xv. Storage: Alyson (W&C) explained change in storage is about 0.3% per year. In terms of total water available, we do not anticipate significant and unreasonable URs occurring in the future. Therefore, no MTs are needed. Another approach is to take groundwater elevation (GWE) levels as a proxy and state that GWE levels are protective. A third approach is to say URs do not occur until a reduction by 10MAF is reached, and then report on this over time. W&C has suggested not to set thresholds and to provide an explanation for this. We are still waiting to hear back from DWR on this approach.

xvi. Seawater Intrusion: This indicator is not applicable for the Merced GSP, as it is not present and not likely to occur for the subbasin. Salinity is addressed as an MT under "Degraded Water Quality".

xvii. Degraded Water Quality: Thresholds should be based on our actions, where groundwater extractions effect groundwater quality. Existing cleanup sites have been previously mapped, which can ensure that new recharge sites are not put in these places and potentially cause water quality issues (e.g. extension of plumes). Where contaminants are regulated under existing programs, communication will be established with these programs. It is not necessary to take responsibility for these contaminants when they are regulated under existing mechanisms and frameworks. However, the Merced GSP will be addressing salinity.

xviii. Alyson (W&C) requested input from the group on proposed MTs for salinity. A current limit of 1000mg/L TDS is proposed for discussion. Does this sound reasonable? From a drinking water perspective as well as for agriculture?

xix. Feedback from CC group:

1. Comment (MID): There are some areas where it is already 1000mg/L. Response (W&C): In some areas where this is occurring we would not need to assign MTs if this is not posing an UR (e.g. blending, or use of salt-tolerant crops are currently employed as solutions).
2. Comment (MSGSA): They are receiving salinity intruding from the west, might be from the San Joaquin River.
3. Comment: There are sources of salinity. For example, upwelling brine. There could be trigger points where you can manage these primary sources like upwelling through saline sources and migration of water from the west. Options are to change the extraction process and take actions to prevent this.
4. Comment (public): Could look at a percentage change from ambient as one option. Or could look at difference from baseline number or use another indicator as a proxy such as acres of production affected as a proxy. Response (W&C): The only proxy allowed under SGMA is GWE.

xx. Question: What are risks are associated with a scenario where an investment fund purchases property and then violates their pumping allocation and violates an MT? Response (W&C): The GSA would be in charge of managing the extraction and enforcement through penalties (e.g. fines). MTs are not defined at every well in the basin. MTs are set on specific monitoring wells.

xxi. Land Subsidence: W&C is in communication with DWR regarding the current approach for the Merced Subbasin.

xxii. Depletion of Interconnected Surface Water: URs, MTs for this indicator are challenging. What can be measured or estimated in the modeling is streamlosses. The greatest losses actually occur in wet years because there is a lot more water in the stream channel. There

is also not a clear UR. The consulting team has tried to come up with a threshold that would keep within the historical range of depletions. We have taken out wet years, looked at historical losses, and considered the 5-year average within this range. The goal is to not exceed historical losses.

xxiii. Question: How does the Supplemental Environmental Document play into this? Answer (W&C): This is not included in the analysis. It is assumed that the SED would impact the analysis but will not be included.

c. Approach and Timing For Implementing Allocations

i. Alyson (W&C) provided review of Conceptual GSP Implementation Timeline. The CC group discussed general ideas regarding the approach and timing for implementing allocations. No agreements or formal recommendations were reached.

d. Next Steps in GSP Development

i. Alyson (W&C) reviewed the section schedule, including release dates for admin and SC & CC section drafts in preparation for GSP public draft.

ii. Alyson also reviewed the proposed GSP review and submission timeline, which includes the public review period and proposed meetings prior to GSP approval and submittal. There is a 90-day requirement that goes effect after the notice of intent to adopt. The GSP may be adopted at 90 days after the notice of intent to adopt is made. The goal with release administrative drafts to GSA staff and sections to the SC and CC is to allow additional input and time to review content prior to the complete draft.

e. Other Updates

i. Alyson (W&C) gave an update on the status of several GSP sections sent or anticipated for administrative draft release.

5. Public Outreach update

a. The next public workshop will take place May 29th at the Atwater Community Center. Notices and additional information will be posted on the Merced SGMA website.

6. Coordination with neighboring basins

a. For interbasin agreements, W&C team has been reaching out to Delta-Mendota and has been looking at Chowchilla and the Turlock agreements as models for potential agreement structure and content.

7. Public comment

a. None.

8. Next steps and adjourn

a. Focus for May will be on Minimum Thresholds and Measurable Objectives and Implementation Planning.

Next Regular Meeting
May 29, 2019 at **1:30 p.m.**
Atwater, CA – Castle Conference Center at Castle Airport (subject to change)
Information also available online at mercedsgma.org
Action may be taken on any item

Note: If you need disability-related modification or accommodation in order to participate in this meeting, please contact Merced County, Community and Economic Development staff at 209-385-7654 at least 48 hours prior to the start of the meeting.

MEETING NOTES – Merced GSP

SUBJECT: Merced GSP Coordinating Committee Meeting

DATE/TIME: May 29, 2019 at 1:30 PM

LOCATION: Castle Conference Center at Castle Airport, 1900 Airdrome Entry, Atwater, CA 95301

Coordinating Committee Members In Attendance:

	Representative	GSA
☒	Stephanie Dietz	Merced Irrigation-Urban GSA
☒	Justin Vinson	Merced Irrigation-Urban GSA
☒	Daniel Chavez	Merced Irrigation-Urban GSA
☐	Ken Elwin (alternate)	Merced Irrigation-Urban GSA
☒	Bob Kelley	Merced Subbasin GSA
☒	Mike Gallo	Merced Subbasin GSA
☒	Nic Marchini	Merced Subbasin GSA
☐	George Park (alternate)	Merced Subbasin GSA
☒	Larry Harris	Turner Island Water District GSA #1
☐	Scott Skinner (alternate)	Turner Island Water District GSA #1

Meeting Notes

1. Call to order
    a. Alyson Watson (Woodard & Curran) called meeting to order. Members introduced themselves.
2. Approval of minutes for April 22, 2019 meeting
    a. Meeting minutes from April 22th were approved.
3. Stakeholder Committee update
    a. Update from May 29 morning meeting provided by Alyson Watson (W&C).
4. Presentation by Woodard & Curran on GSP development
    a. Management Areas
        i. Alyson Watson (W&C) defined Management Areas and how and why they might be implemented.
        ii. Comment: Haven't come up with specific areas besides the subsidence area. Follow-up: may not need to call out a separate management area if there isn't subsidence in another part of the Subbasin – in this case, the same standards apply across the whole Subbasin.
    b. Sustainable Management Criteria
        i. Alyson Watson (W&C) walked through the sustainable management criteria for each of the sustainability indicators.

ii. Question: For purposes of setting thresholds for groundwater levels, what is the difference between CASGEM wells and domestic wells? Answer: CASGEM wells are used for representative monitoring as they meet strict SGMA monitoring requirements. Domestic wells were used to define location-specific minimum thresholds and undesirable results (e.g. finding the shallowest domestic well within a 2-mile radius of each CASGEM well).

iii. Comment: Need to come up with GWL threshold methodology for future additional monitoring wells where (1) there may not be domestic wells located within 2 miles or (2) there won't be historical groundwater record to help determine a minimum threshold since it is a new monitoring well.

iv. Question: Certain areas of the Subbasin (e.g. West side, near San Joaquin River) already have high salinity above minimum threshold. How do we bring this into the discussion? Answer: The proposed minimum threshold for degraded water quality is 1,000 mg/L TDS but in areas where it's already higher, it's not considered significant and unreasonable because high salinity is already being managed.

v. Lacey Kiriakou will check with Merced County Environmental Health for any feedback about constituents effected by groundwater pumping that we should consider setting thresholds beyond TDS.

vi. Feedback from Amanda Peisch-Derby (DWR): Suggestion provided to review example of Paso Robles Draft GSP which is publicly available. For degraded water quality, the GSP picked a set of common contaminants and used MCLs for setting Minimum Thresholds. Areas with existing exceedances of the MCLs were not selected for representative monitoring (e.g. MT was not developed for these areas). Elsewhere, the definition of undesirable results was set so that multiple wells had to exceed the MT.

vii. Comment: For about 10 years, Eric Swenson managed groundwater assessment and cleanup regulations for Merced County. Most of the concerns are in urban areas in domestic wells and large municipal wells. Practice was to carefully monitor constituents for exceedances of MCLs. Only 2 example wells where plume migration was observed.

viii. Question: How come we don't have specificity on the year type for definition of undesirable results for land subsidence, though we do for groundwater levels? Answer: In part, land subsidence doesn't respond as quickly as groundwater levels, but this also doesn't allow much flexibility in extended drought.

    1. CC group requested that consultant team update the definition of undesirable results for land subsidence to apply only in non-dry/critically dry years, similar to groundwater levels.

ix. Clarification on Interconnected Surface Waters: The MercedWRM model was used to determine what level of surface water flow reduction would be expected using the existing groundwater level minimum thresholds; the analysis did not determine a new set of minimum thresholds that meet known exact undesirable results for this sustainability indicator.

x. Comment: Moving forward, should consider whether there is an opportunity to directly measure stream depletions so when five year update comes we can re-evaluate. May need to involve additional monitoring wells along streams as well.

xi. Public question: Merced River floods ranch and water is seen as being wasted. Can the water be used to recharge aquifer and credited to the landowner? Answer: CC group has previously discussed possibility of having a permit for multiple diversion locations,

identifying places of use, etc. that would mean ability to have credits would exist in the future.

c. Implementation Plan

i. Alyson Watson (W&C) gave a brief outline on implementation planning steps for the GSP that are currently underway, as well as a schedule for future implementation of the GSP.

1. Hicham ElTal (MIUGSA): Suggestion to invite Irrigation Training & Research Center (ITRC) from Cal Poly in to talk about one way we might implement one mechanism for incentives and groundwater tracking.

    a. CC interest was expressed from multiple members.

2. Suggestion: it would good to come up with other creative ideas for incentivizing better groundwater use, e.g. a funding mechanism establishing a dollar amount per year to incentivize people to fallow land.

    a. Eastside Water District has a program like this. Alternatively, a program could work to incentivize recharge, too. Could bring member of Eastside to present, too, in addition to ITRC above.

3. Hicham ElTal (MIUGSA) proposed writing a letter re: Prop 68 to DWR requesting that the previously funded projects for SDAC funding shouldn't be counted against the ~$2M funding cap.

    a. CC group approved a motion to direct Lacey and Hicham to write and submit a letter.

4. Hicham ElTal (MIUGSA) shared some proposed changes to DWR Technical Support Services (TSS) application, originally for monitoring well and extensometer funding for Merced/Delta-Mendota shared set of monitoring wells along southwest side. Since Subbasin is moving away from using groundwater levels as proxy for subsidence, proposal is to focus only on funding a continuous GPS station for subsidence monitoring which will be cheaper and easier to implement overall.

    a. CC members approved motion to submit TSS application based on this updated proposal.

5. Recommendation from SC to implement policy in GSP to limit/exclude exporting of water from the Subbasin (albeit maybe with little authority to enforce).

    a. CC response: legally complicated to include in the GSP, probably not necessary to include since the County has the existing Ordinance. Proposed allocation framework has measures for limiting export of water from the Subbasin.

d. Water Allocation Framework

i. Hicham ElTal (MIUGSA) shared a proposed clarification on Item #4 in 4/2/2019 water allocation framework update TM to GSA staff "Use framework above to establish total allocations to each GSA. GSAs can modify the implementation and allocations within their GSA Boundary."; To avoid a perverse incentive of groundwater mining prior to implementation, MIUGSA would like to modify text so that internal GSA management is

allowed except transfer of groundwater from non-developed to developed lands. However, groundwater credit exchange for in-lieu recharge (recharge, surface water, FloodMAR, etc.) would still exist.

ii. Discussion ensued about various rules under this proposed scenario and other clarifications.

iii. Public Comment and Suggestion: What does this updated scenario mean for several different landowners? E.g. rangeland, 1000 acres owner, 5000 acres large property owner who wants to pipe 2 miles down road from allocations, etc.; Response: it is possible to come up with some examples for this in a future meeting.

iv. Public comment: Difficult to follow the overall conversation about framework modifications. Response: Team provided commitment to provide additional information in packet for next meeting with reference on framework memo discussion.

e. Next Steps in GSP Development

i. Included a summary of upcoming section review drafts to expect, as well as a review of steps for submission (e.g. notice of intent to adopt).

f. Other Updates

i. Included a summary of upcoming section review drafts to expect

5. Public Outreach update

a. The next public workshop will take place May 29th at the Atwater Community Center. Notices and additional information are posted on the Merced SGMA website.

6. Coordination with neighboring basins

a. A meeting with Turlock was just held. Also developing a draft agreement on how to coordinate in the future with Delta-Mendota (which is on a tight timeline and does not expect to be able to coordinate on data sharing unless there has been sufficient time for internal review).

7. Public comment

a. Question: Is Merced annexing property near UC Merced? Response: Not sure of details.

b. Question: Geologists say we are past due for a big earthquake. What would it do to our basin and is there any potential effect on sustainability of groundwater? Answer: See Hydrogeologic Conceptual Model for more information about the faults. We have not considered dam failure (while not required by SGMA, MID has been working on this separately).

c. Question: How many more meetings will be held? Answer: We will talk about this at the next meeting. Will be meeting in June and most likely in July as well. August we will likely spend discussing comments and how to support adoption as well as what additional meetings are required.

8. Next steps and adjourn

a. Focus for June will be on comments on draft sections and process for GSP Adoption and next steps.

Next Regular Meeting
June 24, 2019 at **1:30 p.m.**
Atwater, CA – Castle Conference Center at Castle Airport (subject to change)
Information also available online at mercedsgma.org
Action may be taken on any item

Note: If you need disability-related modification or accommodation in order to participate in this meeting, please contact Merced County, Community and Economic Development staff at 209-385-7654 at least 48 hours prior to the start of the meeting.

MEETING NOTES – Merced GSP

SUBJECT: Merced GSP Coordinating Committee Special Session

DATE/TIME: June 18, 2019 at 1:00 PM

LOCATION: Castle Conference Center at Castle Airport, 1900 Airdrome Entry, Atwater, CA 95301

Coordinating Committee Members In Attendance*:

	Representative	GSA
☐	Stephanie Dietz	Merced Irrigation-Urban GSA
☒	Justin Vinson	Merced Irrigation-Urban GSA
☒	Daniel Chavez	Merced Irrigation-Urban GSA
☐	Ken Elwin (alternate)	Merced Irrigation-Urban GSA
☒	Bob Kelley	Merced Subbasin GSA
☐	Mike Gallo	Merced Subbasin GSA
☒	Nic Marchini	Merced Subbasin GSA
☒	George Park (alternate)	Merced Subbasin GSA
☒	Larry Harris	Turner Island Water District GSA #1
☐	Scott Skinner (alternate)	Turner Island Water District GSA #1
	Others:	
	Leah Brown (non-member)	MIUGSA, City of Merced
	Bryan Kelly	MIUGSA, MID
	Hicham ElTal	MIUGSA, MID

***Some attendees participated via phone.**

Meeting Notes

1. Call to order
    a. Alyson Watson (Woodard & Curran) calls to order the Special Session of the Coordination Committee.
2. Discussion of Allocation Framework Issue
    a. Issue
        i. The Allocation Framework is discussed in the Projects and Management Actions section of the GSP. MIUGSA provided written comments on the administrative draft of this section,
        ii. The quantification of developed supply, included in the GSP for illustrative purposes, includes only seepage of surface water from unlined canals.
        iii. There are other potential sources of developed supply in groundwater that are not quantified in the current GSP, including deep percolation of applied surface water and leakage from piped conveyance.

iv. MIUGSA comments on GSP admin draft requested definition of "developed supply" in GSP text be expanded to include deep percolation of applied surface water.

b. Prior Discussions

i. Have discussed that sources other than seepage exist and may be refined later. A possible approach is that the GSP could state that there are other sources and that these could be investigated and the definition of "developed supply" could be refined moving forward.

c. Discussion:

i. Comment (MSGSA): We talked about deep percolation of applied surface waters. It is difficult to quantify, and difficult to ensure that this is not impacting the native groundwater.

ii. Comment (MIUGSA): Developed water is any water brought into the basin that is not natural. Scenario: If overirrigation occurs and this goes to groundwater for recharge. Developed water is something people should be able to bank on, it is not part of the allocation, it is outside of this. MIUGSA is not requesting to change the current Sustainable Yield estimated numbers.

iii. Comment (MSGSA): We have no issue with recharge. However, trend is not in the direction of overirrigating. The trend is to have less and less applied surface water.

iv. Comment (MIUGSA): People are using less water to irrigate their plants. There are two systems, one irrigation system in wet and one in dry years. Need to have a water balance. and we have to agree on the numbers. These are changing all the time, e.g., we have updates every 5 years. All that we are talking about today is the concept: developed water.

v. Comment (MSGSA): Could the number that came out of the MID Agricultural Water Management Plan used in the Water Budget Technical Memo be higher? (potential additional deep percolation).

vi. Comment (MIUGSA): This could increase, but we would need to do a water balance and have a good definition for developed water.

vii. Clarification (W&C): Yes, MIUGSA is asking to define "developed supply" and acknowledge that there are other sources of supply that can be investigated in the future.

viii. Comment (MSGSA): In defining "developed supply" is it the person who purchases the developed water the entity who receives credit for this water?

ix. Clarification (W&C): In adjudications in other basins, that water was considered the agency's property and not the person who purchased the water. We are not at the point of setting up a water credit system.

x. Comment (MSGSA): Would think that this should be the property of the person who purchased it.

xi. Clarification (W&C): For today what we are trying to clarify is whether this water would be part of the developed supply estimate.

xii. Comment (MSGSA): For continue progress of the GSP, we are going to need to hold out on additional details of the allocation framework. Do not see being able to get our boards to approve greater detail in the time that we have.

xiii. Comment (MIUGSA): In order to have an exchange system in the basin, we have to agree on how to account for the water. For today, we are discussing whether there are other sources that should be reviewed and investigated. We should have something now that

encourages people to start thinking and working together to look into having a robust water exchange market, a monitoring network, and so on.

xiv. Comment (W&C): Once we estimate the amounts, we need to look at who has the right to this water.

xv. Comment (MSGSA): We would want to ensure that intent to recapture is documented.

xvi. Comment (MSGSA): How can we prevent people from overpumping?

xvii. Comment (MSGSA): We would like to make sure that not all applied surface water is pulled out of sustainable yield. The rights will need to be determined. A portion of that percolation would go to the overlying bucket, but that is either going to the agency or the person who purchased and applied it.

xviii. Clarification (W&C): Where we are with the definition: We are underscoring the importance of future work needed. We will use the conceptual definition that "developed supply" is supply that is brought into the basin. It would not be limited to the definition in the plan. We may be required to have documentation of intent to recapture and can have a description of future work that would be needed. This includes estimates from seepage, refining conveyance losses, addressing rights to developed supply, and documenting developed supplies. We currently do not specifically talk about managed recharge.

xix. Comment (MSGSA): It is hard to prove deep percolation.

xx. Comment (MIUGSA): Common law says that this is once the water passes the root zone it is lost to the grower. However, this has to be accepted by the GSAs.

xxi. Comment (MSGSA): We should have a certification process if there is going to be additional documentation of deep percolation of applied surface water. It should be approved with a public process.

3. Public comment

a. Question on the allocation: In April, GSAs agreed that all parcel's (including rangeland and undeveloped) would have equal allocation. Wasn't an agreement made that MSGSA would have full allocation.

b. Clarification (W&C): That is more related to the developed land. What we are talking about is developed water.

c. Comment (Public): Should do sooner rather than later, the subbasin should develop a credit system.

d. Comment (MSGSA): Agree, would like to see this developed in the first year.

e. Comment (MIUGSA): This should not be rushed. First should complete gaps in data, then complete metering, and then work on how we are going to move water and use the models to maximize how we use this.

f. Comment (Public): It seems legally ambiguous whether the water lost to the growers goes back to the agency.

g. Clarification (W&C): Developed supply includes supplies that are brought into the basin which would not otherwise reach the GW basin. Ownership would have to be determined. This definition would be included and not limited to definition in the plan. This could come online, with intent to recapture. This would include documenting, developing, and refining developed supply, and determining rights to this supply.

h. Comment (Public): We can add the caveat that the water should be put to beneficial use.

i. Comment (W&C): Is the group ok with the consultant team revising the definition and then sending this to GSA staff.

j. Comment (MIUGSA): Would be good to include Bryan Kelly while Hicham is out.

k. Question (Public): Do the Sustainable Yield buckets change?

l. Clarification (W&C): No, buckets stay the same. In the future if there's additional supply then it goes in that current developed supply bucket. It would be cleaner to have developed surface supply with an asterix that it will be refined later with future steps.

m. Comment (MSGSA): still some lack of clarity for how we are going to estimate deep percolation.

n. Comment (TIWD): The current definition is fine, but we also agree that it will be very difficult to come up with estimates for deep percolation.

o. Comment (MIUGSA): Estimates are based on as much information as we have. Everything has to be approved by the GSAs.

p. Comment (MSGSA): Each GSA should be able to manage its Sustainable Yield of GW within its boundaries. However, when we were talking about overlying and underlying users in the basin, we agreed we'd determine allocation by acreage. Transferring credits within GSAs respective basins should be enabled if it's transferring among developed acres.

q. Comment (MIUGSA): We would like to put a hold on creating a credit system until we ensure we fill data gaps. We are ok with developed acres moving water to developed acres.

r. Comment (MSGSA): We want dormant overlying users to be able to have credits, but need to have a system to enable that process. This can be done down the road.

s. Clarification (W&C): We have said both developed and undeveloped land are at full allocation. If undeveloped land starts using their water, it is not going to reduce allocation for developed lands. What Bob is suggesting that the GSA has X TAF that they can administer the full amount for developed or undeveloped lands.

t. Comment (MIUGSA): We have to see how the cities are going to survive in looking to work toward sustainability. At this point, we would like to have time to get a better understanding to resolve ambiguity. We're not saying that we will not agree to this, but that we need time and more information, and do not need to make a decision today.

u. Clarification (W&C): MIUGSA had some concerns initially. We all agree that the Sustainable Yield estimates will need to be refined. We need to hold off on issuing credits and establish credit system. MSGSA agrees but also states that MSGSA would allocate within their own boundaries.

v. Comment (MSGSA): We are saying that each GSA can determine how the allocation works within their area.

w. Clarification (W&C): We are not going to set up an allocation framework. Options are to go to the GSA level split and allow each GSA to administer their amount of water in their GSA in the interim, or this can be limited to developed land.

x. Comment (MIUGSA): We can see how we divvy up undeveloped land across the basin. We have no reason to reach a decision on that today. This is a GSA decision, not GSP decision.

y. Clarification (W&C): There was agreement to use 0.7 AF/acre to come up with the GSA allocation numbers. However, GSAs have the ability to use the full amount for their developed and undeveloped parcels. This was a good faith agreement, but there may have been some miscommunication. Both MSGSA and MIUGSA gave some compromise, but there may have been a misunderstanding. What

we can do for the plans for now is state what has been estimated for the Sustainable Yield for the basin, this is how discussed, and how credits could be used and worked out at a later time.

z. Comment/ (Public): The 440K AF should be the native water. We do not need to talk about developed or undeveloped land for the purpose of GSP.

aa. Clarification (W&C): The assumption is that there are about 200K acres that could be using water but are not. From previous discussions, before we allow transferring, we need to get more information. For purpose of the GSP, we can take the suggestion not to discuss developed or undeveloped lands for the GSP.

bb. Comment (MIUGSA): Everything done on our side is done to avoid adjudication in the basin. (In these cases, grazing grounds do not often get anything, have to pay to put in a well, etc.). We want to have a fair system and be good example through our GSA and have good cooperation.

cc. Comment (MSGSA): Our GSA echoes those comments and feels very positively about ability to communicate and resolve issues. We think we have the ability to make a difference long term. Having this discussion and working through these issues is very positive.

4. Next steps and adjourn

   a. Adjourned to the next regular meeting.

Next Regular Meeting
June 24, 2019 at **1:30 p.m.**
Atwater, CA – Castle Conference Center at Castle Airport (subject to change)
Information also available online at mercedsgma.org
Action may be taken on any item
Note: If you need disability-related modification or accommodation in order to participate in this meeting, please contact Merced County, Community and Economic Development staff at 209-385-7654 at least 48 hours prior to the start of the meeting.

MEETING NOTES – Merced GSP

SUBJECT: Merced GSP Coordinating Committee Meeting

DATE/TIME: June 24, 2019 at 1:30 PM

LOCATION: Castle Conference Center at Castle Airport, 1900 Airdrome Entry, Atwater, CA 95301

Coordinating Committee Members In Attendance:

	Representative	GSA
☒	Stephanie Dietz	Merced Irrigation-Urban GSA
☒	Justin Vinson	Merced Irrigation-Urban GSA
☒	Daniel Chavez	Merced Irrigation-Urban GSA
☒	Ken Elwin (alternate)	Merced Irrigation-Urban GSA
☒	Bob Kelley	Merced Subbasin GSA
☒	Mike Gallo	Merced Subbasin GSA
☐	Nic Marchini	Merced Subbasin GSA
☐	George Park (alternate)	Merced Subbasin GSA
☒	Larry Harris	Turner Island Water District GSA #1
☐	Scott Skinner (alternate)	Turner Island Water District GSA #1

Meeting Notes

1. Call to order
    a. Alyson Watson (Woodard & Curran) called meeting to order. Members introduced themselves.
2. Approval of minutes for May 29, 2019 meeting
    a. Meeting minutes from May 29th were approved.
3. Stakeholder Committee update
    a. Update from May 29 morning meeting provided by Alyson Watson (W&C). SC group would like to remain involved and be able to give input. The agenda for SC followed closely to content with CC's agenda. Input from the SC will be provided as each item is gone through during today's CC meeting.
    b. Leadership Counsel provided a comment and letter to the Merced Subbasin GSAs. Representatives attending CC meeting communicated some of the recommendations including recommendation to set minimum thresholds based on the anti-degradation policy at the state level (per Bill 1968), with level set at best water quality since 2015. Where minimum threshold exceeds public health goals, the GSP should include a policy to strive for water quality improvements to meet relevant public health goals.
4. Presentation by Woodard & Curran on GSP development
    a. Next Steps in GSP Development

i. Alyson (W&C): We are taking more time to get through the administrative reviews. However, should still be on schedule for July 19th estimated Public Draft release date. July 22nd CC meeting will go through contents/allow discussion for comments. Are looking at Aug./Sept. to provide review and comments on the draft GSP.

ii. Sustainable Management Criteria will be released to SC and CC June 28th, rest of chapters to be available for comment with Public Draft.

b. Sustainable Management Criteria

i. Alyson reviewed summary of sustainable management criteria MOs, URs, and MTs per sustainability indicator.

ii. For water quality, the takeaway from May 2019 from both forums and from LC and the public was to consider including more constituents. The GSAs circled back with Merced County Division of Environmental Health and received the feedback that SGMA does not specify constituents to be set with MTs, GSAs do not have tools, responsibility, or resources to monitor and clean up water quality contamination, or other programs are tasked with that. The Division support the proposed MT rationale.

iii. Comment: Public agencies already have to comply with water quality requirements.

iv. Clarification: Can usually find contamination sites on Geotracker.

v. Comment: There are not that many currently active monitoring wells. That's a concern because we've set an upper limit of 1000 mg/L, but we don't have more information. Response: General concentrations for those selected wells for the network are on order of 300 mg/L.

vi. Clarification: Need to confirm we know where these areas are that are already over this threshold[1]

vii. Alyson (W&C) explained the current minimum threshold methodology for declining groundwater levels and issues with areas in which the model does not fit well due to a shallow geological issue.

viii. Suggestion/clarification from MSGSA: Add third element to methodology for groundwater elevation Minimum Threshold— use simulated GWLs where historical data shows GWLs may have already dewatered shallowest domestic wells or where modeling shows GWL may drop below the 2015 level. Much discussion occurred over this suggestion and the complications of the two wells with a model fit issue. Ultimately the group decided:

1. Not to include these 2 wells as representative wells (what is included is the best representation for the Subbasin)
2. Acknowledge that GSAs will need to develop a methodology (like this third option suggested by MSGSA) in the next GSP update and model will need to be calibrated for this (new methodology to be developed once model calibrated).

c. Monitoring Networks & Addressing Data Gaps

i. Alyson Watson (W&C) reviewed the status of the monitoring networks and data gaps for each sustainability indicator.

[1] Information on TDS concentrations across the basin are provided in maps containing the average 2008-2018 TDS concentrations in the Current and Historical Conditions section of the Water Budget chapter of the Merced GSP.

ii. Comments regarding the metering program:

1. Heard from SC in morning session that they want a very flexible metering program. Received feedback that folks do not want to have to replace their meters (they are good to go out and continue gathering their own data). There are different types of set ups for metering, and different types of meters.
2. Question: Has that white paper on metering been released? A: No, it will be part of projects and management actions chapter, which will be available for SC & CC around July 19th.[1]
3. Clarification: Telemetry is a method where you can get the metering information sent, e.g., to your cell phone.
4. Comment: Could get a few subbasins to work together to get satellite imagery in lieu of metering. If we could get the state to provide annual numbers – this could be huge.
5. Alyson: Hicham mentioned getting ITRC to attend a CC meeting. This is still in progress and will be revisited when Hicham comes back from vacation.

d. Plan Implementation

i. Request for input on assumptions:

1. We are assuming existing MOU will remain in place.
2. Interbasin coordination will continue.
3. We are reaching out to understand cost for GSA operating/administrative costs.
4. Much discussion was held about the role and frequency of the SC in the future during GSP implementation and CC consensus was reached:
    a. It is important to have continued input from the SC, particularly as the first few years of the GSP implementation will require crucial decisions for the Subbasin.
    b. SC and CC meetings would be staggered. (stagger can be a couple weeks, not a whole month, so as to have enough time for documentation of input from SC meeting to CC meeting and vice versa). These meetings would occur quarterly. It was agreed a liaison position for a member of the SC could be created by decision of the GSAs.
5. Also agreed that assumed 2 public outreach workshops per year.
6. Comment: Would be good to have public comment come as first agenda item.
7. CC agreed that if a GSA implements a project that they are expanding their allocation. Can start at the GSA level and be clear that there is a basinwide option.
8. People on the SC communicated they want to continue on the committee to provide input.

e. Water Allocation Framework

[1] Correction: this is a technical memorandum that will be added as an appendix to the Plan Implementation Chapter of the Merced Draft GSP.

i. Alyson (W&C) recounted the content and purpose of the Special Session of the CC.

    1. Purpose was to discuss language in the draft GSP on Developed Supply and Water Allocation Framework. General agreement that the numbers in draft GSP (allocation estimates) will remain for the Draft GSP. Miscommunication identified in agreement on whether GSAs can determine allocation within their own boundaries between developed and undeveloped lands.

ii. Recommendation and follow up from meeting:

    1. Include working definition of developed supply.
    2. Note that the full definition and ownership of developed water would need to be agreed upon by GSAs after adoption. Groundwater originating from developed supply could include seepage from unlined surface water conveyance, deep percolation of applied surface water, leakage from surface water infrastructure, and potentially other sources.
    3. Add footnote that developed supply in this GSP was calculated based on estimated seepage from unlined conveyance and will be refined and further documented in the future.
    4. Identify future work needed for GSP updates including: develop, refine, and document estimates of developed supply and determine rights to confirmed estimates of developed supply

iii. Clarification (W&C): Exchange system will not be discussed in the GSP.

iv. Question: The layout of steps would be in the GSP? Answer (W&C): The GSP is not going to document how GSAs are managing their allocation because we do not have that information yet.

v. Question: What are the management practices needed other than an exchange system if we want to agree on an estimated number that we want to use to actively manage? MSGSA Reply: All lands under each GSA receive water.

vi. MIUGSA: If we have not confirmed what the allocation is at a GSA level, what would MSGSA put into place to manage the allocation? We have mechanisms to manage this in a city and can document steps to achieve a concrete path to management. If MSGSA wants local control, everyone needs to know that there are mechanisms for management.

vii. MSGSA: We would manage this as a total, whatever the total allocation is for sustainable yield of overlying water – this is the "bucket" that would be managed.

viii. MIUGSA: To clarify, if MSGSA reaches that allocation number, folks would be asked to stop drawing water? MSGSA: Yes, by 2040.

ix. Clarification discussion:

    1. MSGSA: It is not our understanding that we would have undeveloped lands already transfer credits.
    2. Agreement: All GSAs agree that allocations to developed acres can be shared with other developed acres.
    3. Question: If the County has to issue the well permit, how are you going to adjust allocations each year based on the new permits? We want to prevent the type of management where land changing from not developed to developed gets an allocation without some kind of accounting system.

x. Clarification from W&C: The initial approach was developed with understanding that GSAs would have discretion to allocate within their boundaries. It is important to consider that, if we do not allow usage to undeveloped land, we are telling MSGSA that they have to reduce by half.

xi. MIUGSA: We gave on the 80% because this was requested by MSGSA, with agreement that there not be a credit system. We think we need to bring this back and establish whether and why some areas have not had historical use.

xii. Continued back and forth discussion with agreement that continued discussion is needed to clarify areas of disagreement and find solution. Request made to review past discussion and get everyone up to speed on development of allocation framework discussion.

xiii. Alyson (W&C): Continued discussion can also include how often these allocations should be updated, and how new wells come online each year.

5. Public Outreach update
    a. Public workshop summary is posted.
6. Coordination with neighboring basins
    a. Currently in process of scheduling a meeting with Delta-Mendota for late July.
7. Public comment
    a. Letter presented by Leadership Counsel. This letter has been attached as an appendix to the meeting minutes.
8. Next steps and adjourn
    a. Be on lookout for Sustainable Management Criteria draft on June 28th.
    b. Adjourn to next meeting on July 22.

Next Regular Meeting
July 22, 2019 at **1:30 p.m.**
Atwater, CA – Castle Conference Center at Castle Airport (subject to change)
Information also available online at mercedsgma.org
Action may be taken on any item

Note: If you need disability-related modification or accommodation in order to participate in this meeting, please contact Merced County, Community and Economic Development staff at 209-385-7654 at least 48 hours prior to the start of the meeting.

Larry Harris, Turner Island Water District GSA #1
Mike Gallo, Merced Subbasin GSA
Nic Marchini, Merced Subbasin GSA
Bob Kelley, Merced Subbasin GSA
Daniel Chavez, Merced Irrigation-Urban GSA
Justin Vinson, Merced Irrigation-Urban GSA
Stephanie Dietz, Merced Irrigation-Urban GSA

June 21st, 2019

Re: Concerns and Recommendations to Ensure that Merced Subbasin GSP Protects Vulnerable Drinking Water Users

Dear Merced Groundwater Sub-basin Coordinating Committee members,

Our organization works alongside low income communities of color in the San Joaquin Valley and the Eastern Coachella Valley to advocate for local, regional and state government entities to address their communities' needs for the basic elements that make up a safe and healthy community, including clean, safe, reliable and affordable drinking water, affordable housing, effective and safe transportation, efficient and affordable energy, green spaces, clean air, and more. We have been engaged in the Sustainable Groundwater Management Act (SGMA) implementation process because many of the communities with whom we work are dependent on groundwater for their drinking water supplies, and often have already experienced groundwater quality and supply issues. Historically, communities we work with have not been included in decision-making about their previous water resources, and their needs have not been at the forefront of such decisions. In 2012, California recognized the Human Right to Drinking Water as a statewide goal. Now, because of SGMA's requirements for a transparent and inclusive process, groundwater management under the new law has the opportunity to include disadvantaged communities in decision-making and create groundwater management plans that understand their unique vulnerabilities and are sensitive to their drinking water needs.

We are concerned that drinking water impacts and disadvantaged community input have not been adequately analyzed and incorporated into the draft GSP, and recommend the following actions to ensure that drinking water is protected, especially for the communities whose drinking water is severely at risk from groundwater management activities, and who are the least able to pay for solutions for clean and reliable drinking water.

Development of Sustainable Management Criteria

In order to "consider the interests of"[1] disadvantaged communities in developing sustainable management criteria, GSAs must address the impacts of the six sustainability indicators, engage residents of disadvantaged communities to understand their groundwater issues and needs and get input on how to shape sustainable management criteria, and analyze the impact of preliminary minimum thresholds on drinking water users before establishing minimum thresholds.

Under SGMA, ***all sustainable management criteria must be based on the GSA's determination of what will cause a "significant and unreasonable" impact on each of the six sustainability indicators.*** [2] This determination of what is "significant and unreasonable" must be based on the needs of all beneficial users.[3] Without first consulting beneficial users, including disadvantaged communities, to understand what groundwater impacts those individuals and communities want to avoid, the GSA cannot make a valid determination of what is "significant and unreasonable", and thus cannot set valid sustainable management criteria.

In the Merced subbasin, GSAs and consultants had initial discussions at the first few stakeholder committee meetings about the general impacts that stakeholders on the committee wanted to avoid as they developed the GSP. On August 27th, 2018, consultants began more concrete conversations on the minimum thresholds, proposing groundwater levels minimum thresholds at the lowest historical elevation, plus a buffer, unless this would dewater no more than 25% or the shallowest nearby domestic wells. Consultants also proposed a second methodology that could protect more wells by establishing the minimum threshold at the level of the shallowest well, or the 25th percentile level, whichever was higher. For groundwater quality, consultants proposed only doing a minimum threshold for total dissolved solids and not other contaminants despite their knowledge that the subbasin has water quality issues from nitrates, DBCP, 123-TCP and other contaminants[4], and that their groundwater management activities could impact the concentration and location of those contaminants. Our organization and Self-Help Enterprises both voiced concerns with these thresholds, both in their substance and also because they were not based on a participatory determination of what stakeholders in the subbasin consider to be "significant and unreasonable" impacts from the sustainability indicators.

Subsequently, the Merced Subbasin GSAs hosted several workshops at which they asked the public for feedback on what they considered to be significant and unreasonable impacts. Our organization and Self-Help Enterprises worked with GSA consultants to ensure that workshops were accessible to disadvantaged communities, and that the presentations would go beyond presenting updates and be geared towards soliciting meaningful feedback. After the workshops and several more conversations with the Stakeholder Committee in April and May 2019, at which Leadership Counsel and Self-Help Enterprises stressed the importance of protecting drinking water for disadvantaged communities, consultants are now proposing that groundwater levels minimum thresholds be set at the depth of the shallowest well in the 2-mile radius around each monitoring well, or if the water levels are already below that level then setting

[1] Water Code sec. 10723.2
[2] CCR sec. 352.28(a), 354.30(b), 354.26(a)
[3] CCR sec. 352.28(b)(4)
[4] Merced Subbasin Groundwater Sustainability Plan Current and Historical Groundwater Conditions

the minimum threshold at 2015 levels. We believe public and stakeholder feedback on "significant and unreasonable" impacts to drinking water informed the improvements to the groundwater levels minimum threshold have come from, but it is still not clear what impact the 2015 levels will have on nearby drinking water users, or how many wells will not be taken into account that are outside the 2-mile radius around monitoring wells. For groundwater quality, despite our feedback that consultants look at addressing all contaminants, the GSAs still only propose a minimum threshold for total dissolved solids. There has been no meaningful discussion with the public or stakeholders about whether this will cause "significant and unreasonable" impacts to drinking water resources for beneficial users.

In order to effectively "consider the interests of" all beneficial users, GSA committees must analyze how preliminary sustainable management criteria will affect drinking water users before reaching proposed final sustainable management criteria.[5] Our experience demonstrates that once recommendations are made at the committee level, it is difficult to reassess those recommendations once they reach the governing board, so such a decision cannot overlook impacts on the most vulnerable groundwater users. Before asking committees to make recommendations to GSA staff, committees must be equipped with information about how potential minimum thresholds will impact access to drinking water for domestic well owners and communities on small community water systems. To date and to the best of our knowledge, the Merced subbasin GSAs have not conducted an analysis of how drinking water will be impacted by the groundwater quality and groundwater levels minimum thresholds proposed by consultants. Specifically, we request that the GSAs ensure that an analysis be done of the impact to domestic well users and small community water systems from the proposed minimum thresholds for groundwater quality and groundwater levels. With this drinking water impact analysis, the stakeholder committee can be equipped with the necessary information to determine whether impacts from these proposed minimum thresholds will be "significant and unreasonable."

The GSP development process must be representative of the interests of all beneficial users named in the Act. When board members do not come from disadvantaged communities or understand the unique groundwater needs of such communities, as is the case more often than not, ***it is imperative for the agency to reach out to disadvantaged community members for input*** before making key decisions such as recommending or proposing draft sustainable management criteria. The Merced GSAs' consultants have worked with Leadership Counsel and Self-Help to do outreach to disadvantaged communities for workshops, and have regular calls with our organizations to coordinate outreach to disadvantaged communities. At GSA meetings, to which community residents' schedules prevent them from coming, Leadership Counsel and Self-Help Enterprises helps provide feedback on GSP development on behalf of community residents. We are grateful that the GSA consultants actively reach out to us for suggestions on how to do such outreach, and hope that our organizations have been able to help the GSAs and

[5] California Department of Water Resources, Sustainable Management Criteria Best Management Practices, p. 9. The GSP must discuss how groundwater conditions at a selected minimum threshold could affect beneficial uses and users. This information should be supported by a description of the beneficial uses [of] groundwater and identification of beneficial uses, which should be developed through communication, outreach, and/or engagement with parties representing those beneficial uses and users, along with any additional information the GSA used when developing the minimum threshold.

consultants learn how to do more effective outreach to disadvantaged communities in the area. As the GSAs develop their sustainable management criteria and projects and management actions, they must ***show that they are meaningfully implementing the input*** that they are receiving from disadvantaged communities and disadvantaged community advocates regarding their drinking water needs.

Groundwater Quality Minimum Threshold Recommendation

Groundwater quality has been a particularly complex issue for GSAs. In determining how they will set their sustainable management criteria for groundwater quality, GSAs have considered many factors, including the state Maximum Contaminant Levels (MCLs), other agencies monitoring and regulating groundwater contaminants in the region, areas where MCLs are already exceeded, and ways that groundwater management could impact the concentration and movement of groundwater contaminants.

We understand the complexity of setting groundwater quality SMC that are accurate, attainable and measurable, and we are eager to work with the Merced subbasin GSAs to ensure that groundwater management does not increase groundwater contamination, especially where groundwater is being used as a drinking water source. Consultants for the Merced subbasin GSAs have stated they would only be monitoring for total dissolved solids. Given the need for a concrete minimum threshold that strongly protects the human right to drinking water, we recommend that the Merced subbasin GSAs instead implement the following minimum thresholds:

- Minimum thresholds for water quality should be set at the best water quality since 2015 for each constituent.
- Where the minimum threshold exceeds the public health goal for any constituent, the GSP should, at a minimum, include a policy to strive for improvements to water quality to the point of meeting the relevant public health goal(s).

The reasoning behind these minimum thresholds is that the GSA is tasked with avoiding any undesirable results, and contamination of groundwater and other drinking water sources is a "significant and unreasonable" impact to the resource that we all need to drink, cook, bathe, grow food, and more. Accordingly, minimum thresholds must ensure protection from and prevention of contamination of groundwater and other drinking water sources. DWR instructs GSAs to look to existing groundwater regulatory programs and water quality standards.[6] Many GSAs have proposed incorporating the existing MCLs into their minimum thresholds, however reliance on an MCL is not sufficiently protective of drinking water sources, and does not prevent contamination of our critical resources. An appropriate standard in the context of groundwater protections is the state's anti-degradation policy, which is used by the SWRCB and regional water boards, and does not allow for further contamination of groundwater based on the best quality of the water since 1968.[7] In the SGMA context, it is key to prevent further

[6]California Department of Water Resources, Sustainable Management Criteria Best Management Practices, p. 15.
[7] *Asociacion de Gente Unida por el Agua v. Central Valley Regional Water Quality Control Bd.* (2012) 210 Cal.App.4th 1255, 1268.

degradation of groundwater quality to protect drinking water. We are asking the GSA to specifically look at protecting the highest quality of groundwater achieved since 2015, based on the year that SGMA was passed. Another rule commonly used in environmental law is the precautionary principle, which prohibits activities that could cause harm when the amount of potential harm is unknown. We urge the GSA to use these two rules, combined with seeking to remediate groundwater to the public health goal, as laid out above, to ensure that groundwater management does not cause degradation of groundwater quality.

GSAs should monitor all primary drinking water contaminants, as well as chrome-6[8], which is known has significant health effects but is undergoing a new process to set the MCL because of procedural flaws. It is widely known that the San Joaquin Valley experiences widespread water quality issues from nitrates[9], DBCP[10] [11], 123-TCP[12] and other contaminants, and the GSA's groundwater management activities could impact the concentration and location of those contaminants. Where relevant, GSAs should also consider monitoring for PFOA and PFOS as the EPA has established a Lifetime Health Advisory for them due to their potential impacts on drinking water systems.[13] This should especially be considered in the Merced Subbasin as they have they have identified these as emerging contaminants in their "Current and Historical Groundwater Conditions" Draft GSP Chapter. GSAs should also monitor contaminants that are proven to increase from groundwater management, such as arsenic and uranium,[14] increased contamination from recharge,[15] movement of contaminant plumes from groundwater pumping, and other groundwater management activities.[16]

Water Quality Considerations for Groundwater Management Actions

[8] Hausladen, Debra M., et al. "Hexavalent chromium sources and distribution in California groundwater." *Environmental science & technology* 52.15 (2018): 8242-8251.
[9] *Addressing Nitrate in California's Drinking Water: With a Focus on Tulare Lake Basin and Salinas Valley Groundwater: Report for the State Water Resources Control Board Report to the Legislature*. Center for Watershed Sciences, University of California, Davis, 2012.
[10] Peoples, S. A., et al. "A study of samples of well water collected from selected areas in California to determine the presence of DBCP and certain other pesticide residues." *Bulletin of environmental contamination and toxicology* 24.1 (1980): 611-618.
[11] Loague, Keith, et al. "A case study simulation of DBCP groundwater contamination in Fresno County, California 2. Transport in the saturated subsurface." *Journal of Contaminant Hydrology* 29.2 (1998): 137-163.
[12] Burow, Karen R., Walter D. Floyd, and Matthew K. Landon. "Factors affecting 1, 2, 3-trichloropropane contamination in groundwater in California." *Science of The Total Environment* 672 (2019): 324-334.
[13] "Drinking Water Health Advisories for PFOA and PFOS." *EPA*, Environmental Protection Agency, www.epa.gov/ground-water-and-drinking-water/drinking-water-health-advisories-pfoa-and-pfos.
[14] Jurgens, Bryant C., et al. "Effects of groundwater development on uranium: Central Valley, California, USA." Groundwater48.6 (2010): 913-928.; *also see* "Groundwater Quality in the Sustainable Groundwater Management Act (SGMA): Scientific Factsheet on Arsenic, Uranium, and Chromium," found at https://d3n8a8pro7vhmx.cloudfront.net/communitywatercenter/pages/293/attachments/original/1559328800/Groundwater_Quality_in_SGMA_Scientific_factsheet_on_arsenic__uranium__and_chromium.pdf?1559328800
[15] Ground Water Recharge Using Waters of Impaired Quality (1994) https://www.nap.edu/read/4780/chapter/3
[16] Moran, T., & Belin, A. (2019). *A GUIDE TO WATER QUALITY REQUIREMENTS UNDER THE SUSTAINABLE GROUNDWATER MANAGEMENT ACT*. Retrieved from https://purl.stanford.edu/dw122nb4780.

To establish causality between groundwater management activities and groundwater contamination, GSAs should look to (1) whether there has been a correlation in groundwater management activities and an increase in contamination that could result from groundwater management activities, (2) relevant scientific studies that show proven mechanisms by which causation can be established between groundwater management activities and groundwater contamination, and (3) data and samples collected showing a causal nexus in the case at hand.

Finally, in order to effectively protect drinking water resources, GSAs should establish Management Areas in areas that are more vulnerable to groundwater contamination, such as communities with many shallow wells and communities that cannot afford to install drinking water filters or treatment facilities.

Groundwater Levels Minimum Threshold Recommendation

GSAs must protect drinking water, and must consider the needs of disadvantaged communities and domestic well users in creating their GSPs. The California legislature has stated that the use of water for domestic purposes is the highest use of water,"[17] and passed the Human Right to Drinking Water in 2012.[18] After the passage of SGMA, GSAs now have the responsibility to protect drinking water through groundwater management. If they choose to allow individuals to keep pumping at the expense of severe drinking water impacts, that is a groundwater management decision that violates their obligation to protect drinking water resources. GSAs must therefore have strong minimum thresholds that protect all drinking water wells from dewatering.

Minimum thresholds are the most pivotal measure for how a GSA will prevent impacts from a sustainability indicator. This is the point that a GSA must avoid, and could necessitate state intervention. There is some flexibility, however; for groundwater levels, DWR shows in its Sustainable Management Criteria Best Management Practices guide that it will allow a GSA to dip below its minimum threshold for groundwater levels in some cases, as long as its GSP will ensure that it comes back up and towards its measurable objective. Therefore, GSAs should strive to set minimum thresholds at levels that they seek to avoid.

GSAs should set minimum thresholds for groundwater levels at the level of the shallowest existing wells in use, with a buffer above the depth depth of the top of the screen. If GSAs choose not to do so, they must take on the responsibility for the wells that do go dry from this policy choice. If proposed minimum thresholds allow wells to go dry, a GSA must conduct a drinking water impact analysis to evaluate how many drinking water wells will go dry, set management areas for shallower minimum thresholds where there are more concentrated shallow domestic wells, and ensure that drinking water is protected by implementing preventive actions such as digging deeper wells and assisting with

[17] Water Code sec. 106.
[18] Water Code sec. 106.3

consolidation projects. It is important to note that prevention, not mitigation, is the only way to effectively protect drinking water resources.

Consultants for the Merced subbasin GSAs are currently proposing that the groundwater levels minimum thresholds be set at the depth of the shallowest well within a 2-mile radius of monitoring wells, or if the water levels are already above that level then setting the minimum threshold at 2015 levels. We request that the GSAs set all minimum thresholds at a level to provide a buffer above the depth of the top of the screen of the shallowest well. The buffer must be adequate to ensure that the shallowest well does not go dry due to a short or medium-term exceedance of the minimum threshold. The GSAs should only disregard wells that they can prove are not in use.

