue to go dry, infringing on the rights of overlying users of groundwater.*** The GSP must be revised to protect the rights of residents of disadvantaged communities and/or low-income households who hold water rights to groundwater. 54 Water Code § 10720.5(b).		PH	AF	
014	Leadership Counsel for Justice and Accountability	DC	LC-017		1	Beneficial Uses- Disadvantaged Communities/Domestic	Water Code § 10720.5(b).	The "reasonable and beneficial use" doctrine, to which SGMA expressly must comply,55 is codified in the California Constitution. It requires that "the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use or unreasonable method of use of water be prevented, and that the conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and for the public welfare." (Cal Const, Art. X § 2; see also United States v. State Water Resources Control Bd. (1986) 182 Cal.App.3d 82, 105 ["…superimposed on those basic principles defining water rights is the overriding constitutional limitation that the water be used as reasonably required for the beneficial use to be served."].) The reasonable and beneficial use doctrine applies here given the negative impacts of the Draft GSP on groundwater supply and quality, which are likely to unreasonably interfere with the use of groundwater for drinking water and other domestic uses. As ***the Draft GSP authorizes waste and unreasonable use, it conflicts with the reasonable and beneficial use doctrine and the California Constitution. 55 Water***		PH		
014	Leadership Counsel for Justice and Accountability	WR	LC-018		1	Water Resources/Public Trust		The "public trust" doctrine applies to the waters of the State, and establishes that "the state, as trustee, has a duty to preserve this trust property from harmful diversions by water rights holders" and that thus "no one has a vested right to use water in a manner harmful to the state's waters."56The "public trust" doctrine has recently been applied to groundwater where there is a hydrological connection between the groundwater and a navigable surface water body.57 In Environmental Law Foundation, the court held that the public trust doctrine applies to "the extraction of groundwater that adversely impacts a navigable waterway" and that the government has an affirmative duty to take the public trust into account in the planning and allocation of 56 United States v. State Water Resources Control Bd. (1986) 182 Cal.App.3d 82, 106; see also Nat'l Audubon Soc'y v. Superior Court (1983) 33 Cal.3d 419, 426 ["before state courts and agencies approve water diversions they should consider the effect of such diversions upon interests protected by the public trust, and attempt, so far as feasible, to avoid or minimize any harm to those interests."]. 57 Environmental Law Foundation v. State Water Resources Control Bd. (2018) 26 Cal.App.5th 844, 844. water resources.58 The court also specifically held that SGMA does not supplant the requirements of the common law public trust doctrine.59 In contrast to these requirements, ***the Draft GSP does not consider impacts on public trust resources, or attempt to avoid insofar as feasible harm to the public's interest in those resources.***		PH	AF	

MID-KAWEAH GROUNDWATER SUSTAINABILITY AGENCY
ADVISORY COMMITTEE MEETING

MINUTES

September 3, 2019 – 3:00 p.m.
City of Visalia Wastewater Treatment Plant
7579 Ave 288 – Visalia, CA

MEMBERS PRESENT: Richard Garcia, Ed Henry, Jessi Snyder, Blake Wilbur, Mike Lane, Eric Furtado, Mark Boyes, Lee Johnson, Soapy Mulholland

MEMBERS ABSENT: Jim Nichols

BOARD MEMBERS PRESENT: None

GSA MEMBER STAFF PRESENT: Paul Hendrix (GSA Manager), Aaron Fukuda, Trisha Whitfield

PUBLIC ATTENDEES: Leo Schulz, Trent Sherman, Liesbet Olaerts

1. CALL TO REGULAR ORDER
   The meeting was opened by Chairman Wilbur at 3:05 p.m. Self-introductions of the Committee members, GSA member staff and general public were made.

2. PUBLIC COMMENT
   No comments from any members of the public were given.

3. APPROVAL OF MINUTES
   B. Wilbur asked if any Committee members had changes to submit regarding the minutes of the regular meeting held on July 2 and special meeting held on July 25, 2019. There being none, upon the motion of M. Boyes and second by M. Lane, the minutes were approved for filing.

4. GSP OVERVIEW SESSIONS
   Tulare ID Grower Meetings – A. Fukuda summarized the multiple meetings held with growers to review and discuss the draft GSP. He noted the key issues on the minds of growers, including dairy water usage, white areas, minimum thresholds and droughts, adjacent well fields, and state actions under probationary status. Mr. Fukuda added that there was good discussion regarding the need for meters and the role of pumping allocations and groundwater markets.

   City Public Meetings – P. Hendrix noted the several meetings being held within the cities of Tulare and Visalia concerning the GSP. It was further noted by T. Whitfield that the cities are placing a notification in utility billings about the GSP and associated comment period.

   Okieville-Highland Acres CSD Workshop – J. Snyder then announced an upcoming workshop scheduled for September 12th in Okieville concerning the GSP and its relevance to small community and domestic wells.

5. COMMENTS ON GSP
   P. Hendrix stated that no substantive comments have been submitted thus far on the draft GSP. He added that Tulare County may be submitting some comments soon, and that their consultant's review of the Plan called attention to its description of county and city general plans and water rights issues.

6. OTHER GSP PUBLIC DRAFTS
   P. Hendrix indicated that the Greater Kaweah and East Kaweah GSA public drafts will be available sometime in September.

7. REAPPOINTMENTS TO ADVISORY COMMITTEE
   P. Hendrix reviewed the GSA Board's action at its last meeting to reappoint the six members of the Committee whose terms have expired. The reappointments extend the term to the end of 2019, at which time the Board is to consider future reappointments such that a periodic stagger in terms will be instituted.

8. COMMITTEE MEMBER REPORTS, UPDATES
   M. Lane noted that he has been asked to provide a GSP overview presentation to the Visalia Industrial Group and to the Visalia Lions Club in the near future.

9. ADJOURN
   There being no other matters to come before the Committee, Mr. Wilbur adjourned the meeting at 4:45 p.m.

_____
Advisory Committee Chair

Attest:

_____
GSA Board Secretary