In setting groundwater levels minimum thresholds, GSAs should also set minimum thresholds high enough as to avoid groundwater contamination from overpumping. They should also set minimum thresholds that ensure that rural communities have equitable access to groundwater resources, and have enough for current needs and future growth. GSAs must also factor in the increased costs of pumping and installing new wells if groundwater levels decrease, and avoid additional costs in groundwater access for low income communities dependent on groundwater for drinking water resources. GSAs should also set minimum thresholds for groundwater levels that will prevent subsidence from occurring and disrupting infrastructure that is critical to the health and safety of vulnerable communities, such as private wells, roads, and homes.

Monitoring Network

Broadly, the GSAs must develop actionable steps to fill data gaps and monitor groundwater levels and groundwater quality. In order to protect drinking water resources, monitoring networks should be closely monitoring impacts on drinking water. In particular to water quality, GSAs should monitor for contaminant concentrations quarterly, and increase monitoring to every month if a water quality test detects higher contamination concentration than the previous water quality test. Testing should also robustly monitor plume migration especially given the high number of water users in the Merced subbasin.

As a result, the GSP should fund a water quality testing program for strategically identified domestic wells to complement data from small water systems and disadvantaged communities in order to fill existing data gaps as well as begin to identify contaminant plumes. To track these concerns the GSA should place monitoring wells near DACs and clusters of domestic wells.

We look forward to providing further recommendations on the monitoring network in the future.

Transparency and Inclusivity

As public agencies, GSAs are subject to the requirements of the Ralph M. Brown Act, which requires transparency of public agencies through notice of meetings and prior posting of agendas, posting of meeting minutes after meetings, and public access to meeting materials upon request by a member of

the public. In addition to Brown Act requirements, GSAs must also adhere to the specific public participation and inclusivity requirements for GSP development laid out in SGMA. SGMA expands the public participation requirements of GSAs to also "*encourage the active involvement of diverse social, cultural, and economic elements of the population within the groundwater basin prior to and during the development and implementation of the groundwater sustainability plan*." (Water Code sec. 10727.8) To assist in GSAs complying with this requirement, DWR has published guidance on public notice and engagement, highlighting good practices for effective engagement. Both the letter and spirit of SGMA communicate that GSAs must conduct GSP development in an open and inclusive way.

A best practice to ensure authentic, meaningful input as required by SGMA is to post meeting materials before the meeting, so that these materials are available to the public for feedback and engagement. The Brown Act requires these materials to be made available after the meeting upon written request of the public. Paired with SGMA's requirements for robust community engagement, the most effective way to ensure that the public is aware of what will be talked about at meetings, and to access critical GSP development information despite not being able to attend one meeting, is to post all meeting materials online before the meeting. The Merced Subbasin GSAs send out meeting notices with an agenda, and have an easily navigable website that contains meeting agendas, presentations and minutes for each meeting. However, the GSAs would facilitate more effective public engagement at the meetings if they were to post meeting presentations ahead of time, so that attendees could view the discussion items and data before the meeting.

GSAs should also ***dedicate sufficient funding to ensure meaningful, effective, and accessible engagement of the public***. We, along with Self-Help Enterprises, have worked with the Merced subbasin GSAs' consultants to improve outreach to disadvantaged communities. We have helped give input on several workshops, and have helped conduct outreach for those workshops. We have also kept community residents informed about GSP developments at community meetings. Self-Help has conducted translation and interpretation at meetings to ensure that Spanish-speaking residents can meaningfully engage at GSA workshops. However, we note that the Merced subbasin GSAs' consultants said that there was not enough funding for translation. Having food at evening meetings is also key to ensuring that residents who have worked all day can come to meetings, so the GSAs should allocate funding for food at public workshops. Given the type of outreach that is necessary in order to engage disadvantaged communities, the GSAs should also hire bilingual staff or consultants who can help conduct door-to-door outreach, attend community meetings, translate materials, and interpret at all GSA meetings. In creating annual operating budgets, GSAs should prioritize funding for these necessary outreach activities.

Projects and Management Actions

Projects and Management Actions are a crucial part of the GSP, since they demonstrate how the GSA plans on attaining the sustainability goals that they have set out. Therefore, GSAs should set specific timelines and triggers for projects.

We look forward to commenting further on recommendations for projects and management actions that will protect drinking water for the most vulnerable groundwater users.

Groundwater Markets

We have engaged in many discussions around the state about groundwater markets, and continue to warn against them. Commoditizing precious drinking water resources is dangerous and inequitable, since it lets those with more purchasing power have access to more water, and more likely than not will lead to concentrations of over-pumping by large agribusinesses, leaving nearby communities without drinking water. Furthermore, given all GSAs' severe lack of data on domestic wells and water use in their service areas, and our region's lack of understanding of how a market could impact groundwater use and subsurface groundwater flows, implementing groundwater markets now would be precipitous and reckless.

We know that Merced subbasin GSAs are considering doing a groundwater market, and consultants have communicated at meetings that they will be taking at least five years to collect the data and understand the impacts of a groundwater market for the Merced subbasin. We encourage the GSAs to take time to gather extensive data on existing groundwater resources and drinking water needs and analyze the potential impacts to drinking water before considering implementation of a groundwater market. We look forward to giving more feedback on the potential of developing a groundwater market in the Merced subbasin in the future if the subbasin decides to consider such an action.

~ ~ ~ ~ ~ ~ ~

We look forward to speaking more in depth with consultants and the coordinating committee about our recommendations. We hope that the Merced subbasin GSAs will consider the above recommendations, and hope to collaborate with the GSAs to ensure that the GSP protects the subbasin's most vulnerable drinking water users.

We are also in communication with the Department of Water Resources about current GSP development activities in the San Joaquin Valley, and hope to successfully work with GSAs, communities and DWR to ensure that groundwater management is equitable and sufficiently protective of vital drinking water resources.

Sincerely,

Leadership Counsel for Justice and Accountability

MEETING NOTES – Merced GSP

SUBJECT: Merced GSP Coordinating Committee Meeting

DATE/TIME: August 26, 2019 at 1:30 PM

LOCATION: Castle Conference Center at Castle Airport, 1900 Airdrome Entry, Atwater, CA 95301

Coordinating Committee Members In Attendance:

	Representative	GSA
☐	Stephanie Dietz	Merced Irrigation-Urban GSA
☒	Justin Vinson	Merced Irrigation-Urban GSA
☐	Daniel Chavez	Merced Irrigation-Urban GSA
☒	Ken Elwin (alternate)	Merced Irrigation-Urban GSA
☒	Bob Kelley	Merced Subbasin GSA
☒	Mike Gallo	Merced Subbasin GSA
☒	Nic Marchini	Merced Subbasin GSA
☐	George Park (alternate)	Merced Subbasin GSA
☒	Larry Harris	Turner Island Water District GSA #1
☐	Scott Skinner (alternate)	Turner Island Water District GSA #1

Meeting Notes

1. Call to order
    a. Alyson Watson (Woodard & Curran) called the meeting to order. Committee members introduced themselves.
2. Approval of minutes for July 22, 2019 meeting
    a. Minutes from July 22nd were approved.
3. Presentation by Woodard & Curran on GSP development
    a. Update on Public Comments Received on draft GSP
        i. Alyson (W&C) reviewed the GSP draft timeline.
    b. Plans for September 18 Joint GSA Boards Meeting
        i. Discussion will be focused on the Draft GSP comments and how to incorporate.
4. Prop 68 Funding Opportunity
    a. Alyson (W&C) presented a summary of the Prop 68 Funding Opportunity as well as a summary of the implementation activities that could be included in the funding application.
    b. Staff recommended assembling a small working group to decide what to include in grant application and requesting authorization from GSA Boards to fund preparation of the application itself.

c. CC members expressed concern that there may need to be additional meetings beyond September Joint Board Meeting to finish preparation and finalization of the GSP that would require use of the contingency, so it would be wise to request additional funding for the grant application preparation.

d. CC voted and unanimously approved that the consultants should start working on the Prop 68 grant application and bill to the contract contingency while the GSAs discuss with their boards to authorize an amendment by September 18.

e. Working group volunteers are: Hicham ElTal, Lacey Kiriakou, and Dena Traina (Provost & Pritchard)

5. Water Allocation Framework Discussion

a. Alyson (W&C) provided a summary of previous discussions and provided some clarification and distinction between several sets of numbers that have been presented previously.

b. Q: How do the sustainable yield values compare to what we've seen before? The current overall value doesn't appear to match some of the values presented previously in different regions. A: The number is 90,000 AFY for the entire Basin as a whole. Depending on where you are in the basin, it could be more or less compared to where your pumping is compared to the average.

c. Q: Is the 2040 projected conditions the best baseline for comparison? A: It's based on SGMA compliance being needed by 2040, which would be the Projected Conditions. We should focus on the Sustainable Yield which is the same at all years.

d. Q: Does 2040 projected conditions include implementation of GSP projects? A: No.

e. Q: Is urban water use reduction included in the model of the 2040 projected conditions? A: It includes projected water use in 2040 which includes water use efficiency improvements but also population increases largely based on Urban Water Management Plan projections. Cropping patterns were generally based on current cropping patterns per direction from the GSAs.

f. Q: How is the planned significant growth in UC Merced, City of Merced, etc. accounted for in the model? A: It's already included in the projected conditions scenario as part of the City's own projections for its water use.

g. Alyson (W&C) summarized inter-GSA coordination efforts agreed on and what next steps are needed. Also shared that an ad-hoc committee is recommended to work in parallel with the GSP to develop.

h. Q: What role do you see for the Stakeholder Committee in the ad-hoc allocation committee? A: This ad-hoc committee is intended to be more for GSA staff, but some items need to be put in the GSP vs others are too soon to discuss and won't be part of the GSP.

i. CC supported development of an ad-hoc committee for development of an allocation framework, with the following members: Hicham ElTal, Ken Elwin, Mike Gallo, Larry Harris, and Bob Kelley.

6. Public Outreach update

a. Charles (Catalyst) provided an update on public outreach activities, including community meetings put on by SHE and Leadership Council, the public September 18 Joint Board meeting, and the Adoption Hearings in Fall 2019.

b. Comment: SHE and Leadership Council are spread thin and are concerned that the 30-day comment period was too short for full engagement with their communities and thus now encourage GSAs to consider ways to extend time and find ways to fund future additional DAC outreach. Also to consider expanding the Prop 68 working group to include a voice for DAC communities or to quantify benefits to DACs.

7. Coordination with neighboring basins

a. Hicham ElTal (MIUGSA) described a comment letter received from Delta-Mendota Subbasin representatives about subsidence and highlighted need to coordinate on objectives and thresholds between subbasins.

b. Comment: If we stopped pumping and everyone still farmed, the ground will still sink (subsidence continues), so setting a goal of 0 does not make sense.

8. Informational Item - Groundwater Tracking with Remote Sensing – Presentation by Dan Howes, ITRC
    a. Dan Howes was invited by the Coordinating Committee to talk about the technology for using remote sensing to measure groundwater use in lieu of metering which is potentially being considered for GSP implementation.
    b. (see separate PDF with PowerPoint slides)
    c. General costs of the remote sensing services would be $40,000/yr service for agencies with surface deliveries. More like $25,000/yr (due to simpler setup) if surface water deliveries are not used. Cost can vary with level of riparian areas that need more investigation/setup.
9. Public comment
    a. No comments.
10. Next steps and adjourn
    a. Next public meeting is September 18 @ 6PM Joint GSA Board Meeting to review and discuss public comments on draft GSP.

Next Regular Meeting
September 18 @ 6PM
Sam Pipes Meeting Room, Merced, CA (subject to change)
Information also available online at mercedsgma.org

Action may be taken on any item

Note: If you need disability-related modification or accommodation in order to participate in this meeting, please contact Merced County, Community and Economic Development staff at 209-385-7654 at least 48 hours prior to the start of the meeting.

DRAFT

MEETING NOTES – Merced GSP

SUBJECT: Merced GSP Coordinating Committee Meeting

DATE/TIME: October 28, 2019 at 1:30 PM

LOCATION: Castle Conference Center at Castle Airport, 1900 Airdrome Entry, Atwater, CA 95301

Coordinating Committee Members In Attendance:

	Representative	GSA
☐	Stephanie Dietz	Merced Irrigation-Urban GSA
☐	Justin Vinson	Merced Irrigation-Urban GSA
☒	Daniel Chavez	Merced Irrigation-Urban GSA
☒	Ken Elwin (alternate)	Merced Irrigation-Urban GSA
☒	Bob Kelley	Merced Subbasin GSA
☐	Mike Gallo	Merced Subbasin GSA
☒	Nic Marchini	Merced Subbasin GSA
☐	George Park (alternate)	Merced Subbasin GSA
☒	Larry Harris	Turner Island Water District GSA #1
☐	Scott Skinner (alternate)	Turner Island Water District GSA #1

Meeting Notes

1. Call to order
    a. Alyson Watson (Woodard & Curran) called the meeting to order.
    b. Minutes from previous meeting were approved.
2. Stakeholder Committee update
    a. Alyson (W&C) provided a summary from the October 28 Stakeholder Committee (SC) morning meeting. The meeting included discussion of the next steps in finalizing the GSP and the sustainable management criteria for water quality and subsidence. The SC also discussed the role of the SC during the implementation phase. The SC wants to continue to meet if their input will be used by the CC and suggested the schedule for future SC meetings be based on topics that need to be discussed. The group expressed an interest in potentially meeting jointly for some discussions or otherwise having an opportunity for direct input to the CC.
3. Finalizing Merced Subbasin GSP
    a. Alyson (W&C) reviewed the timeline for finalizing the GSP. The draft response to comments is posted on the MercedSGMA.org website. It includes a redline of the GSP showing edits based on comments and a master response to comments organized by 20 topics (see slide for full list). Master response and comment letters will be included as an Appendix to the GSP.
    b. Joint GSA Boards Meeting September 18, 2019

i. Alyson noted that SGMA does not require GSAs hold a public comment period. The Merced GSAs decided to hold the 30-day public comment period as a good faith effort to gather additional public input. Comments were also received at the Joint GSA Boards Meeting on Sept. 18th.This is an addition to the 60-day public comment period that DWR will hold once the GSP is submitted.

c. Concurrence with response to Public Comments Received on draft GSP

i. The responses to comments on the draft GSP come in a couple of forms: There is a redline version of the GSP that contains all of the suggested changes in redline. There is also a master response to comments by topic. The GSP Appendix will include all of the letters that were received. There were comments received on a wide range of topics for the draft GSP. The Master Response to Comments is up on the website. Two topics are the focus of today's meeting and discussion: the sustainable management criteria for subsidence and water quality.

ii. Subsidence:

1. Alyson provided some background information on subsidence in the basin: it is a gradual process that takes time to develop and time to halt. Subbasin may not be able to fully stop subsidence but can slow it and reduce impacts. She noted that despite wetter conditions 2017-2018, there was still between -0.17 ft/yr and -0.32 ft/yr observed in the portion of the subbasin.

2. Alyson compared the sustainable management criteria that are included in the Merced GSP and in the neighboring basins of Chowchilla and Delta-Mendota.

    a. Merced GSP management criteria based on historical subsidence rates observed.

    b. Chowchilla is using GWLs as a proxy for subsidence in the lower aquifer only (they are using this for both MT and MO). They are using an adaptive management approach with a trigger of -0.25 ft/yr for 3 years in Eastern main aquifer.

    c. In Delta-Mendota they have measurable objectives that vary by GSP and region, but most are between -0.01 to -0.1 ft/yr. For minimum threshold, they (again various by GSP) but have between -0.1 to -0.2 ft/yr. San Joaquin River Exchange Contractors: The MT is narrative: "that which doesn't reduce SJREC's conveyance capacity without appropriate mitigation."

3. Alyson further described Merced GSP approach. MT and MO set based on historical subsidence rates. Some level of future subsidence, likely at similar rates, likely to be underway already and will not be able to be prevented. GSAs will continue coordinate efforts with Chowchilla & Delta-Mendota to develop regional and local solutions to regional subsidence

4. The five-year update can look at options to utilize additional data sets including using DWR's Interferometric Synthetic Aperture Radar (InSAR) data.

5. Clarification (W&C): We don't expect zero subsidence. It may continue at rates that we've seen. We also know that we will have to continue coordination.

6. Question from CC member: Have we asked the state about the different guidance given to Chowchilla from DWR? Answer (W&C): We found out Chowchilla received different guidance than the Merced Subbasin received in our conversations with

DWR only today. There is nothing in SGMA that says each neighboring basin must use the same measure for subsidence.

7. Comment from CC member: We need to be coordinated with the neighboring basins. Different basins should not be taking different approaches. It appears we are allowing for more subsidence than D-M. In 2006, there was a very heavy flood year. In this year the lower SJ Flood District near highway 152 and north of this, was within 6 inches of breaking. Since that time, we've lost 5 feet, maybe more. With that levee system, if that fails, we'd be hard pressed to build it again, let alone the damage the water would do especially if it went out to the east sides (would decimate some of the earthen canal system in this location). Would like to see an arrest to subsidence as soon as possible. It is difficult to put a target minimal amount out there. However, we have to do something along those lines. What we would like to see is that there is a plan to get subsidence to a certain number.
8. Response from CC member: This means we would be watching levels below the Corcoran. We had a recommendation from a hydrogeologist for what they need to do to get an understanding of what is happening and is it stabilizing below the Corcoran. This might not be something we can put in the plan now but could be something for the plan update.
9. Alyson (W&C): The map provided on the slides shows the ranges of rates of subsidence. To give a little context, using data from USBR from 2011-2017 can see that Chowchilla has seen more subsidence. The MTs and MOs they have established are less than the historical subsidence shown on this map.
10. Input from member of Public: (Individual is involved with the Triangle T GSA in the Chowchilla Subbasin). There are two management areas in the Chowchilla Subbasin, including in Chowchilla Water District to the west. The way that it is being managed is above and below Corcoran. Above the Corcoran the MT is at the top of the Corcoran Clay. This is about managing the upper aquifer. The lower aquifer uses GWL from 2012 as a proxy unless it's already below that. Water levels cannot be taken any lower than they already are. There is going to quickly be an allocation system within that management area (within a year or two). In Chowchilla, Western below Corcoran areas will be managed via allocation. This involves the County GSA, and Triangle T GSA, and Clayton Water District (lattermost is not a GSA).
11. Alyson (W&C): Our options with respect to finalizing the GSP are to 1) leave SMC for subsidence as it is, 2) we could change the MT or MO if we thought there was a good reason to do this, or 3) we could follow the suggestion provided and focus on a management program without changing the numbers.
12. Feedback from CC members:
    a. Comment: It makes sense to coordinate the effort.
    b. Comment: For the GWLs to make sense for us, we need to tie it to our local issues. If we are doing what we are supposed to be doing, rather than pumping, the pumping below the Corcoran in some areas outside of the subsidence area will have less impact on areas where there is subsidence.
    c. Comment: What is your suggestion (asking consulting team), about whether to have both GWLs and surface measures?

i. Alyson (W&C): We are currently using both measures in the monitoring framework.

d. Comment: We as GSAs need to see what's happening around the subsidence area.

e. Alyson (W&C): In summary and in updating the draft GSP contents, we should at least update in the response to comments to be clearer that the GSAs intend to close the data gaps around subsidence and the subsidence area itself.

f. Comment: There's a need to coordinate. Response (W&C): Exactly, we need to get the plans out and then continue coordination. Because of current timeframe, will need to do further coordination with the other GSAs who are also (at the same time) trying to get their plans out.

g. Question: Did we have a buffer on the numbers used from historical data? Clarification from W&C: These numbers (for subsidence historical data) were rounded up slightly – no specific percentage buffer added.

h. Comment: We want to make sure that GWLs are not dropping because of neighboring basins.

i. Alyson (W&C): We can also note in the response to comments that the County has a project that would also streamline the process for environmental permitting to better enable conversion of wells from below to above Corcoran Clay.

j. Comment from CC: If we do not fully understand the extent of subsidence, and we set too low a threshold, this will not help us. Should not lower this threshold.

k. CC Recommendation: The CC recommended adding additional information about closing data gaps and the County project to the master response to comments and adding additional language around the GSAs intent to continue coordination with neighboring basins to the GSP. No change to the MTs or MOs.

13. Water Quality:

a. Alyson provided an explanation of Merced GSP water quality sustainable management criteria. The MT is set at 1,000mg/L for TDS (Total Dissolved Solids, measurement of salinity). This is drinking water standard. There are numerous other authorities governing and monitoring drinking WQ and contaminants. There is a summary of the response to comments for WQ on the Merced SGMA website.

b. Alyson provided summary of response to WQ comments. Salinity is selected as an indicator. GSAs recognize the importance of protecting drinking water quality. There is a desire to coordinate with agencies and their ongoing efforts to avoid duplication of efforts and efficiently use limited resources. Coordination activities include: (see list on PPT).

c. Comment/input from CC member: A CC member expressed concern that some areas of the subbasin already exceed the MT in part due to salinity migrating from marine soils underlying portions of the subbasin and

wanted to ensure this would not cause a problem for these areas of the basin later.

d. Alyson (W&C) reply: The CC has discussed that some areas have salinity greater than 1000 mg/l TDS currently, but that this is not an Undesirable Result (UR). It is not related to GW extraction and is an existing condition that has been adapted to by agricultural users by blending with higher quality water.

e. Clarification from Alyson (W&C): The MTs are set for specific areas in the basin (not basinwide) and are well specific. Currently all wells with MTs are domestic wells.

f. Charles Gardiner (Catalyst): The SC was generally comfortable with this. However, it is important to pay attention to domestic well users.

g. CC Recommendation: No change to MTs or MOs for water quality.

d. Dates for Adoption Hearings for GSA Boards – still being scheduled. Tentative dates below:

i. TIWD GSA-1 Nov. 19th

ii. MSGSA is TBD

iii. MIUGSA Dec. 11th

4. GSP Implementation Planning

a. Prop 68 funding opportunity (deadline Nov. 1, 2019)

i. Alyson (W&C) described the Prop 68 grant application. DWR has made development a higher priority for funding over GSP implementation for this funding round. DWR's priority is funding activities that help develop GSPs, including data gathering and addressing data gaps. The grant application contains three components. The first is grant administration portion of work, the second is work to address data gaps. This is focused on developing a data gaps plan and figuring out how to address those gaps. The third is to develop a remote sensing decision support tool to estimate groundwater use.

ii. Comment from CC member: METRIC™ (evapotranspiration data) looks backwards – it looks at who is using water and understanding general use. Could use conventional processes to develop a tool to look to the future (there are other options and we may use different remote sensing methods to achieve our objectives).

iii. Comment from CC member: It sounds like these are things we need to do anyway regardless of funding. We need them.

iv. Comment from CC member: if we want to do GW credits, we need to have a good enough water budget and accounting system to do something like this.

v. Comment from CC member: Please add that Lone Tree Mutual Water Co. has also provided a letter of support for the Prop 68 grant application.

b. Annual report preparation proposal from Woodard & Curran

i. The first annual report is due to DWR on April 1st. At staff request, W&C prepared a proposal to prepare the first annual report. The proposal includes optional tasks for program management, preparing stakeholder engagement plan update, and evaluation of the GDE pulse tool.

ii. Alyson (W&C) asked if there is any input on this and on the optional tasks:

1. Comment from CC member: MID is working on a Prop 218 process to fund GSP related costs.

iii. Recommendation to authorize funding for W&C to prepare GSP First Annual Report consistent with consultant proposal is approved by the CC.

c. Water Allocation Framework discussion

i. There is an ad hoc group working on this and this work will continue.

1. Comment from CC member: The sustainable yield is the most important thing to come out of the GSP. Some items will have to be worked on at the GSA level.

5. Public Outreach update

a. Charles (Catalyst) reviewed input from the SC. The SC would like to have a roadmap of key implementation issues and get an understanding of the progress. We did not have the folks in the SC this morning who are normally more vocal about water quality issues. We received a suggestion from staff that a way to structure this is to organize topics as a workshop of the SC and CC together. That way we have everybody sitting around the table discussing the issues. The next step would be to flesh out the roadmap and the structure. We also have had a few resignations from the SC and we may want to re-evaluate the balance of interests we have represented on this committee. We may need to see if we need to replace some people. Any questions or comments?

b. Comment from CC member: Not sure about having workshops on regular basis, what is meant by this? Charles (Catalyst): This could be workshops on specific key topics – perhaps jointly at the beginning of a CC meeting with the SC and then after the joint discussion, the CC meeting would move onto its other business. We could also structure them as separate meetings as it is done now.

c. Comment from CC member: I think we are getting the information from the SC. Concern if this is too much.

d. Comment from CC member: For some of these topics, such as projects, this can be done in a workshop together. However, some issues that get very technical are not suited to a workshop format.

e. Comment from CC member: For certain issues, like subsidence, it will be important to have SC input.

6. Coordination with neighboring basins

a. The consulting team and GSA staff reached out to the three neighboring basins for letters of support for the Prop 68 grant application. All three basins provided letters of support to the Merced Subbasin Prop 68 application. The GSAs provided reciprocal letters of support to the neighboring basins in return.

b. Question from CC: Are we coordinating with all members of the GSAs in Delta-Mendota? Alyson (W&C): No, Delta-Mendota is coordinating with their members internally. We will be focused on working with Delta-Mendota GSAs on interbasin flows and subsidence.

c. Comment from CC member: We put together a plan and met with their consultants (from other GSAs). With Turlock we've had two big meetings and some small meetings.

i. Have not had a chance to do this in detail with Delta-Mendota and Chowchilla. We've had one call with Delta-Mendota, but not to the same level of formal review as with Turlock.

7. Public comment

a. None.

8. Next steps and adjourn

a. Prop 68 due Nov. 1st

b. GSA adoption hearings for the GSP are coming up. These will be published on website.

c. Adjourned and date for next meeting to be decided at later time and published accordingly.

Next Regular Meeting
TBD at **1:30 p.m.**
Atwater, CA – Castle Conference Center at Castle Airport (subject to change)
Information also available online at mercedsgma.org
Action may be taken on any item

Note: If you need disability-related modification or accommodation in order to participate in this meeting, please contact Merced County, Community and Economic Development staff at 209-385-7654 at least 48 hours prior to the start of the meeting.

MEETING NOTES – Merced GSP

SUBJECT: Merced GSP Coordination Committee Meeting

DATE/TIME: November 2, 2020 at 10:00 AM

LOCATION: Online - Microsoft Teams Meeting

Coordination Committee Members In Attendance:

	Representative	GSA
☒	Hicham ElTal	Merced Irrigation-Urban GSA
☐	Stephanie Dietz	Merced Irrigation-Urban GSA
☒	Justin Vinson	Merced Irrigation-Urban GSA
☐	Daniel Chavez	Merced Irrigation-Urban GSA
☒	Ken Elwin (alternate)	Merced Irrigation-Urban GSA
☒	Bob Kelley	Merced Subbasin GSA
☒	Mike Gallo	Merced Subbasin GSA
☒	Nic Marchini	Merced Subbasin GSA
☐	George Park (alternate)	Merced Subbasin GSA
☒	Larry Harris	Turner Island Water District GSA #1
☐	Scott Skinner (alternate)	Turner Island Water District GSA #1

Meeting Notes

1. CALL TO ORDER AND WELCOME

a. Alyson Watson (Woodard & Curran) called the meeting to order.

2. ROLL CALL

a. Coordination Committee members in attendance are shown in table above. The Committee had a quorum.

3. CONSENT CALENDAR

a. Meeting notes from previous meeting (October 28, 2019) were approved.

4. REPORTS

a. Update on Submittal of Groundwater Sustainability Plan and First Annual Report – Alyson Watson (Woodard & Curran) provided an update about GSP related submittals and reviewed GSP related commitments and timelines. The GSP and First Annual Report were submitted on time in early 2020. DWR is now in a 2-yr review of plans and expects GSAs to start implementation in interim. The next Annual Report due April 1, 2021.

i. Hicham ElTal (MIUGSA) recommended that work on the second annual report should begin soon and the CC directed Woodard & Curran to prepare a timeline for the GSA representatives to review.

b. Severely Disadvantaged Communities Grant Status Update

   i. Matt Beaman (MID) provided a status update on the three grant-funded SDAC Projects: Planada Recharge Basin Pilot Project, El Nido Groundwater Monitoring Wells, and Meadowbrook Water System Intertie Feasibility Study, describing location, funding status, and details about projects and ongoing steps.

c. Coordination with neighboring basins

   i. Hicham ElTal provided updates:

      1. The Merced Subbasin has 3 neighboring basins (Turlock, Chowchilla, and Delta-Mendota). The GSAs have a formal cooperative MOU and an agreements with Turlock and Chowchilla, respectively.

      2. Ongoing coordination is occurring with Turlock Subbasin as that basin develops their GSP (not critically overdrafted, so on a later completion schedule than Merced).

      3. Subsidence is the main issue of concern for coordination with the Delta-Mendota and Chowchilla subbasin.

d. GSA Reports - Updates were provided from each GSA on activities they are undertaking in their own jurisdiction:

   i. Merced Subbasin GSA - Bob Kelly provided an update on past year activities, including:

      1. MSGSA joined the coordinated right to water application

      2. MSGSA is considering sustainability zones for GSP implementation, for example for subsidence. Outside consultant will be working on developing a summary of likely areas and reasons for development of separate sustainability zones within the GSA.

      3. Added Amsterdam Water District as a non-voting member to the GSA's Joint Powers Agreement. Set a board meeting schedule and continued to engage in the ad-hoc committee for implementation measures.

   ii. MIUGSA - Hicham ElTal provided an updated on recent activities, including:

      1. Generally keeping busy on technical work and now catching up on administration to build up capacity for MIUGSA.

      2. The coordinated effort towards a basin-wide water right to flood water application has been a key item and is described later in the meeting notes.

      3. On behalf of the basin, have been working on SDAC projects (also described later in meeting notes).

      4. Executed agreement with DWR for Prop 68 Planning Grant (described later in meeting notes)

   iii. TIWD GSA #1 - Larry Harris (TIWD) provided an update on recent activities, including:

      1. Joined in the coordinated water right application

      2. Completed the groundwater metering programs (all active wells are now metered).

      3. Current focus of attention is on locating some storage reservoirs to capture flood waters.

5. ACTIONS

a. Water Level and Water Quality Monitoring Networks – Approve RFQ for Monitoring Support Services

i. Matt Beaman (MID) gave a background on historical monitoring

1. Reviewed existing groundwater elevation (CASGEM) and water quality monitoring program
2. DWR has asked whether the voluntary wells from the CASGEM will continue to be reported. The voluntary wells are not part of the required reporting group for various reasons (questionable data results or don't meet construction requirements). A recommendation was made to discontinue reporting on these wells for CASGEM purposes.
3. Q: Monitoring well installed with telemetry as dedicated monitoring ~1 year ago (east end of MCWD/SWD area). Currently updates to DWR telemetry website. Should it be part of the GSP network? A: MID will take a look and if it meets the construction requirements, consider adding it to the network.

ii. Matt Beaman (MID) gave a background on current and future monitoring.

1. Q: In GSP, monitoring entities were sending information into data management system (DMS). What is different in what is being proposed? A: MIUGSA is assigned to submit the data for all monitoring wells throughout the basin (not per agency or well-owner). Measurements were submitted March and October (and December measurement coming up). But to meet GSP commitment, wells needs to start being measured more frequently (monthly instead of 2-3 times per year).
2. Q: How many wells are dedicated monitoring vs active production for irrigation/drinking water? A: The number in current monitoring network is 4 or 5 dedicated. 2 from SWD and 2 City of Merced and 1 from City of Atwater, plus 2 from MID former production but currently no pumps; rest are production.
    a. Follow-up Q: What concerns are there about moving to monthly monitoring for production wells (pumping impacts)? A: Many MID wells are dormant much of the time. For the most part, these wells need to be included to provide a complete subbasin picture.
3. Q: Nic Marchini has been taking elevations for several years in 12 wells that aren't necessarily part of CASGEM. Should these be included? A: It depends on Corcoran Clay and other CASGEM requirements for time between pumping. These would need to be reviewed individually.
4. Public Comment via chat: "Hello, my name is Jovana with Leadership Counsel. I have a question regarding the monitoring network. Our concern is that vulnerable communities will be overlooked, how is the monitoring network going to detect impacts to drinking water users, particularly for vulnerable communities?"
    a. MIUGSA: As we work on data gaps, we'll be looking at these issues, however the majority of these communities are served drinking water as part of community service districts that conduct routine water quality monitoring and meet all applicable drinking water regulations.
5. Q: What would it take to bring marginal/voluntary wells up to the technical standards to be able to consider them for the monitoring network? A: Most of the voluntary wells were production wells screened in multiple aquifers. It would

require a large level of effort to modify those to meet monitoring requirements. This is, however, an evaluation task under the Prop 68 planning grant work.

iii. **ACTION approved by CC:** Direct MID to prepare and issue a Request for Qualifications (RFQ) for the purpose of hiring one or more firms to conduct groundwater elevation monitoring, data compilation, reporting, general monitoring site maintenance, and other associated activities as needed. Selection of firm(s) and preparation of the scope of work subject to subsequent conversations among the GSAs prior to issuance of any contracts.

b. Proposition 68 Planning and Implementation Grants

i. **Prop 68 Planning Grant**: The scope for the $500,000 Planning Grant work was developed by a committee of GSA and stakeholder reps in Fall 2019. The GSAs were awarded the grant in early 2020. MID, as the GSAs' authorized rep, executed a grant agreement with DWR in May 2020. The grant scope includes 3 components: Developing a plan to address Data Gaps in the subbasin, field work to upgrade existing wells and potentially install new wells to augment the monitoring network, and development of a decision support tool.

1. Matt Beaman (MID) provided an overview of the work that needs to be started and recommended the GSAs request a scope/budget from Woodard & Curran for the Data Gaps Plan and Remote-sensing Tool, and issue an RFQ for the field work component.
2. Hicham ElTal (MID) suggested additional items that should be considered as part of data gaps plan development: assessment of CIMIS station for reliable location if considering satellite information in future, also add subsidence recommendations.
3. Bob Kelley (MSGSA) confirmed that work under the grant would be coordinated with all 3 GSAs since all will benefit.
4. **ACTION approved:** Direct Woodard & Curran to provide a scope and budget consistent with Prop 68 Grant Workplan to complete Data Gaps Plan and Remote Sensing components for review by GSAs.
5. **ACTION approved:** Direct MID to prepare and issue a Request for Qualifications (RFQ) for the purpose of hiring one or more firms to for well installation, well inspection, and other activities associated with Proposition 68 Grant Workplan. Selection of firm(s) and preparation of the scope of work subject to subsequent conversations among the GSAs prior to issuance of any contracts.

ii. **Prop 68 Implementation Grant:** DWR is releasing a solicitation for proposal for Prop 68 Implementation Grant funds. Matt Beaman (MID) provided an update on latest information on Prop 68 Implementation Grant Proposal Solicitation Package.

1. The three Merced Subbasin GSAs submitted a joint letter to DWR requesting an extension of the deadline to March 2021. DWR publicized the January 2021 deadline last week and is not expected to extend it.
2. MID recommended that the GSAs ask W&C to prepare a scope to prepare the grant application and the 3 GSAs would review the scope and decide how to move forward with grant application preparation and work with stakeholders to select most likely projects to compete for limited funds.
3. Q: Will projects need to be identified and scoped out before the grant app is submitted? A: Yes, W&C will have to come up with some assumptions about number of projects which will need to happen in parallel to grant preparation.

4. Public Comment: What actions will be taken to make sure funding for disadvantaged communities is appropriately allocated/addressed? A: GSAs will consider whether projects will benefit under-represented communities (URCs) during project selection. DWR will give preference to projects that meet requirements and benefit URCs so the basin has incentive to move those projects forward. Furthermore, most of the subbasin meets the definition of disadvantaged community or under-represented community.
5. **ACTION approved:** Direct W&C to prepare a scope for grant application preparation and for MID to serve as the subbasin representative in submitting the grant application and eventual contracting with DWR.

c. DWR Technical Support Services General Application

i. Matt Beaman provided an update on the status of the application. The three Merced Subbasin GSAs have coordinated on initial development of the General Application to DWR (effort primarily led by Lacey McBride (MSGSA)), and discussed the next steps for applying for DWR Technical Support Services.

ii. **ACTION approved:** Assign Groundwater Subbasin Coordinator (Hicham ElTal) to finalize and submit DWR Technical Support Services application and associated materials requesting various field activities. Application and submittal are subject to subsequent coordination among the GSAs.

6. Public Comment

a. No additional comments submitted besides the two noted earlier that were submitted during discussion of the monitoring network and Prop 68 agenda items.

7. Informational Items

a. Matt Beaman (MID) presented a brief summary of the Domestic Well Inventory project administered by Merced Integrated Regional Water Management Authority (MIRWMA), funded by DWR's Disadvantaged Community Involvement Grant
b. Hicham ElTal (MID) provided a summary of the Coordinated Water Right Application which has to do with use of periodic floodwater from most streams in the Subbasin.
    i. Application was submitted December 2019. It then took about five additional months to revise per State Water Resources Control Board staff feedback. Currently waiting for results of the review.
c. Other information items
    i. No items were raised.

8. Next steps and adjourn

a. Meeting frequency for Coordination Committee and Stakeholder Committee
    i. Hicham ElTal (MID) suggested some agenda items that could be discussed in future meeting(s):
        1. Establishing thresholds and sustainability criteria in areas without historical monitoring data or not monitored in past or without domestic wells.
        2. Meeting frequency and composition of stakeholder committee
        3. Consider changing general interest email address mercedsgma@woodardcurran.com to something that doesn't include a consultant or agency name like: mercedsgma@mercedsgma.org.
            a. W&C will look into this and report back.
    ii. GSP indicated CC and SC would meet quarterly.

1. The group expressed interest in CC meeting more frequently in the near term given pressing issues like the Prop 68 Implementation Grant application. The group agreed to schedule a meeting in early December and also consider a meeting in early January as well.

b. Confirm next meeting date
    i. Woodard & Curran will work on scheduling an early December meeting.
c. Meeting adjourned at 12:17 PM

Next Regular Meeting
TBD (expected early December)
Meeting to be conducted virtually (subject to change)
Information also available online at mercedsgma.org

MEETING NOTES – Merced GSP

SUBJECT: Merced GSP Coordination Committee Meeting

DATE/TIME: December 1, 2020 at 9:00 – 11:00 AM

LOCATION: Online - Microsoft Teams Meeting

Coordination Committee Members In Attendance:

	Representative	GSA
☒	Hicham ElTal	Merced Irrigation-Urban GSA
☐	Stephanie Dietz	Merced Irrigation-Urban GSA
☒	Justin Vinson	Merced Irrigation-Urban GSA
☐	Daniel Chavez	Merced Irrigation-Urban GSA
☒	Ken Elwin (alternate)	Merced Irrigation-Urban GSA
☒	Bob Kelley	Merced Subbasin GSA
☒	Mike Gallo	Merced Subbasin GSA
☒	Nic Marchini	Merced Subbasin GSA
☐	George Park (alternate)	Merced Subbasin GSA
☒	Larry Harris	Turner Island Water District GSA #1
☐	Scott Skinner (alternate)	Turner Island Water District GSA #1

Meeting Notes

1. CALL TO ORDER AND WELCOME

a. Samantha Salvia (Woodard & Curran) called the meeting to order.

2. ROLL CALL

a. Coordination Committee members in attendance are shown in table above. The Committee had a quorum.

3. CONSENT CALENDAR

a. Meeting notes from previous meeting (November 2, 2020) were approved.

4. PUBLIC COMMENT

a. Lou Myers (Merced Grasslands Coalition) provided public comment on the Stakeholder Committee reengagement agenda item. Lou represents a coalition of farmers and ranchers in the Merced Subbasin. Lou has reached out to members of the GSA and has submitted letters to DWR. The Merced Grasslands Coalition would like to be part of GSP discussions moving forward potentially through the stakeholder committee.

5. REPORTS

a. Coordination with neighboring basins

i. Hicham ElTal (MIUGSA) provided updates:

1. More information will be coming from the Turlock Subbasin including about their water budget.
2. There is a new proposed timeline for coordination between Delta-Mendota, Merced, and possibly Chowchilla Subbasins.

b. GSA Reports - Updates were provided from each GSA on activities they are undertaking in their own jurisdiction:

i. TIWD GSA #1 - Larry Harris indicated no updates since the last CC meeting.

ii. MIUGSA - Hicham ElTal expressed concern that this appears to be a dry year and it's uncertain how this may impact the GSP.

iii. Merced Subbasin GSA - Bob Kelly reported that MSGSA is working with Provost & Pritchard to determine potential sustainability zones in the GSA that may be used for management, monitoring, or projects in the future. The MSGSA's Technical Advisory Committee will be discussing these at ongoing meetings.

6. ACTIONS

a. Water Year 2020 Annual Report

i. Samantha Salvia (W&C) provided a brief background on the first annual report submitted for Water Years 2016-2019 and the requirement to submit a Water Year 2020 report by 4/1/2021 to DWR.

ii. Hicham ElTal and Bob Kelly indicated they'd like to start work on the annual report as soon as possible.

iii. Ken Elwin asked what is the total budget for this effort. Woodard & Curran confirmed it is about $85,000.

iv. Nic Marchini asked: will recent monitoring data be reported and what locations will be included? Matt Beaman and Hicham ElTal (MIUGSA) confirmed monitoring data was collected and submitted in March and MID is now finalizing data to submit to DWR from October for the whole monitoring network.

v. Bob Kelly (MSGSA) asked if agencies could be notified if there's data not received. Matt Beaman confirmed that data from all agencies were received for all of 2020 thus far.

vi. **ACTION approved by CC:** Recommend GSA Boards approve a contract amendment with Woodard & Curran to complete the Second Annual Report including data collection, analysis, report writeup, and submittal to DWR by April 1, 2021.

b. Proposition 68 Planning Grant Work

i. Basin awarded a $500,000 Prop 68 Planning Grant in early 2020

ii. MID has contracted with DWR for the grant and is ready to begin work

iii. At November meeting, CC requested Woodard & Curran prepare a scope and budget consistent with grant agreement for Data Gaps Plan and Remote-Sensing Tool part of grant scope.

iv. Hicham ElTal (MIUGSA) clarified that the work Woodard & Curran will be doing is the planning work for the data gaps plan and remote sensing and not the "field work" components which make up most of the grant amount.

1. Hicham indicated he'd like Woodard & Curran to determine DWR's direction for remote sensing data sources. The GSAs would like to be in alignment with the data source DWR is likely to consider standard.

v. Q: Will there be additional coordination on the Remote Sensing Decision Support Tool and its development? A: Yes. The scope includes stakeholder engagement and GSA coordination and input.

vi. Q: Will the Data Gaps Plan be used to update/refine the Subbasin's model? A: Modeling work is not directly part of the Data Gaps Plan, but down the road it's likely the model will be updated once additional monitoring locations are identified and data is collected.

vii. Q: Will the Data Gaps Plan be complete by end of February? A: Woodard & Curran will confirm a more detailed schedule, but likely will require more than two months to prepare a detailed plan with outreach.

viii. Hicham ElTal would like Woodard & Curran to connect with each GSA individually as the Data Gaps Plan is developed for locally-specific information.

ix. **ACTION approved by CC:** Recommend GSA Boards approve a contract amendment with Woodard & Curran to conduct Prop 68 Planning Grant work associated with Data Gaps Plan and Remote Sensing components as described in scope provided by Woodard & Curran.

7. DISCUSSION ITEMS

a. Prop 68 Implementation Grant Opportunity

i. Samantha Salvia (W&C) provided an overview of the Prop 68 Grant Implementation opportunity.

ii. Lacey McBride (MSGSA) reported that a group of GSA representatives have had several discussions about potential projects as well as posed some questions to DWR representatives about competitiveness of the grant. The small group has a shortlist of projects: recharge basins, El Nido improvement, and LeGrand Athlone intertie. Recommend that the CC direct the GSA representatives to select projects scoped to have a combined value within the $2-$5M grant requirements.

1. Black Rascal Creek flood control project was also identified but probably more appropriate for round 2 of implementation funding and won't be included in the project list for this grant application.

iii. Brad Samuelson provided a description of the LeGrand Athlone intertie project: a canal that links MID through Le Grand-Athlone Water District on southeast side of Subbasin, then continues to connect to Chowchilla River. Phase 1 would be connecting MID's booster 3 lateral to several creeks and would be just under $5M budget, but grant app could be adjusted to only include certain components. Overall the project is envisioned to bring floodwater into the Subbasin that otherwise would continue in Merced River or MID's service area. A feasibility study was completed in June 2020 and Summers Engineering is currently developing 30% drawings.

1. Brad Samuelson confirmed he should be able to pull together required project information for the grant on the intertie project. He can provide starting information to W&C. He also has information about the recharge basins and KMZ maps.

iv. Brad Samuelson provided background on the potential La Paloma recharge basin project: a wetland area that can be flooded by local supplies. The area is already used for some recharge. There's a good environmental enhancement at this site as a mutual benefit. There

is an existing diversion point. The project budget is about $750K but could be scaled back if needed.

v. Hicham ElTal (MIUGSA) provided a description of the El Nido improvements project ($400-$500K).

1. El Nido is on the tail end of MID's service area and moving water there and beyond is particularly challenging. The improvements would be in areas of major flow restrictions (e.g. increasing capability of moving water down El Nido system on the order of 1,000 AF). This would help MID move water to lower end of El Nido area during the flood event using existing floodwater licensing.

2. MID could provide details on project in 2 days if group were to move forward with this. Woodard & Curran confirmed it will be tight but doable in this case.

3. Also a plus from a grant app perspective is that this is in the subsidence area and supports a Disadvantaged Community.

vi. Hicham ElTal (MIUGSA) clarified that CC should make a decision today on whether to pursue round 1 funding and generally what project(s) should be in the application (with a little room for edit in next few days).

vii. Hicham ElTal (MIUGSA) requested that the cost for application preparation can be taken on by the GSA for which the proposed project benefits.

viii. Bob Kelly (MSGSA) expressed concern that project details, budget, etc. aren't refined enough and won't be in time for round 1 application due date. Discussion ensued on schedule feasibility.

ix. MIUGSA and MSGSA to provide project info by end of Thursday 12/3 for El Nido Improvements and scaled back versions of La Paloma recharge basin and Le Grand-Athlone Intertie project.

x. **ACTION approved by CC:** Authorize W&C to start working on and complete an application for Prop 68 Implementation grant funding, providing that the GSAs forward project descriptions, costs, and project benefits to W&C by Thursday 12/3/2020 and also that the GSAs benefiting from awarded (funded) projects would be burdened proportionally for the cost of preparing the application and not the whole Subbasin's typical GSA split.

b. Stakeholder Committee re-engagement (meeting frequency, review of member composition)

i. Samantha Salvia (W&C) provided a description of the Stakeholder Committee function and original formation. The committee was formed for development of the GSP through a public application process. The CC reviewed applications and recommended a stakeholder committee list to the GSA boards. The GSA boards approved the stakeholder committee. The committee met monthly prior to coordination committee meetings for the duration of GSP development.

ii. Q: how long are these members asked to serve? A: Original expectation was through the development of the GSP (end of 2019).

1. Mike Gallo suggested the potential for implementing a term limit with option to renew to be in alignment with other committees (e.g. avoid asking for indefinite membership length).

iii. Additional Public Comment – the committee took additional public comment on this item:

1. Angela (Self-Help Enterprises): Previous manager Maria Herrera has left but SHE continues to engage with the Merced Subbasin and would like to continue to do so through the Stakeholder Committee.
2. Lou Myers: Suggested that future stakeholder participation should be explicitly for GSP implementation. Roughly 50% of the landmass is rangeland and roughly 3% of the interested parties represent that so the CC should consider this given the potential for recharge on rangeland.

iv. Hicham ElTal (MIUGSA) suggested that if virtual meeting attendance continues to be an option, it may make it easier for stakeholders to be involved.

v. Bob Kelly (MSGSA) indicated the MSGSA Technical Advisory Committee is meeting 12/2 and will discuss this. He agreed with a quarterly meeting frequency.

vi. Samantha Salvia (W&C) suggested staggering SC meetings so they occur before the corresponding CC meeting to provide time to consolidate feedback and transmit to CC.

vii. Hicham ElTal (MIUGSA) suggested reaching out to existing SC list to solicit interest in continued participation and defining responsibilities and requirements. MID has done something similar in the Integrated Regional Water Management (IRWM) process.

viii. W&C will start with the previous SC application description and update then pass to the CC for feedback.

c. Update the MercedSGMA general contact inbox from mercedsgma@woodardcurran.com to contact@mercedsgma.org and route messages to the three GSAs.
   i. CC agreed this is a good idea and the GSAs will each provide points of contact.

d. Approach for establishing thresholds and sustainability criteria in areas without historical monitoring data or not monitored in past or without domestic wells.
   i. Hicham ElTal (MIUGSA) is interested in identifying abandoned wells and thinks they might provide information on development of the aquifer over time. Also interested in shallow wells in Above Corcoran Clay that have been abandoned to be drilled deeper into the Below Corcoran Clay to give an idea of shallow aquifer health.
   ii. Q: If individual person has been taking historical groundwater elevations, how should they go about voluntarily submitting that data? (e.g. in Le Grand area, fairly regular elevation data has been collected, might be useful to fill data gaps). A: We can circle back on where those wells might be and data available. Per Matt Beaman (MIUGSA), there is a form to submit level data on MercedSGMA website. Official representative wells are required to meet state guidelines for the wells (e.g. construction and commitment to monitoring frequency) and would be up to CC or GSAs to incorporate if they can be demonstrated to meet the requirements.
   iii. Greg Young (MSGSA) noted that in model calibration there were wells in data gap areas and those can be valuable for understanding what might be representative wells and historical conditions in the area.
   iv. Hicham requested that W&C send a list of the options/venues to use to try to estimate or develop a threshold/sustainability criteria for CC feedback and further investigation.
      1. Example, PG&E had historical wells with significant data that were used previously.

8. Next steps and adjourn

a. Confirm next meeting date
   i. Woodard & Curran will schedule a February 22 meeting from 1:15-3:15pm.

ii. Request was made to add standing item near end of future agendas for committee member thoughts/suggestions, etc.

b. Meeting adjourned at 10:57 AM

Next Regular Meeting
February 22 at 1:15-3:15 PM
Meeting to be conducted virtually (subject to change)
Information also available online at mercedsgma.org

MEETING NOTES – Merced GSP

SUBJECT: Merced GSP Coordination Committee Meeting

DATE/TIME: February 22, 2021 at 1:15 – 3:15 PM

LOCATION: Online – Zoom Meeting

Coordination Committee Members In Attendance:

	Representative	GSA
☒	Hicham ElTal	Merced Irrigation-Urban GSA
☐	Stephanie Dietz	Merced Irrigation-Urban GSA
☒	Justin Vinson	Merced Irrigation-Urban GSA
☐	Daniel Chavez	Merced Irrigation-Urban GSA
☒	Ken Elwin (alternate)	Merced Irrigation-Urban GSA
☒	Eric Swenson	Merced Subbasin GSA
☒	Mike Gallo	Merced Subbasin GSA
☒	Nic Marchini	Merced Subbasin GSA
☒	George Park (alternate)	Merced Subbasin GSA
☒	Larry Harris	Turner Island Water District GSA #1
☐	Scott Skinner (alternate)	Turner Island Water District GSA #1

Meeting Notes

1. CALL TO ORDER AND WELCOME

a. Samantha Salvia (Woodard & Curran) called the meeting to order.

2. ROLL CALL

a. Coordination Committee members in attendance are shown in table above. The Committee had a quorum.

3. CONSENT CALENDAR

a. Meeting notes from previous meeting (December 1, 2020) were approved.

4. PUBLIC COMMENT

a. No public comments.

5. REPORTS

a. Coordination with neighboring basins

i. Hicham ElTal (MIUGSA) provided updates:

1. There is an ongoing effort to schedule a coordination meeting between the Merced, Chowchilla, Delta-Mendota, and Madera Subbasins. This will be scheduled with GSA representatives soon.

2. Ongoing coordination is occurring with the Turlock Subbasin including about their water budget.

b. GSA Reports - Updates were provided from each GSA on activities they are undertaking in their own jurisdiction:

i. Merced Subbasin GSA – Lacey McBride shared that the MSGSA Board had a January meeting where proposed sustainability zones were discussed; more information is available on MSGSA website (https://www.co.merced.ca.us/2799/Merced-Subbasin-GSA). A Board workshop (2/24 at 2pm, open to the public) is upcoming to talk about goals and options for demand reductions.

1. Question (Hicham ElTal): What are the unique characteristics considered for identifying sustainability zones? Answer: Many factors, but they include hydrologic/hydrogeologic differences, land use, and jurisdictional boundaries.

ii. MIUGSA - Hicham ElTal shared that MIUGSA is administering various pieces of grant work (e.g. SDAC grants for well installations), the Meadowbrook Water System Intertie Feasibility Study is nearly complete, and MID is considering installing dry wells in the Planada area (recharge effort). MIUGSA is also working on setting policies related to the management framework discussed in GSP.

1. Request: Hicham ElTal requested that a standing agenda item be added to future CC meetings on current groundwater conditions, similar to updates that used to be provided at Merced Area Groundwater Pool Interest (MAGPI) meetings.

iii. TIWD GSA #1 - Larry Harris shared that now that monitoring/metering programs are completed, TIWD GSA #1 will be focusing on telemetry for some metering systems. Another focus in the next few months will be developing additional reservoirs for surface water storage.

6. ACTIONS

a. Stakeholder Advisory Committee Recommendation

i. Samantha Salvia (W&C) provided a brief background on the recent process for soliciting and reviewing applications for re-establishing the Stakeholder Advisory Committee during the GSP implementation process. 30 committee members were recommended by the GSA staff, with 5 alternates.

ii. Question: How long are the terms of the Stakeholder Advisory Committee? Answer: The application stated it should be considered a 2-year term.

iii. Question: If members were to drop from the Committee, is the list reviewed annually to fill vacant positions? Answer: In the past, when this happened, it was dealt with on an individual basis and often an alternate was filled in the position.

iv. Public Question: Is there an opportunity to still be a part of this committee? Answer: The application process has closed but Stakeholder Advisory Committee meetings are open to the public and have an option for public comment and input (as do Coordination Committee meetings).

v. Question: How many people on this list are representing disadvantaged communities and primarily drinking water interests? Answer: Multiple, some representatives include Planada, Livingston, and Winton.

vi. Question: What is the structure of the group? Answer: It is an advisory committee that will meet quarterly. There aren't any appointed positions or hierarchy – it provides input to the Coordination Committee.

vii. **ACTION approved by CC:** Recommend the GSA boards appoint the staff recommended applicants (shown on slide) to the Stakeholder Advisory Committee.

b. GSP Well Monitoring RFQ

i. Lacey McBride (MSGSA) provided a brief background on the GSP Well Monitoring Request for Qualifications (RFQ). Two submissions were received by the deadline. The GSAs coordinated the review of submissions and provided a recommendation of QK. Input was requested from the Coordination Committee on the amount of the contract and who would administer.

ii. Question: What kind of contract is this? Answer: This is up for discussion; a rate was provided in the RFQ response but a scope would need to be developed for each project. One thought is to have a Not to Exceed amount for a period longer than one year.

iii. Public Comment (Eric Swenson): "I would recommend that the Merced Subbasin administer the groundwater monitoring contract due to much of work being needed will be in the Merced Subbasin."

iv. Hicham ElTal noted that most monitoring currently is located in the MIUGSA portion of the Merced subbasin.

v. Mike Gallo (MSGSA) shared that during previous discussion he thought it made sense for contracting to go through MIUGSA so that one group pays and there's one bill, with a cost share separately on the backend (like with GSP development contracting).

vi. Lacey McBride (MSGSA) confirmed that all three GSAs will be involved from a technical standpoint of monitoring effort regardless of who is coordinating the administration of the contract.

vii. Garth Pecchenino (QK) agreed that a defined scope should be developed so a specific cost can be provided for purpose of contracting. Exact wells would need to be identified to develop read routing plan.

1. Hicham ElTal (MIUGSA) clarified that additional scope/budget should be considered for additional projects, such as installation/siting of a CIMIS station.

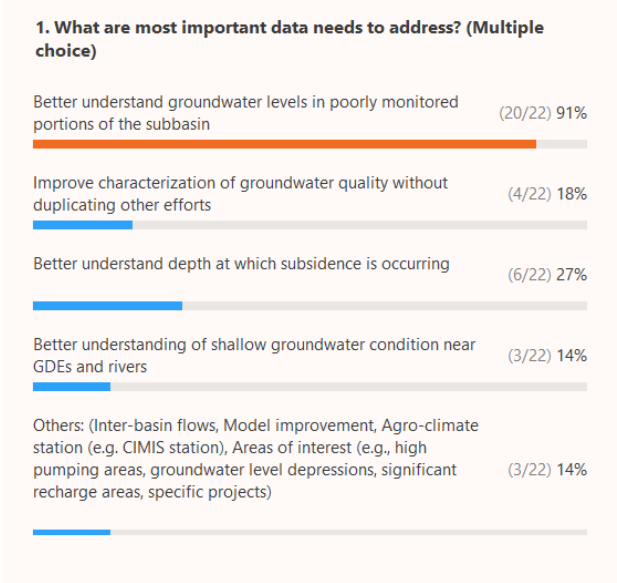
viii. Question: Do the GSAs do WQ monitoring at CASGEM wells? Answer: As described in the GSP, the GSAs review monitoring data collected by other monitoring programs. It could be part of the monitoring contract if identified as a need in the future.

ix. **ACTION approved by CC:** Recommend GSAs select QK as consultant for monitoring work under SGMA for Merced Subbasin. Authorize MIUGSA to enter into an agreement with QK. Provide QK with initial budget of $10,000 to conduct spring monitoring.

7. DISCUSSION ITEMS

a. Data Gaps Plan (Prop 68 Planning Grant funded work)

i. Jim Blanke (W&C) shared the approach and schedule for Data Gaps Plan development along with the results of the initial assessment and facilitated a discussion with the CC on priorities, including polls (results shared in screenshots below).

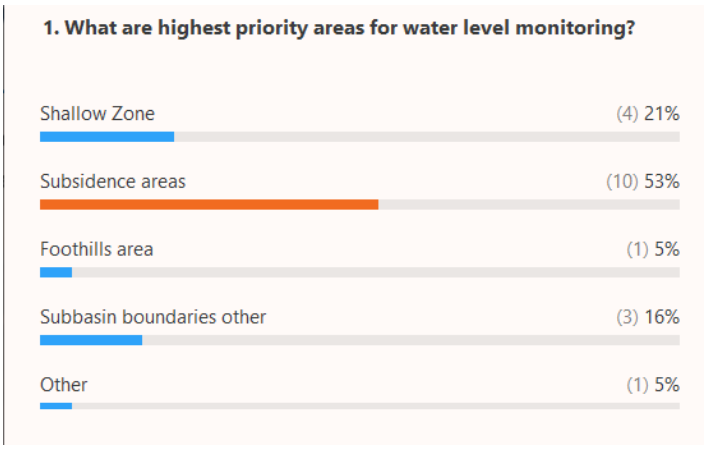


ii.

iii. Question from Amanda Monaco: A big data gap is where domestic wells are and how deep they are. Are the GSAs going to fill in this data gap? Answer: Work funded by IRWM is evaluating locations and depths of domestic wells in key areas of the Subbasin.

iv. Public Comment (Eric Swenson): "I believe that existing production wells should be used when possible to provide additional SWL (static water level) monitoring in zones with data gaps. Short screened monitor wells may not provide the data desired."

v. Hicham ElTal (MIUGSA) shared that other basins are looking at what Merced Subbasin is doing. If Merced were to install monitoring wells along the Merced River, the Turlock Subbasin would be interested and likely reciprocate with additional well installations. He also brought up that there's an issue about the location of the groundwater ridgeline (e.g. where it slopes to southwest San Joaquin River vs sloping to the Merced River).



vi.

vii. Hicham ElTal (MIUGSA) asked when a recommendation (e.g. the Data Gaps Plan) will be ready. Answer: A draft plan is expected to be presented at a public meeting in the April/May time period.

viii. Ken Elwin (MIUGSA) saw some empty locations in the map of monitoring well density in the Outside Corcoran Clay Principal Aquifer (UC Merced and another site) and suggested that some known wells could be available or useful to add to the monitoring network.

ix. Hicham ElTal (MIUGSA) shared that MID has a well near Fahrens Creek that may be able to be incorporated into the network.

x. George Park (MSGSA) said it would be useful to know what completion information and characteristics of wells would be ideal for identifying production wells that could be useful for filling data gaps, so well owners know what to look for in inventory.

1. Jim Blanke (W&C) responded that a key requirement is that wells need to be screened only in one aquifer.

b. Remote-sensing tool development (Prop 68 Planning Grant funded work)

i. Dominick Amador (W&C) described the approach and schedule for developing the tool, including a background on how crop evapotranspiration is estimated from remote sensing data, the various data products available, and the next analysis steps.

ii. Hicham ElTal (MIUGSA) shared that both METRIC and SEABAL depend on CIMIS data. The existing CIMIS station surrounding land use has changed and the station is no longer reliable.

iii. Public comment (Geoff Vanden Heuvel): "The GSA's that have adopted Land iQ like Semitropic, Lower Tule GSA, Pixley GSa all put in multiple weather stations to assure accuracy of the ETC data. It doesn't require all that much investment"

c. Sustainability Criteria Approaches for Additional Representative Monitoring Wells

i. At the December CC meeting, the CC requested that W&C return to the group with some information about potential approaches to use for setting sustainability criteria for wells that lack historical data. Chris Hewes (W&C) described two potential approaches.

ii. Question (Hicham ElTal): Will Sustainable Management Criteria methodology be part of the data gaps plan? Answer: No, but the Data Gaps plan can help inform the methodology and provide an opportunity to test the different methods in real world situations given the actual location of new wells.

iii. Public Comment (Eric Swenson): "Older domestic wells are typically those at highest risk of running out of water. New domestic wells not so much. Criteria in the Merced Subbasin should likely be by Sustainability Zone."

d. Prop 68 Implementation Grant

i. Samantha Salvia (W&C) provided a brief background on the grant application which was submitted on January 8, 2021 and seeks $5,000,000 in funding for two groundwater recharge related projects in the southern portion of the basin. Release of the draft funding list for Round 1 expected mid-March 2021, with final grant awards in May 2021.

8. Next steps and adjourn

a. Confirm next meeting date

i. Woodard & Curran will schedule an April 26 meeting from 1:15-3:15pm, shifting meetings to quarterly 4th Monday of January, April, July, and October.

b. Meeting adjourned at 3:26 PM

Next Regular Meeting
April 26 at 1:15-3:15 PM
Meeting to be conducted virtually (subject to change)
Information also available online at mercedsgma.org

MEETING NOTES – Merced GSP

SUBJECT: Merced GSP Coordination Committee Meeting

DATE/TIME: April 26, 2021 at 1:15 – 3:15 PM

LOCATION: Online – Zoom Meeting

Coordination Committee Members In Attendance:

	Representative	GSA
☒	Hicham ElTal	Merced Irrigation-Urban GSA
☐	Stephanie Dietz	Merced Irrigation-Urban GSA
☒	Justin Vinson	Merced Irrigation-Urban GSA
☐	Daniel Chavez	Merced Irrigation-Urban GSA
☒	Ken Elwin (alternate)	Merced Irrigation-Urban GSA
☒	Eric Swenson	Merced Subbasin GSA
☒	Mike Gallo	Merced Subbasin GSA
☒	Nic Marchini	Merced Subbasin GSA
☒	George Park (alternate)	Merced Subbasin GSA
☒	Larry Harris	Turner Island Water District GSA #1
☐	Scott Skinner (alternate)	Turner Island Water District GSA #1

Meeting Notes

1. CALL TO ORDER AND WELCOME

a. Samantha Salvia (Woodard & Curran) called the meeting to order.

2. ROLL CALL

a. Coordination Committee members in attendance are shown in table above. The Committee had a quorum.

3. CONSENT CALENDAR

a. Meeting notes from previous meeting (February 22, 2021) were approved with one correction to note a missing committee member in the attendance table (Mike Gallo motions, Ken Elwin seconded, none opposed or abstained).

4. PUBLIC COMMENT

a. Dennis Evans: Dennis shared that he emailed a report to contact@mercedsgma.org from the EPA about green infrastructure to help decision-makers assess the potential value of investment in green infrastructure and encourages committee members to read it. Dennis provided additional follow-up information via chat:

i. Please check out two links concerning Green Stormwater Infrastructure (GSI) epa.gov/smartgrowth and Enhancing sustainable communities with green infrastructure

epa.gov/green-infrastructure. The report was prepared by the U.S. Environmental Protection Agency's Office of Sustainable Communities. The report Links and valuation tools will help guide community leaders' decision makers to potential cost saving in Merced.

The examples of how cost savings can be compared in Merced County please See (page 9-Exhibit 6), Supportive Strategies (page 20)

5. REPORTS

a. Current basin conditions

i. Chris Hewes (Woodard & Curran) presented hydrographs for each principal aquifer to highlight new Spring 2021 groundwater measurements.

ii. Hicham ElTal (MIUGSA) suggests considering in future GSP updates to move to quarterly monitoring instead of monthly monitoring.

b. Coordination with neighboring basins

i. Hicham ElTal (MIUGSA) provided updates:

1. Turlock Subbasin – Coordination is occurring through Merced Irrigation District (MID) and Merced County's involvement as member agencies in the East Turlock GSA during the Turlock Subbasin GSP Development process. Current discussions are focused on interconnected surfaces water and chronic lowering of groundwater levels. This is particularly relevant to flows into and out of the Merced Subbasin. A draft GSP is not expected for public review until a July timeframe.

2. Chowchilla Subbasin – a meeting was sponsored by DWR for Chowchilla, Merced, Madera, and Delta-Mendota Subbasins to discuss subsidence. An additional meeting is expected (date TBD) to talk about the history of subsidence.

c. GSA Reports - Updates were provided from each GSA on activities they are undertaking in their own jurisdiction:

i. Nic Marchini and Eric Swenson (MSGSA) provided updates:

1. At the April 8 meeting, the MSGSA Board moved forwarded with sustainability zones for groundwater management. For now, they are not permanent and may be further refined. It will help MSGSA analyze subareas.

2. The MSGSA Board also formed a demand reduction committee to explore options for implementing this management action in the GSA.

3. The MSGSA Board has moved from quarterly to monthly meetings.

ii. Hicham ElTal (MIUGSA) provided updates:

1. MIUGSA is still looking to put forward several policies (similar to what was shared in February CC meeting).

2. DWR has officially awarded the Merced Subbasin $4,999,800 for two projects under the Proposition 68 implementation grant program (DWR finalized a draft awards list released a couple months ago). MID will move forward with executing a contract with DWR.

iii. Larry Harris (TIWD GSA-#1) provided updates:

1. TIWD GSA-#1 is still focused on a telemetry project for metering and storage projects (permitting, financing, etc.).

6. DISCUSSION ITEMS

a. Meadowbrook Water System Intertie Feasibility Study

i. Mark Reitz (AECOM) provided an overview of the Meadowbrook Water System Intertie Feasibility Study. The feasibility study evaluated possible connections to the City of Atwater and to the City of Merced systems. Details are presented in the separate slide deck.

ii. Q: City of Merced has a nominal pressure of 44 psi, plus some various pressure drops, so does the cost estimate include a booster pump? A: Not yet, would need to check some of the observed pressures in the potential connection areas.

b. Stakeholder Advisory Committee update

i. Samantha Salvia (Woodard & Curran) presented a summary of the first meeting of Stakeholder Advisory Committee for GSP Implementation, held on 4/12. Engagement was good (25/30 members in attendance). The meeting provided an overview of GSP commitments and the annual reports, and sought input on priorities for the Data Gaps Plan.

1. Link to meeting minutes from 4/12: https://www.mercedsgma.org/assets/pdf/meeting-materials/2021-04-12-SC-Meeting-Minutes-final.pdf

c. Data Gaps Plan (Prop 68 Planning Grant funded work)

i. Jim Blanke (W&C) shared the approach and draft results/recommendations from the data gaps plan effort.

ii. Comment (Hicham ElTal): it would be nice to have wells near the Merced River stream gauging stations to correlate surface water and groundwater measurements. It would also be nice to have similar wells on the Turlock side of the basin.

iii. Comment (Hicham ElTal): East of City of Merced along Bear Creek, MID installed gauging stations and put in two sets of wells (50 and 100 feet deep). It is possible we could add one of these wells to the network, though the gauging stations are not maintained.

iv. Q: Numerous folks have offered up monitoring sites sourced from existing production wells. Are these included in the draft results? A: Yes, some have been included where depth information or recent monitoring data were available.

v. Comment (Eric Swenson): Hard to review maps without roads or latitude/longitude coordinates.

1. Woodard & Curran will generate some PDFs with a different basemap where you can zoom in on locations with more detail.

vi. Comment (Eric Swenson): The intersection of Baxter and Buchanan Hollow roads is a suggested location for a new well that is a County dirt road.

vii. Comment (Eric Swenson): Another tool for subsidence is looking at casing failures for production wells (vertical and lateral shear fractures). Depth at which this is occurring may shed light on compaction depth. If you can identify locations, the next question would be outreach to the landowners.

viii. Comment (Hicham ElTal): Have looked at extensometers in the past and confirmed they are very expensive.

ix. Comment (Eric Swenson): Thinks there are some consistent cropping areas in the Subbasin that might be good candidates for a new CIMIS station.

x. Comment (Hicham ElTal): Hoping the data gaps plan can look at topography and wind patterns to suggest a representative location for a new CIMIS station. Not sure if we need to talk to DWR or other weather forecasters. Wind is an important factor to consider.

    1. Next steps for additional siting evaluation will be outlined in the data gaps plan.

xi. Q: Why can't the CIMIS station be installed in an alfalfa field? Does it need to be grass? A: Hicham's understanding is that it could be, but would require some kind of adjustment factor.

xii. Q: Will the plan look at how many wells needed to look at interconnected surface waters? A: The preferential monitoring layer takes into account distance to stream boundaries and included some suggested well sites along both Merced and San Joaquin Rivers.

xiii. Woodard & Curran will consider putting out some draft maps for Committee members to provide input before the draft plan is published.

xiv. Q (Dennis Evans): Is Aquifer recharge monitored? A: It depends on the context of the question – some artificial recharge is measured directly while other measurements (e.g. rainfall, etc.) are used to help model and estimate recharge.

7. Next steps and adjourn

a. Confirm next meeting date – July 26
b. Meeting adjourned at 3:13 PM

Next Regular Meeting
July 26 at 1:15-3:15 PM
Meeting to be conducted virtually (subject to change)
Information also available online at mercedsgma.org

MEETING NOTES – Merced GSP

SUBJECT: Merced GSP Coordination Committee Meeting

DATE/TIME: July 26, 2021 at 1:15 – 3:15 PM

LOCATION: Online – Zoom Meeting

Coordination Committee Members In Attendance:

	Representative	GSA
☒	Hicham ElTal	Merced Irrigation-Urban GSA
☐	Stephanie Dietz	Merced Irrigation-Urban GSA
☒	Justin Vinson	Merced Irrigation-Urban GSA
☒	Daniel Chavez	Merced Irrigation-Urban GSA
☒	Ken Elwin (alternate)	Merced Irrigation-Urban GSA
☒	Eric Swenson	Merced Subbasin GSA
☒	Mike Gallo	Merced Subbasin GSA
☐	Nic Marchini	Merced Subbasin GSA
☐	George Park (alternate)	Merced Subbasin GSA
☐	Kel Mitchel	Turner Island Water District GSA #1
☒	Tim Allan (alternate)	Turner Island Water District GSA #1

Meeting Notes

1. CALL TO ORDER AND WELCOME

a. Samantha Salvia (Woodard & Curran) called the meeting to order.

2. ROLL CALL

a. Coordination Committee members in attendance are shown in table above. The Committee had a quorum.

3. CONSENT CALENDAR

a. Meeting notes from previous meeting (April 26, 2021) were approved. (Mike Gallo motioned, Tim Allan seconded, all voted in favor.)

4. PUBLIC COMMENT

a. No public comment. (comments and questions from the public were accepted during the meeting on agenda items)

5. REPORTS

a. Current basin conditions

i. Matt Beaman (MIUGSA) presented hydrographs for each principal aquifer to highlight recent new monthly groundwater measurements recorded since the last review of data collected in March 2021.

ii. Public Q: Is there anything in that data that is a reason for concern? A: Nothing concerning at this point. It's typical to see during summer irrigation season that levels trend lower and recover into the fall and winter.

b. Coordination with neighboring basins

i. Hicham ElTal (MIUGSA) provided updates:

1. Chowchilla, Delta-Mendota, Merced, and Turlock subbasins have held several coordination meetings on subsidence over the last few months. The agencies are sharing information on impacts and also defining the region of subsidence.

2. Hicham noted that it will be important for the State to recognize that subsidence is chronic and was a problem before SGMA. He noted the Merced started coordinating with Chowchilla subbasin as early as 2015.

c. GSA Reports - Representatives from each GSA provided updates on activities they are undertaking in their own jurisdiction:

i. Lacey McBride (MSGSA) provided updates:

1. At the MSGSA July 2021 meeting, the GSA adopted a Water Year 2025 target of 15,000 AFY reduction in groundwater use. The GSA Board wanted to formalize a target to help communicate to stakeholders that actions need to start soon.

2. MSGSA formed an ad-hoc committee on demand reductions and has been meeting regularly and reporting to the GSA Board.

3. MSGSA has a Technical Advisory Committee meeting on 7/29 to start discussing strategies for land repurposing.

4. Public Q: MSGSA is 330,000 acres total, correct? A: About 337,000 ac.

5. Public Q: Are the Merced Subbasin GSA meetings public? A: Yes (meeting in person but also remote Zoom access is available).

ii. Hicham ElTal (MIUGSA) provided updates:

1. A Stakeholder Guidance Committee meeting for MIUGSA is coming up to discuss policies for implementation of the GSP.

2. MIUGSA is evaluating financing options, whether basin-wide or GSA-wide projects.

3. MIUGSA expressed interest in Merced County providing a workshop to key staff of different GSAs in the County to discuss transferring of groundwater well permitting process oversight to the GSAs within their respective boundaries.

a. Lacey McBride clarified that the proposal to the County for this process has no hard implementation deadline at this point. The County is also planning on offering such a workshop for GSAs possibly in August.

iii. Tim Allan (TIWD GSA-#1) Tim Allan introduced himself and was welcomed by the group to the Coordination Committee.

6. ACTION ITEMS

a. GSP Well Monitoring

i. Matt Beaman (MIUGSA) provided background on the contract for technical support related to monitoring and presented main elements of the proposed full contract for the next 12 months.

ii. Q: Is the current cover crop around the existing CIMIS station compliant with DWR guidance? A from MIUGSA: No – MIUGSA plans to work with DWR to identify locations and get recommendation for an additional site.

iii. Lacey McBride (MSGSA) clarified that today's action is for the Coordination Committee to agree to recommend to their respective GSA Boards to approve this monitoring contract.

iv. **ACTION (motioned by Hicham ElTal, seconded by Eric Swenson, approved by committee):** Recommend GSAs authorize Merced Irrigation-Urban GSA to enter into an agreement, on behalf of the GSAs, with QK for monitoring work and other technical support, as presented.

1. Duration 12 months, with opportunity to extend.
2. Not to Exceed $136,050.00
3. Share cost according to existing MOU

7. DISCUSSION ITEMS

a. Remote Sensing Decision Support Tool (Prop 68 Planning Grant funded work) – Dominick Amador (Woodard & Curran) presented an update on the remote sensing decision support tool development. The goal is to utilize satellite technology to estimate monthly Et at a parcel level and combine this with information on precipitation and surface water deliveries to provide a better understanding of net groundwater use at higher resolution than currently available. Dominick described the work to date, conducted utilizing previously purchased Et data from approximately 2008 through 2013 He provided a mockup of the dashboard the tool will provided for end users. Next steps include collecting parcel-level surface water delivery data from local irrigation districts as an input to the accounting steps of the tool.

i. Prior to opening up for committee discussion, Samantha Salvia reminded committee members that this tool is being developed under grant funding from DWR. Woodard & Curran is scoped to develop the tool itself and a technical support document summarizing the tool's capabilities and limitations. How the GSAs decide to use the tool is a policy matter – it may be used to identify trends in groundwater use, to support allocation framework discussions, or for other information purposes to help with basin management activities.

ii. Committee Member Discussion

1. Q: What is difference between ET_{actual} and $ET_{Applied\ Water}$? `A: ET_{actual} provided directly from METRIC independent of any other factors. $ET_{Applied\ Water}$ is essentially the evapotranspiration after processing (accounting for root storage, precipitation, etc.)
2. Comment (Eric Swenson): The real world won't be as neat and clean as this tool. For Merquin County Water District, the measured deliveries to individual parcels are a mix of surface and groundwater and hard to disaggregate. Some users have unusual water supplies like wastewater treatment plant effluent where data may not be readily available. Monthly data will likely be challenging and annual is probably more possible. Need to think about how to accurately measure in the

future moving forward. Suggest the tool have options for reporting on monthly, quarterly, and annual basis.. Getting the satellite data will be the easiest part, sorting out the other water use will be more challenging.

3. Comment (Hicham ElTal): METRIC data is good, especially for identifying trends – but have to understand its limitations. The method is as strong as the information used to calculate evapotranspiration (applied) and depends on a number of factors such as the quality of the CIMIS data.

iii. Public Questions Submitted Via Chat – a number of questions were submitted into the chat and are captured below. Due to time constraints, not all questions could be answered during the meeting.

1. Public Q: What are Metric rasters? A: A tool that uses satellite infrared imagery to get a heat signature off the land surface. Once it goes through a modelling process and account for solar radiation and other climatic data – the satellite image is transformed into a layer describing where there is crop evapotranspiration. They cover a large area at a 30m resolution. Overall – it uses satellite imagery to determine evapotranspiration on a high-resolution basis.
2. Public Q: What about sub-surface drip? A: The method of irrigation is independent of this method – it's measuring the crop evapotranspiration and thus generally operational methods don't matter.
3. Public Q: Applied water is different right? applied water includes ET and deep percolation and runoff which would need to be measured with meters…correct?
4. Public Q: Won't ET be elevated if the picture is taken while someone is irrigating?
5. Public Q: How is precipitation going to be measured from parcel to parcel? CC Q: How is precipitation measured and how does is variability incorporated? A: We use PRISM (from University of Oregon) which takes into account many factors to interpolate point data to provide a spatially complete (30m resolution) precipitation on a daily basis.
6. Public Q: How many ground based weather stations are going to be used to inform the satellite etc information.
7. Public Q: How will riparian water application be calculated? By that I mean surface water used that is not being provided by MID (e.g. creek lift pumps).
8. Public Q: What will be the procedure if the remote-sensing consumption numbers are not consistent with the numbers calculated by growers from a parcel-level… and they have data from meters, etc to support?

b. Stakeholder Advisory Committee update – Samantha Salvia (Woodard & Curran) presented a brief summary of the July 26 Stakeholder Advisory Committee meeting. She noted it was the second meeting of this group, listed topics covered, and summarized the group's discussion on moving to in-person meetings.

i. Lacey McBride (MSGSA) recommended keeping legal counsels involved when scheduling the next meeting because it's possible the Governor's Executive Order altering Brown Act requirements (e.g. allowing Zoom meetings) may expire at the end of September 2021.

ii. Hicham ElTal (MIUGSA) pointed out that the previous Merced IRWM stakeholder meeting process invited stakeholder input online at the same time as the agenda (e.g. ranking of issues, providing comment ahead of time) and asked if this could be considered for future Merced GSP stakeholder meetings.

c. Data Gaps Plan (Prop 68 Planning Grant funded work) – Samantha Salvia and Chris Hewes (Woodard & Curran) presented the findings and recommendations from the Data Gaps Plan. The goal of the plan is to identify and rank priority areas for the installation of monitoring wells or subsidence monitoring stations to support basin characterization and future GSP refinement. The Plan priorities were developed based on feedback from the SAC and CC April meetings and GSA staff review. The Plan will be finalized and sent to the GSAs this week.

   i. Hicham ElTal (MIUGSA) confirmed that reaching out to the Turlock Subbasin for coordination on planned monitoring adjacent to the Merced River is a good idea.

   ii. Hicham ElTal (MIUGSA) suggested additional consideration on areas outside the Corcoran relative to DACs

   iii. Eric Swenson (MSGSA): Suggested deprioritizing monitoring in areas that are unlikely to be pumped (e.g. because water may be saltier than typically used for ag)

d. Minimum Thresholds in Areas Lacking Historical Monitoring Data – Samantha Salvia (Woodard & Curran) described that the GSP adopted in January 2020 includes minimum thresholds set for 25 representative wells based on a methodology that utilizes historical data and proximity to domestic wells. The GSP acknowledged that during implementation the GSAs would need to develop a methodology for new representative wells that may lack historical data or are not within 2 miles of a domestic well. Samantha summarized recent discussion and analysis with GSA staff and recommendations on how to proceed with establishing MTs in areas lacking historical monitoring or domestic wells. The recommendation so far is to use the GSP methodology where possible, and to address others on a case-by-case basis. New minimum thresholds should be set as interim while additional data are collected.

   i. Hicham ElTal (MIUGSA) clarified that this is an ongoing process and it hasn't been figured out entirely yet. As a next step, it would be beneficial to evaluate some real-world examples (e.g. new monitoring wells in TIWD or El Nido).

e. Insights from DWR Comment Letter on Other GSPs – Samantha Salvia (Woodard & Curran) summarized DWR input on four GSPs it has reviewed so far and their potential relevance to the Merced GSP.

f. Legislation Update – Hicham ElTal (MIUGSA) provided a summary of SWRCB latest emergency rules/notices affecting surface water diversions and their potential implications for the basin.

   i. SWRCB recently published emergency rules due to the drought, including restrictions to both pre- and post-1914 diversion licenses in the San Joaquin River watershed. The priority date threshold for rights was set to 1883 in the previous drought (~2012-2016) but no priority date threshold has been determined this time for the San Joaquin Valley watershed (e.g. affects all rights). MID expects to have a normal diversion this year due to storage prior to the emergency rules. MID and the cities coordinated on a letter to the SWRCB urging them to consider establishing a priority date that would help MID and not prevent them from capturing next year's storms due to lack of storage space in their reservoir.

   ii. Lacey McBride (MSGSA) reported that AB 252 (Department of Conservation: Multibenefit Land Repurposing Incentive Program) is in the California legislature now and would create a Department of Conservation funding program. MSGSA signed a letter of support for the bill. The Governor put ~$500M aside for this land repurposing but the legislature may not approve it. MSGSA supports such a program because they anticipate they will need to utilize land repurposing as a strategy to reduce groundwater use in the GSA to meet sustainability goals.

g. Allocation Framework Update – With only a few minutes left in the meeting, there was not time for much discussion on this item. At a future meeting, the ad-hoc group will provide an update on the development of the allocation framework.

i. Hicham ElTal (MIUGSA) quickly summarized several concerns related to MSGSA's 5 yr objective:

1. What is the baseline from which MSGSA will measure their 15,000 AFY reduction goal for Water Year 2025? The difference between wet and dry year pumping is more than the 15TAF goal.
2. MSGSA's goal is stated in terms of consumptive use. GSP water budget is based on groundwater pumping. Need to be on the same page re consumptive use vs pumping as basin moves forward.
3. MSGSA has claimed the groundwater budget in the GSP indicates wetlands do not use groundwater, but they do.
4. No progress has been made on the issues of final allocation and accounting for imported surface water.

ii. Hicham agreed to type up a list of the concerns and send them out to assist in future discussions.

8. Next steps and adjourn

a. Confirm next meeting date – TBD based on identification of a meeting space and status of Brown Act requirements.
b. Meeting adjourned at 3:22 PM

Next Regular Meeting
TBD, expected in October 2021
Information also available online at mercedsgma.org

MEETING NOTES – Merced GSP

SUBJECT: Merced GSP Coordination Committee Meeting

DATE/TIME: October 25, 2021 at 1:15 – 3:15 PM

LOCATION: Online – Zoom Meeting

Coordination Committee Members In Attendance:

	Representative	GSA
☒	Hicham ElTal	Merced Irrigation-Urban GSA
☐	Stephanie Dietz	Merced Irrigation-Urban GSA
☒	Justin Vinson	Merced Irrigation-Urban GSA
☒	Daniel Chavez	Merced Irrigation-Urban GSA
☒	Ken Elwin (alternate)	Merced Irrigation-Urban GSA
☒	Eric Swenson	Merced Subbasin GSA
☒	Mike Gallo	Merced Subbasin GSA
☒	Nic Marchini	Merced Subbasin GSA
☐	George Park (alternate)	Merced Subbasin GSA
☒	Kel Mitchel	Turner Island Water District GSA #1
☐	Tim Allan (alternate)	Turner Island Water District GSA #1

Meeting Notes

1. CALL TO ORDER AND WELCOME

a. Samantha Salvia (Woodard & Curran) called the meeting to order.

2. ROLL CALL

a. Coordination Committee members in attendance are shown in table above. The Committee had a quorum.

3. CONSENT CALENDAR

a. Approval of meeting notes from the previous meeting (July 26, 2021) was deferred to allow the committee more review time.

4. PUBLIC COMMENT

a. No public comment (comments and questions from the public were accepted during the meeting on agenda items).

5. REPORTS

a. Current basin conditions

i. Matt Beaman (MIUGSA) reported that the most recent basin conditions report (July to October 2021) was delayed due to technical issues with the data. The report will be sent out to the Coordination Committee by the end of this week.

b. Coordination with neighboring basins

i. Chowchilla-Madera-Delta Mendota:

1. Hicham ElTal (MIUGSA) reported that coordination with the Chowchilla and Delta-Mendota Subbasins is continuing and current work is focused on developing water budgets for each basin. The meeting facilitator sent out a questionnaire that Merced Subbasin has not yet responded to. Hicham noted the importance of ensuring the same baselines and datums in comparing basin information.

2. Lacey McBride (MSGSA) noted that recent work has included providing a list of Merced Basin projects and discussing how to determine sub-Corcoran pumping in the subsidence-focused area. No activity since last meeting in September

ii. Turlock

1. Hicham reported that some of the Turlock GSP chapters are out for public comment. A later agenda item will cover this.

c. GSA Reports - Representatives from each GSA provided updates on activities they are undertaking in their own jurisdiction:

i. MSGSA

1. Lacey McBride reported that MSGSA has been developing a two-phase approach to implementation of the GSP and the Board is set to take action on the approach at their November meeting.

a. Phase 1 – now through end of WY2025 – focused on meeting the target of reducing groundwater consumption by 15,000 AF annually through land repurposing and fallowing, importing surface water, and capturing flood waters. Other Phase 1 work will include the development of parcel-level water year budgets for growers, Prop 218 process for funding, and initiating discussions with stakeholders and the public regarding allocations (which are not anticipated to be adopted until Phase 2).

b. Phase 2 – WY2026 through 2040 – includes adopting and implementing an allocation plan with continued land repurposing, fallowing, and securing surface supplies.

2. MSGSA plans a public workshop (hybrid Zoom/in person) tentatively for November 18, with details to be released shortly.

3. Eric Swenson noted that MSGSA is also looking at whether the Prop 218 process should fund filling data gaps and a well mitigation program

ii. MIUGSA:

1. Hicham ElTal reported that MIUGSA has held three Stakeholder Guidance Committee meetings to receive feedback from constituents related to the types of policies they would like to see for implementing the GSP. A fourth meeting is expected and will most likely be the final meeting. MIUGSA hopes to start policy

development in February 2022 and receive multiple iterations of public before publishing the policy, likely in the form of a rules and regulations guidebook. The main emphasis has been on agricultural uses, but conversations around urban use and their accelerated efficiency standards have continued.

iii. TIWD GSA-#1

1. Kel Mitchell reported that although WY2021 was difficult due to extended lack of surface water, the District had a 15-20% reduction in water use relative to WY2020 largely due to growers making crop changes. Data indicate that they met their target of 1.5 AF per acre during WY2021. Kel observed it was good to know that even in one of the most challenging years the District has experienced, they were able to meet the target.

d. Data Gaps Plan Update – Samantha Salvia (Woodard & Curran) reported that the Data Gaps Plan has been developed and will be modified as new information is collected. She noted that the grant the basin received to address data gaps includes funding for identifying and upgrading existing wells, and/or installing new wells which must be used by the end of 2022.

i. Matt Beaman (MIUGSA) added that the Data Gaps work has been slightly delayed to due to parallel work on developing a methodology for setting minimum thresholds for areas that don't have domestic wells. He also clarified that approximately $270K is remaining in the grant to support the Data Gaps work and MID will contract for this additional work. Matt noted that they have a proposal from QK and are going to review the cost estimate and perform their due diligence to ensure cost effectiveness.

6. ACTION ITEMS

a. None.

7. DISCUSSION ITEMS

a. Well Consistency Policy for Groundwater Well Permits – The Coordination Committee discussed options coordinating on well consistency determination policies.

i. Lacey McBride summarized the existing well permitting process. Well applications come into the County's Environmental Health Department, which permits all new wells. GSPs are in place in three of out four basins in Merced County and GSAs have been managing groundwater for the last two years. The County wants to shift determination of whether a well application is consistent with a GSP to the GSAs. Domestic wells would still be exempt, and the County would review and approve those permits.

1. New wells within GSA boundaries will be required to obtain a letter of consistency from a GSA after a consistency determination is made. Then, the applicant will file a permit with the County, who will review construction standards and inspect the well.

2. The proposed timeline for implementation is tentatively set for the end of 2021. Requires Board of Supervisors adoption.

3. Lacey requested the committee discuss the potential for consistency among the three GSAs' policies and potential development of a joint CEQA document

ii. Committee Member Discussion

1. Hicham ElTal (MIUGSA) noted it would be interesting to see what other basins are doing and agreed that consistency within the basin would be very helpful.

2. Eric Swenson (MSGSA) added that MSGSA is considering establishing allocations of sustainable yield and transition allocations to reach sustainability by 2040. He expects these numbers would be established by 2025 and asked what other GSAs timelines were.

    a. Hicham ElTal (MIUGSA) responded that MIUGSA hopes to establish allocations next year, although they will be subject to changes as the GSP is implemented and more data become available.

3. Lacey McBride (MSGSA) asked how MIUGSA will handle consistency determinations in the time between when the County adopts the updates in early 2022 and the development of their own policy.

    a. Hicham ElTal (MIUGSA) responded that MIUGSA will likely follow what the County has been doing until they have their own policy in place, but will need to discuss further with their legal counsel.

4. Eric Swenson (MSGSA) recommended that each GSA designate points of contact to continue coordination on this topic before the next Coordination Committee meeting.

iii. Public Questions Submitted Via Chat

1. Public Q: Is CEQA required for the development of an allocation or cap on groundwater extraction? A: Lacey clarified that the meeting discussion so far was related to CEQA coverage for well consistency determinations. Each GSA's legal counsel would need to advise on whether making a consistency determination on an individual well is a discretionary action.

b. Proposal Solicitation Package (PSP) for SGMA Implementation Grants

i. Matt Beaman (MIUGSA) presented the latest Draft Guidelines and PSP. Approximately $152M is made available for critically overdrafted basins in Round 1 (not competitive between basins, but it is competitive within basins); funds are divided equally at $7.6M for each basin.

1. $3.7M must be used for geophysical investigations, implementation of existing regional flood management plans that incorporate groundwater recharge, or projects that complement efforts of local GSP for floodplain expansion to benefit groundwater recharge or habitat; the remaining $3.9M can be used for a wide variety of projects, such as data gaps, long-term planning, annual reports, coordination activities, or installation of monitoring wells.

2. The Merced Basin is eligible for funding and would need to prepare a spending plan by Jan 31, 2022. The spending plan consists of developing a project list and evaluating and scoring projects using a process provided by the California Department of Water Resources (DWR). DWR will then review the spending plan and check the eligibility of the projects before developing a draft agreement.

ii. Discussion

1. Jim Blanke (Woodard & Curran) noted that in order to be eligible for grant funding, projects must be in an adopted GSP. He has reached out to DWR to find out how projects can be added and suggested the group consider commenting to request they allow projects that help meet the goals of the GSP and provide more flexibility.

2. It was recommended by the Coordination Committee that the following steps be taken:

a. Attend the public workshop hosted by DWR on November 16, 2021 from 2-4pm to learn more and ask questions.

b. Provide a single comment letter to DWR (signed by the three GSAs) requesting an extended deadline to allow for review of DWR comments on the Merced GSP and allowing projects that help meet the goals of the GSP be eligible for funding, not solely those listed in the GSP.

    i. Eric Swenson (MSGSA) offered to draft the comment letter and provide it to the GSAs for review.

c. Start identifying projects, select representatives to score projects, and begin preparation of the spending plan.

c. Turlock Subbasin GSP – The Coordination Committee discussed the draft Turlock Subbasin GSP and options for commenting.

    i. Matt Beaman (MIUGSA) provided a summary of the Turlock GSP and provided comparisons to the Merced GSP. He noted that 6 of 9 chapters are now available for public review and there are also opportunities for the Basin to comment during the 60-day public comment period that begins after the GSP is submitted (due by January 31, 2022). He suggested the basin might be most interested in commenting on the sustainable management criteria and projects & management actions.

    ii. Committee Member Discussion

        1. The group discussed Turlock's water budget which indicates the Merced River could lose additional water to the subbasin (budget indicates losses from Merced River could increase from 17 TAF/yr to 60 TAF/yr). It appears improvements in the subbasin's overdraft are partially the result of stream depletion, an undesirable result.

        2. The group discussed forum and timing for comments. The group agreed to continue to use informal comment mechanisms, including the County and MID's participation on Turlock's technical advisory committee, and to wait to submit formal written comments until DWR comments are received on the Merced GSP, so that the comments on the Turlock GSP would be more comprehensive.

d. Insights from DWR Comment Letter on Other GSPs – The Coordination Committee discussed the comments made by DWR on other GSPs and the recent SWRCB comment letter to the Merced GSP.

    i. Samantha Salvia (Woodard & Curran) summarized the status of DWR review of submitted GSPs. They have approved two GSPs and provided comments on two others (Cuyama and Paso Robles). DWR reports they will complete review of all submitted GSPs within their two-year deadline. Samantha expects the basin will receive comments requesting some corrective actions and have 180 days to respond.

    ii. Samantha presented a brief summary of the DWR comments provided on two GSPs with potential relevance to other Central Valley GSPs. Relevant comments were:

        1. Better justification for how minimum thresholds are consistent with avoiding undesirable results

        2. Concern about use of groundwater levels as a proxy for the Depletions of Interconnected Surface Water sustainability indicator

3. Request to add sustainable management criteria and a monitoring network for nitrates and arsenic (the Cuyama GSP only has criteria for salinity)

iii. Samantha gave a brief summary of the SWRCB comment letter, which was received substantially after the public comment period, noting the GSAs have previously decided not to respond to comments submitted to DWR, but rather to wait to receive DWR's comments.

8. Next steps and adjourn

a. The next Stakeholder Advisory Committee meeting is November 8, 2021.
b. The next Coordination Committee meeting date is TBD, but expected virtually in January 2022, based on identification of a meeting space and status of Brown Act requirements.
c. Meeting adjourned at 2:59 PM

Next Regular Meeting
TBD, but expected to be in January 2022 (later scheduled for December 22, 2021)
Information also available online at mercedsgma.org

MEETING NOTES – Merced GSP

SUBJECT: Merced GSP Coordination Committee Meeting

DATE/TIME: December 22, 2021, 1:00 to 3:00 PM

LOCATION: Online – Zoom Meeting

Coordination Committee Members in Attendance:

	Representative	GSA
☒	Hicham ElTal	Merced Irrigation-Urban GSA
☐	Stephanie Dietz	Merced Irrigation-Urban GSA
☒	Justin Vinson	Merced Irrigation-Urban GSA
☒	Daniel Chavez	Merced Irrigation-Urban GSA
☐	Ken Elwin (alternate)	Merced Irrigation-Urban GSA
☒	Eric Swenson	Merced Subbasin GSA
☒	~~Mike Gallo~~ By MSGSA Board resolution, Kole Upton is standing in for Mike Gallo for the 12/22 CC meeting and subsequent project scoring	Merced Subbasin GSA
☒	Nic Marchini	Merced Subbasin GSA
☐	George Park (alternate)	Merced Subbasin GSA
☒	Kel Mitchel	Turner Island Water District GSA #1
☐	Tim Allan (alternate)	Turner Island Water District GSA #1

Meeting Notes

1. **Call to Order and Welcome**
    a. Jim Blanke (Woodard & Curran) called the meeting to order at 1:03 pm.

2. **Roll Call**
    a. Coordination Committee members in attendance are shown in table above. The Committee reached a quorum.

3. **Consent Calendar**
    a. Nic Marchini motioned to approve all consent calendar items, Kel Mitchel seconded. All present voted in favor.

4. Public Comment

a. Jeff, a fairly new farmer in the Merced Subbasin located in the MIUGSA, introduced himself and raised the topic of recharging the aquifer with treated wastewater and desalinated brackish water. Eric Swenson (MSGSA) responded that the economics of this type of recharge are more difficult in agricultural areas. Matt Beaman (MID) encouraged Jeff to contact MID to initiate further discussion and suggestions.

5. Reports

a. None

6. Actions

a. None

7. Discussion Items

a. Overview of Round 1 SGM Implementation Planning and Projects Grant Application Process

   i. Jim Blanke (Woodard & Curran) discussed funding availability, project type considerations, and timeline for the Round 1 SGM Implementation grant.

b. Informational item: Overview of Round 2 IRWM Implementation Grant Program

   i. Jim Blanke (Woodard & Curran) provided an overview of the IRWM implementation grant. There are projects already lined up from Merced IRWM Authority to apply for the available funding.

   ii. Public Question: Is Clayton Water District part of Merced Subbasin? Answer from Lacey McBride (MSGSA): Clayton Water District was annexed in 2019 and 7,000 to 10,000 acres are part of Merced County. One project they are pursuing is to bring water from the Eastside Bypass into the Merced portion of the District.

   iii. Public Question: When is the next IRWM meeting? Answer from Matt Beaman (MID): February, with additional information to be available on the website: http://www.mercedid.com/index.cfm/water/groundwater1/mirwma-merced-integrated-water-management-authority/

c. Scoring Criteria Review for Round 1 SGM Implementation Planning and Projects Grant

   i. Liz DaBramo (Woodard & Curran) presented on the updated evaluation criteria, maps of Underrepresented Communities, and the Excel project scoring workbook.

   ii. Lacey McBride (MSGSA) requested that the technical team send the evaluation criteria to the project proponents so they can modify their project descriptions accordingly.

   iii. Question from Hicham ElTal (MIUGSA): Does DWR include anything about water rights in their evaluation criteria? Answer: Not explicitly, but the project must show quantifiable benefits and be reasonably accomplished.

   iv. Question from Kel Mitchel (TIWD GSA-#1): Can private agencies submit projects? Answer: No, public agencies must sponsor projects.

   v. Question from Eric Swenson (MSGSA): Which projects have specially funded projects for flagged DWR funds (e.g., AEM, etc.). Answer: Project proponents discussed their projects and verbally mentioned if the project incorporated an activity specially flagged. It was further noted that the requirement for certain project types included in the draft proposal solicitation package is not part of the final proposal solicitation package.

d. Review Projects to Be Scored for Round 1 SGM Implementation Planning and Projects Grant

i. Jim Blanke (Woodard & Curran) discussed the project sources for initial scoring: GSP shortlist projects (3), GSP running project list (3), and new projects (14) – totaling 20 projects for grant consideration.

ii. Question from Lacey McBride (MSGSA) to the Coordination Committee: How should we allocate funding – fully fund projects or partial fund a higher quantity of projects?

1. Hicham ElTal (MIUGSA): Focus on projects that can receive benefits soon.
2. Eric Swenson (MSGSA): Ask project proponents if partial funding is an option.
3. Kole Upton (MSGSA): Focus on areas hardest hit by subsidence.

iii. The following projects were briefly presented by project proponents and CC members asked intermittent questions:

1. Amsterdam Water District Surface Water Conveyance and Recharge Project
    a. Question from Hicham ElTal (MIUGSA): What are the water rights for this project: Answer: Based on existing water rights and temporary permits until permanent water right is granted.
2. Filling Data Gaps Identified in Data Gaps Plan
3. Merced Water Resources Model Enhancement
4. Merced Subbasin Recharge Project Decision-Support and Implementation Tool
5. Merced Subbasin Integrated Managed Aquifer Recharge Evaluation Tool (Merced MAR)
    a. Project #3-#5 are complimentary and together update the basinwide modeling tool set.
6. Buchanan Hollow Mutual Water Company Floodwater Recharge Project
    a. Question: Where is the basin located and have there been recharge tests yet? Answer: The basin will be located a few hundred feet from a creek. No investigations yet.
7. Purdy Project (E. Purdy, W. Purdy, and Kevin Recharge Basins) (Project No. 38)
    a. The project will utilize existing water rights.
8. Purdy Project (East Pike Recharge Basin) (Project No. 37)
9. G Ranch Groundwater Recharge, Habitat Enhancement & Floodplain Expansion Project
    a. Question from Eric Swenson (MSGSA): Is there data that the water table is dropping in this location? Answer from Brad Samuelson: He can provide information that the water table is dropping, although that information is not included in the project description.
10. LeGrand-Athlone Water District Intertie Canal – Phase 2
    a. Kole Upton expresses support for this project.
11. Deadman Creek Canal Off Stream Storage and Recharge

a. Questions from Hicham ElTal (MIUGSA): Could this project proceed with partial funding? What is the acreage? Answer from Lacey: 250 acres of previously double-cropped land. Partial funding is okay.

b. Comment from Hicham ElTal (MIUGSA): They are looking for another surface water storage location to replace Black Rascal Creek for FloodMAR application. There is potential alignment with this project.

12. Merquin County Water District (MCWD) Sustainable Yield Management Plan and Plan Implementation
13. Project 31: Crocker Dam Modification
    a. Question from Eric Swenson (MSGSA): Have you estimated the quantity of water that could be saved from this project? Answer from Hicham ElTal (MIUGSA): Yes, 100,000 AF down Bear Creek is not unusual, and he will provide those number in the project application.
    b. Question from Eric Swenson (MSGSA): Does this project bring MID closer to charging canals in winter? Answer from Hicham ElTal (MIUGSA): Yes.
14. MIUGSA Groundwater Extraction Measurement Program
    a. The project will include 200 private wells.
15. Tri City's Water Recharge/Underground Storage Feasibility
    a. Comment from Hicham ElTal (MIUGSA): There is potential to revise the state's AEM survey pathway if there are locations that would support local underground/recharge investigations.
16. Vander Woude Storage Reservoir
    a. Question: What is the water right for this project? Answer: Flood water rights off of Mariposa Creek listed in the water rights application under review.
17. Vander Dussen Subsidence Priority Area Flood-MAR Project
    a. Eric Swenson (MSGSA) requested that the project proponents show quantities/probability of flooding in their project write up.
18. Turner Island Water District (TIWD) Water Conservation
    a. Question from Eric Swenson (MSGSA): Do you have a property already? Answer from Kel Mitchel (TIWD GSA-#1): Yes, would be on private property in TIWD – he has some locations in mind.
    b. Question from Hicham ElTal (MIUGSA): What are the water rights for this project? Answer from Kel Mitchel (TIWD GSA-#1): Contracted water from neighboring agencies.
19. TIWD Surplus Water Conveyance
20. TIWD Shallow Well Drilling
    a. Question from Eric Swenson (MSGSA): What is the source of the cost per well? Eric volunteered to share cost estimates and recommends a lower target flow rate with more wells to reduce drawdown. Response

from Kel Mitchel (TIWD GSA-#1): The contractor included pump bowls, etc. in the cost estimate and he will follow up offline.

8. Next steps and adjourn

a. Jim Blanke (Woodard & Curran) adjourned the meeting at 3:08 pm.

Next Regular Meeting
February 7, 2022
Information also available online at mercedsgma.org

MEETING NOTES – Merced GSP

SUBJECT: Merced GSP Coordination Committee Meeting

DATE/TIME: February 7, 2022, 10:00 AM to 12:00 PM

LOCATION: Online – Zoom Meeting

Coordination Committee Members in Attendance:

	Representative	GSA
☒	Hicham ElTal	Merced Irrigation-Urban GSA
☐	Stephanie Dietz	Merced Irrigation-Urban GSA
☐	Justin Vinson	Merced Irrigation-Urban GSA
☒	Daniel Chavez	Merced Irrigation-Urban GSA
☒	Ken Elwin (alternate)	Merced Irrigation-Urban GSA
☒	Eric Swenson	Merced Subbasin GSA
☒	Mike Gallo By MSGSA Board resolution, Kole Upton is standing in for Mike Gallo for SGM grant-related agenda items.	Merced Subbasin GSA
☒	Nic Marchini	Merced Subbasin GSA
☐	George Park (alternate)	Merced Subbasin GSA
☒	Kel Mitchel	Turner Island Water District GSA #1
☐	Tim Allan (alternate)	Turner Island Water District GSA #1

Meeting Notes

1. **Call to Order and Welcome**
   a. Jim Blanke (Woodard & Curran) called the meeting to order at 10:10 am.

2. **Roll Call**
   a. Coordination Committee members in attendance are shown in table above. The Committee reached a quorum.

3. **State of Emergency Teleconference Findings**

   ACTION (motioned by Eric Swenson (MSGSA), seconded by Mike Gallo (MSGSA), all present voted in favor): The Coordination Committee considered the circumstances of the State of Emergency and made the following findings per AB 361:

   a. The State of Emergency continues to directly impact the ability of the members to meet safely in person and/or

   b. State or Local Officials continue to impose or recommend measures to promote social distancing.

4. Approval of December 22, 2021 Meeting Minutes

a. **ACTION (motioned by Kel Mitchel (TIWD-GSA#1), seconded by Mike Gallo (MSGSA), all present voted in favor):** The Coordination Committee approves the December 22, 2021 Coordination Committee meeting minutes.

5. Public Comment

a. Geoff Vanden Heuvel (via chat): "If a discussion is had about future meetings, as an member of the public, I would respectfully request that a remote option continue to be available."

6. Reports

a. GSA Reports

i. *Merced Subbasin GSA.* Lacey McBride (MSGSA) reported that the MSGSA is working on multi-benefit land repurposing initiatives. They will be discussing land repurposing and Prop 218 at their upcoming Board meeting. They would like to have a plan for voting by summer 2022. Eric Swenson (MSGSA) added that the MSGSA has also been working on project selection for the SGM grant.

ii. *MIUGSA.* Hicham ElTal (MIUGSA) described that the GSA has been working on policies, rules, and stakeholder input for the GSA's Stakeholder Guidance Committee. Additionally, MIUGSA has continued to administer grant funding.

iii. *TIWD GSA #1*. Kel Mitchel (TIWD-GSA#1) has also been working on project selection for the SGM grant.

b. Current Basin Conditions

i. Matt Beaman (MIUGSA) illustrated the monthly groundwater levels for each monitoring well by principal aquifer (Above the Corcoran Clay, Below the Corcoran Clay, and Outside of the Corcoran Clay) to better understand how the Subbasin behaves on monthly basis (not just biannually). Over the last year, groundwater levels have been relatively consistent. Groundwater levels Below and Outside of the Corcoran Clay have dropped between approximately 5 and 15 feet over the course of the last year. There are some groundwater level anomalies, perhaps due to pumping or measurement issues.

ii. At several newly installed monitoring sites, pressure transducers have been recently calibrated, so more groundwater level data will be available with additional processing.

iii. Recent measurements available from representative monitoring wells appear to be above Minimum Thresholds (MTs). Two representative monitoring wells are within 25 feet of the MTs – one far east in the Subbasin and one in the City of Atwater.

7. Comments on Groundwater Sustainability Plan by the Department of Water Resources

a. Jim Blanke (Woodard & Curran) provided an overview of DWR comments on the GSP in the preliminary consultation letter (11/18/2021) and final determination (1/28/2022).

b. DWR outlined three primary GSP deficiencies:

i. *Non-consecutive dry years.* Drought-period declines do not apply to stream depletions, which currently rely on groundwater levels as a proxy.

ii. *Groundwater level sustainable management criteria (SMC).* DWR noted that NGO and other agency analyses suggested that the SMC for groundwater levels could potentially dewater domestic wells. Further investigation into data sources and studies will be conducted. Woodard & Curran will present current groundwater levels compared to other potential MTs (e.g., 2015 groundwater levels) at upcoming GSA technical meetings.

iii. *Subsidence*. The GSP currently allows for some level of continued subsidence, while DWR is looking to minimize or stop subsidence under sustainable conditions. Also, DWR noted that more work is needed to identify what is significant and unreasonable (for flood control and water supply infrastructure, etc.) and how differential subsidence between basins will play a role.

c. DWR did not criticize the GSPs' groundwater quality approach.

d. Response to DWR

i. GSAs have 180 days to respond (by 7/27/22) and address deficiencies. If deficiencies are not satisfactorily addressed, management is assumed by the SWRCB.

ii. The GSA representatives met with DWR on 1/10/2022 to review DWR's comments

iii. A likely deliverable to DWR will be an updated, redline version of the GSP

iv. Hicham ElTal (MIUGSA) described that GSAs will have only a few chances to work with DWR to appropriately address the deficiencies, so caution is advised for final determination of GSP updates.

e. **ACTION (motioned by Hicham ElTal, seconded by Eric Swenson, all present voted in favor):** Recommend GSA Boards approve a contract amendment with Woodard & Curran to develop modifications to the GSP in response to comments from DWR, as described in scope provided by Woodard & Curran

f. Kel Mitchel (TIWD-GSA#1) and Hicham ElTal (MIUGSA) recommend that Coordination Committee meetings be held monthly and that meetings could be cancelled if not needed.

8. Potential future funding opportunity

a. Mike Gallo (MSGSA) discussed a potential future funding opportunity from DWR. Mike Gallo is working with Karla Nemeth (DWR) to identify funding for projects that are ready to implement, can provide benefits quickly, and are scalable.

b. Eric Swenson (MSGSA) suggested using extra funding opportunity to fill gap of projects with lowered requested grant funding for SGM grant.

c. There are other funding opportunities through the federal government's Infrastructure Bill.

d. For those interested in participating in follow up conversations with DWR, contact Mike Gallo (MSGSA) within the next week or two to coordinate.

9. Round 1 SGM Implementation Planning and Projects Grant

a. Jim Blanke (Woodard & Curran) provided an overview of the project scoring and selection process, including the process and rationale for reranking. Coordination Committee members scored each project based on DWR evaluation criteria. GSA representatives reviewed the aggregate scores and recommended modifications to the ranking and funding request amounts based on other considerations including water rights, cost per acre-foot, project location, among other factors.

b. Project proponents will be notified of the revised grant request for each project to ensure they can proceed with the project with local/other funding sources.

c. Kole Upton (MSGSA) encourages GSAs to prioritize projects that keep water within Merced County. This may be discussed further at upcoming GSA meetings.

d. Project proponents will need to provide additional information including shapefiles and backup documentation, as well as prove eligibility (e.g., Agricultural Water Management Plans). GSAs need to provide resolutions authorizing MIUGSA to provide apply for the grant on the Subbasin's behalf.

Liz DaBramo (Woodard & Curran) will follow up with individual project proponents to provide required information.

e. **ACTION (motioned by Eric Swenson, seconded by Hicham ElTal, all present voted in favor):** Recommend GSA Boards direct staff to submit grant application for the projects, and share costs for preparation of grant application, as described in the presentation, incorporating $100,000 for grant administration.

10. Next steps and adjourn

a. Kel Mitchel (TIWD-GSA#1) motion to adjourn, Hicham ElTal (MIAGSA) seconded. Adjourned at 11:59 am.

Next Regular Meeting
TBD, but expected to be in March 2022
Information also available online at mercedsgma.org

MEETING NOTES – Merced GSP

SUBJECT: Merced GSP Coordination Committee Meeting

DATE/TIME: March 21, 2022, 10:00 AM to 12:00 PM

LOCATION: Hybrid meeting with physical location: County of Merced, Livingston Room, 2222 M Street, Merced, CA 95340 and on Zoom

---

Coordination Committee Members in Attendance:

	Representative	GSA
☒	Hicham ElTal	Merced Irrigation-Urban GSA
☐	Stephanie Dietz	Merced Irrigation-Urban GSA
☒	Justin Vinson[1]	Merced Irrigation-Urban GSA
☐	Daniel Chavez	Merced Irrigation-Urban GSA
☒	Ken Elwin (alternate)	Merced Irrigation-Urban GSA
☒	Eric Swenson	Merced Subbasin GSA
☒	Mike Gallo	Merced Subbasin GSA
☒	Nic Marchini	Merced Subbasin GSA
☐	George Park (alternate)	Merced Subbasin GSA
☒	Kel Mitchel	Turner Island Water District GSA #1
☐	Tim Allan (alternate)	Turner Island Water District GSA #1

1. *Justin Vinson arrived at Item #6 below.*

Meeting Notes

1. Call to Order and Welcome

a. Jim Blanke (Woodard & Curran [W&C]) called the meeting to order at 10:10 am.

2. Roll Call

a. Coordination Committee members in attendance are shown in table above. The Committee did not reach a quorum until later in the meeting, so approval of meeting minutes and Emergency Teleconference Findings were moved to later in the agenda.

3. Public Comment

a. None received.

4. Reports

a. GSA Reports

i. *Merced Subbasin GSA*. Lacey McBride reported updates to the land repurposing program (short-term with 3-5 year contracts) being planned for implementation

by the GSA. California Department of Conservation multi-benefit land repurposing grants are being pursued for later 10+ year projects. The GSA is also working on a Prop 218 proceeding may happen later in the summer to fund first phase of the two-phase approach. Workshops will be coming up in the next few weeks. A well consistency determination draft policy document has been made public (https://mercedsubbasingsa.org/wp-content/uploads/2022/03/MSGSA-Well-Consistency-Policy-Public-Draft-Clean-v2-03.16.22.pdf). Comments are due back by April 7.

ii. *MIUGSA*. Matt Beaman shared that MIUGSA has been holding MIUGSA-specific Stakeholder Guidance Committee meetings (3 meetings in late 2021 and a 4th meeting in March 2022). Recommendations have come from that Committee on general implementation rules, policies, and guidelines for the GSA implementation, including addressing terms for allocations (recommended that the MIUGSA board allocate on a 3-year term of 1.1 AFY/ac average – water could be used any time within that 3-year period). The recommendation also included some options for pooling between common landowners, carryover, and potential trading. A report is being provided (in draft now), soon to be publicized.

1. Q (Eric Swenson): What year will this allocation program be implemented? A: If not 2022, then 2023.

2. Q (Mike Gallo): How does an allocation work in a year where irrigation water allocation is 1.1 AF/ac? A: The grower has an option to use all or some of their allocated 3.3 AF of groundwater that they have available to them over the next 3 years. If they use all of that 3.3 AF, then they would not have the ability to pump groundwater for the next two years.

iii. *TIWD GSA #1*. Kel Mitchel (TIWD-GSA#1) had no updates.

b. Current Basin Conditions – no updates were generated for this meeting due timing and also the Annual Report presentation later in the agenda which includes a fall 2021 conditions update; a spring 2022 conditions updates is expected to be provided at a later Coordination Committee meeting.

c. Report on plan(s) to address changes to the Merced County Groundwater Ordinance

i. Lacey McBride (MSGSA) provided an overview of the updated Groundwater Mining and Export ordinance approved by the Board of Supervisors Feb 8, 2022 but not in effect until May 1, 2022.

ii. Hicham ElTal (MIUGSA) shared some concerns from MIUGSA that most of the wells will be looked at as a project requiring a lead agency, e.g. for potential linkage to CEQA. He expressed that no individual GSA should not be considered the lead agency. MIUGSA's approach has not been fully developed, but will make sure in response to the county on draft policy to make sure the lead agency issue is clear plus require certain well construction requirements, e.g. recommendation per MIUGSA Stakeholder Guidance Committee to install meters on new wells. The intention is that GSP policies will guide use of well(s) in the future.

1. Stanislaus County for instance passed a Programmatic EIR as a potential option.

iii. Kel Mitchell (ITWD GSA-#1) has the same major concern as MIUGSA about lead agency, e.g. high cost (money and time) of performing CEQA for each new well installation.

iv. Lacey McBride (MSGSA) has had an ad-hoc meeting working on this and it's been discussed at public board meetings as well.

1. The gist of the MSGSA policy is that it includes ways to find a consistency determination for replacement wells that are within the GSA and locating replacement wells on historical parcels served by original well. The MSGSA policy also includes a section for backup wells. It includes a section for wells that don't meet earlier criteria – then can go through a CEQA process to show the GSA that the proposed well doesn't have impacts. Purpose of the policy is to allow growers to maintain farming when needing to replace wells.
2. For the Corcoran Clay, there's a section addressing this; if a well currently exists in both layers and needs to be replaced, it allows flexibility in replacing in one or the other principal aquifer (or otherwise install two separate wells, one per aquifer) in recognition of potential that in future, there could be limitations in Sub-Corcoran pumping.
3. If landowner chose to do CEQA evaluation, landowner funds the work but the GSA would be the lead agency.
4. Policy is intended to be a bridge to get the GSA to when an allocation program is in place for long-term SGMA implementation. MSGSA expects that allocation program to have CEQA requirements.
5. Q: With exemption for replacement backup/replacement wells, will the GSA file the official exemption? A: Not determined yet, will be brought up with legal counsel.
6. Q: What happens to portion of Chowchilla basin that falls within the Merced Subbasin but is in Merced County? A: Subject to the county ordinance – will have to have a consistency determination with application package submitted to Merced County.

5. Grants

a. Round 1 SGM Implementation Planning and Projects Grant Update

i. Jim Blanke (W&C) described that the application was submitted and DWR has since shared that they do expect to fund the whole $7.6 million requested.

b. Prop 68 Round 3 Planning

i. Lacey McBride (MSGSA) shared that staff level conversations have been occurring on the second phase of the Data Gaps Plan to fund 2 shallow or 1 deep well plus some other activities to incorporate existing wells. Surrounding subbasins are also using Technical Support Services and the Merced GSAs would like to pursue this funding source as well. The GSAs have talked to the Stakeholder Advisory Committee as well as their Boards about potential additional wells. There's a running list of wells to be considered. Conversations are continuing.

ii. Jim Blanke (W&C) shared that the Remote Sensing Decision Support Tool development is ongoing, largely based on what kind of data is available. Time has been spent looking for accurate and cost-effective data. OpenET has been the latest focus, but the data is not quite available yet, though a preliminary copy has been obtained for initial review.

iii. Q: What's the status of the new CIMIS station? A: MID needs to meet with landowner and coordinate an agreement. MID has met with DWR to identify several candidate locations for the station on the parcel. Unsure of online date.

iv. Q: What other remote sensing options have you looked into? A: Formation and LandIQ.

1. TIWD GSA-1 has looked into LandIQ and found it to be more robust than OpenET. OpenET does not match up more with irrigation records.

v. Public Comment (Greg Young): "Just a note about OpenET…they have designed the platform to continue to refine and obtain more consistency between various remote sensing methods, which would get things closer to very specific analysis like LandIQ. This just may take time (a few years)."

c. 2020 SGM Implementation Grant

i. Matt Beaman (MID) shared the latest information on the two funded projects, both of which are in progress and on track (LGAWD Intertie and Recharge Project & El Nido Conveyance System Improvements).

1. Q: When is LGAWD construction expected to finish? A: Nic Marchini shared that he thinks it may be completed in late 2023.

d. SDAC Grant

i. Matt Beaman (MID) provided an update on a 2019 grant agreement covering 3 projects serving underrepresented communities.

ii. Q: Over time, do recharge basins have diminishing returns for volume recharged? A: Depends basin to basin on soil type and how it's maintained. It's like a natural log where you might see a drop in effectiveness over the first 2-3 years, but then should remain more consistent.

1. Under FLOOD-MAR, it is challenging when it comes to recharge basins because floodwater includes silt and other materials that can over time reduce recharge capability. But if you're taking (flood) water out of a reservoir, it's likely to be better quality.

iii. Q: When is Planada basin going into service? A: 2 sites with cone penetration tests found shallow clay, so moving to install dry wells at one site. Permitting is on schedule to be done over next 3-4 months and dry wells will be installed in summer 2022. Dry wells will be screened at 50 and 90-110 feet deep. Water is 190 feet deep. Water quality testing will be involved, as well as a settling tank.

6. State of Emergency Teleconference Findings

a. Motioned by Nic Marchini and seconded by Hicham ElTal. Motion passed unanimously.

7. Approval of February 7, 2021 Meeting Minutes

a. Motioned by Kel Mitchel and seconded by Hicham ElTal. Minutes were approved unanimously.

8. WY2021 Annual Report

a. Chris Hewes (W&C) provided key highlights from the recently drafted WY 2021 Annual Report that will be submitted to DWR by April 1.

b. Comment (Hicham ElTal): It would be interesting to look at change in storage per aquifer.

9. Comments on Groundwater Sustainability Plan by the Department of Water Resources

a. Jim Blanke (W&C) provided an overview of the schedule for the response to comments from the DWR on the Merced GSP, as well as an overview of the comments. He also presented some information on the technical analysis for the groundwater levels sustainability indicator, including potential options being considered for updated minimum thresholds.

b. Q: Did DWR also recommend looking at domestic wells? A: Yes, they noted the need to investigate domestic wells further to understand potential impacts.

c. Comment (Hicham ElTal): Expressed support for Option 1 (2015 GWLs) with interim milestones because the basin may run into issues with regulatory agencies in the future for levels below 2015 (e.g. such as a mitigation requirement), even though this is a harder option to implement.

d. Comment (Kel Mitchel): The GSAs need to consider balancing the need to be responsive to DWR's comment and reasoning for the comment against practicality – don't want to see the GSP do a hard pivot to a more restrictive threshold without careful consideration.

e. Comment (Eric Swenson) Don't think MSGSA can meet the 2015 levels scenario.

f. Q (Eric Swenson): Could the GSAs approach things differently within their regions? A from Hicham ElTal: Providing there can be a handshake in areas that influence MIUGSA, that's possible. Thinks 2015 levels are achievable if pumping reduces, but there are some areas that may need more careful attention.

    i. Kel Mitchel cautioned that other GSPs had comments from DWR about differences in policies between GSAs in the same GSP. Need to consider that as a potential secondary issue to avoid.

g. Eric Swenson proposed writing up an MT policy and discussing it in next 20 days to come to a consensus on minimum threshold approach, while W&C continues to develop the technical analysis to support. Hicham ElTal and Kel Mitchel supported the idea.

h. The Committee agreed on the need to put together questions for DWR and meet with the agency soon.

    i. Coordination Committee requested W&C to develop questions and send out for Coordination Committee review and input.

i. Q (Kel Mitchel): If groundwater levels were to decline to minimum threshold for option 3, what would be the impact to domestic users? Even if not dewatering, are there electricity or pump-resetting issues? A: Dataset doesn't exist to answer all those questions, per Eric Swenson. Pump companies have that kind of data, but doesn't exist in the county dataset and isn't typically made available.

10. Next steps and adjourn

a. Meeting adjourned 12:09 pm.

Next Regular Meeting
TBD, but expected to be April 25, 2022
Information also available online at mercedsgma.org

MEETING NOTES – Merced GSP

SUBJECT: Merced GSP Coordination Committee Meeting

DATE/TIME: April 25, 2022, 3:00 PM to 5:00 PM

LOCATION: Hybrid meeting with physical location at Merced Irrigation District, Franklin Yard Facility, 3321 North Franklin Road, Merced, CA 95348 and online via Zoom

---

Coordination Committee Members in Attendance:

	Representative	GSA
☒	Hicham ElTal	Merced Irrigation-Urban GSA
☒	Stephanie Dietz[1]	Merced Irrigation-Urban GSA
☒	Justin Vinson	Merced Irrigation-Urban GSA
☒	Daniel Chavez	Merced Irrigation-Urban GSA
☐	Ken Elwin (alternate)	Merced Irrigation-Urban GSA
☒	Eric Swenson	Merced Subbasin GSA
☒	Mike Gallo	Merced Subbasin GSA
☒	Nic Marchini	Merced Subbasin GSA
☐	George Park (alternate)	Merced Subbasin GSA
☒	Kel Mitchel	Turner Island Water District GSA #1
☐	Tim Allan (alternate)	Turner Island Water District GSA #1

1. Stephanie Dietz joined around item 7(e) in the minutes below.

Meeting Notes

1. Call to Order and Welcome

a. Jim Blanke (Woodard & Curran [W&C]) called the meeting to order at 3:00 pm.

2. Roll Call

a. Coordination Committee members in attendance are shown in table above.

3. State of Emergency Teleconference Findings

a. Motioned by Nic Marchini and seconded by Kel Mitchel. Motion passed unanimously.

4. Approval of March 21, 2022 Meeting Minutes

a. Motioned by Kel Mitchel and seconded by Mike Gallo. Minutes were approved unanimously.

5. Public Comment

a. None received.

6. Reports

a. GSA Reports

i. *Merced Subbasin GSA*. Adriel Ramirez shared that the MSGSA adopted 4/14/22 well consistency determination policy. Also contacted by Department of Conservation to interview for application for multibenefit land repurposing program.

ii. *MIUGSA*. Hicham ElTal shared that the GSA is working on comments to the County updated groundwater ordinance. Working on setting up for future management of the GSA, e.g. software for water trades which will include accounting for surface water. Monitoring SWRCB curtailments and potential impact on basin sustainability.

iii. *TIWD GSA #1*. Kel Mitchel working through well consistency determination comments with GSA board.

b. Current Basin Conditions – Matt Beaman (MIUGSA) presented some figures showing groundwater levels recently recorded at monitoring wells, including some continuous pressure transducers at newer SGMA monitoring wells, others measured by QK, or others measured by City of Merced. He noted that not all wells are dedicated to monitoring and may be in use, or otherwise influenced by groundwater pumping by a nearby active well. Wells 53315 and 53316 have had some measurement challenges.

i. Q (public): Is the El Nido Firehouse well a dry or monitoring well? A: Monitoring well.

ii. Q (Nic Marchini): Where are stations 53315 and 53316 located? A: Off of Buchanan Hollow Rd, they are private wells.

7. Potential Revisions to the Groundwater Sustainability Plan

a. Jim Blanke (W&C) reviewed the three comments from DWR on the GSP which was determined "incomplete". He also refreshed the group on SGMA terminology related to sustainable management criteria.

b. Jim Blanke (W&C) reminded the group about several options that have been evaluated for different minimum thresholds (MTs), including (1) 2015 levels, (2) historical low, (3) deeper of historical low or shallowest domestic well + 10 ft, or (4) a combination of #2 in the area of subsidence and #3 elsewhere in the Subbasin.

i. Q (Eric Swenson, MSGSA): How would we respond to someone who says their well has been dewatered going forward because we didn't have information on it or wasn't covered by a representative well? A: Mitigation component is not something being discussed today. The GSAs can decide if a mitigation program is needed and what that should look like.

ii. Q (Joseph Angulo): Are all domestic wells considered in the minimum threshold, regardless of date installed or quality of water withdrawn? A: The domestic well data source starts from mid-1990s based on electronic well permitting

database from Merced County. We've included nearly all domestic wells except statistically-defined outliers.

c. Jim Blanke (W&C) shared that we've expanded the domestic well search radius from 2 miles to 5 miles and included public water supply wells.
d. Jim Blanke (W&C) expanded on some additional considerations incorporated into the latest round of modeling for ongoing/future subsidence, including no cumulative change in storage (to avoid additional subsidence) over the long term, as well as no cumulatively negative storage in any year (e.g. dry years). These criteria are generally more protective than the MTs that take into consideration groundwater levels only.
    i. Q (Kel Mitchel, TIWD GSA-#1): How does the subsidence map look for 2015-2021 instead of 2012-2021? Should we consider expanding the "subsidence area" to the whole Below Corcoran Clay area because it could occur elsewhere in the future? A: W&C has not looked at that specifically and could consider expanding the region.
e. Jim Blanke (W&C) walked the group through the model results table.
    i. Q (Hicham ElTal, MIUGSA): Does the pumping reduction column include developed supply? A: Yes.
    ii. Q (Hicham ElTal, MIUGSA): Between modeling scenarios A, B, and C, could you add the stream depletions from the Merced River? A: Yes, W&C can do that.
    iii. Comment (Hicham ElTal, MIUGSA): From MIUGSA perspective, if the updated GSP uses any scenario that isn't 2015 groundwater levels, MIUGSA doesn't want to be responsible for mitigation. But, if using 2015 levels, then can look at scale of depletions between GSAs to share cost of mitigation that might occur.
        1. MIUGSA has comments to share later on expanded 5-mile radius used for domestic wells and for comparison to historical lows.
    iv. Q (Eric Swenson, MSGSA): What is the baseline gross extraction that the groundwater reductions are starting from? A: Around 620,000 AF.
    v. Jim Blanke (W&C) shared highlights of comments on the results table from the Stakeholder Advisory Committee earlier on 4/25. They ranged from support for 2015 levels and higher groundwater levels vs others concerned about economic impacts on the County with support for scenario C, potentially with projects or management actions to address dry year negative cumulative storage change.
        1. Kel Mitchel (TIWD GSA-#1) shared that he thought he heard that there was more interest in having a strong response (over-response) early on and then readjust later (rather than the opposite of not going far enough now and needing to be reactive later on).
    vi. Q (Kel Mitchel, TIWD GSA-#1): Where are the reductions occurring geographically? A: Modeling was based on reduced crop acreage. In the subsidence area, pumping reductions were focused primarily in the Below Corcoran, with less reductions in the Above Corcoran. Note that planned

supply side projects will reduce what is needed for magnitude of demand reductions, but not enough to fully offset.

vii. Public comment (from chat): It would be helpful to see what the specifics of the mitigation strategy to get the -40,000 [*AF shown in modeling scenario C*] to positive.
    1. Response: Likely, the strategy would primarily include land fallowing because there are limited water supplies to bring in those very dry conditions.

viii. Q (Kel Mitchel, TIWD GSA-#1): DWR's letter was specific about evaluating subsidence impacts on beneficial uses and users in the subbasin – anything we can do to think about that or address is more directly? A: W&C contacted USBR and reviewed some of their published Channel Capacity reports to see how subsidence would impact the Middle Eastside Bypass and its ability to convey flood flows. For instance, USBR Channel Capacity Report (2019, Appendix B) suggested impacts by 2031 for ability to meet goals for flood flow conveyance. We also know Delta-Mendota has had issues with conveyance through infrastructure.

ix. Jim (W&C) clarified that modeling scenario C involves historical low in Below Corcoran Clay in subsidence area, but shallowest domestic well (+10ft) everywhere else (including the Above Corcoran Clay aquifer in the subsidence area).

x. Q (Stephanie Dietz, MIUGSA): What are the impacts of pumping reductions on municipal wells? A: Hard to answer directly, but all these reductions will need to go through a process of allocation between the GSAs and then within each individual GSAs before it gets to individual wells.

xi. Q (Adriel Ramirez, MSGSA): What if we choose 2015 levels and don't get there at 2040? Can we address in a 5-year update to be less restrictive? A: The GSP is a living document and can be updated through a stakeholder process and with DWR approval.

xii. Public Question (in chat): Can you explain why the GSP scenario which reduces pumping 66,000 AFY has a -36,000 AF Minimum Annual change in storage below Corcoran and Scenario C which reduces pumping more at 70,000 AFY results in -40,000. What is going on in the model to make this result? A: There a few factors: the pumping reductions are not uniform throughout the Subbasin but also there are a series of revisions since the GSP model version was developed, so there are some model behavior differences.

xiii. Comment (Adriel Ramirez, MSGSA): Majority of pumping reductions are in MSGSA. They might be able to meet pumping reductions, but if can't get to 2015 levels, there's concern about negative impacts on the economy and not meeting goal. Might be too restrictive, too fast.

xiv. Comment (Kel Mitchel, TIWD GSA-#1): In comparing modeling scenarios B and C, there is a 45,000 AFY difference in pumping reductions. If an additional 45,000 AFY would need to be reduced from just the Below Corcoran aquifer, that's a huge volume of water for that area.

xv. Comment (Greg Young, MSGSA): If we go to 2015 levels, sounds like it would remove mitigation challenges, but there's a chance that 2015 levels might not be achievable by 2040 even if demand reductions are achieved. MSGSA is open to taking on some of the responsibility of mitigation (especially domestic wells) so MIUGSA isn't burdened for something that is not MIUGSA's responsibility.

Thinks modeling scenarios B or C are more implementable if we tie with another solution (e.g. mitigation program to be designed and shared).

1. Hicham ElTal (MIUGSA) replied:
    a. MIUGSA technically not looking at reduced pumping today, but it could happen in future because of SED and Bay Delta Plan.
    b. Concerned that groundwater levels below 2015 levels could be a slippery slope, even with consideration for mitigation responsibility by MSGSA. But willing to consider modeling scenario B or C if other GSAs serious about taking on mitigation responsibility (would need to be better defined).
    c. Concerned about recent observed declines in groundwater in MIUGSA's west side, which historically has been more resilient .

xvi. Kel Mitchel (TIWD GSA-#1) confirmed that in the case of 2015 groundwater levels goal, these don't need to be achieved in 2023 – the goal is 2040.

xvii. Hicham ElTal (MIUGSA) would like MSGSA to share more information on how they'll commit to 100% mitigation responsibility for domestic wells (if want to deviate from 2015 groundwater levels).

xviii. Jim Blanke (W&C) shared another option where 2015 levels could be the new measurable objective (MO), but set the MTs lower to reduce risk of violation. MIUGSA shared they're open to this and other creative solutions.

xix. Q (Adriel Ramirez, MSGSA): What happens to wells that go dry during implementation as we ramp down pumping to go for 2015 levels? A from Hicham ElTal (MIUGSA): Willing to do a proportional cost share based on the percentage of pumping percentage over the native yield.

xx. Q (Kel Mitchel, TIWD GSA-#1): How should we think about a goal for 2015 levels in Above Corcoran considering it was pretty high in 2015 and not pumped heavily? A: It would have a benefit to subsidence. However, we would need to look to impacts on groundwater dependent ecosystems (GDEs) and stream depletions due to increased pumping likely to occur in Above Corcoran.

1. Kel suggested that we would need a Below Corcoran Clay MT which would be 2015 or historical low. Then Above Corcoran Clay can't be tied to 2015.
    a. Hicham ElTal (MIUGSA) agreed with this.
    b. One additional suggestion could be 2015 levels minus some buffer. Hicham requested that Woodard & Curran look into this.

xxi. Comment (Eric Swenson, MSGSA): Has designed pumps for Above Corcoran wells in previous work; pumping rate for above wells is much smaller than Below Corcoran. Might need twice as many wells to meet same pumping volume. This could be complicated under well permitting, but addressable.

xxii. Adriel Ramirez (MSGSA) confirmed that they need direction from the MSGSA Board as next step on mitigation program responsibility; the next meeting will occur in the second week of May.

xxiii. Q (Nic Marchini, MSGSA): Are there any scenarios that are protective of domestic wells and address the other categories? A: Option C is lowest pumping value that is still protective in terms of domestic wells (meets minimum threshold definition, though may still allow some dewatering). But Option C doesn't address subsidence.

xxiv. Q (Nic Marchini, MSGSA): Would replacement of a very shallow well be part of a mitigation program? A: It will be up to the Committee and GSAs to put

together a mitigation program, e.g. how to determine whether dewatering is due to GSP vs other conditions.

xxv. Q (Eric Swenson, MSGSA): How much detail would the updated GSP need to have about mitigation? A: Need to include an open and transparent impact of MTs on beneficial uses and users of groundwater in the Subbasin. Up to the GSAs to include or not include a mitigation program, but not necessarily required. For example, several other GSPs included a plan for how to consider development of a mitigation program. There's some flexibility.

f. Jim Blanke (W&C) described the schedule for incorporating edits into the GSP by end of July to address DWR's comments.

8. Next steps and adjourn

a. Meeting adjourned 4:45 pm.

Next Regular Meeting
TBD, but expected to be late May 2022
Information also available online at mercedsgma.org

MEETING NOTES – Merced GSP

SUBJECT: Merced GSP Coordination Committee Meeting

DATE/TIME: June 1, 2022, 1:00 PM to 3:00 PM

LOCATION: Hybrid meeting with physical location at Merced Irrigation District, Franklin Yard Facility, 3321 North Franklin Road, Merced, CA 95348 and online via Zoom

---

Coordination Committee Members in Attendance:

	Representative	GSA
☒	Hicham ElTal	Merced Irrigation-Urban GSA
☐	Stephanie Dietz	Merced Irrigation-Urban GSA
☒	Justin Vinson	Merced Irrigation-Urban GSA
☐	Daniel Chavez	Merced Irrigation-Urban GSA
☒	Ken Elwin (alternate)	Merced Irrigation-Urban GSA
☒	Eric Swenson	Merced Subbasin GSA
☒	Mike Gallo	Merced Subbasin GSA
☒	Nic Marchini	Merced Subbasin GSA
☒	George Park (alternate)	Merced Subbasin GSA
☒	Kel Mitchel	Turner Island Water District GSA #1
☐	Tim Allan (alternate)	Turner Island Water District GSA #1

Meeting Notes

1. Call to Order and Welcome

a. Jim Blanke (Woodard & Curran [W&C]) called the meeting to order at 1:02 pm.

2. Roll Call

a. Coordination Committee members in attendance are shown in table above.

3. State of Emergency Teleconference Findings

a. The Coordination Committee considered the circumstances of the State of Emergency and determine whether to make the findings that any of the circumstances exist per AB 361: that the State of Emergency continues to directly impact the ability of the members to meet safely in person and/or State or Local Officials continue to impose or recommend measures to promote social distancing.

b. Action: Motion made, seconded, and carried

4. Approval of April 25, 2022 Meeting Minutes

a. Action: Motion made, seconded, and carried

5. Public Comment

a. None received.

6. Reports

a. GSA Reports

i. *Merced Subbasin GSA.* Adriel Ramirez shared that MSGSA applied for a multibenefit land repurposing grant program, but was unsuccessful in this funding round. As an additional $60 million may be added as a part of the Governor's proposed budget, the GSA is working to strengthen the application. Holding a public meeting on July 19 that, if successful, will fund their land repurposing program and fund the GSA executive director and domestic well mitigation program.

ii. *MIUGSA.* Hicham ElTal shared that MIUGSA approved 3.3. AF per acre for the period of April 1, 2023 through December 31, 2025 (equivalent to 1.1 AF/Ac annually) as sustainable native number for pumping allocations. MIUGSA is currently working through details of monitoring and enforcement and their Board will be approving certain numbers for recharge on a farm-by-farm basis. Matt Beaman shared that MIUGSA received the draft Grant Agreement with DWR for the SGM Implementation grant of $7.6 million; Mr. Beaman anticipates sending data requests to the respective project proponents to finalize the work plan, schedule, and budget. Hicham ElTal and Matt Beaman shared a presentation regarding an analysis of groundwater levels and pumping from 2016 to 2021 assuming pumping allocations at 1.1 AF per developed acre. Results show differences in the groundwater storage balance among the three GSAs. MIUGSA has a positive groundwater balance, even as groundwater levels have declined. Further, Mr. ElTal stated that MIUGSA believes that setting the minimum thresholds lower than 2015 levels may expose the GSAs to additional liability for impacts that may occur. Mr. ElTal stated that MIUGSA believes it should not bear mitigation or liability for setting minimum thresholds at historical lows and language in the GSP will need to reflect this.

1. Q: MSGSA has allocated funds for a domestic well mitigation program. What other mitigation measures may be included?

    a. Mr. ElTal responded that mitigation and liability are the two different issues. MIUGSA desires language broad enough to protect themselves at levels below 2015 levels, as all cities are in their GSA area. If the GSAs move forward with MTs set at 2015 levels, then MIUGSA does not require this language.

    b. Jim Blanke (W&C) added that the average pumping reduction between minimum thresholds set at historical lows (115 TAF) and those set at 2015 levels (175 TAF).

2. A question was raised about whether mitigation is required. Jim Blanke (W&C) clarified that the GSP must provide transparency around the impacts anticipated at minimum thresholds. Potential for state intervention could be triggered by missing an interim milestone.

3. MSGSA and MIUGSA discussed potential impacts of SWRCB intervention if consensus regarding mitigation/responsibility language could not be reached before the GSP revision deadline.

4. MSGSA requested MIUGSA provide the minimum thresholds options and related language for sharing liability for the MSGSA Board to consider.

MIUGSA committed to drafting language to provide to MSGSA and TIWD GSA #1 for review prior to next MSGSA Board meeting.

5. Jim Blanke (W&C) clarified that the GSAs will need to set measurable objectives and interim milestones based on a similar methodology of the selected minimum threshold.

iii. *TIWD GSA #1*. No update provided.

7. Potential Revisions to the Groundwater Sustainability Plan

a. Groundwater levels
   i. Jim Blanke (W&C) shared progress on revising groundwater level minimum thresholds. GSAs have decided to pursue historical lows as the minimum threshold approach. Once pumping reductions are implemented through projects and management actions (ramping up after 2025), groundwater levels are projected to increase. Measurable objectives will be developed to provide operational flexibility (approach being evaluated at this time is to use fall 2011 groundwater levels) and interim milestones will be defined by anticipated GSP implementation and model simulated response. Meeting discussion included incorporating a domestic well mitigation program, with primary financial responsibility with MSGSA, and a management action to explore different levels above Corcoran in the subsidence area for more flexibility in responding to subsidence issues.
   ii. Q (Kel Mitchel): Can interim milestones go below minimum thresholds?
      1. A (Jim Blanke): Based on BMPs from DWR, yes, this is allowed.

b. Subsidence
   i. Jim Blanke (W&C) presented the subsidence minimum threshold (and measurable objective) option under consideration by the GSAs: 0 feet per year, with condition of uncertainty. Other options include total subsidence (rather than rate) or the stipulation of a 5-year rolling average. USBR measurement issue is approximately +/- 1 inch and will be discussed with DWR. The final option is to set groundwater levels as a proxy for subsidence, which would involve extensive rework of the subsidence section. Interim milestones will assume some level of subsidence through 2040, both residual and new.
   ii. Jim Blanke (W&C) introduced the proposed management action for the subsidence area: goal is to target pumping reduction (or recharge activities) within Subsidence Focus Area (defined by region with 2015-2021 average less than -0.15 ft/yr) to achieve positive annual storage change. Noted that exact details will be developed as part of the management action determined after GSP is updated.
   iii. Comment (Hicham ElTal): Believes that the GSAs should accept DWR's position of 0 ft/yr for minimum threshold at this point and perform studies prior to 2040 to demonstrate that subsidence occurs in neighboring subbasins and argue that this is not a Merced Subbasin-specific problem.
   iv. Comment (Kel Mitchel): Could be explicit in the GSP that the MTs for GWLs are protective of subsidence, since set at historical lows.

c. Domestic well mitigation
   i. Jim Blanke (W&C) explained that, while identification of the need for a domestic well mitigation program will occur during GSP implementation, it is envisioned that a board or committee will review claims (which would need to be tied to

regional groundwater conditions), with the primary financial responsibility coming from MSGSA, through negotiations.

ii. Mr. ElTal reiterated that MIUGSA should not be responsible for mitigation for minimum thresholds set lower than 2015, and restated the commitment to prepare options and language for other GSAs to review.

d. Adoption / public input opportunities

i. Jim Blanke (W&C) shared that, by next Coordination Committee meeting in late June, consensus on the minimum thresholds, measurable objectives, and interim milestones should be reached and the redline GSP should be drafted for Board review and adoption.

ii. Comment (Hicham ElTal): Propose to combine committee meetings in late June to incorporate revisions from Stakeholder Advisory Committee members live and reduce need to respond to comments multiple times.

8. Next steps and adjourn

a. Charles Gardiner (Catalyst) shared an update from the SAC meeting that most of group was content with the GSAs direction to select historical lows as minimum threshold, but some wanted to see 2015 levels as the minimum threshold.

b. Greg Young (MSGSA) requested MIUGSA to share analysis details from their table of estimated groundwater use and allocations included in their presentation under Item 6(ii).

i. Hicham ElTal (MIUGSA) agreed to share the analysis.

c. Meeting adjourned at 2:49 pm.

Next Regular Meeting
Tentatively scheduled for a joint meeting of the Stakeholder Advisory Committee and the Coordination Committee on June 27, 2022, 1pm
Information also available online at mercedsgma.org

MEETING MINUTES – Merced GSP

SUBJECT: Merced GSP Stakeholder Committee Meeting

DATE/TIME: May 29, 2018 at 9:30 AM

LOCATION: Castle Conference Center at Castle Airport, 1900 Airdrome Entry, Atwater, CA 95301

Stakeholder Committee Members In Attendance:

	Representative	Community Aspect Representation
☐	Alex McCabe	City of Livingston
☒	Arlan Thomas	MIDAC, growers
☒	Ben Migliazzo	Live Oak Farms, growers
☒	Bill Spriggs	City of Merced, Merced Irrigation District
☒	Bob Salles	Leap Carpenter Kemps Insurance, insurance industry and natural resources
☒	Brad Robson	Buchanan Hollow Nut Co. Le Grand-Athlone Water District, growers
☒	Breanne Ramos	Merced County Farm Bureau
☒	Brian Carter	D&S Farms, growers
☒	Carol Bonin	Winton M.A.C.
☒	Daniel Machado	Machado Backhoe Inc., construction industry
☒	Frenchy Meissonnier	Rice Farmer, rice growers
☐	Galen Miyamoto	Miyamoto Farms
☒	Gino Pedretti III	Sandy Mush Mutual Water Company
☒	Greg Olzack	City of Atwater resident
☐	James (Jim) Marshall	City of Merced
☒	Joe Scoto	Scoto Bros Farms / McSwain Union School District
☒	Ladi Asgill	East Merced Resource Conservation District / Sustainable Conservation
☒	Maria Herrera	Self-Help Enterprises
☒	Mark Maxwell	University of California, Merced
☐	Maxwell Norton	Retired agricultural researcher
☒	Parry Klassen	East San Joaquin Water Quality Coalition, growers
☒	Rick Drayer	Drayer Ranch, Merced cattlemen
☒	Simon Vander Woude	Sandy Mush Mutual Water Company, dairies

Meeting Notes

1. Welcome, Introductions, and Agenda Review

- GSP outreach consultant Charles Gardiner (Catalyst Group) started the meeting
- Introductions were given for Charles, the GSP technical consultant Samantha Salvia with Woodard & Curran, and members of GSA leadership attending the meeting, as well as audience members
- Attending GSA leadership included: Larry Harris, Turner Island GSA, Governing Board; Hicham ElTal, Merced Irrigation-Urban Groundwater Sustainability Agency, Governing Board; Lacey Kiriakou, Merced Subbasin GSA, Water Resource Coordinator; Nic Marchini, Plainsburg Irrigation District and Merced Subbasin GSA, Vice Chair Governing Board

2. Stakeholder Outreach Approach and Committee Purpose

- Lacey Kiriakou (Merced Subbasin GSA) reviewed the requirements of GSP Outreach and provided information on approach and committee purpose
    i. The website is www.mercedsgma.org and information will be posted as it becomes available
    ii. Each of the GSAs will be the final decision makers and the Coordinating Committee (CC) is formed by agreement among all three GSAs
    iii. The role of the Stakeholder Committee (SC) is to provide community feedback to the Coordinating Committee
- Charles Gardiner (Catalyst Group) reviewed the SC Meeting Agreements and Guidelines for Successful Meetings
    i. The technical team will bring ideas to the SC to test ideas, see how they work, and seek input
    ii. SC members should bring information and input to meetings from their constituents and help educate constituents about SGMA and groundwater management
    iii. Discussion and recommendations from the SC will go to the CC and from there to the three GSAs

3. Overview of Sustainable Groundwater Management Act (SGMA) and Groundwater Sustainability Planning

- SGMA purpose and timeline
    i. Samantha Salvia (Woodard & Curran) reviewed: common language used, SMGA fundamentals, a map showing the high priority basin and critical overdrafted basins in California, and a map showing the Merced Subbasin as one of the high priority and critically overdrafted basins in California
    ii. Hicham ElTal (MIUGSA) reviewed that SGMA allows local management of groundwater basins with oversight from two agencies - DWR and State Water Resource Control Board and approval of a GSP by both agencies is needed to maintain local control
- Elements of a Groundwater Sustainability Plan

i. Samantha Salvia (Woodard & Curran) reviewed: GSP requirements; six undesirable results that are addressed during the development of the GSP; what the Basin Setting includes; what areas of the Merced Subbasin are either designated as a disadvantaged community or severely disadvantaged community; neighboring GSAs (Chowchilla, Delta-Mendota, and Turlock); options for the basin management approach and Merced Subbasin chosen approach (three GSAs to adopt one GSP for Merced Subbasin)

4. Pre-SGMA Groundwater Understanding

- Hicham ElTal (MIUGSA) reviewed what work has been done to date in the Merced Subbasin including data compilation and gaps, monitoring plans, model updates, and key findings

5. SGMA Grants, Scope, and Timeline of Planning Activities

- Lacey Kiriakou (Merced Subbasin GSA) reviewed where the funding was coming from to develop the GSP, with most of it coming from grant funding and reviewed grant funded projects that will assist Planada, El Nido, and Meadowbrook.

- Samantha Salvia (Woodard & Curran) reviewed the progress made on the GSP to date and Samantha and Charles (Catalyst Group) reviewed the GSP Roadmap

6. Stakeholder Committee Schedule and Decision-Making

- Charles Gardiner (Catalyst Group) reviewed the stakeholder committee decision-making options

- Charles suggested the SC develop consensus agreements or comments to share with the CC and three GSAs explained how the committee may want to define and reach consensus

- Samantha Salvia (Woodard & Curran) asked whether there was other feedback from the SC that can be presented to the CC in the afternoon meeting

- Lacey Kiriakou (Merced Subbasin GSA) asked if the meetings should be accessible by phone for members and the public to listen-in if these persons cannot participate

- The group discussed preferred meeting location and the Airdrome Conference Center was identified as comfortable and accessible

7. Public Comment on Items not on the Agenda

- No comments on public items not on the agenda.

8. Next Steps and Next Meeting

- The next two SC meeting are June 25th and July 23rd at 9:30 am.

- Items for Coordinating Committee:

  i. A request was made to receive regular updates from CC on interbasin coordination between the GSAs and for an alternate attend on a member's behalf be presented to CC for decision

- Topics for Future Discussions:

i. Water Quality and how it will be addressed in the Merced Subbasin GSP

ii. Bay Delta Plan impact on the water and the Merced Subbasin GSP

MEETING MINUTES – Merced GSP

SUBJECT: Merced GSP Stakeholder Committee Meeting

DATE/TIME: June 25, 2018 at 9:30 AM

LOCATION: Castle Conference Center at Castle Airport, 1900 Airdrome Entry, Atwater, CA 95301

Stakeholder Committee Members In Attendance:

	Representative	Community Aspect Representation
☒	Alex McCabe	City of Livingston
☒	Arlan Thomas	MIDAC, growers
☒	Ben Migliazzo	Live Oak Farms, growers
☒	Bill Spriggs	City of Merced, Merced Irrigation District
☒	Bob Salles	Leap Carpenter Kemps Insurance, insurance industry and natural resources
☒	Brad Robson	Buchanan Hollow Nut Co. Le Grand-Athlone Water District, growers
☒	Breanne Ramos	Merced County Farm Bureau
☒	Brian Carter	D&S Farms, growers
☒	Carol Bonin	Winton M.A.C.
☒	Daniel Machado	Machado Backhoe Inc., construction industry
☒	Darren Olguin	McSwain MAC
☒	Frenchy Meissonnier	Rice Farmer, rice growers
☒	Galen Miyamoto	Miyamoto Farms
☒	Gino Pedretti III	Sandy Mush Mutual Water Company
☒	Greg Olzack	City of Atwater resident
☐	James (Jim) Marshall	City of Merced
☒	Joe Scoto	Scoto Bros Farms / McSwain Union School District
☒	Ladi Asgill	East Merced Resource Conservation District / Sustainable Conservation
☒	Maria Herrera	Self-Help Enterprises
☒	Mark Maxwell	University of California, Merced
☒	Maxwell Norton	Retired agricultural researcher
☒	Parry Klassen	East San Joaquin Water Quality Coalition, growers
☒	Rick Drayer	Drayer Ranch, Merced cattlemen
☒	Simon Vander Woude	Sandy Mush Mutual Water Company, dairies

Meeting Notes

1. GSP Development Elements and Approach

    - Alyson Watson (Woodard & Curran) provided an overview of the schedule of components that will be used to develop the GSP, broken into three categories: Technical Work, Policy Decisions, and Management Actions

2. Stakeholder Outreach and Engagement Strategy

    - Charles Gardiner (Catalyst Group) provided an overview of Outreach and Engagement Activities, including targeting of the first week of August for first public workshop.

3. Merced Subbasin Overview

    - Plan Area Information
        i. Alyson provided an overview of the "Plan Area and Authority" chapter of the GSP.
        ii. A request was made to view the land use/crop map in greater detail, as well as a high-level, order of magnitude summary of total acreage by crop type. Maps are being prepared separately per GSA and the presentation slides will be posted online at www.mercedsgma.org

    - Historical Groundwater Conditions

        i. Alyson provided an overview of the six groundwater sustainability indicators, with some specific examples and maps that help explain each. Groundwater elevations are a good indicator of several sustainability indicators since they are all related.

4. Groundwater Sustainability Goals

    - Purpose and Overview
        i. Alyson introduced the sustainability terms: Undesirable Results, Minimum Thresholds, and Measurable Objectives.

    - Initial Committee Perspectives and Input on Sustainability

        i. The Committee was asked to provide input on their definition of sustainability. Below are the notes recorded on a flipchart during the conversation. Sustainability is:

            - The amount of groundwater depletion allowed during two, three, and four-year droughts.
            - Whatever the State Water Board wants to see for sustainability.
            - Stable groundwater levels.
            - Improving groundwater quality.
            - No adverse economic effects.
            - Not running out of water.
            - No restricted use that would affect the economy.
            - Enough water for the uses – agriculture, community, and environment – with a healthy reserve.
            - Significant water quality issues in the Valley improve over time.
            - Balancing surface and groundwater use.
            - Increased acreage in production and crop shift.

- Maintain a balance of agriculture, human right to water, and safe drinking water.
- Reduce the environmental impact (groundwater basin and water quality) while maintaining things of value.
- Shared understanding of water budget so everyone knows how much water is used and replaced in every year.
- Doing what needs to be done so you can keep doing what you are doing but better.
- Need to plan for wet years – what to do with surplus water.
- Storage would help fix the problem.

  - A DWR representative provided some background information about DWR and State Water Board roles in reviewing and approving GSPs as well as annual and five-year reporting.
    - A request was made to review the criteria that DWR will be using the evaluate the GSP. These criteria will be provided to SC members.

5. Stakeholder Committee Procedures

   - Based on feedback from the Coordinating Committee, Alternates for Stakeholder Committee members are allowed, but they need to represent the same interest as the SC member for whom they are substituting. Members of the SC are responsible for keeping their respective alternate current on the meeting topics.

   - The group reaffirmed their understanding that the Stakeholder Committee is subject to the Brown Act.

   - A suggestion made to flag in meeting agendas where Stakeholder Committee members are requested to make recommendations or achieve consensus on an item to help make the line of communication clearer with the Coordinating Committee.

   - The group reached consensus on Procedures and Commitments (see Attachment A).

6. Interbasin Coordination Update

   - Staff have provided edits on Interbasin agreement back to Chowchilla Subbasin.

   - 2 meetings have been held so far with representatives from Turlock Subbasin to coordinate on GSP development status, data, etc.

   - Staff are trying to schedule a meeting with Delta-Mendota Subbasin, with preference to coordinate with GSAs preparing GSPs adjacent to Merced Subbasin.

7. Public Comment on Items not on the Agenda

   - No comments on public items not on the agenda.

8. Next Steps and Adjourn

Attachment A – Stakeholder Committee Procedures and Commitments

Purpose

- Advise the Coordinating Committee and GSA Governing Bodies

Membership

- Diverse representation of interests in the Merced Subbasin
- Coordinating Committee identifies and appoints members, with GSA approval

Member Terms and Responsibilities

- Through development of GSP
- Participate, represent interests, and educate communities

Alternate Members

- Alternates selected by members
- Should represent the same interest/perspective as the member
- Member is responsible for keeping alternate current

Decision-making

- Consensus approach for joint recommendations

Meetings

- Brown Act compliance
- Consistent participation: don't miss 3 in a row or 5 in a year

Consensus

Polling the committee to assess and confirm consensus. Consensus is all members present voting in categories 1 through 4.

1. I can say an unqualified 'yes' to the decision. I am satisfied that the decision is an expression of the wisdom of the group.
2. I find the decision perfectly acceptable. It is the best of the real options we have available to us.
3. I can live with the decision. However, I'm not especially enthusiastic about it.
4. I do not fully agree with the decision and need to register my view about it. However, I do not choose to block the decision and will stand aside. I am willing to support the decision because I trust the wisdom of the group.
5. I do not agree with the decision and feel the need to block the decision being accepted as consensus.
6. I feel that we have no clear sense of unity in the group. We need to do more work before consensus can be achieved.

MEETING MINUTES – Merced GSP

SUBJECT: Merced GSP Stakeholder Committee Meeting #3

DATE/TIME: July 23, 2018 at 9:30 AM

LOCATION: Castle Conference Center, 1900 Airdrome Entry, Atwater, CA

Stakeholder Committee Members In Attendance:

	Representative	Community Aspect Representation
☒	Alex McCabe	City of Livingston
☒	Arlan Thomas	MIDAC, growers
☐	Ben Migliazzo	Live Oak Farms, growers
☒	Bill Spriggs	City of Merced, Merced Irrigation District
☒	Bob Salles	Leap Carpenter Kemps Insurance, insurance industry and natural resources
☒	Brad Robson	Buchanan Hollow Nut Co. Le Grand-Athlone Water District, growers
☒	Breanne Ramos	Merced County Farm Bureau
☒	Brian Carter	D&S Farms, growers
☐	Carol Bonin	Winton M.A.C.
☒	Daniel Machado	Machado Backhoe Inc., construction industry
☒	Darren Olguin	McSwain MAC
☐	Frenchy Meissonnier	Rice Farmer, rice growers
☒	Galen Miyamoto	Miyamoto Farms
☒	Gino Pedretti III	Sandy Mush Mutual Water Company
☐	Greg Olzack	City of Atwater resident
☐	James (Jim) Marshall	City of Merced
☒	Joe Scoto	Scoto Bros Farms / McSwain Union School District
☐	Ladi Asgill	East Merced Resource Conservation District / Sustainable Conservation
☒	Maria Herrera	Self-Help Enterprises
☒	Mark Maxwell	University of California, Merced
☒	Maxwell Norton	Retired agricultural researcher
☒	Parry Klassen	East San Joaquin Water Quality Coalition, growers
☒	Rick Drayer	Drayer Ranch, Merced cattlemen
☒	Simon Vander Woude	Sandy Mush Mutual Water Company, dairies

Meeting Minutes

1. Welcome, Introductions, and Agenda Review

    a. Introduction and overview of agenda items given by Alyson Watson (Woodard & Curran)

    b. There were no comments for the past meeting minutes. Comments and questions from past meeting minutes and further input can be sent via email to Woodard & Curran

    c. Alyson Watson (Woodard & Curran) provided an explanation on GSP Development addressing what we are trying to do, what we are trying to avoid, and how to establish our management objectives

2. Merced Subbasin Water Resources Model and Water Budget

    - Baseline overview
        - Alyson Watson (Woodard & Curran) presented the most recent work on the groundwater modeling tool and talked about the model's progress. Input on clarifications and questions were given by Jim Blanke (Woodard & Curran) and Dominick Amador (Woodard & Curran)
        - The following points and questions were addressed:
            - How we intend to use the model: the model will help us talk about stream/aquifer interaction, water quality, subsidence, GW levels, etc. and how to quantify this
            - A clarification was given regarding that we are discussing the Merced Subbasin, which is part of the larger San Joaquin Basin
            - Alyson Watson (Woodard & Curran) explained the grid criteria for the model and that there are models the state has developed. However, we are developing a smaller scale model which is needed for the projects we would like to talk about implementing
        - Question: how many wells are we using? Answer: there are over 200 wells operated by various agencies.
        - Question: if we are light on the data in the Eastern part of the subbasin, could there be inaccuracies in the model? Answer: where we have more data, we are more confident that the data is simulating more accurately. Where we don't have data, we do the best we can
        - Question: what kind of wells were utilized for this? Answer: there are 200 calibration wells, and over 200,000 were taken into consideration including urban and agricultural wells

3. Undesirable Results

    a. Alyson Watson (Woodard & Curran) provided a review of SGMA requirements and guidelines, including that we have to use 50 years of hydrology and must consider three important baselines
    b. Alyson Watson (Woodard & Curran) clarified we used 2013 as a pre-drought starting point with good land use data
    c. Merced Subbasin conditions were explained by Alyson Watson (Woodard & Curran) with input by Jim Blanke (Woodard & Curran) and Dominick Amador (Woodard & Curran). Contents included an explanation of historic use and groundwater budget in the Merced Subbasin
    d. Several questions were asked and clarifications given as follows:
        i. Question: does the model show change in GW levels? Answer: where the change occurs varies from area to area and is very site specific. The model has capacity to show this change including the rate of decline across the basin
        ii. Comment from Stakeholder Committee member: nothing is going to look as bad as 2014 and 2015. Response: we are going to look at both historical and current conditions and are also looking at urban water use, land use, and river flows. From 2015-2060, we are simulating up to 2060 using the historical data

iii. Question: how do the three (2015-2018) years of actual data compare with what we are using? Answer: we are using the historical data in covering these years
iv. Comment: we should recharge in wet years, use our surface water, and rest the deep wells
v. Question: are updates made every 5 years? Answer: Per SGMA updates are every 5 years
vi. Question: are we going to account for population change? Answer: yes, this will be part of the projected budget
vii. Question: how are we checking the data? Answer: data is checked with each of the GSAs
viii. Question: is there a 600 AFY overdraft? (referring to slide) Answer: this is still a best estimate with the assumption that everything stays the same except hydrology. Eventually we will get to the projects we might want to implement and how these impact overdraft
ix. Comment: cities will (and have) projected higher population growth than actual growth, and this will make a huge difference on our water budget. Response: we are working with the GSAs to establish what they think will happen with land use change, population growth, etc.
x. Question: do we have a map with the projected changes throughout the basin? Answer: yes, we do have this can present next time
xi. Question: do we have a map with the 200 wells? Answer: this can be provided next meeting
xii. Question what well information do you need? Answer: Any well that has data, we can use
xiii. Question are you looking for more wells? Answer: Yes, especially in gap areas
xiv. Question: can you use data that the growers are keeping track of? Answer: we would take that information into consideration, although it might not go into the model
xv. Question: can we list what kind of well data we need on the website? Answer: yes
xvi. Comment: is a well with no historical data useful? Answer: we currently need historical data, but other data will be helpful going forward
xvii. Question: the Mariposa Basin is not included in the model? Answer: no, the other 3 directions have more complexity. However, at other boundaries we want to look at boundary interactions with the other basins
xviii. Question: when would we have a number for overdraft to plan with? Answer: there are many assumptions built into this number. However, using the projected baseline will be our best measure for future planning
xix. Question: does the Coordinating Committee make the decisions on this? Answer: the Coordinating Committee makes recommendations to the GSAs, who make decisions.
xx. Question: are we going to include the SED (Substitute Environmental Document) into the baseline? Answer: that will be a policy decision, and our recommendation is to not build it into the baseline until it is adopted

e. Alyson Watson (Woodard & Curran) explains for storage the challenge is in getting to the groundwater. The subbasin does not have a substantial issue in terms of total volume (storage)
f. Alyson Watson (Woodard & Curran) described what are significant and unreasonable undesirable results (types of negative impacts we want to avoid), minimum thresholds (what we are going to measure), and measurable objectives
g. Discussion was held focusing on undesirable results for the different sustainability indicators, addressing what members and attendees have seen, what is critical and most important based on their experience in the basin. Results of that discussion were put on a whiteboard as follows:
    i. Subsidence
        1. Loss of storage
        2. Infrastructure impacts
        3. Irreversible system impacts
        4. Flood flow impacts
        5. Planned projects impacts
    ii. Interconnected Surface Water
        1. SED impacts
        2. Environmental quality + habitat

iii. Degraded water quality
    1. Human consumption
    2. Reduced crop yields
    3. Soil impacts
    4. Public health + sanitation
iv. Groundwater Elevation
    1. Cost of pumping water
    2. Harder to recharge (with decline in levels)
    3. Energy requirements increasing
    4. Shallow wells going dry
    5. Well replacement costs
    6. Decline in yields

h. Economic impacts from groundwater issues impact everyone and span across all issues because everyone in the Subbasin is connected financially. This includes property value impacts and public health impacts

4. Stakeholder Outreach and Engagement Strategy

    a. The First Public Meeting will be August 2, 6:00pm to 8:30pm. Woodard & Curran will send out a notice. There will be Spanish translation provided. Committee members and attendees are encouraged to help get the word out about this event

5. Interbasin Coordination Update

    a. Hicham ElTal (MIUGSA) gave an update. We have met with Turlock and have an interbasin agreement with Chowchilla which is going to the GSAs for approval and signing. This is for agreeing to work together on the subsidence area and to share information and to agree on how we manage this area. There is a meeting with the technical staff in August to coordinate that information sharing. We are also setting up coordination the Delta-Mendota

    b. Question asked whether this means that one basin will adversely affecting another. Answer: There are different ways to develop goals and thresholds. We are going to coordinate now to avoid a position where one basin negatively affects another in the future

6. Public Comment on Items not on the Agenda

    a. Question was asked about what is the "SED". Answer: the "Substitute Environmental Document". This looks at in stream flow requirements for the Delta but has not been adopted yet

7. Next Steps and Next Meeting (will be Aug. 27th)

    a. Historical Water Budget
    b. Undesirable Results Continued (working toward sustainable thresholds)

Next Regular Meeting
August 27, 2018 at **9:30 a.m.**
Castle Conference Center, 1900 Airdrome Entry, Atwater, CA
Information also available online at mercedsgma.org

Note: If you need disability-related modification or accommodation to participate in this meeting, please contact Merced County, Community and Economic Development staff at 209-385-7654 at least 48 hours prior to the start of the meeting.

MEETING MINUTES – Merced GSP

SUBJECT: Merced GSP Stakeholder Committee Meeting #4

DATE/TIME: August 27, 2018 at 9:30 AM

LOCATION: Castle Conference Center, 1900 Airdrome Entry, Atwater, CA

Stakeholder Committee Members In Attendance:

	Representative	Community Aspect Representation
☐	Alex McCabe	City of Livingston
☒	Arlan Thomas	MIDAC, growers
☒	Ben Migliazzo	Live Oak Farms, growers
☒	Bill Spriggs	City of Merced, Merced Irrigation District
☒	Bob Salles	Leap Carpenter Kemps Insurance, insurance industry and natural resources
☒	Brad Robson	Buchanan Hollow Nut Co. Le Grand-Athlone Water District, growers
☒	Breanne Ramos	Merced County Farm Bureau
☒	Brian Carter	D&S Farms, growers
☒	Carol Bonin	Winton M.A.C.
☐	Daniel Machado	Machado Backhoe Inc., construction industry
☒	Darren Olguin	McSwain MAC
☒	Frenchy Meissonnier	Rice Farmer, rice growers
☒	Galen Miyamoto	Miyamoto Farms
☒	Gino Pedretti III	Sandy Mush Mutual Water Company
☒	Greg Olzack	City of Atwater resident
☐	James (Jim) Marshall	City of Merced
☒	Joe Scoto	Scoto Bros Farms / McSwain Union School District
☐	Ladi Asgill	East Merced Resource Conservation District / Sustainable Conservation
☒	Maria Herrera	Self-Help Enterprises
☒	Mark Maxwell	University of California, Merced
☒	Maxwell Norton	Retired agricultural researcher
☒	Parry Klassen	East San Joaquin Water Quality Coalition, growers
☒	Rick Drayer	Drayer Ranch, Merced cattlemen
☐	Simon Vander Woude*	Sandy Mush Mutual Water Company, dairies

* Nate Ray (Sandy Mush Mutual Water Company) was present as an alternate for Simon Vander Woude

Meeting Minutes

1. Welcome, Introductions, and Agenda Review

    a. Introduction and overview of agenda items given by Charles Gardiner (Catalyst Group)

    b. There were no comments for the past meeting minutes. Comments and questions from past meeting minutes and further input can be sent via email to Woodard & Curran.

2. Minimum Thresholds

    a. Alyson Watson (Woodard & Curran) provided an overview of sustainability criteria, a summary of the comments provided last month on undesirable results related to each criteria, and a description of how setting minimum thresholds will be an iterative approach.

    b. Chronic Lowering of Groundwater Levels

        i. Question: How will the state evaluate the basin's minimum thresholds? Answer: The state doesn't have its own threshold methodology by which a comparison will be made. They will be evaluated based on the GSP's rationale of setting thresholds based on describing undesirable results.

        ii. Question: How will coordination of threshold-setting work with neighboring basins? Answer: Through our Interbasin coordination efforts with an understanding of different deadlines for SGMA for different basins.

        iii. Question: Is there a breakdown of location of all the CASGEM wells (to help identify which ones are under particular jurisdiction)? Answer: Yes, we can provide that information from DWR's CASGEM database and map with locations. This was sent out to all SC members on 9/5/2018.

        iv. Question: Have you taken into account historical cropping patterns in the basin? Answer: No, not explicitly, but whatever has been pumped at a particular location is most likely tied to crop history and is reflected in historical groundwater elevations.

        v. Question: How do you take into account previous droughts or future droughts? Answer: Droughts are seen in the historical groundwater levels and we're going to define violations to thresholds in the future (e.g. could be based on number of wells below threshold in a normal year, % of wells in a dry year, etc.)

        vi. Question: How far back does the DWR completion well database go back? Answer: In a review of the DWR database records for the Merced Subbasin, the "Date Work Ended" field (assumed to be well construction date) has entries as far back as 1941, though about 12% of all records have no date available.

        vii. Concern was expressed by several Stakeholder Committee (SC) members and the Leadership Council for Justice and Accountability that having a threshold near the shallowest domestic well depth (25th percentile or higher) may not be protective enough.

            1. Members requested seeing the threshold analysis using the shallowest well instead of 25th percentile for reference purposes.

viii. Question: Will thresholds be set for the whole basin vs areas of the basin? Answer: Thresholds are set at a specific monitoring well only but are meant to be representative of the entire basin in total.

ix. Question: Why aren't we using elevation thresholds to inform management areas? Answer: Thresholds are for measuring implementation of the plan and not a direct management tool.

x. Public Comment: Timing of spring/fall measurement of CASGEM wells may not align with seasonal peak domestic well pumping (e.g. domestic wells may be temporarily dewatered in August, which wouldn't be caught by March/October monitoring).

xi. Question: Does domestic well data show where the pumps are? Answer: No, it's not consistently part of the dataset.

xii. Question: Were disadvantaged communities overlaid or incorporated in the spatial portion of the analysis? Answer: No, we included all confirmed CASGEM wells, but disadvantaged community locations can be something we use when actually selecting the wells that will be used for regulatory purposes.

xiii. Marco Bell (Merced Irrigation District [MID]) noted that MID does record biannual measurements from production wells (e.g. not dedicated monitoring wells) as long as they're not actively running (e.g. static conditions) and meet other CASGEM program requirements.

c. Degraded Water Quality

i. Alyson Watson (Woodard & Curran) provided an overview of constraints on measuring and setting thresholds for groundwater quality constituents. SGMA will involve a focus on understanding issues and coordinating with other agencies who are managing water quality efforts.

ii. Questions: If GW elevations decline to a certain point, there may be drinking WQ issues, so how do we plan to handle this? Answer: This is going to be covered under setting minimum thresholds for groundwater elevations based on undesirable results.

iii. Comment: Growers require high quality water, so if growers encounter a saline well, it doesn't get used. Thus it's been somewhat of a self-regulating issue. Areas of high salinity will see crops that are salt-tolerant.

d. Land Subsidence

i. Question: Why don't we use actual subsidence values or rates (e.g. ft/yr) as a threshold? Answer: It is hard to accurately predict subsidence rates in order to develop our threshold and the Subbasin has no way to correct inelastic subsidence should a violation occur, but a related way to measure would be to use groundwater elevations as a surrogate with 1/1/2015 levels as a goal.

e. Depletion of Interconnected Surface Water

i. Comment: The areas where connectedness exists are very sandy and have a high salt content.

ii. Hicham ElTal (MID) noted that the Merced River is a gaining river (groundwater provides to the river) and when wells pump along the river, the river level goes down. Additionally, MID

has recently added two groundwater elevation measuring points along the lower portion of the Merced River.

iii. Question: Can the Merced GSP emphasize that the San Joaquin River needs more water to help groundwater levels? Answer: Potentially yes, if we can link river flows to undesirable results for groundwater.

3. Projected Water Budget

    a. Multiple comments related to sustainable yield assumptions will change a lot of depending on State Water Board decision on the Substitute Environmental Document (SED) for Lower San Joaquin River and Southern Delta. (ability to manage flood flows and recharge as much as possible is important)

    b. Question: How much will we be including snowpack changes in future (different beyond historical hydrology)? Answer: We'll be including a climate change analysis, though it inherently considers a longer timescale beyond our 25 year regulatory horizon.

4. Public Outreach Update

    a. Charles Gardiner (Catalyst Group) provided a summary of discussion and comments recorded during the August 2 public workshop presentation.

    b. Comment: Having this workshop was valuable and important to inform the public about the process.

    c. Comment: We can bring more people to workshops by coordinating with Municipal Advisory Councils (MACs)

    d. Self-Help Enterprises will be using some of their DWR grant funding in Merced to continue door-to-door outreach before workshops as well as neighborhood meetings.

5. Interbasin Coordination Update

    a. A preliminary meeting was held with the Chowchilla Subbasin to facilitate information sharing.

    b. The Turlock Subbasin meeting series is ongoing but it was noted that Turlock has a SGMA deadline 2 years behind Merced.

    c. Preliminary Delta-Mendota Subbasin discussions have started and formal meetings will be scheduled soon.

6. Public Comment on Items not on the Agenda

    a. No comments were made.

7. Next Steps and Next Meeting

Next Regular Meeting
September 24, 2018 at **9:30 a.m.**
Castle Conference Center, 1900 Airdrome Entry, Atwater, CA
Information also available online at mercedsgma.org

Note: If you need disability-related modification or accommodation to participate in this meeting, please contact Merced County, Community and Economic Development staff at 209-385-7654 at least 48 hours prior to the start of the meeting.

MEETING MINUTES – Merced GSP

SUBJECT: Merced GSP Stakeholder Committee Meeting #5

DATE/TIME: September 24, 2018 at 9:30 AM

LOCATION: Castle Conference Center, 1900 Airdrome Entry, Atwater, CA

Stakeholder Committee Members In Attendance:

	Representative	Community Aspect Representation
☐	Alex McCabe	City of Livingston
☒	Arlan Thomas	MIDAC, growers
☒	Ben Migliazzo	Live Oak Farms, growers
☒	Bill Spriggs	City of Merced, Merced Irrigation District
☒	Bob Salles	Leap Carpenter Kemps Insurance, insurance industry and natural resources
☒	Brad Robson	Buchanan Hollow Nut Co. Le Grand-Athlone Water District, growers
☒	Breanne Ramos	Merced County Farm Bureau
☒	Brian Carter	D&S Farms, growers
☐	Carol Bonin	Winton M.A.C.
☒	Daniel Machado	Machado Backhoe Inc., construction industry
☒	Darren Olguin	McSwain MAC
☐	Frenchy Meissonnier	Rice Farmer, rice growers
☒	Galen Miyamoto	Miyamoto Farms
☒	Gino Pedretti III	Sandy Mush Mutual Water Company
☒	Greg Olzack	City of Atwater resident
☐	James (Jim) Marshall	City of Merced
☒	Joe Scoto	Scoto Bros Farms / McSwain Union School District
☐	Ladi Asgill	East Merced Resource Conservation District / Sustainable Conservation
☒	Maria Herrera	Self-Help Enterprises
☒	Mark Maxwell	University of California, Merced
☒	Maxwell Norton	Retired agricultural researcher
☒	Parry Klassen	East San Joaquin Water Quality Coalition, growers
☒	Rick Drayer	Drayer Ranch, Merced cattlemen
☒	Simon Vander Woude	Sandy Mush Mutual Water Company, dairies

Meeting Minutes

1. Welcome, Introductions, and Agenda Review

    a. Introduction and overview of agenda items given by Charles Gardiner (Catalyst Group)

    b. There were no comments for the past meeting minutes. Comments and questions from past meeting minutes and further input can be sent via email to Woodard & Curran.

2. Minimum Thresholds Update

    a. Alyson Watson (Woodard & Curran) provided a review of the sustainability criteria and an update on the methodology used for developing minimum thresholds for groundwater levels.

    b. Clarifying questions were asked about the data source and characteristics of the Voluntary CASGEM wells and Domestic Wells from Merced County Database.

    c. Question: How does a well get populated in the Merced County Database? Answer: Well drilling requires a permit and has been required for several decades. The electronic version of the database includes all permitted domestic wells installed from the mid-1990s onward.

    d. Question: Are there a sufficient number of wells to set minimum thresholds around vulnerable communities? Answer: There are still gaps in certain areas, but if there isn't a history of monitoring in that area, then it is difficult to set thresholds there. There is good coverage overall but part of the GSP will involve developing additional monitoring locations in these types of areas.

    e. Question: Do minimum thresholds and a 3-mile radius around monitoring wells end up translating to individual management areas? Answer: The monitoring wells are meant to be indicative of the entire Subbasin. The 3-mile radius is used to select nearby domestic wells for analyzing undesirable results. We will be selecting a subset of monitoring wells to ultimately report long-term to the State for SGMA compliance.

    f. Question: Will SGMA compliance be determined based on seasonal measurements reported to CASGEM (e.g. March and October measurements influenced by seasonality)? Answer: Each GSP defines its compliance/violation standards and it will vary year-to-year as there are wet/dry cycles. Criteria will be developed that account for seasonal and year-to-year variations.

    g. A concern was raised that on the minimum thresholds map for groundwater elevations, the "white area" (unincorporated) on east side of Subbasin has no wells representation. Answer: At the next meeting, we can put together a map of all the wells used in the Merced Water Resources Model (MercedWRM) in that area.

    h. Question: Agricultural wells are much deeper than domestic wells (typically), so will they be included in the analysis? Answer: Because they're typically deeper, they're expected to be covered by this methodology which is protecting the shallowest wells.

    i. Public comment: Hitting thresholds may be economically infeasible and a future iteration may need to include ways to deliver water to shallow domestic users as a more efficient way of mitigating undesirable results.

    j. Question: How many monitoring wells are there in total and how many are driven by the domestic well depth for the minimum threshold? Answer: There are 65 monitoring wells total and 25 of them (38%) are driven by the shallowest domestic well to set the minimum threshold.

3. Hydrogeologic Conceptual Model

    a. Alyson Watson (Woodard & Curran) provided an overview of the HCM section of the GSP and some example maps that will be included in the section writeup that will be provided for SC member review in the next few months.

    b. Question: Will the plan be periodically updated to account for new information/data on water quality Constituents of Concern (COCs) in the future? Answer: Yes.

4. Projected Water Budget and Sustainable Yield

    a. Alyson Watson (Woodard & Curran) provided a reminder on the assumptions and results of the projected conditions baseline groundwater budget, as well as a presentation of the initial results of sustainable yield groundwater budget.

    b. Public Question: Has the City of Merced possible use of surface water for drinking water been included in projected water budget? Answer: No, but it may be considered as a future project and we'd need more details/parameters on that use.

    c. Question: Why does net deep percolation show as very similar across all 50 years (would expect to see large variation due to hydrology)? Answer: Net deep percolation comes primarily from agricultural use and not precipitation, since the sum of agriculture and precipitation will be roughly the same regardless of hydrology.

    d. Additional clarifying questions were asked about basin inflow from Sierra Nevada Mountains, which is largely seen in gain from streams (surface water) and less so from boundary inflow (long-term migration of groundwater from the eastern boundary).

    e. Public question: If you reduced pumping by an amount equal to the "Change in Storage" number, will we be in balance? Answer: Not exactly – there are a lot of interrelated complicating factors that respond to one another, such that reducing pumping has multiple different effects on other items in the balance.

    f. Question: Will the recent public trust doctrine court case (*Environmental Law Foundation vs. State Water Resources Control Board*) affect our "Gain from Streams" inflow value? Answer: No, because it's a natural system where inflow happens naturally. We will need to look at if pumping has a negative impact on stream level.

    g. Question: A localized project will help a localized area, but how do our geographically spaced projects help the whole Subbasin? Answer: A local project will still have an impact on the basin-wide water budget. It will also have localized impacts on groundwater elevations.

    h. Several clarifying questions were asked about what the basin-average sustainable yield allocation means and what it applies to (e.g. it is based on gross acres across the entire basin, since some landowners may have rights to pump even if they're not pumping now) and where the reductions in pumping occurred in the modeled scenario (across all uses on all acres). It was explained that the 1AF/ac is simply a calculation of the projected sustainable yield of the basin divided by gross acres and is not meant as a suggested management action allocation.

5. Public Outreach Update

    a. Charles Gardiner (Catalyst Group) provided an update to public outreach efforts, including planning for a public meeting in early December.

6. Interbasin Coordination Update

    a. The project team held an initial meeting with Delta-Mendota Subbasin representatives, but it looks like further coordination efforts won't begin until early 2019 as the Delta-Mendota Subbasin is farther behind Merced Subbasin's efforts due to a complex organizational structure of multiple GSAs and GSPs.

7. Substitute Environmental Document (SED) Update

    a. Hicham ElTal (Merced Irrigation District) provided an explanation of what SED is and some associated details about how it was developed and some potential impacts it may have on surface water flows to the San Joaquin River.

8. Public Comment on Items not on the Agenda

    a. No public comments were raised.

9. Next Steps and Next Meeting

Next Regular Meeting
October 22, 2018 at **9:00 a.m.**
Please note the ½ hour earlier start time for special topics
Castle Conference Center, 1900 Airdrome Entry, Atwater, CA
Information also available online at mercedsgma.org

Note: If you need disability-related modification or accommodation to participate in this meeting, please contact Merced County, Community and Economic Development staff at 209-385-7654 at least 48 hours prior to the start of the meeting.

MEETING MINUTES – Merced GSP

SUBJECT: Merced GSP Stakeholder Committee Meeting #6

DATE/TIME: October 22, 2018 at 9:00 AM

LOCATION: Castle Conference Center, 1900 Airdrome Entry, Atwater, CA

Stakeholder Committee Members In Attendance:

	Representative	Community Aspect Representation
☐	Alex McCabe	City of Livingston
☒	Arlan Thomas	Merced Irrigation District Advisory Committee (MIDAC), growers
☒	Ben Migliazzo	Live Oak Farms, growers
☐	Bill Spriggs	City of Merced, Merced Irrigation District
☒	Bob Salles	Leap Carpenter Kemps Insurance, insurance industry and natural resources
☐	Brad Robson	Buchanan Hollow Nut Co. Le Grand-Athlone Water District, growers
☐	Breanne Ramos	Merced County Farm Bureau
☒	Brian Carter	D&S Farms, growers
☐	Carol Bonin	Winton M.A.C.
☒	Daniel Machado	Machado Backhoe Inc., construction industry
☐	Darren Olguin	McSwain MAC
☒	Frenchy Meissonnier	Rice Farmer, rice growers
☒	Galen Miyamoto	Miyamoto Farms
☐	Gino Pedretti III	Sandy Mush Mutual Water Company
☒	Greg Olzack	City of Atwater resident
☐	James (Jim) Marshall	City of Merced
☒	Joe Scoto	Scoto Bros Farms / McSwain Union School District
☐	Ladi Asgill	East Merced Resource Conservation District / Sustainable Conservation
☒	Maria Herrera	Self-Help Enterprises
☒	Mark Maxwell	University of California, Merced
☒	Maxwell Norton	Retired agricultural researcher
☐	Parry Klassen	East San Joaquin Water Quality Coalition, growers
☒	Rick Drayer	Drayer Ranch, Merced cattlemen
☐	Simon Vander Woude	Sandy Mush Mutual Water Company, dairies

Meeting Minutes

1. Welcome, Introductions, and Agenda Review
    a. Charles Gardiner (Catalyst) welcomed the group and gave an overview of the meeting agenda.
2. CASGEM Update
    a. Matt Beaman (MID) gave overview of the California Statewide Groundwater Elevation Monitoring program (CASGEM) and an introduction to the Merced Area Groundwater Pool Interests (MAGPI).
    b. CASGEM coordinates between DWR, the State Board, and the public. Elevation data is submitted to DWR, made public, and then DWR draws contours based on this data. DWR has created guidelines for CASGEM.
    c. Question: what does it mean to be in compliance? Answer: groundwater data is submitted to the satisfaction of DWR.
    d. Question: Could pumping above the Corcoran clay layer cause subsidence? What about water quality above this layer? Answer from Hicham ElTal (MID): recharge and pumping above the Corcoran clay layer are very unlikely to cause subsidence. Water quality above the Corcoran is generally not an issue, though there are some saline issues closer to the San Joaquin River.
    e. The CASGEM monitoring plan work from MID is nearly complete. Next steps include expanding coverage, continuing data compliance, instrumenting additional monitoring wells, and finalizing the updated monitoring plan.
3. Presentation by Woodard & Curran on GSP development
    a. Next Steps in GSP Development
        i. Alyson Watson (Woodard & Curran) provided an overview of the GSP Development overall timeline. Current focus is on sustainability goals and projects and management actions.
        ii. SGMA has two focus areas: to halt overdraft and to establish and monitor thresholds over time (i.e. avoid undesirable results). SGMA does not alter surface or groundwater rights.
        iii. The challenge for the Merced Subbasin is to reduce groundwater pumping while minimizing how much total water use must be reduced. Steps to reach sustainable yield are: 1) determine extent of groundwater pumping that is sustainable, 2) determine available surface water, and 3) identify potential deficit between demand and available resources.
        iv. Two areas should be addressed to achieve sustainability: reducing groundwater pumping (e.g. though an allocation framework); and identifying projects and management actions (e.g. that recharge groundwater, enhance surface water availability, and reduce demand).
        v. Question asked about what FERC (Federal Energy Regulatory Commission) flows are and how are these being accounted for. Answer: FERC is explained by Hicham ElTal (MID). This is a dam licensing and relicensing process. Every time a license is renewed considerations related to flows must be taken. With FERC relicensing MID will have to increase water released into the Merced River. MID is still waiting on a final answer for FERC flow. However, an estimate will be incorporated into GSP water budgets.
        vi. Discussion on Subbasin Sustainability:

1. A discussion was held on whether the problem framing and the approach to achieving sustainability is understood. A few key points from committee members are as follows:

    a. It would be good to have public meetings again in the eastern "white area" (gap areas) with a focus on communicating the current problem and creating a sense of urgency to start conserving now.

    b. Messages should be conducted continuously. Advertising can include via social media and media interviews. Simple talking points could be created to give to people and use in interviews. It would also be good to have a one-pager on SGMA and why people should get involved.

    c. People will be interested once we have rules set up for allocation.

    d. It would be good to have a further simplification of terms.

    e. Having a number to quantify how much overall use should be reduced is helpful in understanding the magnitude of the problem.

    f. There will always be demand, and solutions for achieving sustainability will need to consider surface water. Everyone seems to understand that the Subbasin needs groundwater recharge.

    g. UC Merced can also conduct further outreach.

b. Groundwater Rights Primer

    i. Water Rights Attorney Brad Herrema (Brownstein Hyatt Farber Schreck) gave an informational presentation on groundwater rights and potential allocation frameworks under SGMA. (see full presentation details on Merced SGMA website) Questions from group noted below:

    ii. Question regarding the recent Public Trust Doctrine case. Answer: Groundwater extractions can be regulated by SGMA if pumping is affecting neighboring streams. However, SGMA did not preempt the Public Trust Doctrine in applying to groundwater extractions.

    iii. Question asked about impacts to Pre-1914 rights. Answer: pre-1914 water rights only apply to surface water. There are no exemptions from SGMA except for some adjudicated basins. SGMA does not alter water rights.

    iv. Question: How does a basin become adjudicated? Answer: someone has to start the adjudication process. There are some streamlined adjudication processes, but some can last 20 years. What often starts as a one-one case becomes a full basin process.

    v. Clarification provided on dryland pastures and overlying water rights: There's a concept of subordination where the overlying water right could be lost. In Antelope Valley, they were able to pump if they found water (e.g. they purchased a groundwater right or can lease out a right to use during a particular year).

    vi. Question: What have you seen regarding a water credit system? How does that work out? Answer: each basin is different, and this depends on the adjudication.

vii. Question: What about water markets? Answer: There are examples of a portal where people can see what water is available (e.g. water pricing, how much is available). In Chino Basin a portal was not needed because the basin was small.

viii. Question: how will changes in efficiencies of water use be taken into account, especially differences in return flows? Answer from Woodard & Curran: TBD, is something CC will need to consider.

c. Projects and Management Actions

i. Alyson Watson (Woodard & Curran) provided an introduction to projects and management actions. The goal is to implement projects to help achieve sustainability and minimize impacts to groundwater users.

ii. Woodard & Curran has looked through specific plans, contacted GSAs, and reached out to individual land owners as a starting point to gather information on existing projects for discussion. An initial list of these projects was provided.

iii. Committee members recommend looking into the list of grant reports from the Water Resources Control Board maintains for water quality projects.

iv. Committee members also recommended looking into past projects from the Army Corps of Engineers.

v. It is likely that several projects will develop in DAC areas.

vi. Alyson Watson (W&C) gave examples of criteria for assessing projects and invited discussion asking committee members what additional criteria should be considered. Responses included: benefits to DACs, eligibility for funding for DACs, and projects that help with CV-SALTs.

vii. Alyson Watson (W&C) asked committee members to think about whether there are projects we are missing in the initial list. She also asks what other criteria should be used to assess projects. This information should be brought to the next meeting.

viii. DWR representative states that Prob 68 will have funding for SGMA projects.

d. Other Updates

i. Groundwater Data templates and instructions for submitting data have been updated and are available on the MercedSGMA homepage.

4. Public Outreach Update

a. Charles Gardiner (Catalyst) reported that two public workshops will take place in December and will be in two different locations to make sure we are covering different areas of the Subbasin.

5. Interbasin Coordination Update

a. Hicham ElTal has been in contact with Chowchilla regarding subsidence discussions.

6. Public Comment on Items not on the Agenda

a. No public comments.

7. Next Steps and Next Meeting

   a. Several GSP development items anticipated to be discussed in the next meeting including: water budgets and documented assumptions, the data management system, the Hydrogeological Conceptual Model (HCM) GSP section, sustainable yield analysis, and assessment of projects and management actions.

Next Regular Meeting
November 26, 2018 at **9:30 a.m.**
Castle Conference Center, 1900 Airdrome Entry, Atwater, CA
Information also available online at mercedsgma.org

Note: If you need disability-related modification or accommodation to participate in this meeting, please contact Merced County, Community and Economic Development staff at 209-385-7654 at least 48 hours prior to the start of the meeting.

MEETING MINUTES – Merced GSP

SUBJECT: Merced GSP Stakeholder Committee Meeting #7

DATE/TIME: November 26, 2018 at 9:30 AM

LOCATION: Castle Conference Center, 1900 Airdrome Entry, Atwater, CA

Stakeholder Committee Members In Attendance:

	Representative	Community Aspect Representation
☐	Alex McCabe	City of Livingston
☒	Arlan Thomas	Merced Irrigation District Advisory Committee (MIDAC), growers
☒	Ben Migliazzo	Live Oak Farms, growers
☒	Bill Spriggs	City of Merced, Merced Irrigation District
☒	Bob Salles	Leap Carpenter Kemps Insurance, insurance industry and natural resources
☒	Brad Robson	Buchanan Hollow Nut Co. Le Grand-Athlone Water District, growers
☒	Breanne Ramos	Merced County Farm Bureau
☐	Brian Carter	D&S Farms, growers
☐	Carol Bonin	Winton M.A.C.
☐	Daniel Machado	Machado Backhoe Inc., construction industry
☒	Darren Olguin	McSwain MAC
☒	Frenchy Meissonnier	Rice Farmer, rice growers
☒	Galen Miyamoto	Miyamoto Farms
☒	Gino Pedretti III	Sandy Mush Mutual Water Company
☒	Greg Olzack	City of Atwater resident
☐	James (Jim) Marshall	City of Merced
☐	Joe Scoto	Scoto Bros Farms / McSwain Union School District
☐	Ladi Asgill	East Merced Resource Conservation District / Sustainable Conservation
☒	Maria Herrera	Self-Help Enterprises
☒	Mark Maxwell	University of California, Merced
☒	Maxwell Norton	Retired agricultural researcher
☒	Parry Klassen	East San Joaquin Water Quality Coalition, growers
☒	Rick Drayer	Drayer Ranch, Merced cattlemen
☒	Simon Vander Woude	Sandy Mush Mutual Water Company, dairies

Meeting Minutes

1. Welcome, Introductions, and Agenda Review
    a. Charles Gardiner (Catalyst) welcomed the group and gave an overview of the meeting agenda.
    b. There were no changes nor comments to the past meeting minutes.
2. Presentation by Woodard & Curran on GSP development
    a. Jeanna Long (Woodard & Curran) presented on the Data Management System (DMS)
        i. Jeanna Long (Woodard & Curran) provided an introduction to what a DMS is and how this is used. Questions and discussion from the Stakeholder Committee (SC) were as follows:
            1. Question: How long has this system been used or has been in place? Answer (W&C): Since 2010. This has also been used in Sacramento to manage their water resources data. This tool has been customized for the SGMA program and helps enable collection of data from multiple agencies into one place.
            2. Question: Is there a program or effort in place to enable something statewide like this? Answer (W&C): No, not for this data. Comment from committee member: There is, however, statewide data used for emergency management. This may be something the state can pull together based on the information they have.
            3. Jeanna Long (W&C) demonstrated the different filters that can be viewed in the Opti tool, e.g. to zoom in on a well and see the data for that well.
            4. Question: Where is the data from that are currently in the system? Answer (W&C): Much of this is from the previous Integrated Water Resources Management Plan and from SGMA Readiness work for Merced and CASGEM data.
            5. Clarification on well information collected: This information is collected for monitoring and data reporting requirements according to SGMA.
            6. Question: Do we have a way to track where the data came from? Answer (W&C): Data source, importing, and modifications are tracked within the DMS.
            7. Question: How would this help with e.g. if I want to increase fire flows in the City of Atwater? Answer (W&C): it is a matter of scale. Comment from committee member: We did this before and it worked out well as a planning tool.
            8. Comment from Hicham ElTal (MID): Data collected for canals is water quality data.
            9. Jeanna Long (W&C) demonstrated the functionalities of the DMS. Data is still being imported. W&C will send you the link and a user guide for accessing and using the portal once this is complete.
            10. Jeanna (W&C) explained how this will be used for meeting SGMA requirements. It provides participating agencies and entities access to data collected. It enables tracking of thresholds and supports decision making for management actions.
    b. Next Steps in GSP Development

i. Alyson Watson (Woodard & Curran) provided an overview of the GSP Development overall timeline and roadmap plan.

ii. Several comments were provided on the Hydrogeologic Conceptual Model (HCM). However, the majority of SC committee members needed more time to review. Comments provided included:

1. On page 26 determine if fault line is significant for subsidence.
2. Do the maps on pages 38-39 need units?
3. On page 41 clarify what the depth means.
4. Comment for page 50: We have low recharge potential in the Eastern part of the basin.
5. There did not seem to have much information on land use and who depends on this water. Clarification from W&C given that this section is intended to provide the hydrogeologic basin settings. There are other sections that will address land use and water users.
6. Request made for a clarification on the losing and gaining streams interconnection section. This should be provided either via email or next meeting.
7. Request was made to resent the links to the HCM. These were resent during the meeting to the SC.

iii. Alyson Watson (W&C) provided an update on the water budgets and sustainable yields. This update shows the new water budgets that account for the FERC flows. Clarification was given that this is an estimate. The Subbasin will need to reduce pumping by approximately 25% according to the estimates. This is similar to the previous calculations that did not account for updated FERC flows.

c. Water Allocation Frameworks

i. Under SGMA, GSAs have authority to establish groundwater extraction allocations. SGMA and GSPs adopted under SGMA cannot alter water rights. Alyson Watson (W&C) gave a brief overview of the different allocation frameworks to allocate the basin's sustainable yield, their pros and cons, and potential implications for gw users in the basin.

ii. Question: what about management areas? Answer (W&C): GSAs can determine if management areas are needed.

iii. Alyson explained the proposed decision-making timeline. Potential allocation approaches and values to consider are discussed in November. This would continued in December, with a goal of recommending a preliminary allocation approach to the GSA Boards. In January, projects and management actions will be further discussed by the SC and CC.

iv. Question: Where are the undesirable results? And are these clearly defined? Answer (W&C): This is an iterative approach. These were discussed previously but have not been finalized or formalized. These were discussed by sustainability indicator in prior meetings, and they will need to be revisited, finalized, and written up in tandem with consideration of what allocation approaches and projects and management actions are available.

v. Pro Rata Approach: This divides sustainable yield by total basin acreage. Advantages are that this is simple and that it acknowledges existing pumping. Disadvantages include not explicitly accounting for appropriators/prescriptive rights and does not account for unexercised groundwater rights.

vi. Pro Rata Irrigated Areas Approach: Divides the sustainable yield by irrigated and urban areas. It is simple and acknowledges exiting pumping. However, it does not account for unexercised groundwater rights nor account for appropriators/prescriptive rights.

vii. Historical Pumping Approach: This is based on historical use. This is less likely to result in conflict and accounts for appropriators and prescriptive rights. However, it requires more data and if unirrigated acres are excluded this also does not account for unexercised groundwater rights.

    1. Comment from CC: we will need to determine our historical reference point.

    2. Question: this assumes everyone is metered? Answer (W&C): This would require having a way to measure and could result in extensive metering.

viii. Comprehensive Approach: The advantages include less likelihood of conflict and an accounting of appropriative use and prescriptive rights. However, this approach requires data not that are currently available, and does not account for unexercised groundwater rights. The approach requires significant outreach and engagement.

ix. Alyson Watson (W&C) provided key differences. Some approaches do not address prescriptive rights (e.g. pro-rata approach). Some do not consider all acres (pro-rata with irrigated acres, historical or comprehensive based on historical use).

x. SGMA and GSPs adopted under SGMA cannot alter water rights. The group discussed the types of groundwater rights in the basin – overlying users (correlative) rights, prescriptive rights, and developed/imported supplies.

xi. Comment: Can look at historical use to find the ratios of what is used by cities vs agriculture.

xii. Comment: Would be interesting to look into what we can do with a water credit system.

xiii. Discussion comments on allocation frameworks from SC members:

    1. One consideration is to look at the estimates for allocations and see if they will impact cities' abilities to meet public health and safety needs. Water quality is also something that must be considered as some places have a single source.

    2. Who can participate in the market and how this affects disadvantaged communities is also important.

    3. We need to be aware of what happened in the Australian water rights credit system – external firms have come in and are driving up the price of water.

    4. Question: What about management areas? Answer (W&C): Projects and management actions and undesirable results will be revisited to address whether management areas will be needed. This will occur in February next year.

    5. If groundwater is not being banked, it should be possible to store this water and be able to use it later. If we can only use 500,000 TAF a year, can we bank it? I

would be best to save groundwater until it is absolutely needed. If someone doesn't want to credit it, they should be able to bank it. Should not be a use it or lose it.

6. Comment from Hicham ElTal (MID): We will also be making adjustments as we monitor. We can implement an allocations framework and then find later on that this needs to be adjusted.

7. If crop allocation or historical allocation is used, an equitable amount should be determined (e.g. how many acre feet does it take to grow almonds). However, this is not cut and dry, and depends on soil type and water quality.

8. When looking at historical use, the subbasin should avoid rewarding inefficient use.

9. Having numbers with allocation scenarios will help us to know which allocation frameworks are best.

d. Projects and Management Actions (Discussion)

i. Projects and Management Actions were discussed with a series of questions. The following are the general responses from the SC. Many of which were relevant for several questions:

1. Idea suggested of why not spend the first 5 years on enhancing supply (all supply) and then look at allocation frameworks?

2. Use of purple/recycled water can be increased.

3. There is funding from the United States Bureau of Recreation for recycled water projects that could be pursued.

4. General agreement that the supply side should be targeted more than demand.

5. However, demand must be reduced because the subbasin is in overdraft. Projects take a long time to achieve, and there are many variables and high uncertainty (e.g. climate change). There are still families relying on tanked water right now.

6. Improving water treatment especially in areas that do not have adequate clean water sources is an important consideration.

7. Quantifiable goals should be set. For example, "the subbasin will increase groundwater recharge by X% in the next 5 years".

8. Clarification on projects and criteria for assessment: It will be necessary to identify funding sources and pathways. The process started with a wide net for a range of projects. At a certain point, we will need to compare projects.

e. Other Updates

i. Monitoring Networks and the DMS sections of the GSP are underway.

3. Public Outreach Update

a. There are two upcoming Public Workshops: Dec. 4th in Planada, and Dec. 13th in Franklin.

4. Interbasin Coordination Update

a. Chowchilla and Delta-Mendota Subbasins will be ready early next year to continue coordination.

5. Public Comment on Items not on the Agenda

   a. Public comment given by Jeff Denham in printed form. This input will be scanned and sent out to the group.

   b. Question asked: Is there excess surface water available in a regular rain year or when we have extra rain? Answer from Hicham ElTal (MID): This depends on a number of factors, including inflows from streams that have to be taken into account.

6. Next Steps and Next Meeting

Next Regular Meeting
December 17, 2018 at **9:30 a.m.**
Castle Conference Center, 1900 Airdrome Entry, Atwater, CA
Information also available online at mercedsgma.org

Note: If you need disability-related modification or accommodation to participate in this meeting, please contact Merced County, Community and Economic Development staff at 209-385-7654 at least 48 hours prior to the start of the meeting.

MEETING MINUTES – Merced GSP

SUBJECT: Merced GSP Stakeholder Committee Meeting #8

DATE/TIME: December 17, 2018 at 9:30 AM

LOCATION: Castle Conference Center, 1900 Airdrome Entry, Atwater, CA

Stakeholder Committee Members In Attendance:

	Representative	Community Aspect Representation
☐	Alex McCabe	City of Livingston
☒	Arlan Thomas	Merced Irrigation District Advisory Committee (MIDAC), growers
☒	Ben Migliazzo	Live Oak Farms, growers
☒	Bill Spriggs	City of Merced, Merced Irrigation District
☒	Bob Salles	Leap Carpenter Kemps Insurance, insurance industry and natural resources
☒	Brad Robson	Buchanan Hollow Nut Co. Le Grand-Athlone Water District, growers
☒	Breanne Ramos	Merced County Farm Bureau
☐	Brian Carter	D&S Farms, growers
☐	Carol Bonin	Winton M.A.C.
☐	Daniel Machado	Machado Backhoe Inc., construction industry
☒	Darren Olguin	McSwain MAC
☒	Frenchy Meissonnier	Rice Farmer, rice growers
☒	Galen Miyamoto	Miyamoto Farms
☒	Gino Pedretti III	Sandy Mush Mutual Water Company
☐	Greg Olzack	City of Atwater resident
☐	James (Jim) Marshall	City of Merced
☒	Joe Scoto	Scoto Bros Farms / McSwain Union School District
☐	Ladi Asgill	East Merced Resource Conservation District / Sustainable Conservation
☐	Maria Herrera	Self-Help Enterprises
☒	Mark Maxwell	University of California, Merced
☒	Maxwell Norton	Retired agricultural researcher
☐	Parry Klassen	East San Joaquin Water Quality Coalition, growers
☒	Rick Drayer	Drayer Ranch, Merced cattlemen
☒	Simon Vander Woude	Sandy Mush Mutual Water Company, dairies

Meeting Minutes

1. Welcome, Introductions, and Agenda Review
    a. Alyson Watson (Woodard & Curran) welcomed the group and went over ground rules.
2. Presentation by Woodard & Curran on GSP development
    a. Alyson Watson (W&C) discussed the GSP timeline and next steps in GSP development. The focus of the meeting is on the groundwater accounting framework and allocation. This will flow back into projects and management actions.
    b. Comments on the hydrogeologic conceptual model (HCM) were received and will be tracked with the GSP section drafts.
    c. Water Allocation Frameworks
        i. The goal will be to get the Coordinating Committee to the point where the Committee can make a preliminary recommendation to the GSA Boards. The goal for the Stakeholder Committee is to provide feedback and an input to the Coordinating Committee.
        ii. Key points from the previous CC meeting included: A need to address prescriptive rights, and an approach to how to bring in users that are not currently exercising rights but might in the future; agreement on a date range for historical and prescriptive periods; a timeline for implementation; and identification of remedies GSAs have for enforcing allocations.
        iii. Alyson Watson (W&C) provided a brief overview of what authority GSAs have under SGMA.
        iv. Question: Will implementation be monitored? How would GSAs be able to enforce allocations? Answer (W&C): Yes, there will be monitoring, and this is something we will be revisiting.
        v. Question: Where does the GSAs' authority come from? Answer (W&C): This comes from SGMA, which is state law.
        vi. Alyson Watson (W&C) provided an overview of prescriptive and overlying groundwater rights.
        vii. Question: What about those who are pumping water and taking this out of the basin? Answer (W&C): There is a Merced County Ordinance that prevents this. Lacey Kiriakou (County of Merced) confirmed there are no existing permits with the County to pump water out of the basin. A contract that previously permitted this has now expired.
        viii. Question: Will all GSAs be able to have the same enforcement mechanisms? Answer (W&C): Each GSA can determine individually how to enforce allocations, which must be approved by the GSA board (e.g. fees). Each GSA has the discretion to create their own rules.
        ix. Additional comments were provided and recorded via flipchart paper. These are summarized as follows:
            1. Comment: There should be a single structure in place to have a uniform fee structure across GSAs (should have consistency across GSAs).

2. Comment: Within the Merced Irrigation District (MID) area, there are those who pump and those who don't. Commentator does not see MID permitting a rate structure to some areas.

3. Revised previous comment: There should be a single structure as much as possible, but some areas may require a different structure.

4. Comment: Population projections seem a little high and might need to be adjusted.

5. Clarification (W&C): The money collected from fees established by the GSAs goes to the GSAs.

6. Comment (summary): Examples of potential different timeframes for allocation calculations include 2006-2015, 2006-2010, 1995-2015.

7. Clarification from MID: MID seepage is reserved for MID because this is developed water, and the rest is available for the allocation framework.

x. Rights to groundwater imported to a Subbasin:

1. Alyson Watson (W&C) clarifies that developed water is water that is imported into the Subbasin. This includes seepage of conveyed surface water that reaches the groundwater basin. It is the property of those who have brought that water into the basin.

2. Clarification (W&C): Seepage from developed water will have to be accounted for within sustainable yield/water budget calculations. This information will have to be monitored and the amounts agreed upon.

3. Question: This explanation is in existing state water law? Answer (W&C): Yes, this is consistent with CA groundwater law. The source of information from today's presentation and a good summary of CA groundwater rights law and SGMA is: *Groundwater Pumping and Allocations under California's Sustainable Groundwater Management Act*, Environmental Defense Fund, July 2018

xi. Alyson Watson (W&C) provided examples of allocation methods. The goal is to see how close the Subbasin can get to a comprehensive approach for allocation. There is not adequate time or data resources to do a full comprehensive approach.

xii. Alyson Watson (W&C) explained revisions made to the sustainable yield analysis. There were some discrepancies with the estimations of flows from the San Joaquin River. This has been recalculated and the outcome is updated estimate of basin sustainable yield is 530,000 af.

xiii. Alyson Watson (W&C) provided a review of the different potential allocation distributions and an example based on historical use is presented. Prescriptive use allocation tables are presented showing two 10-year historical periods and the projected demand in 2040.

1. Comment: Estimations should include a breakdown showing the individual CSDs and mutual water companies.

2. Clarification (W&C): the values shown for Prescriptive Use reflect water use and projected use with projected demand. These are based on Urban Water Management Plans.

3. Question: Where do the numbers for population come from? Answer (W&C): Population for projected conditions of Urban Water Use come from the 2040 projections of available Urban Water Management Plans.

4. Comment: We are going to have growth. It is normal to have an estimation of increased population. Cities as they grow need to have more rigorous conservation efforts. This will come down to household level.

xiv. Alyson Watson (W&C) gave an explanation of a modified application of the comprehensive allocation approach for Merced Subbasin.

1. Question: What about in a water market? If someone does not have an allocation, would they have no skin in the game? Answer (W&C): If there was a water market in place, then potentially yes. However, the GSAs would have to establish a water credit/trading system.

xv. Quantified and Transferable Rights

1. Alyson Watson (W&C) described some details of the Mojave Adjudication process.

2. Questions were asked that will be followed up by the W&C team as follows: What is the process for a new pumper to be added and what is the current status of the lawsuit on Mojave?

3. Comment: We do not want speculators coming into the subbasin.

4. Clarification (W&C): The CC in the last meeting did not say that we cannot do a water market or credit system. They were concerned with outside speculators purchasing land, not using the water on this land, and instead using it for profit elsewhere.

5. Comment: If the Subbasin does a credit system with irrigated lands that can trade back and forth, then this puts non-irrigated acres at a disadvantage.

6. Comment: If a trading system is developed then a discussion about dry range land will be needed.

7. Comment: Yes, if a credit system is pursued, then non-irrigated acres must be taken into account. A partial credit for the non-irrigated acres could be considered.

8. Comment: Non-irrigated lands should be able to have the opportunity to have a partial allocation. When this land is later changed to irrigated lands, allocation would change to a 100% allocation.

9. Comment: It will also be important to consider what happens if land is on more than one GSA.

xvi. Prescriptive based on Historical Use

1. Comment: Using historical data for calculating prescriptive use is more accurate, but the projected calculations will change. Response: This can be updated over time and a selected time period will be needed.

2. Comment: The historical period should use a 20-year time frame, and the Subbasin should consider looking at other adjudication examples.

3. Comment from W&C: The longer the time period, the greater potential change. We can look into shorter and longer timeframes, and can look at the full 95-2015, and 90-2010 periods as examples.

4. Question: Are we including the drought years? Answer (W&C): Yes.

5. Comment: Will have to keep in mind that the years after the drought tend to require more pumping because the water is lower.

6. Question: What does the State Water Regional Control Board decision for Substitute Environmental Document (SED) mean for the Merced Subbasin? Answer Hicham ElTal (MID): On Wednesday the SWRCB adopted the SED. Daniel Chavez found an article in the MercedSunstar that provides some information. This article was sent in electronic form to the committee members.

xvii. Alyson Waterson (W&C) reviewed the conceptual GSP implementation draft timeline and requested feedback from the SC. The feedback and discussion are summarized as follows:

1. Comment: The timeframe seems appropriate, especially considering that we will have to install and create the metering and monitoring networks we're going to use.

2. Comment: What do we need to show in the plan? Answer (W&C): We will need to show milestones into the plan and will need to put our allocation framework into the plan.

3. Question: How detailed should the plan be? Answer (W&C): Details should be included on how to implement the allocation. It is also possible to have a footnote with a "subject to change" clause that communicates the update process.

4. Clarification (W&C): Properties of under 2AF/year of domestic use are considered de minimus users and are not required to be metered according to SGMA.

5. General comment from the group: this is a reasonable timeframe, but we will need to eventually vet with thresholds.

6. Comment: What would be helpful in assisting the SC to think about and provide a recommendation is a quantification of acreages (pastures, etc.), and how many acres are in MID and other service areas.

7. Comment: It will be important to balance between the agricultural and urban users.

8. Question asked about status of projects and management actions. Answer (W&C): There is a current potential projects list. However, once the allocation is further along, this will enable us to identify which projects to target.

9. Question asked about funding mechanisms for projects. Answer (W&C): The W&C team has been looking into some preliminary options and will continue to identify these options as we get closer to our projects discussion.

10. Question: Could installing monitoring systems create opportunity to connect areas that are not currently connected to the system. Answer (W&C): Yes. Comment: Would like to see this put into the 20-year plan.

11. Question: Is there anything that mentions clean drinking water. Answer (W&C): Yes, there will be thresholds related to clean drinking water in the water quality thresholds.

d. Other Updates: A beta link for the Data Management System will be sent out in January.

3. Public Outreach Update

   a. Daniel Chavez asked Merced County to have Merced MACs help set up future public meetings.

   b. The next public workshop will likely occur in February.

4. Interbasin Coordination Update

   a. January and February are expected to have more interbasin coordination activities.

   b. There is an agreement with Turlock. They are on the 2022 timeline and are interested in keeping up with Merced.

5. Public Comment on Items not on the Agenda

   a. There were no comments.

6. Next Steps and Next Meeting

   a. Water Budgets memo to be provided to GSA staff for initial review.

   b. Provide follow-up on questions regarding allocation frameworks for next meeting.

Next Regular Meeting
January 28, 2019 at **9:30 a.m.**
Castle Conference Center, 1900 Airdrome Entry, Atwater, CA
Information also available online at mercedsgma.org

Note: If you need disability-related modification or accommodation to participate in this meeting, please contact Merced County, Community and Economic Development staff at 209-385-7654 at least 48 hours prior to the start of the meeting.

MEETING MINUTES – Merced GSP

SUBJECT: Merced GSP Stakeholder Committee Meeting #9

DATE/TIME: January 28, 2019 at 9:30 AM

LOCATION: Castle Conference Center, 1900 Airdrome Entry, Atwater, CA

Stakeholder Committee Members In Attendance:

	Representative	Community Aspect Representation
☐	Alex McCabe	City of Livingston
☒	Arlan Thomas	Merced Irrigation District Advisory Committee (MIDAC), growers
☒	Ben Migliazzo	Live Oak Farms, growers
☒	Bill Spriggs	City of Merced, Merced Irrigation District
☒	Bob Salles	Leap Carpenter Kemps Insurance, insurance industry and natural resources
☒	Brad Robson	Buchanan Hollow Nut Co. Le Grand-Athlone Water District, growers
☒	Breanne Ramos	Merced County Farm Bureau
☐	Brian Carter	D&S Farms, growers
☐	Carol Bonin	Winton M.A.C.
☒	Daniel Machado	Machado Backhoe Inc., construction industry
☒	Darren Olguin	McSwain MAC
☒	Frenchy Meissonnier	Rice Farmer, rice growers
☒	Galen Miyamoto	Miyamoto Farms
☒	Gino Pedretti III	Sandy Mush Mutual Water Company
☐	Greg Olzack	City of Atwater resident
☐	James (Jim) Marshall	City of Merced
☒	Joe Scoto	Scoto Bros Farms / McSwain Union School District
☐	Ladi Asgill	East Merced Resource Conservation District / Sustainable Conservation
☐	Maria Herrera	Self-Help Enterprises
☐	Mark Maxwell	University of California, Merced
☒	Maxwell Norton	Retired agricultural researcher
☐	Parry Klassen	East San Joaquin Water Quality Coalition, growers
☒	Rick Drayer	Drayer Ranch, Merced cattlemen
☒	Simon Vander Woude	Sandy Mush Mutual Water Company, dairies

Meeting Minutes

1. Welcome, Introductions, and Agenda Review

    a. Alyson Watson (Woodard & Curran) welcomed the group and went over ground rules.

2. Flood-Managed Aquifer Recharge (Flood-MAR)

    a. Hicham ElTal (MID) gave a presentation on Flood-MAR. The presentation included an explanation of public benefits of Flood-MAR and what is required for Flood-MAR to be put into place. He explained current plans and activities for Flood-MAR.

        i. Hicham described the components of the MIDH2O Model (Res-SIM & RAS), as well as the analysis conducted to investigate favorable recharge areas. This analysis included consideration of hydrology and favorable soils. Many areas are already built as residential. Some favorable areas exist around Planada.

        ii. Hicham explained that MID is working with DWR on a tool that the GSAs could own that puts all of these components together. This is called a GRAT (Groundwater Recharge Assessment Tool). This is initially funded by DWR, and then maintained via funding through GSAs. The tool helps determine where are the best areas for recharge, when and how much surface water can be recharged, and costs.

        iii. Water Rights for both surface and groundwater must also be considered. Hicham explained that South of Bear Creek MID has licenses received with the annexation of El Nido, but this is restricted water. State regulation says you can take water if the flow is 90% range of the flow for that day. For example, if you have a creek with capacity of 1000 cfs, can only take water when this is above 900 cfs.

        iv. Hicham explained that there are difficulties including: 1) if water is put on someone's parcel it is difficult to determine whether water is it getting to the groundwater or not, and 2) it is difficult to forecast storm events. Having good forecasting is important because there are a limited number of strong storms during the year, and the Subbasin should use good forecasting to get best use of these storms.

        v. Question: How does Flood-MAR work in practice? Answer from Hicham (MID): The typical scenario is that a storm comes in, flood control dams are put to use, and there is a window of time to notify folks as the water backs up. MID contacts those who are part of Flood-MAR and asks who needs this water. This can be on a rotation basis. The GSAs would have to agree on the diversion. 800-900 cfs can happen often from a storm.

        vi. Question: how would this (Flood-MAR) work as a project on the GSP? Answer from Hicham (MID): this might be hard to quantify but looking at the Merced Study is a good start.

        vii. Question: Is there a Merced streams group now? Answer from Hicham: Yes, there is. However, it does not extend to Deadman and Dutchman, but does go to Sandy Mush.

        viii. Question: Is there a way to make the capacity higher during wet seasons and store water? Reply from Hicham: The Army Corps of Engineers owns the dams. The flood control dams are small. The Mariposa Flood Control Dam near Le Grand may be an option to forecast and store 5,000 AF. The cost of making the other dams larger might not be worth it.

ix. Question: What about the project like the Margarita Dam? Answer from Hicham: This was a very expensive project with very small acreage. More efficient projects should be sought.

3. Presentation by Woodard & Curran on GSP development

   a. Next Steps in GSP Development

      i. Alyson Watson (Woodard & Curran) reviewed the development and the decision-making timeline. Alyson explained that the goal is to discuss and determine an allocation framework and have the CC make a recommendation for the GSA boards. The SC should come up with recommendations to take to the CC group in the afternoon.

      ii. With the allocation framework, the Subbasin attempts to divide the sustainable yield amongst the GSAs. The GSAs will need to determine projects and management actions. The allocations are not likely to take place within the first 10 years of the GSP implementation because there are many technical analyses that will need to take place before the allocations are officially implemented.

      iii. Alyson (W&C) explained that within the first 5 years, the GSP will be focused mostly on monitoring and reporting. Alyson explained a further breakdown of potential activities including project implementation over time periods leading up to 2040.

      iv. Question: Has DWR seen this potential timeline breakdown? Answer from Alyson (W&C): No, this was brought to the CC last week. SGMA legislation allows GSAs to determine how to implement and over what timeframe.

      v. Question: How do we incentivize farmers to not aggressively pump? Answer (W&C): The GSAs will have to determine how to handle this. As allocations are discussed and drafted, there could be a maximum set for how much people are drafting to avoid aggressive pumping, but not penalize inappropriately.

   b. Water Allocation Frameworks

      i. Alyson (W&C) reviewed the list of requests and follow ups from the last meetings with respect to considerations for allocation. She also provided a brief overview of the definition of overlying and prescriptive water rights.

      ii. Question: Is prescriptive a stronger right? A: No, the prescriptive rights are junior to overlying rights.

      iii. Alyson (W&C) explained the meaning of developed water and that the entity that has created the canals to import water into the basin are the owners of that supply.

      iv. Water for the Subbasin comes from 3 buckets: overlying use, appropriation of groundwater, and recovery of seepage of developed surface water supply. These cannot be double-counted.

      v. Alyson (W&C) explained the process for the allocation framework. This includes determining the sustainable yield, subtracting developed supply, and allocating remaining sustainable yield to overlying and appropriative users. The end goal is to come up with a framework for basin-wide management.

      vi. Alyson (W&C) provided an illustration of the allocation framework using numbers estimated from the current analysis.

vii. Alyson explained potential allocation between overlying and appropriative allocations using an analysis of different historical averaging periods.

viii. Question: What are the implications for the GSAs? Answer (W&C): There are slides with this information. Choosing different historical averaging periods results in slightly different allocations between overlying and prescriptive users which would result in different allocations to GSAs depending on their proportion of types of users. This is a policy decision, there is no "right" answer.

ix. Several comments from the SC were provided and are summarized as follows:

1. The drought really influences the overlying more than the appropriative. If we have to pick one would this should be the 10-year period 2006-2015.

2. This is important for the cities as appropriators and for city planning. We will want to think about how this impacts growth of cities.

3. The farther out the time period, the less impact on the drought. A 40-year time frame would be possible. Response (W&C): Yes, but the issue is data, especially for land use change.

4. There should be have more than one drought in the calculation if we consider that these might become more frequent. Response (W&C): True, but again the issue is lack of data to support that analysis.

x. At the end of discussion, the general consensus was that a 10-year period 2006-2015 seems to make sense and will enable including the drought. This can be adjusted later.

xi. Question: For the seepage credit, what if the canal is over some else's (not MID's) property? Answer (W&C): The water itself is still MID's property as the creator of the developed water, it does not matter where on the surface the seepage enters the basin.

xii. Alyson (W&C) explained that in addressing unirrigated lands there is no consistent legal precedent or formal guidance. These lands may have "sleeping" or dormant water rights.

xiii. Alyson (W&C) provided a brief follow up on the Mojave Adjudication example. An individual who was involved in the Chino adjudication stated that millions of dollars are spent on the adjudications. He does not recommend pursuing an adjudication. Suggests if possible, to avoid it.

xiv. Question: What about all of the landowners who have riparian rights? Is there seepage that should be taken into account? Answer (W&C): Not unless they have a developed supply that we can quantify. They are exercising their overlying right and are not an appropriative user. Follow up comment: They could give you what they have submitted to the state board? Answer (W&C): Yes, but the percolation for the conveyance would need to be accounted for as the losses.

xv. Comment: Diagrams would be helpful to better understand seepage and conveyance (how this works).

xvi. Previously, the group had requested an illustration of how partial allocations to currently unirrigated lands would affect overall allocations. W&C provided an illustration based on available data showing partial allocations of 0, 25%, 50%, and 100%. There are roughly 300,000 acres of developed/irrigated acres, and 200,000 acres of undeveloped in the basin.

Key questions are: should there be an allocation for acres that have not historically used groundwater? If so, what is appropriate for a partial allocation? And how can future pumpers be added at a later time?

xvii. Comment from Hicham (MID): The MID Advisory Committee (MIDAC) which is made up of growers is in favor of a 0% allocation for grazing/pasture lands.

xviii. Question: How do management areas work into this? Answer (W&C): We will be looking at these as a next step, after we are able to determine where to look for specific reasons such as avoiding undesirable results.

xix. Question: Are the CSDs included in these breakdowns? Answer (W&C): Some of the CSDs are included, but we are still gathering data for the remaining CSDs.

xx. Question: What about refuge land? Answer (W&C): They are counted within the undeveloped lands. If they have had historical use, they have prescriptive rights.

c. Question and Discussion for Water Allocation Framework recommendations to CC:

i. Clarification (W&C): We are trying to determine if there should be an allocation given to the acres that currently don't use groundwater.

ii. Comment: Some SC members in favor of not giving an allocation (following MIDAC's recommendation). But we should keep the conversation going.

iii. Question: If you own an irrigated acre and a non-irrigated acre – can you transfer this between your properties. Response (W&C): This is something needs to be considered.

iv. Comment: If you have non-irrigated water allocation, there should be language to direct how this water can be used (e.g. how this can be sold and used).

v. Question: How can overlying rights be taken away for undeveloped land? And how can these lands be added for allocation? Answer (W&C): There will need to be a process for how to add these lands. If there is a water market, the undeveloped land owner would stand to lose their ability to sell water allocation.

vi. Comment: Can see the undeveloped land as banking water for irrigated lands. If undeveloped lands don't use it or sell it, they can bank this for use later when irrigated users have greater need and have this be available on a transfer basis. Does not see 100% allocation as feasible but likes the 50%.

vii. Comment: The long term goal should be that we are not worried about allocation, because we have managed sustainably and have implemented projects.

viii. Question: Of the acreage within MID, how much of that acreage is farmed? Answer from Hicham (MID): There is very little undeveloped land left.

ix. Question: Irrigated and non-irrigated land has to be defined. Are drip systems with trees counting as irrigated? Answer from Hicham (MID): Yes. There are a lot of nuances with what is irrigated, or not. We will have to agree on definition of this.

x. Clarification: Fallowed acreage should maintain its allocation

xi. Comment: Along with allocation, we still need to know what we are actually pumping.

xii. Comment: We need to come up with a recommendation, an idea, but this is going to be changed. More importantly, we need meters.

xiii. Comment: 100% allocation is never going to be true for grasslands. It's going to have to be between 50% and 25%.

xiv. Comment: There are MID land owners that pump but could use surface water.

xv. Comment: There should be a starting point for non-irrigated in the middle, not 0%. There should also be language to add non-irrigated lands in the future.

xvi. Comment: Concern that the water for irrigators is a "live or die by water" situation. Should have a 1.25 AF/A amount allocation for irrigated lands.

4. Data Management System

    a. Alyson Watson (W&C) gave a brief introduction to the beta link for the DMS. This has been sent out to the group via email.

5. Other Updates

    a. Projects are being reviewed. There are currently 40 in the draft list as of this meeting. These will be reviewed in more detail in the next meeting.

6. Public Outreach Update

    a. Feedback provided from the SC that the summary of the workshops is done well.

7. Interbasin Coordination Update – none.

8. Public Comment on Items not on the Agenda

        i. Breanne Ramos gave information on the Water Symposium Hosted by the Merced County Farm Bureau.

9. Next Steps and Next Meeting

Next Regular Meeting
February 25, 2019 at **9:30 a.m.**
Castle Conference Center, 1900 Airdrome Entry, Atwater, CA
Information also available online at mercedsgma.org

Note: If you need disability-related modification or accommodation to participate in this meeting, please contact Merced County, Community and Economic Development staff at 209-385-7654 at least 48 hours prior to the start of the meeting.

MEETING MINUTES – Merced GSP

SUBJECT: Merced GSP Stakeholder Committee Meeting #10

DATE/TIME: February 25, 2019 at 9:30 AM

LOCATION: Castle Conference Center, 1900 Airdrome Entry, Atwater, CA

Stakeholder Committee Members In Attendance:

	Representative	Community Aspect Representation
☐	Alex McCabe	City of Livingston
☐	Arlan Thomas	Merced Irrigation District Advisory Committee (MIDAC), growers
☒	Ben Migliazzo	Live Oak Farms, growers
☐	Bill Spriggs	City of Merced, Merced Irrigation District
☒	Bob Salles	Leap Carpenter Kemps Insurance, insurance industry and natural resources
☐	Brad Robson	Buchanan Hollow Nut Co. Le Grand-Athlone Water District, growers
☒	Breanne Ramos	Merced County Farm Bureau
☒	Brian Carter	D&S Farms, growers
☐	Carol Bonin	Winton M.A.C.
☒	Daniel Machado	Machado Backhoe Inc., construction industry
☒	Darren Olguin	McSwain MAC
☐	Frenchy Meissonnier	Rice Farmer, rice growers
☒	Galen Miyamoto	Miyamoto Farms
☒	Gino Pedretti III	Sandy Mush Mutual Water Company
☐	Greg Olzack	City of Atwater resident
☐	James (Jim) Marshall	City of Merced
☒	Joe Scoto	Scoto Bros Farms / McSwain Union School District
☒	Ladi Asgill*	East Merced Resource Conservation District / Sustainable Conservation
☒	Maria Herrera	Self-Help Enterprises
☒	Mark Maxwell	University of California, Merced
☒	Maxwell Norton	Retired agricultural researcher
☒	Parry Klassen	East San Joaquin Water Quality Coalition, growers
☒	Rick Drayer	Drayer Ranch, Merced cattlemen
☒	Simon Vander Woude	Sandy Mush Mutual Water Company, dairies
	*Jean Okuye attended as alternate for Ladi Asgill	

Meeting Minutes

1. Welcome, Introductions, and Agenda Review

    a. Charles Gardiner (Catalyst) welcomed the group and went over ground rules.

2. Presentation by Woodard & Curran on GSP development

    a. Alyson Watson (Woodard & Curran) communicated goal of SC meeting is to provide input to the CC on the draft list of projects for the first iteration of the 2020 GSP.

    b. Alyson Watson (W&C) briefly described the state intervention that would be triggered if there is no adopted GSP by the deadline. Several questions were asked as follows:

        i. Question: Will our GSP have a *de minimus* fee? Answer (W&C): This will need to be determined by the GSAs.

        ii. Question: What happens if we have something adopted and then 5 or 10 years down the road, we are not compliant? Answer (W&C): W&C will follow up on confirming specifics for this process.

        iii. Clarification on *de minimus* users (W&C): These users who extract 2 AF or less per year for domestic purposes are subject to SGMA but cannot be required to meter. These are generally private users.

    c. Water Allocation Framework

        i. Alyson Watson (W&C) briefly reviewed the water allocation framework under consideration by the CC and explained that it is a framework to allocate the sustainable yield of the basin to each of the GSAs. The GSAs have discretion to determine how they allocate to their users.

        ii. Alyson (W&C) provided a summary of feedback from the GSAs. Main points included: making metering a priority in the first 5 years, recommendation for a 10-year historical baseline, consider population growth and infill for cities, and establishing thresholds during period 2020-2030 to prevent over pumping.

        iii. Clarification given (W&C) that GSAs will have the ability to enforce allocations through fees.

        iv. Clarification given (W&C) that the water allocation framework will not go into effect immediately once the GSP is approved. There is a lead time including an outreach period to help ensure users are categorized correctly.

        v. Comment from SC member: Member disagreed with not metering residential acres. Stated this would be good for planning.

        vi. Clarification given on conceptual timeline for allocation framework: The allocation framework is established first, followed by consideration for projects. The goal is to investigate how both will avoid undesirable results.

        vii. Question: Will these results be made available to SC? Answer (W&C): Yes, but these are not complete yet.

viii. Question: Will the team run the project list through the model? Answer (W&C): Not all projects. The point of today is to look at priorities that help narrow the project list.

ix. Comment: We should consider areas like the ranches in Mcswain that have landscape that can use a lot of water. Specifically consider whether they will be metered.

x. Comment: A policy for *de minimus* users should be developed. Other basins have done this based on an analysis of what these users are extracting and on knowledge of the region.

xi. Input from W&C: Yes, and there will also need to be a mechanism for people to have an opportunity to contest this policy.

xii. Comment: The City of Merced is 100% metered. Residential usage is generally half an AF/Y. Agricultural use is significantly higher than urban use on a per acre basis.

xiii. Question: Are high density houses included in this estimate for City of Merced? Answer (commentator): Yes, and these use even less AF/Y.

xiv. Question: What is meant by determining partial allocations for rangeland? Answer (W&C): GSAs have to decide how to determine what this allocation should be and consider assumptions of what to do in the case of water market. For example, what must be considered in trying to prevent outside investment.

d. Projects and Management Actions

i. Alyson reviewed the conceptual implementation timeline with respect to projects. Outreach will be important throughout this process. Updates will be every 5 years.

ii. Comment: The allocation program should be phased in during the 2025-2030 time period.

iii. Comment: SC should and is ready to start groundwater recharge projects. Projects should be started as soon as possible. Everyone in the basin needs to contribute in some way. Cities can set up their projects individually. This has been explored for a long time – need temporary use of working farmland. Details will have to be worked out by the governing bodies once we get that point.

iv. Comment: Need to be working on securing grant funding to implement projects as soon as possible because this will take time.

v. Comment: Projects for demand management will be painful. Should focus on recharge and supply projects first.

vi. Alyson Watson (W&C) briefly explained the number of projects by GSA and their allocation.

vii. The group discussed the permitting constraints around storing riparian water and flood flows. MID has proposed applying for a single Long Term Permit for Flood flows from the SWRCB. MBK will be providing a presentation to the CC next month on this topic.

viii. Alyson Watson (W&C) asked the SC several questions including: What projects, programs, or actions do you see as the highest priority for the basin? What further questions or concerns do you have in considering projects? Which projects should be in a short list vs. a general running list of potential projects? Are there additional projects that can help the GSP address groundwater quality issues? Input from the SC discussion on projects & management actions is summarized as follows:

1. Projects that already have funding should be prioritized.
2. It is important to understand what permits or regulatory requirements are applicable for each project.
3. Projects that result in direct GW recharge should be prioritized.
4. Go BIG project would address basin issues.
5. Projects should help address areas where there is the greatest need.
6. The Environmental Quality Incentives Program (EQIP) is a USDA funding program that can be used to for meters. This is a very good program.
7. The subbasin should also consider water quality projects from the SWRCB.
8. GSAs will also have responsibility to ensure continued pumping and access for areas needing water. This should be tied to minimum thresholds and avoiding undesirable results. Creating a fund for mitigation will be important to address needs arising between now and next 10 years. The sooner revenue is collected for that the better the state of the subbasin.
9. There are water treatment facilities, e.g. ponds in the Franklin-Beechwood area, that are antiquated and need to be addressed.
10. Addressing water quality is a part of any recharge program.
11. Comment from Hicham (MID): Have to consider with in lieu recharge, you are saving groundwater so that you can pump it when you need it. States he is not in favor of recycled water recharge because there are risks in introducing pathogens or poor water quality. It is better to keep groundwater where it needs to be. We can look at conveyance facilities that have an issue moving the water currently. This has the best cost/benefit ratio.
12. The subbasin will need to address the subsidence issue because this is part of why we were identified as a critically overdrafted basin.
13. Comment from Hicham (MID): MID is doing a study now with the El Nido Canal improvement project. The intent is to move water to subsidence areas and assist monitoring.
14. The subbasin should have near-term actions when it comes to projects.
15. Groundwater recharge, whether in lieu or direct, is important. Understanding permitting and regulatory permitting process is critical. Everyone should participate in finding a solution, including e.g. school districts.
16. Suggestion to limit outdoor watering to two days as general policy.
17. If the governor declares a drought emergency, then a 2 days policy is enforced. Per current ordinance, existing policy is 3 days for City of Merced.

18. Everyone should contribute. However, the way in which they contribute (e.g. pay) also depends on the user (e.g. ability to pay). Some people are going to benefit more than others.

19. General consensus from SC group: If you are a groundwater user then you will have to pay or contribute somehow to the solution for the subbasin.

20. Priority should go to those projects which are in planning and funding stages.

21. The Go Big Super-Connect project would cover the most area with the most recharge potential.

22. Comment from Charles Gardiner (Catalyst): The subbasin could look at conveyance projects that are not as large and are near-term.

23. Comment from Hicham (MID): MID's Main Canal has been under the purview of Amy Corps Engineers for flood control. MID could move water outside of MID starting March onward, but no one wants it then (e.g. could move 2,000 cfs from Bear Creek). Automation and capacity would be the first things to target. These could be one of the projects. We know what is in MID and where we could recharge, but outside MID we need to work with folks in the basin and see how we can move that water.

24. Question: Could the SC suggest to the GSAs that constant drought conditions regulations be put in place? (e.g. in restaurants water given when requested) Answer (W&C): Municipalities have the authority to enforce conservation, but the GSAs could work with the cities to encourage this. GSAs could apply for funding for the cities to implement a conservation program.

25. Question: Are there areas within our basin we know have the greatest need – is there a way to determine where these areas are? Answer: There are areas where undesirable results have occurred in the past. The area serviced by the Trucked Water Program is an example.

26. Comment: The areas with potentially greatest need are located along the eastern side of the subbasin.

27. Comment from Hicham (MID): There may be $5-10M in funds for implementing projects. This is a rough estimate.

e. Next Steps in GSP Development

    i. Alyson Watson (W&C) reviewed the timeline for draft GSP development.

f. Other Updates

    i. Beta test link is available for the Merced GSP data management system.

3. Public Outreach Update

    a. The next public workshop takes place in Livingston this evening.

4. Interbasin Coordination Update

a. None. Interbasin coordination is expected to pick up in the next couple of months.

5. Public Comment on Items not on the Agenda

    a. None.

6. Next Steps and Next Meeting

    a. Projects and Management Actions review

    b. Minimum Thresholds and Measurable Objectives

Next Regular Meeting
March 25, 2019 at **9:30 a.m.**
Castle Conference Center, 1900 Airdrome Entry, Atwater, CA
Information also available online at mercedsgma.org

Note: If you need disability-related modification or accommodation to participate in this meeting, please contact Merced County, Community and Economic Development staff at 209-385-7654 at least 48 hours prior to the start of the meeting.

MEETING MINUTES – Merced GSP

SUBJECT: Merced GSP Stakeholder Committee Meeting #10

DATE/TIME: March 25, 2019 at 9:30 AM

LOCATION: Castle Conference Center, 1900 Airdrome Entry, Atwater, CA

Stakeholder Committee Members In Attendance:

	Representative	Community Aspect Representation
☐	Alex McCabe	City of Livingston
☒	Arlan Thomas	Merced Irrigation District Advisory Committee (MIDAC), growers
☒	Ben Migliazzo	Live Oak Farms, growers
☒	Bill Spriggs	City of Merced, Merced Irrigation District
☒	Bob Salles	Leap Carpenter Kemps Insurance, insurance industry and natural resources
☒	Brad Robson	Buchanan Hollow Nut Co. Le Grand-Athlone Water District, growers
☒	Breanne Ramos	Merced County Farm Bureau
☒	Brian Carter	D&S Farms, growers
☐	Carol Bonin	Winton M.A.C.
☒	Daniel Machado	Machado Backhoe Inc., construction industry
☒	Darren Olguin	McSwain MAC
☐	Frenchy Meissonnier	Rice Farmer, rice growers
☒	Galen Miyamoto	Miyamoto Farms
☒	Gino Pedretti III	Sandy Mush Mutual Water Company
☐	Greg Olzack	City of Atwater resident
☐	James (Jim) Marshall	City of Merced
☒	Joe Scoto	Scoto Bros Farms / McSwain Union School District
☒	Ladi Asgill*	East Merced Resource Conservation District / Sustainable Conservation
☐	Maria Herrera	Self-Help Enterprises
☒	Mark Maxwell	University of California, Merced
☒	Maxwell Norton	Retired agricultural researcher
☒	Parry Klassen	East San Joaquin Water Quality Coalition, growers
☒	Rick Drayer	Drayer Ranch, Merced cattlemen
☐	Simon Vander Woude	Sandy Mush Mutual Water Company, dairies
	*Jean Okuye attended as alternate for Ladi Asgill	

Meeting Minutes

1. Welcome, Introductions, and Agenda Review
    a. Charles Gardiner (Catalyst) welcomed the group and reviewed the agenda items for the meeting.
2. Presentation by Woodard & Curran on GSP development
    a. Projects and Management Actions
        i. Alyson Watson (Woodard & Curran) provided a brief overview of the GSP Conceptual Timeline.
        ii. Tess Sprague (Woodard & Curran) gave description of the work to date on updating the Projects and Management Actions lists and reviewed the handout contents. Handouts contained the draft shortlist and running list of current potential projects for consideration in the GSP.
        iii. General input from Stakeholder Committee members and interested public:
            1. Water for habitat should be considered in the priorities for shortlisted projects.
            2. The importance of recharge and conveyance projects stressed, especially in the early phases of GSP implementation.
            3. Projects to be implemented in the first five years should include projects related to monitoring, reporting, data modeling, and studies that assist in gathering needed data.
            4. Priority should also be given for projects addressing subsidence.
            5. A “fatal flaw” filter should be applied, whereby a project should be removed from the list if the relevant implementing agency has already indicated it will not support the project.
            6. Drinking water should be a priority for shortlisted projects.
            7. Priority should also be given to projects that provide incentives to reduce pumping and to capture surface water, especially those that encourage capture of flood flows and purchasing of out of district water).
    b. Climate Change Analysis
        i. Alyson Watson (W&C) gave an introduction to the climate change analysis. Merced Subbasin GSA is using DWR provided climate change factors and is following the DWR approach.
        ii. Question: DWR has projected increase in evapotranspiration? Answer (W&C): Yes.
        iii. Question: Can you explain evapotranspiration? Answer (W&C): Evapotranspiration is essentially the water demand of the crop. This can also be influenced by precipitation.

iv. Question for follow up: Is DWR updating the climate change modeling? (Every 5 years?) Answer: We assume that this data is will not stay the same up until 2040. It is likely subject to change. There is a guidance document from DWR that provides further information. (Link to guidance document here)

v. Comment: With the 2020 deadline we should use the DWR data and hopefully get enough data after this point to make the output more locally relevant.

vi. Comment: There is no harm in including climate change in the GSP analyses, but there are more pressing issues until 2020.

vii. Question: What is the order of magnitude difference with the perturbation (change) factors? Answer: W&C to follow up and get this information from the analysis and DWR data.

c. Next Steps in GSP Development

i. Alyson Watson (W&C) reviewed the anticipated timeline and release of chapters for the Merced Subbasin GSP.

ii. Question: Where are the GSAs at with approving these parts? Answer (W&C): Major sections and particularly the water budget has been sent out to the GSA staff for review and comment as technical memos.

d. Other Updates

i. Alyson Watson (W&C) gave an overview of the preliminary work completed for Undesirable Results and addressed the Sustainability Goal. These will be revisited in the next meeting with greater focus on the Undesirable Results.

ii. Alyson explained what thresholds are in general and what does it mean to violate a threshold. Alyson gave a brief description for each sustainability indicator and what an Undesirable Result could be for each.

iii. Question: Are subsidence and loss storage the same thing? Answer (W&C): Storage is about whether there is sufficient storage to meet the needs of the users, whereas land subsidence is whether land subsidence is occurring because of a depleted aquifer and is causing changes to land elevation.

iv. For depletions of interconnected surface water, potential Undesirable Results may include effects on operations of upstream reservoirs and or reduction in viability of agriculture, fishery production, riparian habitat, and recreation usage.

v. Alyson provided an example of the approach that is in progress for next steps: To generate analysis under the sustainable yield scenario and consider groundwater elevations to set Minimum Thresholds.

vi. Question: Is this analysis done by your (W&C) modelers? Answer: Yes, we took the cumulative storage run, pulled the well data, and conducted the modelling analysis.

vii. Question: Are we confident that the Minimum Thresholds aren't too low? Answer: No, and this is the purpose of the continuing the analysis to get clarity on appropriate threshold levels.

viii. Question and clarification on what is in the example shown on slide 25: The example shows whether the well would be dewatered (a potential Undesirable Result) over time. It shows historical data, depth to ground water, and the projected levels with the Sustainable Yield scenario.

ix. The analysis helps determine what is an Undesirable Result, and where the Minimum Threshold should be. For example, a threshold can be set to the level at which you are up to the point of not dewatering the wells. The next step is to analyze how this works with sustainable yield and see if Undesirable Results still occur with Minimum Thresholds.

x. Question: Will there be a model run completed that includes projects? Answer (W&C): There are a few ways to do this. This is a later step in the analysis process.

xi. Question: What is the policy background for the Minimum Thresholds? Answer (W&C): The policy pursued is to take the historical variation, doubled this and check if dewatered wells occur within a three-mile radius of the CASGEM monitoring wells. We have to determine minimum thresholds and how these are violated.

xii. Question: Are there conceptual monitoring wells? Answer (W&C): CASGEM wells are used for monitoring and compliance. Wells outside of the CASGEM network generally do not have adequate historical data. If outside wells are used, it is important to consider wells that have sufficient data because these can be used for a regulatory trigger if their Minimum Thresholds are exceeded. Thresholds have to be representative of basin conditions.

xiii. Comment: What about the subsidence area? Do we have wells in these areas? Answer (W&C and MID): Additional monitoring wells will likely be needed for these areas.

xiv. Comment: Could the El Nido monitoring wells be used to address this issue? Answer (MID): This could be an option.

xv. Question: How do we deal with thresholds for wells above and below the Corcoran Clay? Answer (W&C): We need to look at Undesirable Results for the above, below and beside the Corcoran Clay layer. How this relates to the subsidence area is a complex issue.

xvi. Comment: Chowilla is having the same issue in the Triangle T area. They are paying, and their neighbors are pumping from the deep aquifer. They are basically already trading credits above and below within a water district.

xvii. Comment: In the example chart provided for Undesirable Results and Minimum Thresholds, it would be helpful to flip the left and right axis.

3. Public Outreach Update

    a. The February public workshop summary is available on the website. The next public workshop is anticipated to take place in May.

4. Interbasin Coordination Update

    a. The W&C team has been coordinating with the Chowchilla Madera and Turlock teams. Calls took place to exchange and coordinate on technical data needs. Additional meetings are planned in the next two months.

5. Public Comment on Items not on the Agenda

a. Comment: The policy in setting Minimum Thresholds is very interesting. What about the level of communication between consultants throughout the valley for different subbasins? The observation of the commentator is that policy approaches are very consultant driven. At the consultant level, to what extent is the Merced team coordinating with others. Kern and others seem to be setting very low thresholds that are likely not ever going to be exceeded.

b. Answer (W&C): The Merced team is following the BMPs from DWR. The folks at DWR who wrote the BMPs will be the people evaluating whether these have been followed and whether requirements have been met. Ethically, we would not support setting thresholds as low as we can go, but the threshold level is up to the basin. Interbasin flows are important, SGMA states you cannot impact interbasin flows. The challenge is that we are all on the same schedule. All basins are having to set up processes.

c. Comment: DWR should have a closed door, very highly recommended workshop on approach and methods for minimum thresholds with all of the hydrogeologists. It is not fair to have stakeholders sort this out.

d. Question: Have we looked at other places in the county, e.g. the Ogallala Aquifer area and see what they are doing? Answer: No, but we are modeling outside of the basin.

e. The W&C team is also reaching out to DWR to set up a discussion on Minimum Thresholds and Undesirable Result methods.

f. Question: Interbasin flows are taken into consideration in our analysis? Answer (W&C): Yes.

6. Next Steps and Next Meeting

a. The focus of the next meeting will be primarily on Undesirable Results and Minimum Thresholds.

b. W&C will send out a Doodle poll to find an alternate date for the May Stakeholder and Coordinating Committee meetings. These meetings are currently scheduled to take place on Memorial Day.

Next Regular Meeting
April 22, 2019 at **9:30 a.m.**
Castle Conference Center, 1900 Airdrome Entry, Atwater, CA
Information also available online at mercedsgma.org

Note: If you need disability-related modification or accommodation to participate in this meeting, please contact Merced County, Community and Economic Development staff at 209-385-7654 at least 48 hours prior to the start of the meeting.

MEETING MINUTES – Merced GSP

SUBJECT: Merced GSP Stakeholder Committee Meeting #12

DATE/TIME: April 22, 2019 at 9:30 AM

LOCATION: Castle Conference Center, 1900 Airdrome Entry, Atwater, CA

Stakeholder Committee Members In Attendance:

	Representative	Community Aspect Representation
☐	Alex McCabe	City of Livingston
☐	Arlan Thomas	Merced Irrigation District Advisory Committee (MIDAC), growers
☐	Ben Migliazzo	Live Oak Farms, growers
☒	Bill Spriggs	City of Merced, Merced Irrigation District
☒	Bob Salles	Leap Carpenter Kemps Insurance, insurance industry and natural resources
☒	Brad Robson	Buchanan Hollow Nut Co. Le Grand-Athlone Water District, growers
☒	Breanne Ramos	Merced County Farm Bureau
☐	Brian Carter	D&S Farms, growers
☒	Carol Bonin	Winton M.A.C.
☒	Daniel Machado	Machado Backhoe Inc., construction industry
☒	Darren Olguin	McSwain MAC
☐	Frenchy Meissonnier	Rice Farmer, rice growers
☐	Galen Miyamoto	Miyamoto Farms
☒	Gino Pedretti III	Sandy Mush Mutual Water Company
☐	James (Jim) Marshall	City of Merced
☒	Joe Scoto	Scoto Bros Farms / McSwain Union School District
☒	Ladi Asgill*	East Merced Resource Conservation District / Sustainable Conservation
☐	Maria Herrera	Self-Help Enterprises
☐	Mark Maxwell	University of California, Merced
☒	Maxwell Norton	Retired agricultural researcher
☒	Parry Klassen	East San Joaquin Water Quality Coalition, growers
☒	Rick Drayer	Drayer Ranch, Merced cattlemen
☒	Simon Vander Woude	Sandy Mush Mutual Water Company, dairies
	*Jean Okuye attended as alternate for Ladi Asgill	

Meeting Minutes

1. Welcome, Introductions, and Agenda Review
    a. Charles Gardiner (Catalyst) welcomed the group and reviewed the agenda items for the meeting.
2. Presentation by Woodard & Curran on GSP development
    a. Climate Change Analysis
        i. Alyson Watson (W&C) described the regulations that apply for the climate change analysis and described the overall process used for Merced GSP.
        ii. The approach is consistent with the Department of Water Resources (DWR) recommended approach. A change factor from DWR is applied to the Projected Data Baseline to simulate the impact of climate change. This creates the Climate Change Baseline, which is put into the Merced model. The output is the Climate Change Water Budget. The change (or perturbed) variables include streamflow, precipitation, and evapotranspiration (ET).
        iii. Alyson Watson (W&C) provided an example of precipitation using the Climate Change Analysis. The dark line is the regional average baseline. The blue line is the changed, or perturbed precipitation using factors from DWR. Generally, precipitation during a typical event is projected to be similar to the baseline conditions, but under climate change peak rain events are projected to be higher.
        iv. Similar DWR factors are used for ET. An example for orchards shows a seasonal pattern of peaking in the summer months and a projected average increase in these months of 8%.
        v. For surface water supplies, projections indicate that in wetter years (wetter season) there would be greater surface water, and in drier years (drier seasons) there would be less surface water.
        vi. For groundwater production, the graph shows the difference in groundwater pumping with the climate change scenario. In general, there is an increase in groundwater demand as result of climate change conditions.
        vii. Summary of climate change scenario: Changed storage reduction is projected to increase from 82K AFY to 130K AFY. This analysis did not rerun the MIDH2O model to see how operations would change. The purpose of analysis was to get an order of magnitude understanding of how climate change might affect the basin.
        viii. Comment: Suggestion to use the same units as some units for precipitation and ET are in mm and others are in inches.
        ix. Question: Regarding the precipitation example, is this the actual data and climate change is applied to this? Answer (W&C): We are taking the baseline and applying the DWR change (or perturbation) factors. What is visualized is a snapshot of 20 years. We have looked at the historical streamflow and actual deliveries to calibrate the model to gain an order of magnitude analysis for climate change. Analysis based on DWR guidance and DWR factors applied to see what this looks like for the basin and to help us understand in the future if the basin is trending a certain way.
    b. Undesirable Results & Minimum Thresholds
        i. Alyson Watson (W&C) explained Undesirable Results (URs) and Minimum Thresholds (MTs), provided definitions and reviewed what was discussed in previous meetings.

ii. The GSP goal is to try to bring the basin into balance. The GSP will need to define what is significant and unreasonable for URs. It is important to prevent these URs, because if they are violated there can be state intervention.

iii. Sustainable Management Criteria Definitions: There may be a specific groundwater condition where wells went dry and enough wells went dry that we determine this should not happen again. This could be defined as an UR. An MT can be set at a depth at which this is not going to happen. Our Measurable Objective (MO) will be set at a shallower depth (this is a depth we are trying to reach). We want to work between these two (the MO and the MT) within the Margin of Operational Flexibility. There are no triggers for meeting the MOs. A violation occurs if URs occur. MTs are set to avoid URs. One well being in violation once is not significant and unreasonable, but a certain percentage going dry could be. Specifications can be established for dry years. The goal is to identify a way to prevent URs.

iv. Alyson (W&C) explained each well has its own location and levels. There are 20 locations we are looking at for establishing wells with MTs, but when are there significant and unreasonable URs? Alyson asked the group for input on what is significant and unreasonable. Comments for this are provided after further presentation of slide content.

v. Chronic Lowering of Groundwater Levels: This was discussed qualitatively for URs and needs to be quantified. MTs will be established for a representative subset of wells that are part of the monitoring network. CASGEM wells were used as a starting point for these monitoring wells because they follow closely to SGMA requirements. There should be monitoring wells in all three aquifers (above, below and outside Corcoran Clay). W&C looked at domestic wells and used the Merced County database. W&C looked at the depth of the shallowest domestic well and removed statistical outliers. The shallowest domestic well within a 2-mile radius buffer from each CASGEM well was compared against MTs. An example hydrograph was provided to show MTs, observed data, and a run from 2040 with 50 years of hydrology get to 2090 for Sustainable Yield.

vi. Question: Was the process described conducted for all CASGEM wells? Answer (W&C): Yes.

vii. Question: The wells are all different. If some are dry, does that throw the entire basin out of compliance. Answer (W&C): Good question. The basin (GSAs) have to decide first how this should be approached. The basin can decide if one well goes dry that this is significant and unreasonable. If the basin violates whatever if has self-defined, then there can be state intervention. There is no trigger for violating Measurable Objectives. However, if URs are violated this triggers state intervention.

viii. Alyson Watson (W&C) explained there is an area (identified by a red circle) on the slide with a high level of uncertainty for determining MTs. Some CASGEM wells are new, some do not have enough historical data to calibrate for the model. Alyson asks the group what are there issues in this area? Are you aware of areas where wells are not deep enough? Or have been dug deeper?

ix. Comments from the SC group and public:

1. Comment (MSGSA staff): The current status for the wells in the Trucked Water Program is uncertain. There are about six wells that did not have a solution for how to move forward at the end of the program. They are looking into what has happened in these cases.
2. Comment (SC): Member is currently decommissioning a 300ft well, and is now punching through a 1000ft well.

3. Input from W&C: In looking at the distribution of the domestic well depths, the ones driving the issues are the 125ft depth wells.
4. Alyson (W&C) asks the group: Are there a significant number of wells in this area that are dry or cannot access groundwater? And is this significant and unreasonable?
5. Comment (SC): Member states in his area have had five wells that have gone dry and been replaced.
6. Comment (SC): There are many folks who are helping their neighbors and connecting to their neighbors water sources. Some areas to consider for this are Planada and Le Grand.
7. General response from SC group: Yes, there are wells that have gone dry. There are issues in the highlighted red area on the map.
8. Alyson (W&C) asks group: Are these issues described significant and unreasonable?
9. Comment (public): There could be a management area set up for this area. We could gather data now and get data from locals as we figure out who has gone dry and who is connected to their neighbors or Community Service Districts.
10. Comment (SC): We could identify the data gaps and what we are doing in lead up to our five year plan update.
11. Question: How flexible can this language be? Answer (W&C): We have seen flexibility with other basins. For example, with the use of a percentage of wells to indicate an URs. However, we need to be able to justify and make a case for why this is significant and unreasonable up to this point (or when this percentage of wells is reached). We have also seen exceptions for dry years from other basins.
12. Alyson (W&C) explained that this area could be carved out as a management area. However, there will still be similar challenges. It is possible to say that more monitoring is needed. Some basins use a twice a year frequency, which is a potential minimum because SGMA requires consideration of seasonal variability.
13. Comment (public): Some areas in the Subbasin will have potentially more, or easier, access to gravity flow source while other areas might require more pumping. This is something to consider in future planning and implementation.
14. General understanding from SC group: This area needs to be addressed and identified as a gap area in the GSP. More investigation is required, which will likely need to take place during GSP implementation due to current time constraints.
15. Alyson (W&C) suggested that the pathway forward is to still use the CASGEM wells, and to set thresholds for those that are appropriate (not all CASGEM wells would require setting MTs at this moment).
16. Comment (MID): There is a need for more monitoring wells on the ground. Response (W&C): We expect to have a broader monitoring network than the subset of wells we are currently focusing on.

x. Storage: Alyson (W&C) explained change in storage is about 0.3% per year. In terms of total water available, we do not anticipate significant and unreasonable URs occurring in the future. Therefore, no MTs are needed. Another approach is to take groundwater elevation (GWE) levels as a proxy and state that GWE levels are protective. A third

approach is to say URs do not occur until a reduction by 10MAF is reached, and then report on this over time. W&C has suggested not to set thresholds and to provide an explanation for this. We are still waiting to hear back from DWR on this approach.

xi. Comment: Thinks that this approach might not be approved by DWR.

xii. Comment: If the science is sound, this approach should be fine.

xiii. Clarification (W&C): For each sustainability indicator, including storage, the basin has to determine if URs are not an issue.

xiv. Seawater Intrusion: Alyson (W&C) explained that this indicator is not applicable for the Merced GSP, as it is not present and not likely to occur for the subbasin. Salinity is addressed as an MT under "Degraded Water Quality".

xv. Degraded Water Quality: Thresholds should be based on our actions, where groundwater extractions effect groundwater quality. Existing cleanup sites have been previously mapped, which can ensure that new recharge sites are not put in these places and potentially cause water quality issues (e.g. extension of plumes). Where contaminants are regulated under existing programs, communication will be established with these programs. It is not necessary to take responsibility for these contaminants when they are regulated under existing mechanisms and frameworks. However, the Merced GSP will be addressing salinity.

xvi. Alyson (W&C) requested input from the group on proposed MTs for salinity. A current limit of 1000mg/L TDS is proposed for discussion. Does this sound reasonable? From a crop perspective is using this limit appropriate?

1. Feedback from SC group:
    a. Comment: For pistachio's this would be fine, but for peaches and almonds this could be an issue over a long time period.
    b. Question (MID): How is this managed currently for almonds? Response (SC): In the western parts of the Subbasin they use blending to manage salinity levels.
    c. Comment: Generally for 90% of the group this would not be a problem.

xvii. Subsidence: Alyson (W&C) explained the current approach for subsidence. The approach has been to not measure land subsidence directly, but to measure using groundwater levels as a proxy for future subsidence.

xviii. Comment: There is another basin who tried to use groundwater levels for all sustainability indicators, but have to change this after discussions with DWR. This basin also had more issues with subsidence than Merced Subbasin.

xix. Question: Why not have prevention of further subsidence as a goal? Answer (W&C): We would not want to set this as a goal because even if pumping stopped, there would still be further subsidence from prior pumping.

xx. Depletion of Interconnected Surface Water: URs, MTs for this indicator are challenging. What can be measured or estimated in the modeling is streamlosses. The greatest losses actually occur in wet years because there is a lot more water in the stream channel. There is also not a clear UR. The consulting team has tried to come up with a threshold that would keep within the historical range of depletions. We have taken out wet years, looked at historical losses, and considered the 5-year average within this range. The goal is to not exceed historical losses.

xxi. Comment: Commentator is hesitant to bring in rivers with fisheries with major reservoirs into the analysis.

c. Next Steps in GSP Development

i. Alyson Watson (W&C) reviewed the anticipated timeline and release of chapters for the Merced Subbasin GSP.

ii. Question: Where are the GSAs at with approving these parts? Answer (W&C): Major sections and particularly the water budget has been sent out to the GSA staff for review and comment as technical memos.

d. Other Updates

i. No additional updates at this time.

3. Public Outreach Update

a. The next public workshop will take place May 29th at the Atwater Community Center. Notices and additional information will be posted on the Merced SGMA website.

4. Interbasin Coordination Update

a. For interbasin agreements, W&C team has been reaching out to Delta-Mendota and has been looking at Chowchilla and the Turlock agreements as models for potential agreement structure and content.

5. Public Comment on Items not on the Agenda

a. Comment provided: There is still some money available for disadvantaged communities through government funds. These should be taken advantage of.

b. Comment from SC member: It would be good for the SC group to receive an update of what occurred in the most recent CC meetings to stay up to date.

6. Next Steps and Next Meeting

a. Focus for May will be on Minimum Thresholds and Measurable Objectives and Implementation Planning.

Next Regular Meeting
May 29, 2019 at **9:30 a.m.**
Castle Conference Center, 1900 Airdrome Entry, Atwater, CA
Information also available online at mercedsgma.org

Note: If you need disability-related modification or accommodation to participate in this meeting, please contact Merced County, Community and Economic Development staff at 209-385-7654 at least 48 hours prior to the start of the meeting.

MEETING MINUTES – Merced GSP

SUBJECT: Merced GSP Stakeholder Committee Meeting #13

DATE/TIME: May 29, 2019 at 9:30 AM

LOCATION: Castle Conference Center, 1900 Airdrome Entry, Atwater, CA

Stakeholder Committee Members In Attendance:

	Representative	Community Aspect Representation
☐	Alex McCabe	City of Livingston
☒	Arlan Thomas	Merced Irrigation District Advisory Committee (MIDAC), growers
☒	Ben Migliazzo	Live Oak Farms, growers
☒	Bill Spriggs	City of Merced, Merced Irrigation District
☒	Bob Salles	Leap Carpenter Kemps Insurance, insurance industry and natural resources
☒	Brad Robson	Buchanan Hollow Nut Co. Le Grand-Athlone Water District, growers
☐	Breanne Ramos	Merced County Farm Bureau
☐	Brian Carter	D&S Farms, growers
☐	Carol Bonin	Winton M.A.C.
☒	Daniel Machado	Machado Backhoe Inc., construction industry
☒	Darren Olguin	McSwain MAC
☒	Frenchy Meissonnier	Rice Farmer, rice growers
☒	Galen Miyamoto	Miyamoto Farms
☒	Gino Pedretti III	Sandy Mush Mutual Water Company
☐	James (Jim) Marshall	City of Merced
☒	Joe Scoto	Scoto Bros Farms / McSwain Union School District
☒	Ladi Asgill	East Merced Resource Conservation District / Sustainable Conservation
☒	Maria Herrera	Self-Help Enterprises
☐	Mark Maxwell	University of California, Merced
☐	Maxwell Norton	Retired agricultural researcher
☒	Parry Klassen	East San Joaquin Water Quality Coalition, growers
☐	Rick Drayer	Drayer Ranch, Merced cattlemen
☐	Simon Vander Woude	Sandy Mush Mutual Water Company, dairies

*Jean Okuye attended as alternate for Ladi Asgill

Meeting Minutes

1. Welcome, Introductions, and Agenda Review
    a. Charles Gardiner (Catalyst) welcomed the group and reviewed the agenda items for the meeting.
2. Coordinating Committee Update
    a. Hicham ElTal (MIUGSA) provided an update on the Coordinating Committee meeting in April, including a summary of the climate change presentation, sustainable management criteria (broken down by individual sustainability indicator), as well as the implementation timeline.
    b. Hicham also provided a quick update on the Santa Clara Valley Water District proposal to buy 5,000 acres located in the Merced Subbasin to use as a water bank.
        i. Point was raised that Merced County would need to provide a permit to export groundwater per Ordinance. SCVWD would need to go through CEQA. An exemption for water districts does not apply as this exemption is only for water districts within the County.
        ii. SC reached consensus to provide recommendation to CC that GSP should incorporate a policy statement about intent of GSP to encourage land use ordinances, but noting that GSP doesn't necessarily have the authority to enforce. CC might be able to take that to their individual GSAs if it is groundwater being exported (not necessarily for surface water).
        iii. Comment: Concern that there is no surface water in this land region and poor percolation. Not sure how it can be used as a water bank. Might be information we're missing, so intent is to gather more information.
3. Presentation by Woodard & Curran on GSP development
    a. Management Areas
        i. Alyson Watson (W&C) defined Management Areas and how and why they might be implemented. Charles Gardiner (Catalyst) provided an example where faults located in the center of a different basin interrupt water flows and it was selected as a management area where conditions were different than other areas.
        ii. Question: Have management areas been defined in the Merced Subbasin? Answer: Not yet, the team has been focusing on building an understanding and framework for the whole Subbasin, and then evaluate the need for management areas. Now we're at that evaluation point, e.g. maybe the subsidence area is one example of a possible management area.
        iii. Question: Do we have a model of groundwater levels and flow directions? Answer: Yes, this is contained within the MercedWRM and also described in the Hydrogeologic Conceptual Model section of the GSP.
        iv. Question: Should we be looking at urban vs rural in terms of different thresholds, recharge and reuse of treated water, and converting to surface water? Answer: We can implement different projects in different areas of the Subbasin regardless of management areas.
        v. Comment: Management areas have been used in other Subbasins to focus on more stringent thresholds to protect vulnerable areas. Response: We have focused on shallow water areas via groundwater levels all over the Subbasin and set conservative thresholds based on shallow domestic wells; the limitation on setting more thresholds in these areas are that there are not wells in all these areas.

vi. Comment: Poorer water quality on the West side of the Subbasin may necessitate different management areas on the east vs west but not sure how to implement. Recharge in areas with lower water quality would help water quality. Response: A more restrictive threshold can still apply to the whole Subbasin even though it's developed based on just the lower water quality area.

b. Sustainable Management Criteria

i. Alyson Watson (W&C) walked through the sustainable management criteria for each of the sustainability indicators.

ii. Question: Is there science that quantifies the delay factor of subsidence due to previous pumping? 2 consecutive years used for the definition of undesirable results for land subsidence may not be sufficient or realistic. Answer: We've tried to address this by avoiding exceeding historical rates of subsidence by maintaining current rate or less. We are also not trying to achieve 0 subsidence because this is likely unreasonable.

iii. Comment/concern: Not sure if we have decided if Jan 1, 2015 is representative if historical groundwater levels indicate that the shallowest domestic well(s) may have been dewatered already. As-is, we might be restricting ourselves and need to select a deeper minimum threshold in these cases.

iv. Question: Why don't we have thresholds in the southern area of the Subbasin? Answer: No CASGEM wells currently available (data record limitations or no construction information: ultimately do not meet CASGEM monitoring requirements), but will be able to use the same methodology to implement new wells in future (as described in data gaps section of GSP). Goal to implement additional wells in the first five years of GSP implementation.

v. Question: How much funding do we have for monitoring wells? Answer: 2 monitoring wells in El Nido have been applied and received. The Subbasin is changing the request for Technical Support Services (TSS) from a monitoring well to a continuous GPS station for a number of reasons.

vi. Question: The GSAs are not establishing minimum threshold for contaminants besides salinity – why wouldn't we to set additional thresholds for these other contaminants and meet them by coordination with other agencies? Answer: The GSAs could choose to set minimum thresholds for other contaminants, but there are challenges for making any change or impact on the issue if a threshold was to be exceeded, for example due to natural arsenic increases or due to a commercial user with a toxic contaminant. It's difficult for GSAs to assume responsibility because there's no control over many of these contaminants. Salinity is an issue where changes in pumping can have an impact.

1. One thing to look at would be having an annual review process internal to look at other agency data. Ultimately, project implementation is where we have control.

vii. Question: What are the water quality challenges as of 2015? Answer: We've met with SC, CC, GSAs, and Merced County Environmental Health to identify these issues. They have been laid out in the Current and Historical Conditions section.

viii. Comment: CV-SALTS is about to go before the State in August to adopt new basin plan. Prioritization and optimization study with deep dive on data analysis to identify hotspots of salts, with results coming out over next 10 years. Nitrate control plans are already in place

for ILRP, but additional nitrate control efforts have started in Chowchilla, Turlock, and Modesto Subbasins.

ix. Amanda Peisch-Derby (DWR): DWR cautions against an approach that simply references other water quality programs for addressing other water quality parameters. Amanda shared that she was not clear on how the GSP will become aware of issues and track. Additionally, exceedances of an MT don't have to mean undesirable results are immediately applicable.

x. Alyson framed that many of the suggestions provided for addressing additional contaminants are good basin management actions that should likely be implemented. However, this is different than self-imposed regulatory requirements (minimum thresholds) that include responsibility for managing the problem.

xi. Comment: Other GSAs appear to be doing a more thorough analysis of water quality constituents against MCL/SMCL levels and impacts of pumping on historical water quality and they are thinking about ways to deal with them. Response: Other subbasins are implementing thresholds but adding a disclaimer specifically "as impacted by groundwater pumping". The difference there is that they need to pay for monitoring wells that meet the standards and also back it up with analysis in every reporting cycle to prove whether it was or wasn't due to groundwater pumping on likely a regular basis.

xii. Lots of discussion ensued about what does a coordination program look like, what is enforceable, what does the Subbasin want.

xiii. Public Comment: Need to figure out how to reduce pumping so that total water volume increases and thus improves water quality. Water quality is a trigger.

c. Implementation Plan

i. Alyson Watson (W&C) gave a brief outline on implementation planning steps for the GSP that are currently underway, as well as a schedule for future implementation of the GSP.

ii. Comment: GSP needs to consider economics of the region in setting the implementation time period while balancing the need to avoid perverse incentives for single users to exploit supplies.

d. Next Steps in GSP Development

i. Included a summary of upcoming section review drafts to expect.

e. Other Updates

i. Included a summary of upcoming section review drafts to expect.

4. Public Outreach Update

a. The next public workshop will take place May 29th at the Atwater Community Center. Notices and additional information will be posted on the Merced SGMA website.

5. Interbasin Coordination Update

a. A meeting with Turlock was just held. Also developing a draft agreement on how to coordinate in the future with Delta-Mendota (which is on a tight timeline and does not expect to be able to coordinate on data sharing unless there has been sufficient time for internal review).

6. Public Comment on Items not on the Agenda
    a. Comment provided:
        i. What is the status of the Castle Air Force Base groundwater quality cleanup? Answer: Lots of progress has been made in recent decades, but it is ongoing.
7. Next Steps and Next Meeting
    a. Focus for June will be on comments on draft sections and process for GSP Adoption and next steps.

Next Regular Meeting
June 24, 2019 at **9:30 a.m.**
Castle Conference Center, 1900 Airdrome Entry, Atwater, CA
Information also available online at mercedsgma.org

Note: If you need disability-related modification or accommodation to participate in this meeting, please contact Merced County, Community and Economic Development staff at 209-385-7654 at least 48 hours prior to the start of the meeting.

MEETING MINUTES – Merced GSP

SUBJECT: Merced GSP Stakeholder Committee Meeting #14

DATE/TIME: June 24, 2019 at 9:30 AM

LOCATION: Castle Conference Center, 1900 Airdrome Entry, Atwater, CA

Stakeholder Committee Members In Attendance:

	Representative	Community Aspect Representation
☐	Alex McCabe	City of Livingston
☐	Arlan Thomas	Merced Irrigation District Advisory Committee (MIDAC), growers
☒	Ben Migliazzo	Live Oak Farms, growers
☒	Bill Spriggs	City of Merced, Merced Irrigation District
☒	Bob Salles	Leap Carpenter Kemps Insurance, insurance industry and natural resources
☐	Brad Robson	Buchanan Hollow Nut Co. Le Grand-Athlone Water District, growers
☒	Breanne Ramos	Merced County Farm Bureau
☒	Brian Carter	D&S Farms, growers
☐	Carol Bonin	Winton M.A.C.
☒	Daniel Machado	Machado Backhoe Inc., construction industry
☐	Darren Olguin	McSwain MAC
☒	Frenchy Meissonnier	Rice Farmer, rice growers
☒	Galen Miyamoto	Miyamoto Farms
☒	Gino Pedretti III	Sandy Mush Mutual Water Company
☐	James (Jim) Marshall	City of Merced
☒	Joe Scoto	Scoto Bros Farms / McSwain Union School District
☐	Ladi Asgill	East Merced Resource Conservation District / Sustainable Conservation
☒	Jean Okuye (alternate to Ladi Asgill)	
☐	Maria Herrera	Self-Help Enterprises
☐	Mark Maxwell	University of California, Merced
☒	Maxwell Norton	Retired agricultural researcher
☒	Parry Klassen	East San Joaquin Water Quality Coalition, growers
☒	Rick Drayer	Drayer Ranch, Merced cattlemen
☒	Simon Vander Woude	Sandy Mush Mutual Water Company, dairies

Meeting Minutes

1. Welcome, Introductions, and Agenda Review
    a. Charles Gardiner (Catalyst) welcomed the group and reviewed the agenda items for the meeting.
2. Coordinating Committee Update
    a. Alyson Watson (Woodard & Curran) provided a summary of the previous Coordinating Committee (CC) meeting in May 2019:
        i. CC discussed and decided not to have management areas.
        ii. When looking to fill data gaps, identified that a new methodology to determine minimum thresholds may be needed for representative wells with limited or no historical data and/or no domestic wells within a 2-mile radius.
        iii. Discussed minimum threshold for salinity, such as in areas where TDS is higher, it is not currently considered an undesirable result due to blending and current management practices.
        iv. Discussion on water quality and additional constituents beyond TDS: decision was to circle back to Merced County Division of Environmental Health. The Sustainable Management Criteria chapter has been updated accordingly.
        v. For depletions of interconnected surface water, GSAs will be developing a methodology in the next few years before the 2025 update. In the interim, groundwater level thresholds will be used.
        vi. Discussed the management action in the water allocation framework section of the projects chapter and discovered a misunderstanding and a need for clarification on transferring water between developed and undeveloped land.
        vii. A Special Session of the CC was called to discuss the definition of developed supply. The estimate of canal seepage is the only item used in estimated developed supply. MIUGSA requested not to change the numbers, but consider other sources in the future, such as leaking pipes/canals. The CC agreed to update the working definition.
        viii. Question: Is recharge part of developed supply? Answer (W&C): It would be in the future, but this would be part of the other items to be investigated in the future.
        ix. Comment: SC wants to make sure can get comments and input. Response (W&C): Should have meetings in parallel. CC are looking to SC for input. Right now, need to look at what critical input is needed to get to a Plan. Some issues will have to be delay to get draft completed and approved.
        x. Question: For developed supply, if I overwater my almonds who does that water belong to? Answer (W&C): That is the question at hand. In some other basins undergoing adjudication, this has been determined in a way that recharge for beneficial use has been awarded back as developed supply. Otherwise, the questions are to whom (the agency or the person who purchased the water) does the credit go, how, and how to determine how much.
        xi. Question: Does that mean we need to look at a crop level? Answer (W&C): We could set up a documentation process that considers this for establishing credit.

xii. Comment: There's a lot more developed supply than Stevinson and MID; there are hundreds of riparian farmers from Merced creeks that are not being accounted for. Answer (W&C): What we have talked about is whether the supply can be measured. Will need to be able to measure this to count it.

1. Question: What happens if a farmer has a riparian right and has a ditch and conveyance, and they have losses? Answer (W&C): This could be considered recharge, but there needs to be a mechanism to have participants estimate and document their losses.

xiii. Comment: SC will need to be involved in who gets the water that is lost to deep percolation.

xiv. Confirmation from group: The SC should continue meeting separately while CC is continuing planning. This will be especially important in the first few years of plan implementation as this period involves crucial decision-making topics.

3. Presentation by Woodard & Curran on GSP development

a. Next Steps in GSP Development

i. July 22nd for next meeting, will have a Notice of Intent (NOI) that says the GSAs will consider for adoption a GSP at least 90 days following NOI (will be publishing NOI around July 19).

ii. Schedule plan:

1. Aug/early Sept: walk through comments from public with the GSAs

2. Oct: putting together final draft

3. Nov/Dec: adoption hearings

a. TIWD will adopt, MSGSA will adopt, and MIUGSA has an MOU (individual agencies will adopt)

4. Jan: deadline for submitting GSP to DWR but have a small amount of buffer for this.

iii. Question: Is the NOI a legal requirement? Answer (W&C): The GSAs do have to notify. This is similar to noticing public workshops. Each agency will also go through their notification processes in the fall.

iv. Question: Are all GSAs about at this stage? Answer (W&C): Consultant team has only seen one GSP that is out and complete (Paso Robles).

b. Sustainable Management Criteria

i. Alyson Watson (Woodard & Curran) reviewed current summary of sustainable management criteria MOs, URs, and MTs per sustainability indicator.

ii. Comment: Have heard from other basins about the subsidence and a consultant from Chowchilla-Madera thought the subsidence MT in Merced was too high. Answer (W&C): We have an agreement that we are on a parallel track and that we need to continue coordination with adjacent basins, but Delta-Mendota GSAs are still coordinating internally.

1. Comment: Another Subbasin is using groundwater level (GWL) as a proxy for subsidence. Response (W&C): DWR feedback provided to Merced team indicated the need for direct subsidence measure instead.

iii. Comment/question: Surprised that subsidence minimum threshold is not 0. Answer (W&C): The subsidence minimum threshold cannot be 0, as the Subbasin will continue to experience subsidence because this has already been set in motion (though it's expected to decrease over time).

iv. Water Quality: Comment was received to add minimum thresholds for more constituents. The GSAs can choose to add constituents but need feedback from SC group. GSAs circled back with Division of Environmental Health and got their feedback, which was consistent with the proposed minimum threshold approach. SGMA does not specify which WQ constituents must have MTs.

v. Question: Will other constituents be considered? Winton and Atwater have been identified as having water quality issues. Response (W&C): In the 2025 update, the GSAs will review all of the indicators and can update.

    1. Charles Gardiner (Catalyst): If there is an identified WQ problem, are you suggesting the GSAs take actions to manage this? Self-Help Enterprises (SHE): We would like GSAs to take this into account for indicators.

vi. Leadership Counsel comment: Wondering if would be important to take into account nitrates, etc. because recharge could increase contaminants.

    1. Comment: With new domestic well testing, now all new wells have to be tested for nitrates. This could answer that question.

    2. Comment: State Water Board and DWR are going to have to figure out if it's more valuable to put more water in the ground and potentially more (prev. existing) nitrates, which comes back to the impacts and benefits of recharge. Really this occurs at the level of the state. As for what the SC and GSAs can do, they can notify, can model and show what can happen. Not sure what you can do other than notify.

        a. Additional comment: If applicable, projects will have to go through CEQA.

    3. Comment: Who determines who gets to decide what the acceptable risk is for increased nitrates with groundwater recharge? Someone needs to figure out those policy issues. However, right now our only solution is to dilute our aquifers.

vii. Suggestion from MSGSA: Add third element to methodology for groundwater elevation Minimum Threshold OR remove wells that may have suspect data/conditions. Third element would be to use simulated GWLs where historical data shows GWLs may have already dewatered shallowest domestic wells or where modeling shows GWL may drop below the 2015 level.

    1. Alyson Watson explained the distribution of calibration wells.

    2. Clarification from MSGSA: Did not want to be limited to factors of shallowest domestic well in 2 mile radius or the 2015 level. A third element would give more flexibility, especially if we don't know what it's going to look like. MSGSA has talked about linear demand reduction. It could be that wells continue to drop and could drop below the 2015 level. Many of the wells are occurring in the MSGSA area.

        a. Comment: We need to include that third element, because we are limiting ourselves with the current method. Response (W&C): If there is concern

in using the model in these locations, we could instead remove these 2 wells.

3. Question and clarification from Marco at MID: MercedWRM is set up on quarter mile basis. Have already looked at existing data. Problem is that there are some stratigraphy issues in a particular area and the model results do not match some existing data. We have data analysis in the model, done in 3 dimensions, and have calibrated with adjacent wells. There are areas where we need some refinements. Funding is the issue, and we have not been allowed to charge to complete this refinement. We have done what we can for now. Model has the capacity, but we don't have the data to do that data analysis. Would be closer to a ~$100k effort to refine the model.
4. General consensus after discussion: Use the methodology as originally proposed but remove these two wells from representative wells and highlight need for future refinement.

c. Monitoring Networks & Addressing Data Gaps

i. Alyson Watson (Woodard & Curran) reviewed the status of the monitoring networks and data gaps for each sustainability indicator.

ii. Comment: The Rail Authority has some data/work for subsidence. We could refer to some of that.

iii. Comment/clarification for follow up: We could look at whether additional SJRRP control points could be added.

iv. Comments regarding the metering program:

1. Comment: Should connect with ITRC to get input.
2. Comment: Electric magnetic meters – not as expensive, have to get data myself and is accurate.
3. Comment: Want to have flexibility in what meters can be used.
4. Comment: Would be cheaper to be able to use existing meters and have folks go out to monitor, rather than replacing them with other meters.
5. Comment: Always in favor of the lowest level of tech, and in favor of lowest maintenance cost.
6. Comment: At minimum, have a minimum of "You have to have a meter. And if you don't have one, you need to get someone to go out there" (those are the people who should pay fines that pay for the staff to go out for meters).
7. Comment: There are some subbasins down south that are not doing any metering but are using satellite data. Response: You are in that case estimating crop demand and not use, and it is not as accurate and is difficult to ground truth (have looked into and discussed).

v. Other issues/comments:

1. Comment: On depleted streamflow, it's a little more complicated. Answer (W&C): We're using GWLs as a proxy. Given the location of our wells, we recognize more work needs to be done.

d. Plan Implementation

i. Comment: The GSP Implementation costs should have a careful thought process.

ii. Assumptions made when estimating implementation costs:

1. Consultant team is reaching out to GSAs on administrative costs.
2. Assume CC would continue meeting quarterly and boards to meet bi-monthly.
3. SC: Keep meeting? Quarterly? Term limits?

iii. Comment: Have SC meet every other month and on the "off" month without SC, have members attend a CC meeting.

iv. Question: What do the first few years look like? Answer (W&C): There are a lot of significant open items that will need to get refined right away.

v. Comment: These are huge decisions that may need input soon rather than next quarter. We may want to focus on setting recurring meetings based on important topics.

vi. Comment: Up to this point, we've tried to set the table and the important stuff and in the next 5 years you'll need folks that are on the ground to provide an opinion on whether things are working.

vii. Comments: If we meet quarterly, have to look at how many hours. Also, farmers cannot commit to an all-day meeting.

viii. Alyson (W&C): There has to be a commitment at the CC to take input from this meeting.

ix. Comment: Still think we're duplicating too much by having separate SC and CC meetings. Might be better to have full scope of what everyone is thinking/perspective.

1. Clarification: the SC group is not set up as a voting body, but with intent to get broad range of input.

x. Feedback: What has been seen is that this feedback from the SC is presented well to the CC and is taken into consideration.

xi. Comment: Could have SC meeting staggered to occur with a few days in between SC and CC so that this provides a window to incorporate and make a more formal giving of feedback to the CC.

xii. Clarification from Alyson (W&C): For projects and management actions: If a GSA raises funds for a project this can increase their allocation. Assumption is that GSAs will have own financing plan.

1. Clarification: MSGSA not implementing Prop 218 process for projects. Instead, it is a per-acre fee for GSP development, implementation, and GSA administration.

4. Public Outreach Update

a. Charles Gardiner (Catalyst) provided a summary of the May 2019 public workshop: good discussions, not a large turnout, also provided local perspective of what was occurring in Atwater and Winton.

b. Confirmed: Would not do a meeting in August, would have a combined GSAs meeting that we are currently scheduling with GSAs.

5. Interbasin Coordination Update

a. Currently scheduling a meeting with Delta-Mendota for late July.

6. Public Comment on Items not on the Agenda

    a. Leadership Counsel provided a comment and letter to the Merced Subbasin GSAs. Representatives attending CC meeting communicated some of the recommendations including recommendation to set minimum thresholds based on the anti-degradation policy at the state level (per Bill 1968), with level set at best water quality since 2015. Where minimum threshold exceeds public health goals, the GSP should include a policy to strive for water quality improvements to meet relevant public health goals. This letter has been attached as an appendix to the meeting minutes.

    b. Public Comment: Need more public to show up and attend meetings. Fox26 had a program that featured the Friant Dam entities – camera panned to audience and there was no audience. No one was there. Has to be a means to get people to care.

        i. Leadership Counsel: Really good point to get more people to attend. Have heard from folks that should have more meetings in the evenings so working folks can attend.

    c. Additional comment/input from Breanne Ramos: Secretary Sonny Purdue from the USDA will be at the Los Banos Fairgrounds in the Germino Building Town Hall from 12:30-1:30pm, June 28th.

7. Next Steps and Next Meeting

    a. Sustainable Management Criteria draft chapter expected on the 28th to the SC group, everything else in Public Draft July 19th

    b. Shared focus of July meeting (see slide).

    c. Adjourn to next meeting.

Next Regular Meeting
July 22, 2019 at **9:30 a.m.**
Castle Conference Center, 1900 Airdrome Entry, Atwater, CA
Information also available online at mercedsgma.org

Note: If you need disability-related modification or accommodation to participate in this meeting, please contact Merced County, Community and Economic Development staff at 209-385-7654 at least 48 hours prior to the start of the meeting.

MEETING MINUTES – Merced GSP

SUBJECT: Merced GSP Stakeholder Committee Meeting #15

DATE/TIME: July 22, 2019 at 9:30 AM

LOCATION: Castle Conference Center, 1900 Airdrome Entry, Atwater, CA

Stakeholder Committee Members In Attendance:

	Representative	Community Aspect Representation
☐	Alex McCabe	City of Livingston
☐	Arlan Thomas	Merced Irrigation District Advisory Committee (MIDAC), growers
☒	Ben Migliazzo	Live Oak Farms, growers
☐	Bill Spriggs	City of Merced, Merced Irrigation District
☒	Bob Salles	Leap Carpenter Kemps Insurance, insurance industry and natural resources
☒	Brad Robson	Buchanan Hollow Nut Co. Le Grand-Athlone Water District, growers
☒	Breanne Ramos	Merced County Farm Bureau
☐	Brian Carter	D&S Farms, growers
☐	Carol Bonin	Winton M.A.C.
☐	Daniel Machado	Machado Backhoe Inc., construction industry
☒	Darren Olguin	McSwain MAC
☐	Frenchy Meissonnier	Rice Farmer, rice growers
☒	Galen Miyamoto	Miyamoto Farms
☒	Gino Pedretti III	Sandy Mush Mutual Water Company
☐	James (Jim) Marshall	City of Merced
☒	Joe Scoto	Scoto Bros Farms / McSwain Union School District
☐	Ladi Asgill	East Merced Resource Conservation District / Sustainable Conservation
☒	Jean Okuye (alternate to Ladi Asgill)	
☒	Maria Herrera	Self-Help Enterprises
☐	Mark Maxwell	University of California, Merced
☒	Maxwell Norton	Retired agricultural researcher
☐	Parry Klassen	East San Joaquin Water Quality Coalition, growers
☒	Rick Drayer	Drayer Ranch, Merced cattlemen
☒	Simon Vander Woude	Sandy Mush Mutual Water Company, dairies

Meeting Minutes

1. Welcome, Introductions, and Agenda Review

    a. Charles Gardiner (Catalyst) welcomed the group and reviewed the meeting agenda content. There was a brief round of introductions of attendees.

    b. Alyson Watson (Woodard & Curran) reviewed and provided an update on the last Coordination Committee. The CC had a similar agenda to the SC meeting. Leadership Council (LC) provided a letter focused on water quality issues (please see June 2019 minutes). Last meeting reviewed how to address issues for monitoring and representative wells. Acknowledged that the GSP in the next update will address getting additional information. Decision was to remove two problem wells. Discussed data gaps and heard comments related to the metering program. Discussed role of SC and that this will continue to be important and CC will continue to provide input. Decision was made to have quarterly meetings that are staggered so that there is adequate time to summarize decisions and information from one meeting to the next (e.g. for SC to the CC and vice versa). The CC discussed the water allocation framework. The CC recommended to include in the GSP the working definition of developed supply, and that this will be further refined during Plan implementation. How allocation will be distributed will also need to be further refined.

2. Presentation by Woodard & Curran on GSP development

    a. Public Draft GSP

        i. Alyson (W&C) reviewed the GSP draft timeline and the availability of the public draft. The release of the Public Draft GSP was 19 July 2019. A Notice of Intent to Adopt is being sent to Cities and Counties on 22 July 2019.

        ii. There are 30 days for public review. A list of public locations for hard copies provided is provided in the slide handout (and on the Merced SGMA website) and was sent out to the email distribution lists.

    b. Highlights of key sections for review

        i. Alyson (W&C) reviewed the Sustainable Yield (SY), including the main components that went into calculating SY. This number also includes the items that need to be refined (e.g. the seepage and conveyance estimates).

        ii. Climate Change was reviewed. The climate change water budget starts with projected conditions baseline. A change factor (or perturbation factor) from DWR is applied to the Projected Data Baseline to simulate the impact of climate change. This creates the Climate Change Baseline, which is put into the Merced model. The output is the Climate Change Water Budget. This can be refined in the future to include the Merced Irrigation District (MID) operations model.

            1. Question: Where does the 4% on the slide come from? And are we using the 7% evapotranspiration (ET) forecast in our plan? Answer (W&C): The plan includes the study, but SY does not include climate change projections. We are using the 2070 information from DWR. The uncertainty is large, but the climate change analysis gives us a broader understanding of potential level of impact. DWR requires us to have an analysis. However, W&C recommends refining numbers to be more locally specific prior to using numbers to plan on local scale.

            2. Comment: We should get the plan done and submitted to the state, but the local governing bodies need to immediately insert climate change factors for planning.

3. Comment: For our projects, we also need to work toward the big number of what we need to reduce by in AFY overall for the Subbasin.
4. Agreement from SC: Need to stay aggressive on projects.
5. Comment/question: We should have a plan moving forward to include climate change into how we are managing the Subbasin.
6. Agreement from SC: In the update, we should identify that the plan should include the climate change analysis and a way to manage the Subbasin with this. Need to focus on recharge and consider climate change when working toward sustainability and meeting future demand needs.

iii. Sustainable Management Criteria

1. Alyson (W&C) reviewed what is in the draft GSP and each of the sustainability indicators including how Minimum Thresholds are determined. A summary slide containing information for all indicators was provided.
2. Question: What does this look like in dry years? Answer (W&C): Violations of MTs are not projected to occur during dry years according to model simulations.
3. Comment/question: For Depletions of Interconnected Surface Water, are we using groundwater levels as a proxy because measuring depletions directly is so difficult? Direct measurements are near impossible. Answer (W&C): Yes, but this is identified as something that can be refined.

iv. Water Level and Protecting Domestic Wells

1. Alyson (W&C) explained that groundwater level MTs are the depth of shallowest domestic well in a 2-mile radius of each representative well (24 representative wells), or the minimum level pre-January 2015 (1 representative well). There are 25 representative wells total. The domestic wells are usually shallower than agricultural wells. A single domestic well going dry is not considered an Undesirable Result (UR). An UR is triggered if > 25% of representative wells fall below MTs in two consecutive wet, above normal, or below normal years.
2. Alyson (W&C) asked the SC group for input on what we should be doing if a well is dewatered? And what do we do if an individual representative well reaches an MT but does not trigger an UR?
3. Alyson (W&C) reviewed hydrographs to show the results of 50 years of modelled hydrology. Two of the wells out of the 25% of representative wells would reach MTs during a 6-year drought condition. This does not trigger an UR, and consequential state intervention. However, there is a possibility that we could be dewatering domestic wells.
4. Question/comment: Need to define what we think are significant and unreasonable impacts and how to address these for disadvantaged communities. Concern is that we don't know what the impacts for the communities will be because we don't have representative wells in these areas.
5. Comment: The state is asking for a plan. We know it is not going to be perfect. There are some projects that try to address issue (e.g. El Nido). If we focus on recharge, this can address/mitigate these issues.
6. Comment: There should be a mitigation strategy given that it will take 5 years to get the data and install a monitoring well in these areas.

7. Clarification (W&C): The analysis does not project a potential reach of MTs to occur except once in a 50 year timeframe.
8. Comment: We could reach out to communities to see what kind of data they might have. Response (W&C): We can't establish MT wells now because there are currently no wells in those areas that meet reporting criteria. However, we could work toward this, including through projects.
9. Clarification (W&C): We have to wait until the 5 year update to adjust MTs.
10. Comment: We also have to consider the age of the wells. For example, if a well is 50+ years old, it might be nearing end of life use.
11. Question: What about monitoring in areas that currently have no monitoring wells? Answer (W&C): The CC can work on establishing new monitoring wells, but the approach for this needs to be agreed on. This is important for areas that do not have domestic wells, and especially wells with no historical data. Suggestions have been made at last CC but are not approved yet.
12. Water Quality
    a. Alyson (W&C) explained the MTs and what these are based on. Also received guidance from Merced County Division of Environmental Health. Leadership Counsel provided a letter and follow up letter to the GSAs.
    b. Comment: The Department of Pesticide Regulation already has several programs for the use of pesticides. We are not allowed to make changes that impact these programs. Response (W&C): We have focused on known areas where there are GW and salinity issues. However, we've heard concern over a variety of parameters. We are coordinating with existing programs to understand potential impacts. Depending on what is causing the issue, this may or may not fall within jurisdiction of SGMA.
    c. Comment: The recent approval of SB200, provides $200M per year fund that could be a potential resource for funding (e.g. for projects).
    d. Comment: If you are requesting funding, you need to show that the plan is working toward improving water quality. Otherwise, may have difficulty in getting funding.
    e. Comment: Coordination with DPR and DWR is the best avenue for water quality.
    f. Comment: Protecting water quality for drinking purposes has been discussed. Commentator would like to see more that can be done in the plan.
    g. Comment: It is good to look at coordinating with water quality monitoring groups and agencies.
13. Projects and Management Actions
    a. Alyson (W&C) reviewed the requirements from DWR for project information, the criteria used in the GSP as a filter to prioritize projects, and the list of 12 priority projects.
    b. Question: What are the funding sources for those that have funding: Project #10 is partially privately funded, Projects #1-3 are Prop1 DWR funded (the SDAC projects), Project #12 uses Merced County funding.

c. For Management Actions, there is a basin-wide allocation framework, and then the MSGSA allocation management action.

14. Plan Implementation

a. Alyson (W&C) reviewed the timeline for the GSP implementation from 2020-2040, the components needed for first 5 years, and the estimated costs for plan implementation and projects.

b. Comment: Report for the Prop 218 Landowner Fee pursued by MSGSA is available on the Merced County website (see link here: https://www.co.merced.ca.us/3253/Proposition-218-Landowner-Fee)

c. Alyson (W&C) reviewed potential funding sources including what GSAs are enabled to do to raise funds through SGMA. This included funding authority given for extraction fees. Information included a brief review of options and process, with examples given of extraction fee and acreage-based assessment and fees.

d. Question: How many wells are there for the Indian Wells Valley Groundwater Authority? Answer (W&C): Not certain but can look this up.

e. Comment: Fee break out when looking at total costs to implement and total acreage would be around $4 or more per acre. Commentator thinks this is not bad.

f. Comment: It was communicated in previous meetings that everyone who has a straw in the ground needs to contribute. Landowners should have a per acre fee, maybe for institutions or organization can use an extraction fee.

g. Comment: There is not enough information to make a recommendation on which approach of fee to use, especially on behalf of disadvantaged communities.

3. Water Allocation Framework

a. Alyson (W&C) reviewed the timeline of the initial discussions of the water allocation framework from Oct. 2018 to present. In summary: recently (in 2019) in March we discussed how allocate to overlying acres. In April there was a recommendation from the CC to the GSA boards. In May some disagreements in interpretation were identified. In June had Special CC session to discuss developed supply. For the Plan, the water allocation framework section is kept at a high level and further discussion with the CC is needed to agree on further detail.

b. Alyson (W&C) went through an initial roadmap for continuing discussions. This included data gaps for allocation framework implementation, definition of developed supply, final allocation by GSA, procedure for new wells, and water credits & trading.

c. Comment: Shouldn't it be that each GSA gets their allocation and should manage in a way that's tailored to their areas? Answer (W&C): The GSAs will have that discretion, it's just the process of getting there and agreeing on how.

d. Question: Isn't there a project on streamlining well permitting? Answer from Merced County: This is a county project that is focused on above Corcoran wells. It involves an analysis of removing wells from below to above the Corcoran Clay layer, assists in removing the CEQA regulatory barrier, and should help protect against further subsidence.

4. Public Outreach Update

a. Charles explained the public review process. There is a 30-day public comment period, ending August 19th.

b. Public can provide comments also via Merced SGMA email address (see Contact Us page on Merced SGMA website).

c. A Joint GSA Board Public meeting to take place in September to review comments received. The location of the Joint GSA Board meeting will likely be the Merced County Building.

d. Adoption hearings to be held in Fall 2019.

5. Interbasin Coordination Update

   a. Merced Subbasin team have an Interbasin Coordination call with Delta-Mendota tomorrow, July 23rd.

6. Public Comment on Items not on the Agenda

   a. Comment: The GSAs' job is to address groundwater overdraft and related water quality needs. Response from SC member: To strengthen our communities, we should address and have GSAs take responsibility in addressing WQ issues.

   b. Comment: We could potentially have the SC and CC meet together to discuss this issue and reach decisions.

   c. Comment: 30 days for public review period is aggressive to try to reach communities. Are the GSAs going to have further public outreach? Also, to the point made about joining the two committees, we should consider how this will impact decision making and who is able to make decisions.

   d. Question/request from SC: Request to have the number of AFY the Subbasin needs to reduce by to reach sustainability on the first slide for future meetings.

7. Next Steps and Next Meeting

   a. Next meeting is currently to be determined. Once next regular or special meeting date confirmed, notices will be issued and outreach pursued.

Next Regular Meeting
TBD at **9:30 a.m.**
Castle Conference Center, 1900 Airdrome Entry, Atwater, CA
Information also available online at mercedsgma.org

Note: If you need disability-related modification or accommodation to participate in this meeting, please contact Merced County, Community and Economic Development staff at 209-385-7654 at least 48 hours prior to the start of the meeting.

MEETING MINUTES – Merced GSP Stakeholder Committee

SUBJECT: Stakeholder Committee Meeting #16

DATE/TIME: October 28, 2019 at 9:30 AM

LOCATION: Castle Conference Center, 1900 Airdrome Entry, Atwater, CA

Stakeholder Committee Members In Attendance:

	Representative	Community Aspect Representation
☐	Alex McCabe	City of Livingston
☐	Arlan Thomas	Merced Irrigation District Advisory Committee (MIDAC), growers
☐	Ben Migliazzo	Live Oak Farms, growers
☐	Bill Spriggs	City of Merced, Merced Irrigation District
☐	Bob Salles	Leap Carpenter Kemps Insurance, insurance industry and natural resources
☐	Brad Robson	Buchanan Hollow Nut Co. Le Grand-Athlone Water District, growers
☒	Breanne Ramos	Merced County Farm Bureau
☐	Brian Carter	D&S Farms, growers
☐	Carol Bonin	Winton M.A.C.
☒	Daniel Machado	Machado Backhoe Inc., construction industry
☐	Darren Olguin	McSwain MAC
☐	Frenchy Meissonnier	Rice Farmer, rice growers
☒	Galen Miyamoto	Miyamoto Farms
☐	Gino Pedretti III	Sandy Mush Mutual Water Company
☐	James (Jim) Marshall	City of Merced
☒	Joe Scoto	Scoto Bros Farms / McSwain Union School District
☐	Ladi Asgill	East Merced Resource Conservation District / Sustainable Conservation
☐	Jean Okuye (alternate to Ladi Asgill)	
☐	Maria Herrera	Self-Help Enterprises
☐	Mark Maxwell	University of California, Merced
☐	Maxwell Norton	Retired agricultural researcher
☒	Parry Klassen	East San Joaquin Water Quality Coalition, growers
☐	Rick Drayer	Drayer Ranch, Merced cattlemen
☒	Simon Vander Woude	Sandy Mush Mutual Water Company, dairies

Meeting Minutes

1. Welcome, Introductions, and Agenda Review
    a. Charles Gardiners (Catalyst) welcomed the group. Attendees introduced themselves.
2. Finalizing Merced Subbasin GSP
    a. Alyson Watson (W&C) provided an update on the status of responding to comments and finalizing the GSP. The CC will discuss the revisions to the GSP this afternoon and adoption hearings are being scheduled for late November/early December.
    b. The consultant team worked with GSA staff on addressing comments that were received. The redline of the revised draft GSP and the master responses to comments are posted on the Merced SGMA website. The comment letters are also posted on the website. SGMA requires documenting public comments received.
    c. Master response to comments was organized by 20 topics (see slide for full list). Master response and comment letters will be included as an Appendix to the GSP.
    d. Alyson noted that SGMA does not require GSAs hold a public comment period. The Merced GSAs decided to hold the 30-day public comment period. This is an addition to the 60-day public comment period that DWR will hold once the GSP is submitted.
    e. Alyson highlighted two topics for more discussion today based on topics CC will also be discussing: subsidence sustainable management criteria and water quality sustainable management criteria.
        i. Subsidence discussion:
            1. Alyson provided some background information on subsidence in the basin: it is a gradual process that takes time to develop and time to halt. Subbasin may not be able to fully stop subsidence but can slow it and reduce impacts. She noted that despite wetter conditions 2017-2018, there was still between -0.17 ft/yr and -0.32 ft/yr observed in the portion of the subbasin.
            2. Alyson compared the sustainable management criteria that are included in the Merced GSP and in the neighboring basins of Chowchilla and Delta-Mendota.
                a. Merced GSP management criteria based on historical subsidence rates observed
                b. Chowchilla is using GWLs as a proxy for subsidence in the lower aquifer only (they are using this for both MT and MO). They are using an adaptive management approach with a trigger of -0.25 ft/yr for 3 years in Eastern main aquifer.
                c. In Delta-Mendota they have measurable objectives that vary by GSP and region but most are between -0.01 to -0.1 ft/yr. For minimum threshold, they (again various by GSP) but have between -0.1 to -0.2 ft/yr. San Joaquin River Exchange Contractors: The MT is narrative: “that which doesn’t reduce SJREC’s conveyance capacity without appropriate mitigation.”
            3. Question from SC: Did Delta-Mendota use a different method for coming up with their numbers? Alyson: Yes, what was used to determine this is site specific. What they use cannot necessarily be used in Merced.

4. Clarification: we expect that DWR will expect that we have a continued coordination for subsidence. But we do not expect that they will require neighboring basins to have the exact same measurements.
    a. The consulting team and GSA staff were given direction by DWR that using groundwater level as proxy was not preferred. Neighboring subbasins got different input from DWR. (Chowchilla and Delta-Mendota).
    b. SGMA is very specific that the Subbasins will come up with their own approach to creating MTs and MOs. We are not allowed to impact our neighboring basins adversely. However, we do not have to have the same measurements/mechanisms for measurement in order to get our plan approved.
5. Question: DWR will see the response to comments and comments themselves? A: Yes, these are in GSP appendix and response to comments and comments are on the MercedSGMA.org website.
6. Alyson further described Merced GSP approach. MT and MO set based on historical subsidence rates. Some level of future subsidence, likely at similar rates, likely to be underway already and will not be able to be prevented. GSAs will continue coordinate efforts with Chowchilla & Delta-Mendota to develop regional and local solutions to regional subsidence
7. Alyson explained the subsidence map, showing varying degrees of subsidence in the southern part of the basin.
8. Question to the group: thoughts? Is Merced GSP approach reasonable?
    a. Comment: this is a good educated guess. The other basins are doing the same thing.
    b. Question: is there an overall system or data system that is watching this? A: the Bureau (USBR) is likely the best current data system for this. We are using this data.
    c. Hicham: DWR says they would like to see surface water stations used in our analysis. They were not as excited about using GWL, but we are in a good place to keep moving forward.
9. Question from public: what are you using for a standard measurement unit? Where are we right now and how are we compared to the other areas around us? Have to ask why how much is sinking over that time period in that particular location. A: When there's groundwater pumping and you have permeable clay layers, you are creating these holes in the clay layers and these can compact and the ground can drop. And we can see this in the change in topography and that's where the map is from (using data from USBR). We're looking at directly how much the ground surface is changing. Moving forward we have to work with our neighbors to improve how we are managing this.
10. Comment from public: can you coordinate the GWL data and the subsidence (surface change) data together? A: That's the plan. Think of this as step one. There will need to be more coordination and more data. More monitoring wells are being proposed for the future as well as more monitoring points for subsidence. There needs to be a consistency across the basins. Both sides have GWL and subsidence data, but will need to continued coordination. Next step is to look at

GSPs together and look at potentially regional plans and adjust. Confirmed: we are taking a big picture view.

11. Question: how much are we going to make specific points influence… is there going to be a blanket assessment? A: the MTs are location specific. You can have something greater or less than this at another location in the basin. However, the CC and the Boards can decide there is an issue somewhere and decide to do something there. Part of the reason for this is because of how site specific the issues might be.
12. Comment (Hicham Eltal MID): What we are saying is to look at the most drastic locations to ensure other areas also ok (measuring to the worst case in order to be protective).
13. Comment (Alyson Watson): we are using an approach that is protective of domestic wells in the subbasin.
14. Comment from public: when talking about El Nido, southeast side is very different than other areas. Drastic difference even within El Nido with difference of 3-5 miles.
15. Comment (Hicham): unless your areas become as bad as the other areas, will not be impacted by the restrictions.
16. Comment from public: worried about being lumped into another area and then having to be required to implement demand management actions/restrictions.
17. Clarification on whether GWL vs. subsidence surface measures as being more important: there is nothing in the plan that says there are demand management for areas of subsidence (e.g. for El Nido area). The plan will also be updated every 5 yrs.
18. Clarification from Hicham: you could still (according to discussion from DWR) have an increase in GWLs but still have subsidence.
19. Comment from public: basically, they don't (DWR) know what is going on with subsidence? A: right, we do not know the extent to which this will continue and severity.
20. Question: in the brown area of the map, is there a plan to put folks in that area (where subsidence is worst) on surface water?
    a. Response from SC: there are no cities in that area, and the farmers in that area have procured surface water supplies
    b. Clarification from Charles: we also have GWL objectives and thresholds in that area as well.
    c. Clarification from Alyson: MID has also been doing work to get SW to these areas.
    d. Hicham: folks in these areas have purchased meters. These folks are also getting water outside the district. MID Board has approved most of the time (not all the time) to move water outside the district. Previously has been the case 7 out of 10 years. In MID WRP also recognizes efforts outside the basin.
    e. Comment: Madera, Chowchilla, and others have all been trying to get SW out to these areas.

f. Question: is MID interested in that? Hicham: yes, depends on system capacity. The SW has to go through El Nido first. (El Nido is in district)

ii. Water Quality:

1. Alyson provided an explanation of Merced GSP water quality sustainable management criteria. The MT is set at 1,000mg/L for TDS (Total Dissolved Solids, measurement of salinity). This is drinking water standard. There are numerous other authorities governing and monitoring drinking WQ and contaminants. There is a summary of the response to comments for WQ on the Merced SGMA website.
2. Alyson provided summary of response to WQ comments. Salinity is selected as an indicator. GSAs recognize the importance of protecting drinking water quality. There is a desire to coordinate with agencies and their ongoing efforts to avoid duplication of efforts and efficiently use limited resources. Coordination activities include: (see list on PPT).
3. Comment from SC: we discussed previously that there are all of these other agencies who are doing this work.
4. Comment from Charles: there is some concern for residential users who might not be on these systems that are being monitored by existing agencies
5. Comment from SC: two weeks ago, State Board approved CVSALTS. (there will be data on nitrates becoming available.
6. Comment from Charles: the permittees develop together a collective nitrates program. The management zone is a collaborative effort kind of like a GSA. It might take a couple of years for this to develop and implement this kind of monitoring and planning.
7. Comment from SC: the program will be monitoring the domestic wells. Who is actually going to do the work will be determined by the regional board?
8. Comment: anything we could change in the plan to satisfy commenters?
9. Alyson: we could add more MTs, but there's not much else we can do with the plan. What SGMA requires sets a basin standard, you can have projects, but from a thresholds perspective this is not the most effective way to address these issues for these communities.
10. Charles: the groups who are advocating for these communities are in the process of conducting a study and assessment of the specific needs and issues in DACs throughout the basin
11. Comment: SB1 is going in this direction as well (targets disadvantaged communities and groundwater levels)
12. Clarification: will not have additional specific requirements to dairies, will be subbasin wide.
13. Comment from Charles: the program (CVSALTS) brought up earlier monitor and have regulations.
14. Comment from public: that's what we're hoping that if we are already adhering to the current regulations, that we are not creating a new agency we have to report to.

f. Dates for Adoption Hearings for GSA Boards – still being scheduled. Tentative dates below:

i. TIWD GSA-1 is anticipated for Nov. 19th

ii. MSGSA is TBD

iii. MIUGSA is anticipated Dec. 11th

3. GSP Implementation Planning

a. Prop 68 funding opportunity (deadline Nov. 1, 2019)

i. Alyson briefly summarized Prop 68 grant contents. These were developed by the ad-hoc working group.

ii. We are submitting for the total amount we are eligible which is $500K. Expected to be competitive. DWR has indicated they are prioritizing GSP development activities over implementation projects.

iii. Contents include three components, 1) grant administration, 2) Addressing GSP data gaps, and 3) Developing a remote sensing decision support tool

iv. The objectives include: prioritizing data gaps, increasing the number of wells in the monitoring network, monitoring gw use, and stakeholder outreach.

v. We are soliciting letters of support and currently have 14 letters from various groups in the basin. We have also received letters from all three neighboring subbasins and provided them with letters of support.

b. Annual report preparation proposal from Woodard & Curran

i. Alyson explained that W&C was asked by GSA staff to prepare a proposal for preparing the first annual report. The first annual report is due April 1, 2020 and must cover water years 2015-2019. The proposal includes optional tasks for project management, stakeholder engagement plan update, and evaluation of GDE Pulse Tool

c. Water Allocation Framework update

i. Alyson explained that the GSAs are continuing to discuss this issue. The GSP does not include an allocation. It states that GSAs intend to allocate water to each GSA but have not yet reached agreement on allocations or how they will be implemented. Estimates of basin-wide sustainable yield and developed supply are included in the GSP for illustrative purposes.

d. Implementation and Stakeholder Committee Involvement

i. Discussion: What topics are of most interest to the stakeholder committee?

1. Funding: How and who will pay for this? MSGSA has done a Prop 218, MIUGSA is underway with this.

2. Monitoring and reporting: SC members report hearing concerns in the community that someone will try to turn off their wells. Comment: Biggest question I get, who's turning my pump off? Nobody is going to tell me to turn off my wells.

3. Allocation: What's the allocation and how is it enforced?

4. Projects

5. First 4 bullets (allocation framework, monitoring and reporting GW use, funding, and projects) are the key topics

6. Water Quality – comment: there are 5 government agencies watching that. Do not think this plan needs to get specific about this.

ii. Composition of Stakeholder Committee

1. Charles suggested they may want to discuss who wants to stay on and whether have the right representation. He noted there have been two resignations from the committee during the course of GSP development and that we are at a natural milestone to confirm who wants to stay on committee and what committee's role moving forward will be.
2. Group discussed wanting to stay involved if input is used and valuable. Some members expressed desire to interact directly with the CC committee. Charles suggested possibility of holding joint discussions with CC around key topics.
3. Group wanted to meet no more than needed. Agreement that mapping out topics would be useful. Having summary of what was previously discussed also useful.

e. Integrated Regional Water Management Plan (IRWMP)

i. This effort is continuing and there was a second call for projects. These are all available online.

4. Public Outreach Update

a. GSA Adoption hearings will be coming up in late November/early December.

5. Interbasin Coordination Update

a. Coordination with neighboring basins will continue, especially for topics like subsidence.

6. Public Comment on Items not on the Agenda

a. Question: are we still trying to keep the water in the GSAs? Reply: the GSAs will need to agree together with how to split up the water allocation amongst the GSAs. Then there is also a requirement in SGMA to not adversely impact your neighboring basins. There is a general framework that has been laid out in the plan. However, the big question is how to allocate in a fair manner the water amongst the three GSAs.

b. Public comment submitted: member of public provided letter they received from Department of the Air Force concerning groundwater sampling for PFOS/PFOA. (attached)

7. Next Steps and Next Meeting

a. Will be submitting the Prop 68 grant application

b. Dates for adoption hearings will be posted on the website.

Next Regular Meeting
TBD at **9:30 a.m.**
Castle Conference Center, 1900 Airdrome Entry, Atwater, CA
Information also available online at mercedsgma.org

Note: If you need disability-related modification or accommodation to participate in this meeting, please contact Merced County, Community and Economic Development staff at 209-385-7654 at least 48 hours prior to the start of the meeting.

MEETING MINUTES – Merced GSP Stakeholder Advisory Committee

SUBJECT: Stakeholder Advisory Committee Meeting
DATE/TIME: April 12, 2021 at 1:00 PM
LOCATION: Zoom Virtual Meeting

Stakeholder Committee Members In Attendance:

	Representative	Community Aspect Representation
☐	Arlan Thomas	MIDAC member
☒	Ben Migliazzo (alternate)	Live Oak Farms
☒	Bob Kelley	Stevinson Representative
☒	Breanne Ramos	MCFB
☒	Craig Arnold	Arnold Farms
☒	Darren Olguin	Resident of Merced County
☒	Dave Serrano	Serrano Farms - Le Grand
☒	David Belt	Foster Farms
☒	Emma Reyes	Martin Reyes Farm/Land Leveling
☒	Gil Cardon	Merced Co. Hispanic Chamber of Commerce
☐	Greg Olzack	Atwater Resident
☒	Jean Okuye	E Merced RCD
☒	Joe Sansoni	Sansoni Farms/MCFB
☐	Joe Scoto	Scoto Brothers/McSwain School Dist.
☒	Jose Moran	Livingston City Council
☒	Lacy Carothers	Cal Am Water
☒	Lisa Baker	Clayton Water District
☒	Lisa Kayser-Grant	Sierra Club
☐	Mark Maxwell	UC Merced
☒	Maxwell Norton	Unincorporated area
☒	Nav Athwal	TriNut Farms
☒	Olivia Gomez	Community of Planada
☒	Parry Klassen	ESJWQC
☐	Reyn Akinoa	River Partners
☒	Rick Drayer	Merced/Mariposa Cattlemen
☐	Robert Weimer	Weimer Farms
☒	Simon Vander Woude	Sandy Mush MWC
☒	Susan Walsh	City of Merced
☒	Thomas Dinwoodie	Master Gardener/McSwain
☒	Trevor Hutton	Valley Land Alliance
☒	Wes Myers	Merced Grassland Coalition

Meeting Minutes

1. Call to Order and Welcome
    a. Charles Gardiners (Catalyst) welcomed the group.
2. Introductions and Roll Call
    a. Stakeholder Advisory Representatives for the Merced Subbasin GSP introduced themselves (see attendance record above).
    b. Representatives from the three GSAs introduced themselves (Lacey McBride with Merced Subbasin GSA, Larry Harris with Turner Island Water District GSA-#1, and Matt Beaman for Merced Irrigation-Urban GSA [MIUGSA]) as well as the consultant team from Woodard & Curran (Samantha Salvia, Chris Hewes, and Ali Taghavi).
3. Merced GSP Overview
    a. GSP Highlights/Commitments
        i. Samantha Salvia (Woodard & Curran) provided an overview of the Sustainable Groundwater Management Act (SGMA), the development of the GSP and two annual reports, and key elements of the GSP.
        ii. Matt Beaman (MIUGSA) provided an update on the status of priority projects identified in the GSP.
        iii. Q: Why did the initial Planada recharge project not work out? A: The grant application identified two potential areas to construct a recharge basin based on some preliminary studies looking at soils and available well completion reports. At both sites, there are shallow clay layers (~10 feet) that impede infiltration. The dry wells are the next alternative.
        iv. Q: Historically, what percentage is the volume of overdraft compared to current pumping? (or what is the volume of annual sustainable yield relative to water pumped historically) A: It's not a simple answer as pumping can change annually and the solution is not going to be as simple as an across the board cut to pumping. The long-term change in storage published in the Water Year 2020 Annual Report shows an average reduction of 132,000 Acre-feet per year (based on 2006-2020).
        v. Q: Did DWR have any noteworthy comments on the GSP? A: DWR has provided no feedback on any GSP thus far. The regulations provide DWR two years to review GSPs.
        vi. Q: In making projection for sustainable yield in the future, did the model include the likelihood of precipitation/runoff being less in the future than in last 100 years due to drought or climate change? A: The GSP includes model sensitivity runs for the effect of climate change which was identified and acknowledged as an uncertainty.
        vii. Public Question: Why hasn't green water infrastructure been mentioned in the sustainability plan? The cost and overall benefit seems like a win-win proposition. e.g. rainwater harvesting. What are the barriers to getting a discussion about green water infrastructure? Not just Flood-MAR which is one tool in the toolbox – there are other tools under the umbrella of green infrastructure that benefit communities. Many micro-projects can help enhance the water table. A: While the GSP does not use the term "green infrastructure," much of the analysis of how to reach sustainability has focused on capturing stormwater for recharge purposes. This is a component of several priority GSP projects. Our website has a place (on the Contact Us page) to submit ideas for additional projects.
        viii. Public Question: Does it make it any more urgent to have demand reduction be a focus rather than supply augmentation given that we potentially may not have surface water supplies that the GSP relies on, and recharge projects? A: The GSAs are currently evaluating 5-year objectives to move toward to the sustainability goal. The Merced Subbasin GSA already has a demand reduction management action from the GSP and is

thinking about this as well – it will be balanced between both demand reduction and supply augmentation.

b. GSP Implementation Progress
    i. Lacey McBride (Merced Subbasin GSA) provided an updated on GSP implementation since the GSP was submitted in January 2020, including Proposition 68 grant funded projects.
c. WY2020 Annual Report Summary
    i. Chris Hewes (Woodard & Curran) provided an overview of the Water Year 2020 Annual Report, including sustainable management criteria, groundwater level changes, and groundwater storage change.
d. Comments and questions
    i. Comment (Susan Walsh): As someone who has lived in Merced and has paid attention to growth in the valley in the last 30 years, feeling some cognitive dissonance in talking about limiting pumping yet City of Merced is about to annex a large acreage of land for new development. At what point is growth in the valley going to be collapsed into planning with groundwater? At meetings about safety, housing, etc., rarely do people mention the fact that groundwater is such an important and scarce commodity.
    ii. Comment (Maxwell Norton): The Monterey/Salinas area has some of the most expensive urban water in North America. There seems to be a lot of planning efforts and documents in San Joaquin Valley, but long-term water security doesn't seem to be merged with long-term growth projections.
    iii. Comment (Susan Walsh): Cities and suburban areas in Merced County have made efforts to reduce impacts on water systems, e.g. turf replacement/removal. Have we ever measured that or quantified how different landscapes look between 1980 and now? (some has been mandated for new development requirements). It would be helpful to measure what has been done in the past to apply to the future.
        1. Answer from Leah Brown (City of Merced): Every urban supplier has different information about what's happened in their area. The City of Merced doesn't have tracking of turf conversion projects. But it does have all kinds of data from the metering system. In 2015, a large scale metering project resulted in more complete metering in the City. Between July 2013 drought and July 2018, there was a 39% reduction in use. This urban water use reduction has maintained since then and is a cumulative 28% reduction as of the current Urban Water Management Plan effort.
    iv. Comment (David Serrano): Concerned that foothills in Madera and Merced have been developed from previously native pasture. Impact of reduced natural foothill recharge and increased draw on groundwater resources. With surface water prices increasing, concerned about being priced out of agricultural livelihood/legacy.
    v. Comment (Olivia Gomez): Hearing that California is going into drought again. There was a lot of education in the previous drought but it has stopped. This education is important to keep up because everyone's in it together – it's important to share perspectives. Going to start metering which will help conservation efforts. Education about conservation and preservation is key.
    vi. Comment (Gil Cardon): How have the wildfires affected soil conditions? A: We are not sure – it has not come up in GSA discussions. But we know that UC Merced faculty have been doing research in this area.
    vii. Comment (Joe Sansoni): As family farmers with small operations, water issues and availability are critical. We understand overdraft is an issue that needs solutions. Have spent a lot of effort to be more efficient already. Yields per acre and AF pumped are significantly more efficient than in the past and continuing to improve. This stands for most growers regardless of crop type and growers don't always get a lot of public credit for that.

This is also costly to implement. Something that has become an unfortunate reality in agriculture is big production investment agriculture – for instance, almond industry had several good years, thus thousands of acres were installed in last decade. If there's a downturn, investment agriculture can take a multi-year hit which would hurt smaller farmers. It feels like the large drawdowns are driven by investment agriculture.

viii. Q (Wes Myers): Some monitoring data is iffy, e.g. hatched areas. What opportunities or mechanisms exist to audit the model? GSPs are moving forward based on one assumption, but how do we know that it's correct? Does the state audit or a third party consultant come in and do this? A: Most Annual Report figures are based on actual monitoring data, not modeled data. The model is also informed by historical data. The model has been calibrated based on monthly records from 20-30 years. During the development and calibration process, there was an involved technical advisory panel including UC Merced, USGS, and DWR representation. The GSP includes some writeup about model uncertainty as well.

ix. Comment (Nav Athwal): One way to reduce overdraft is potentially the use of more efficient technology when it comes to irrigation of crops. Many folks have moved to drip irrigation and it's very efficient. But wondering if as a group and GSAs, has there been work in adopting better irrigation technology as a way to reduce demand without requiring fallowing and other negative consequences that come with that? In addition, thoughts about how to use water from parcels that would rather not irrigate (e.g. commodities with less demand) vs those who need the water to meet minimum ET – like a groundwater credits market to meet irrigation demand. Is there thought to fund resource conservation projects at a grower level?

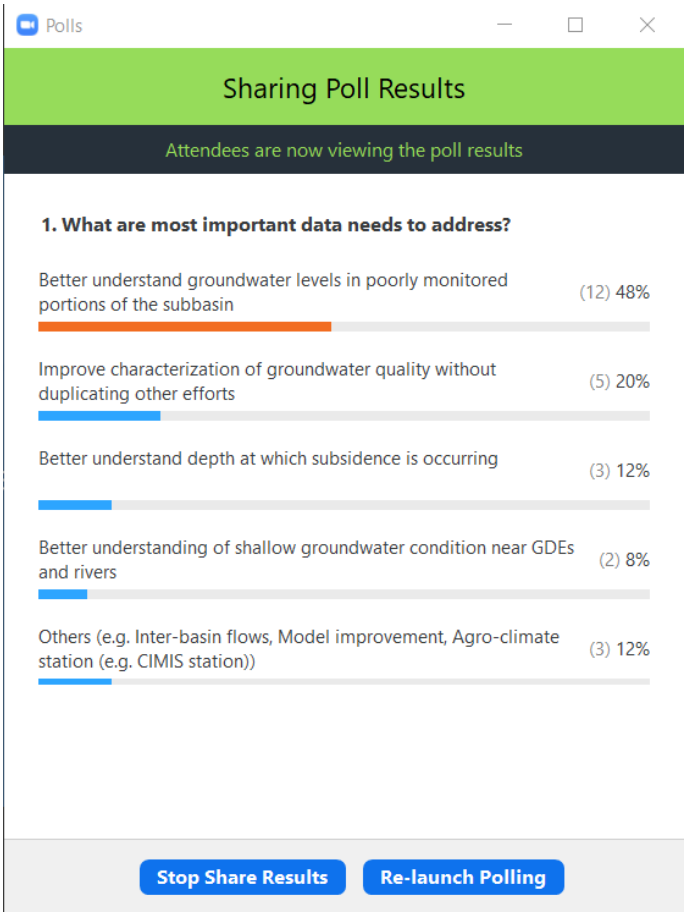
    1. Lacey McBride (Merced Subbasin GSA): The GSA is looking at and considering many different tools in the toolbox as options outside of fallowing land. One challenge is that you need to consider that efficiency should reduce overall groundwater use and not end up increasing it beyond historical due to more efficient use and less percolation. The Merced Subbasin GSA doesn't have a program (or funding now) to do something like funding a resource conservation project. Another future discussion will be how will the GSA generate revenue to pay for these types of programs.

x. Comment (Jean Okuye): With less than 20 years before we are to have balance and sustainable management it seems we need to address the demand. Are we looking at Sustainable Agricultural Lands Conservation? Award those doing the right thing, keep our water in our county, be sure we don't take from Peter to pay Paul, be sure the small farmers and communities can afford water? Who owns the water? Look at what Madera County is doing as they have received grant to help them manage water.

xi. Comment (Maxwell Norton): There's been a wide assortment of cost-sharing and straight funding through NRCS and others. Programs come and go based on the latest Farm Bill. Most improvements that are possible in production agriculture have been achieved.

4. What's Next?
    a. Data Gaps Plan
        i. Samantha Salvia (Woodard & Curran) provided an overview of the Data Gaps Plan effort and encouraged stakeholders to explore the slides in detail after the meeting as time was running short at this point in the meeting.
        ii. Poll results:

iii.



iv. Amanda Monaco: Are the GSAs going to use the data gaps grant to fill in missing info about the location and vulnerability of domestic wells, so we can better understand potential impacts on their drinking water supply? A: Ongoing Integrated Regional Water Management (IRWM) work funded by DWR is evaluating locations and depths of domestic wells in key areas of the Subbasin.
    1. Matt Beaman (MIUGSA): Report will be presented to Merced IRWM region likely in May and made public later.

b. Future Stakeholder Advisory Committee Meetings
    i. Charles Gardiner (Catalyst) talked through options for the next meeting, likely July 6 or 12. A poll will go out to committee members to schedule this.

5. Public Comment
    a. No comments.
6. Next steps and adjourn

Next Regular Meeting
July 12, 2021 from 1-3pm
Information also available online at mercedsgma.org

Note: If you need disability-related modification or accommodation to participate in this meeting, please contact Merced County, Community and Economic Development staff at 209-385-7654 at least 48 hours prior to the start of the meeting.

MEETING MINUTES – Merced GSP Stakeholder Advisory Committee

SUBJECT: Stakeholder Advisory Committee Meeting
DATE/TIME: July 12, 2021 at 1:00 PM
LOCATION: Zoom Virtual Meeting

Stakeholder Committee Members In Attendance:

	Representative	Community Aspect Representation
☐	Arlan Thomas	MIDAC member
☒	Ben Migliazzo (alternate)	Live Oak Farms
☒	Bob Kelley	Stevinson Representative
☒	Breanne Ramos	MCFB
☒	Craig Arnold	Arnold Farms
☐	Darren Olguin	Resident of Merced County
☒	Dave Serrano	Serrano Farms - Le Grand
☒	David Belt	Foster Farms
☒	Emma Reyes	Martin Reyes Farm/Land Leveling
☐	~~Gil Cardon~~ (has left committee, replacement TBD)	~~Merced Co. Hispanic Chamber of Commerce~~
☐	Greg Olzack	Atwater Resident
☒	Jean Okuye	E Merced RCD
☐	Joe Sansoni	Sansoni Farms/MCFB
☒	Joe Scoto	Scoto Brothers/McSwain School Dist.
☒	Jose Moran	Livingston City Council
☒	Lacy Carothers	Cal Am Water
☒	Lisa Baker	Clayton Water District
☒	Lisa Kayser-Grant	Sierra Club
☒	Mark Maxwell	UC Merced
☒	Maxwell Norton	Unincorporated area
☒	Nav Athwal	TriNut Farms
☒	Olivia Gomez	Community of Planada
☒	Amanda Monaco (alternate)	Leadership Counsel
☒	Parry Klassen	ESJWQC
☐	Reyn Akinoa	River Partners
☐	Rick Drayer	Merced/Mariposa Cattlemen
☒	Robert Weimer	Weimer Farms
☒	Simon Vander Woude	Sandy Mush MWC
☒	Susan Walsh	City of Merced
☒	Thomas Dinwoodie	Master Gardener/McSwain
☒	Trevor Hutton	Valley Land Alliance
☒	Wes Myers	Merced Grassland Coalition

Meeting Minutes

1. Call to Order and Welcome
    a. Charles Gardiners (Catalyst) welcomed the group.
2. Introductions and Roll Call
    a. Stakeholder Advisory Representatives for the Merced Subbasin GSP introduced themselves (see attendance record above).
    b. Charles Gardiners (Catalyst) provided a summary of responses to a survey of committee members conducted online ahead of the meeting (25 responses) about resuming in-person meetings.
        i. Comments ranged from wanting in person to desire for hybrid approach (both in person and option for virtual); the major limitation to a hybrid system is confirming a meeting space and the available technology.
        ii. Concern was raised over losing the voices of people who can't attend in-person if there's not a way to include them remotely.
        iii. Emma Reyes shared that vaccination status can be requested or can be stated as part of a policy, but participants don't need to provide that information as it is private medical information.
        iv. The Merced County Farm Bureau is working to upgrade their conference room for remote integration over the next several months which may be a possibility for future hybrid meetings.
        v. GSAs and W&C will explore technology and room availability to see if hybrid option is possible for October meeting.
3. Review of Topics Covered at April Stakeholder Advisory Committee Meeting
    a. Samantha Salvia (Woodard & Curran) briefly listed the topics covered at the April meeting and reminded the group all slides and meeting notes are posted on the www.MercedSGMA.org website. Topics covered:
        i. Overview of Merced GSP (sustainable management criteria, sustainability goal, etc.)
        ii. GSP Implementation Progress (grants, monitoring, projects)
        iii. Annual Report Summary (changes in gw levels in WY 2020)
        iv. Data Gaps Plan Development (gaps identified in GSP and grant funded work to prepare a plan to prioritize and address)
4. SGMA Overview
    a. Samantha Salvia (Woodard & Curran) explained that given the group only meets quarterly and the GSP is a large document, the GSAs want to start each meeting with some context. She provided a brief explanation of SGMA's purpose emphasizing that SGMA is meant to foster local management of groundwater and that SGMA gives GSAs authority to establish groundwater extraction allocations and collect fees. SGMA and GSPs adopted under SGMA cannot alter water rights.
    b. Lacey McBride (MSGSA) provided an informational update about how Merced County is considering updating the Groundwater Ordinance for well permitting (staff proposal currently being developed). The proposal would shift determination of consistency with GSPs from the County to the appropriate GSA. Lacey pointed out that under current conditions, the County is making a determination of whether well permit applications are consistent with GSPs they did not directly develop.
        i. Q: What about existing well replacement? A: Under the current staff proposal, well replacement would fall under the GSAs the same as for new wells. Existing exemptions would be pre-empted by the fact that the applicant is within jurisdiction of a GSA managing under a GSP.
        ii. Q: What about hardship such as replacement of a domestic well? A: That is something the GSAs will need to consider as they develop their policies if the proposal moves forward.

iii. Lisa Kayser-Grant: How many GSAs are considered under this policy? A: Merced County-wide has 17 GSAs across portions of several subbasins, but the Merced Subbasin only has 3 GSAs (and 1 GSP).
iv. Q: What is the level of oversight on consistency between GSPs? A: DWR reviews GSPs for consistency across each individual basin, and each GSP has to adhere to SGMA requirements as well.

5. Merced GSP Overview
   a. Samantha Salvia (Woodard & Curran) provided more information specific to the Merced GSP and ongoing review by DWR. She outlined what DWR has shared about its 3 review pathways for GSPs (approved, incomplete with corrective actions, inadequate). She described the feedback DWR has provided on the plans it has released public information on so far (2 approvals, and 2 "internal consultation"). She reiterated that DWR expects GSAs to be implementing their GSPs during the review process.
      i. Q: If there are questions from DWR's review, does this put us back to "zero" for Committees and decision-making? A: DWR feedback is more likely to be specifically targeted to areas of the GSP where DWR wants more information or support for analyses. Not so much a "redo" as a "refinement".
      ii. Q: Are the Plans that have already received feedback due to lack of documentation or weak implementation? A: Santa Cruz was approved while two others (Cuyama and Paso Robles) have started a more informal "internal consultation" with DWR (this information consultation avoids triggering the formal 180 day period for GSAs to address deficiencies, not fully declared "incomplete"). DWR's initial feedback is published publicly in the SGMA Portal.
      iii. Comment (Amanda Monaco): One takeaway from Leadership Counsel is that in addition to comments on sustainable management criteria and linkage to undesirable results, DWR wants to see as part of undesirable results that GSAs are looking at potential drinking water impacts and whether there will be impacts, as well as whether or not a mitigation program is required. .
   b. Samantha Salvia (Woodard & Curran) walked the group through the Merced GSP's estimates of water budgets, calculation of sustainable yield, and the development of the framework for allocation of the sustainable yield among the GSAs. The Merced GSP contains an explanation that GSAs intend to allocate water to each GSA but have not yet reached agreement on allocations or how they will be implemented. As the GSAs continue to work on basin-wide allocations, they are evaluating GSA-specific 5 yr targets to make immediate progress towards sustainability while allocation framework discussions are ongoing. Samantha invited each GSA rep to describe their 5 yr target.
   c. Matt Beaman (MIUGSA) described MIUGSA's tentative target as a goal of reducing pumping of native groundwater to 1.5AF/AC by 2025. He further explained that a public process is underway within the GSA to develop principles and guideline for GSP implementation within MIUGSA (meetings expected to start August). He said MIUGSA recognizes that the ultimate sustainable number might be lower (than 1.5 AF/AC) but they wanted to set an aggressive intermediate target. Info available at http://mercedgroundwater.org/
   d. Lacey McBride (MSGSA) shared that MSGSA adopted via resolution on 7/8/21 a 5 yr target of 15,000 AFY reduction in consumptive use of groundwater in MSGSA by 2025. She acknowledged that greater reductions will be needed, but that this target puts the GSA on a glidepath to allow time for programs and projects to get into place in the first five years, and then additional reductions in years afterward will need to be steeper.
   e. Kel Mitchell (TIWD GSA #1) confirmed that all wells in TIWD GSA#1 are metered and that 1.5 AF/AC is a likely achievable 5 yr target but nothing has gone to the TIWD GSA#1 board formally yet. He stated that 1.5 AF/AC will be subject to additional discussions and collaboration at the Coordination Committee level.

f. Q: MIUGSA to reduce to 1.5 AF/AC by when? Will the MSGSA target eventually include AF/AC limit to users? Any ideas on when that clarification will be made public?
    i. A (MIUGSA): MIUGSA board has not taken specific action on this. Additional technical work and the public process are ongoing.
    ii. A (MSGSA): There's no single silver bullet for MSGSA to reduce consumptive use – it will be accomplished through a variety of projects and programs. The GSA has a technical advisory committee that is looking at this. Land repurposing will likely be part of a solution because it can provide multiple benefits (habitat, protection of domestic wells around DACs, etc.) along with allocations.

g. Q: So is the thought is we'll reduce pumping by 1.5 acre feet and then to meet the rest of the gap, we'll come up with additional surface water sources or establish a trading market?
    i. A (MIUGSA): There is no set schedule beyond the five-year target at this time.
    ii. A (MSGSA): Similar to MIUGSA, not sure exactly when bigger discussion about trading/markets/etc. will happen down the road because there are more near-term framework discussions to be had. The intent of the 5 yr targets is to help us make progress while we figure out what sustainability ultimately looks like for this basin.
h. Q: How many wells are metered in the Subbasin? A: The GSAs do not have data on how many are metered currently, except for TIWD GSA-#1. Requiring metering on wells is one management option available to the GSAs.

6. Summary of April Coordination Committee Meeting
    a. Chris Hewes (Woodard & Curran) provided a summary of current basin conditions that were presented at the April Coordination Committee meeting, including spring 2021 measurements of groundwater levels.
    b. Samantha Salvia (Woodard & Curran) provided a summary of the April presentation to the Coordination Committee about the Meadowbrook Intertie Feasibility Study. The goal of the grant funded study was to evaluate the needs and feasibility of connecting the Meadowbrook water system to either the Atwater or Merced city water system. The study found that interties to both Merced and Atwater systems are feasible with costs ranging from $1M to $2.5M depending on location.
    c. Chris Hewes (Woodard & Curran) provided a summary of the methodology and progress to date on the Data Gaps Plan. The Data Gaps Plan is grant funded and with a goal of developing a plan that identifies and ranks priority areas for the installation of monitoring wells or subsidence monitoring stations to support basin characterization and future GSP refinement. Chris shared the results of the SAC's April meeting poll on priorities for data gaps to fill. The Plan is currently drafted and being reviewed by GSA staff. Chris shared preliminary results of the spatial analysis tool showing areas recommended for additional monitoring.
        i. Q: Can private well owners be compelled to have their wells participate in the GSP monitoring network? A: No.
        ii. Comment from Bob Kelley: I have let WC know that we have installed a dedicated internet item in monitoring well on the east portion of the Stevinson Area. It is close to an orange area you cite in your tool methodology. Contact Betty Lindeman for inclusion of this real time information. I'm sure you have her email address.
        iii. Q: Will there be outreach to well owners to encourage participation in the monitoring program? A: Yes, the next step in the implementation of the Data Gaps Plan will be to conduct outreach. There is currently a standing call for monitoring data on the MercedSGMA website.
        iv. Q: Is the alternate to volunteering for groundwater level monitoring to be expensive remote sensing? A: For groundwater levels, it is more likely that new dedicated monitoring wells would need to be installed in right-of-ways or by finding willing landowners. . Note: A Remote-sensing tool is also being developed under grant funding as a potential alternative to *metering*, which is very expensive.

v. Q: Do volunteered wells need construction information to be part of the network? A: SGMA doesn't necessarily require construction information but we do need to know which aquifer it is completed in; there's the possibility of running a camera down the well to determine this.
    1. Follow-up comment from Parry Klassen: ESJWQC asked well owners to volunteer wells for their Groundwater Quality Trend Monitoring program and were amazed at the number of owners who volunteered, but most didn't qualify as they didn't have construction information. The ESJWQC Board might agree to provide information previously collected for volunteers in the data gap areas to approach them to be part of the network.

vi. Written Comment in chat: I thought USGS was doing a lot of monitoring of the zone below Corcoran Clay. *Follow-up response in chat:* USGS has been in Stanislaus and Merced Counties monitoring domestic wells. 60-80 wells is planned I understand

7. Drought Preparedness
    a. Matt Beaman (MIUGSA) provided a description of drought-related resources as California continues to experience an extreme drought.
    b. Lacey McBride (MSGSA): MSGSA's Technical Advisory Committee met in May and discussed drought and domestic wells. The committee's recommendation was to gather better information about domestic well locations before considering a mitigation program (data from the County about post-1996 permitted domestic wells may overcount because it doesn't include records for destroyed wells.) For now the best resource for emergency water is Self Help Enterprises (SHE). They are the administrator of state funds to provide tanked water or help drill new wells.
8. Public Comment
    a. Ursula Stock (via email):
        i. Attached is a very good article on the status of water in California, and I hope it will be referenced when making decisions, and included with my public comment, https://thevalleycitizen.com/valley-water-belongs-to-the-people/
        The water of Merced County needs to stay in Merced County. The natural system of the entire valley is an "ecosystem" onto itself. Low snowpack is constantly blamed on global warming, but our handling of valley water is crucial to snowpack. Over 95% of the Valley wetlands have been drained, cutting evapotranspiration. As we divert surface water, reducing recharge and the health of valley biomes, we further impact snowpack. As we lower or dry out the groundwater basin, that has a on the snowpack too. The less moisture in the valley, the less there is to evaporate, form clouds and rain/snow in the mountains- to flow back down our rivers. It is all interconnected.
        For example, lowered groundwater tables become too deep for the tap roots of indiginois trees to reach, causes the death of the tree, stops the huge movement of water it transpires, and reduces soil biomes that are tree dependent. The loss of these biomes result in the loss of water retention around the tree. In the early spring, you can easily see this water retention due to trees, when green encircles the trunks, while surrounding treeless areas remain brown. The Tule Fog is impacted as ground water recedes, which stone fruits and many local plants "mine' for water, further reducing evapotranspiration. Water is a finite resource, and as we remove the water from the valley, and reduce the flow of that water, we impact its availability to snowpack and to the valley.
        Like the human body, which can sustain a sudden loss of up to 14% of its blood in a short incident, and at 15% begins to suffer dire consequences, our watersheds have a tipping point. That tipping point is desertification, and humans have done this all over the world. Will we do it here too, as we fuss about water rights, versus the viability of the entire valley and delta ecosystem upon which we depend?
        Keep the water of Merced County in Merced County, and work to find nature based solutions to " living within the means" provided by this magnificent Valley.
        Ursula Stock, Merced

b. No other public comment during the meeting.

9. Next steps and adjourn
    a. Q: Could we change time of meetings from 1pm to 1:30PM? A: GSAs and consultants will consider this along with evaluating options for hybrid meeting location.

Next Regular Meeting
TBD mid-October 2021
Information also available online at mercedsgma.org

MEETING MINUTES – Merced GSP Stakeholder Advisory Committee

SUBJECT: Stakeholder Advisory Committee Meeting
DATE/TIME: November 8, 2021 at 1:00 PM
LOCATION: Zoom Virtual Meeting

Stakeholder Committee Members in Attendance:

	Representative	Community Aspect Representation
☐	Arlan Thomas	MIDAC member
☒	Bob Kelley	Stevinson Representative
☐	Breanne Ramos	MCFB
☒	Craig Arnold	Arnold Farms
☒	Darren Olguin	Resident of Merced County
☒	Dave Serrano	Serrano Farms - Le Grand
☒	David Belt	Foster Farms
☒	Emma Reyes	Martin Reyes Farm/Land Leveling
☐	Greg Olzack	Atwater Resident
☐	Jean Okuye	E Merced RCD
☐	Joe Sansoni	Sansoni Farms/MCFB
☒	Joe Scoto	Scoto Brothers/McSwain School Dist.
☐	Jose Moran	Livingston City Council
☐	Lacy Carothers	Cal Am Water
☒	Lisa Baker	Clayton Water District
☒	Lisa Kayser-Grant	Sierra Club
☐	Mark Maxwell	UC Merced
☒	Maxwell Norton	Unincorporated area
☒	Nav Athwal	TriNut Farms
☐	Olivia Gomez	Community of Planada
☒	Amanda Monaco (alternate)	Leadership Counsel
☒	Parry Klassen	ESJWQC
☒	~~Reyn Akinoa~~ Darcy Brown	River Partners
☐	Rick Drayer	Merced/Mariposa Cattlemen
☐	Robert Weimer	Weimer Farms
☒	Simon Vander Woude	Sandy Mush MWC
☒	Susan Walsh	City of Merced
☒	Bill Spriggs (alternate)	Merced resident
☐	Thomas Dinwoodie	Master Gardener/McSwain
☒	Trevor Hutton	Valley Land Alliance
☒	Wes Myers	Merced Grassland Coalition

Meeting Minutes

1. Call to Order and Welcome
    a. Charles Gardiners (Catalyst) welcomed the group.
2. Roll Call
    a. Stakeholder Advisory Representatives for the Merced Subbasin GSP introduced themselves (see attendance record above).
3. GSA Reports
    a. Jim Blanke (Woodard & Curran) provided a brief overview of the 10/25/21 Coordination Committee (CC) meeting:
        i. Discussion items covered at both CC and today's SAC meeting: GSA updates, data gaps plan, new grant funding, and insights from DWR on other GSPs.
        ii. Interbasin coordination is ongoing with the Chowchilla and Delta-Mendota Subbasins, with focused discussions around subsidence and developing a uniform method to understand pumping by the various subbasins (e.g., water budgets) and impacts on subsidence.
        iii. The CC discussed options for coordinating on a Well Consistency Policy. Currently the County's Environmental Health Department intakes and reviews all new well permits but wants to shift determination of whether a well application is consistent with the GSP to the various GSAs. Domestic wells would still be exempt and the County would review & approve those permits. Discussions on this are ongoing.
        iv. The Committee discussed the draft Turlock Subbasin GSP and options for commenting on it – they agreed to continue using informal comment mechanisms like existing participation on a technical advisory committee, and wait to submit formal comments until DWR comments are received on the Merced GSP in order to be more comprehensive.
    b. Lacey McBride provided an update for the Merced Subbasin GSA:
        i. Over the past few months, the GSA Board has worked through a two-phased approach to GSP implementation.
            1. Phase 1 – now through end of WY2025 – focused on meeting the target of reducing groundwater consumption by 15,000 AF annually through land repurposing and fallowing, importing surface water, and capturing flood waters. Other Phase 1 work will include the development of parcel-level water year budgets for growers, Prop 218 process for funding, and initiating discussions with stakeholders and the public regarding allocations (which are not anticipated to be adopted until Phase 2).
            2. Phase 2 – WY2026 through 2040 – includes adopting and implementing an allocation plan with continued land repurposing, fallowing, and securing surface supplies.
            3. The GSA Board is going to consider a resolution to adopt the above phased approach at a meeting on 11/12 at 10AM.
            4. A public workshop is planned for 11/18 at 6PM in Merced College Business Resource Center (630 W 19th St in Merced) for landowners, growers, and the public in the GSA to kick off Phase 1 of the implementation approach.
    c. Matt Beaman provided an update for the Merced Irrigation-Urban GSA:
        i. The GSA has been holding several stakeholder guidance committee meetings that include representatives from agricultural, municipal, environmental, and DAC sectors – discussions have been focused on agricultural reductions. Have found that growers supplementing groundwater use with surface water are using about 1 AF/ac – but there are significant users relying only on groundwater.
        ii. Input from stakeholders about how the allocation method should work indicated interest in "high certainty" of what the allocation was going to be ahead of time with moderate flexibility in how to operate the allocation program; this would mean a relatively low initial

allocation (to prevent State intervention) but some flexibility in pooling water, longer allocation period, and potential for trading.

iii. Next steps: MIUGSA is drafting policies and intends to come back to their stakeholder committee next spring 2022 to review draft policies for implementing the GSP within its boundaries. At this point, no allocation volume has been set but MIUGSA's stakeholder committee is expressing a desire for high certainty (e.g., low allocation) while still providing some flexibility.

iv. Question (in chat): How can we find out about MIUGSA meetings to participate in discussions about projects and management actions? We would like to attend and participate in those stakeholder committee meetings. Answer: Meetings have been posted on www.mercedgroundwater.org and https://www.miugsa.org/ – projects page has the past presentations and minutes.

d. Kel Mitchel provided an update for the Turner Island Water District GSA #1:
   i. Previously had shared a soft target of 1.5 AF/ac – despite the difficulties with meeting irrigation demands in the last dry year, they were able to meet and exceed that (averaged around 1 AF/ac of use).
   ii. Kel provided some background about the May 2021 Renewable Resources Group acquisition of about 7,000 acres in TIWD; two out of five GSA board members stepped down and were replaced with Kel Mitchell and Tim Allen. Kel shared that Renewable Resources Group does not intend to operate the public agency (TIWD) as if it was an extension of the private firm.
   iii. To help operate TIWD, the board has retained an outside accounting service and hired a manager for the district, among other efforts, to maintain the public agency as a distinct entity, without co-mingled operations from a private firm.

e. SAC questions and discussion
   i. None.

4. DWR GSP Review
   a. Samantha Salvia (Woodard & Curran) provided an update on DWR review of other GSPs.
      i. DWR has reviewed and approved 2 GSPs (Santa Cruz and Salinas) and has communicated that they plan to complete reviews for others submitted in 2020 by January 2022. She shared some potential comments that Merced might expect based on what was observed in the two existing letters.
         1. Amanda Peisch-Derby (DWR) shared that DWR has hired a lot of new staff and Craig Altare (lead of GSP review) is following a plan to meet the deadline for providing comments. Amanda encouraged interested parties to sign up for the SGM newsletter to keep up to date with DWR news:
            a. https://listservice.cnra.ca.gov/scripts/wa.exe?SUBED1=DWR_SGMP&A=1
   b. Samantha also shared news about upcoming DWR grant funding, $152 million of which is designated for critically overdrafted basins like Merced.
      i. Jim Blanke added that DWR is expected to perform a relatively coarse scale airborne electromagnetic (AEM) survey of the Merced Subbasin in spring of 2022, as part of a statewide effort. There is opportunity to coordinate a local geophysical survey effort under the grant with the statewide AEM survey.
      ii. Question: What is AEM? Answer: It stands for Airborne Electromagnetic (AEM) and provides additional information about soils and groundwater. More information is available at: https://water.ca.gov/programs/SGMA/AEM.

5. Data Gaps Plan
   a. Review of results and status, Chris Hewes (Woodard & Curran) provided a brief overview of the first phase of the Data Gaps Plan effort and reviewed the results and latest status.
      i. The Data Gaps Plan was published in July 2021 (http://mercedsgma.org/resources#data-gaps-plan).

ii. Appendix B has detailed maps showing recommended monitoring sites for each principal aquifer, along with known existing wells within the Subbasin that aren't already part of the monitoring network: https://www.mercedsgma.org/assets/pdf/reports/Data-Gaps-Plan_Appendix-B_Results-of-groundwater-Monitoring-Network-Analysis-Tools.pdf. Additions to the monitoring network should be focused in or near those recommended areas.
iii. Phase 2 of the data gaps plan includes using approximately $270,000 of remaining grant funding to upgrade and incorporate existing wells into network as well as install new wells in critical locations.

b. Lacey McBride (Merced Subbasin GSA) pointed out that many of the identified data gaps and recommended new monitoring locations are within the Merced Subbasin GSA.
   i. She made a request to the SAC to help identify additional wells in these areas.
   ii. SAC committee members are encouraged to reach out to Lacey (Lacey.McBride@countyofmerced.com). If there's a potential monitoring site in the MIUGSA area, stakeholders can reach out to Matt Beaman (mbeaman@mercedid.org).
   iii. Maps showing the locations of recommended new monitoring sites can be found here: https://www.mercedsgma.org/assets/pdf/reports/Data-Gaps-Plan_Appendix-B_Results-of-groundwater-Monitoring-Network-Analysis-Tools.pdf

c. SAC discussion
   i. Question: What are the advantages to participating in the monitoring program? Answer: None of the wells in the monitoring program are being used in any way to penalize or target landowners for specific areas. The Subbasin has very diverse groundwater conditions - by building up the monitoring network, this builds a better understanding of the Subbasin and informs management actions that reflect the existing conditions rather than a guess. Data collected at the well can be shared with the well owner.
   ii. Jim Blanke added that this is intended to be a cost-efficient effort to avoid costly spending by the GSAs. He further noted that efficiencies of using existing wells can only happen with volunteers.
   iii. Question (in chat): What is the pipeline when integrating data from these new wells for the whole GSA (e.g., following current pipeline, new ones, etc.) or are these new wells just to help refine management locally/near to the new wells? Answer: Groundwater level data feeds into many different aspects of GSP management both local and regional, including Annual Reports where hydrographs and groundwater elevation maps are generated every year, Subbasin modeling, water budgets, calculation of Subbasin change in storage, etc.
   iv. Question: What are the criteria for using an existing well as monitoring well? Answer: MSGSA has generally been looking to identify wells that are not continuous production wells (or don't run for multiple months of the year). For the first pass, it would be ideal to know which aquifer the well is completed in (e.g., what depth and what screened interval depths) but there is funding to potentially video that well and determine that information if a well construction log is not available.
      1. Maxwell Norton added that irrigation wells are on a use program with PG&E or MID which means they're not being used during peak power periods each day.
      2. Jim Blanke added that there needs to be an access port for measuring groundwater levels and also would be ideal to avoid excessive oil – both of these items can be checked if well owner is not sure.
      3. Well owners were further encouraged to reach out to the GSAs if interested.

6. Drought Update
   a. Samantha Salvia (Woodard & Curran) provided an update on regional and statewide drought conditions. Precipitation is not the only component of drought – the state has seen some of the hottest temperatures this last water year, which further exacerbated conditions. Even a year of above average precipitation may not be enough to resolve the situation.

i. The latest state reservoir conditions were shared and can be found here: https://cdec.water.ca.gov/resapp/RescondMain
ii. Link to DWR's September drought presentation: https://cwc.ca.gov/-/media/CWC-Website/Files/Documents/2021/09_September/September2021_Item_9_Attach_1_DroughtPowerPoint_Final.pdf

b. Lacey McBride (MSGSA) shared more information about local actions being taken, including 9 tanked water supplies installed by Self-Help Enterprises (Jul-Oct 2021) and 33 "out of water" domestic well permits issued in the Merced Subbasin (Apr-Oct 2021). She also shared a list of emergency water resources in Merced County.
   i. Question (in chat): How do these numbers compare with earlier years? Answer: Merced County 2015 drought saw more like 100 tanked water locations county-wide, which covered a larger area and longer time period.

c. SAC discussion
   i. Joe Scoto: Without surface water, next year is going to be a challenge. Already trying to factor in what crops can be planted where there are known good wells.
   ii. Wes Myers: Less impact on grazing lands, but still a tough year.
   iii. Simon Vander Woude: Surface water helped this year; different ranches, especially in Le Grand it was tougher. In Merced area, Above Corcoran Clay wells are doing better – but without use of surface water in the winter, it will be a different story next year.
   iv. Bob Kelly: Echoes what the panelists have said.
   v. Amanda Monaco: Most folks she works with are on community water systems – more specifics may be available from the Merced representative of Leadership Counsel.
   vi. Dave Serrano: Heard that someone drilled a 21" well (full perforation) and going into bypassed strata and picking up shallower water in the El Nido area. This is making it more difficult for surrounding wells to access groundwater.

7. Public Comment
   a. Susan Walsh shared a thank you to Lacey McBride and City of Merced Leah Brown who gave an excellent presentation to the League of Women Voters and Sierra Club about SGMA and the GSP. Often, Susan hears that people don't understand the issues, but Lacey and Leah did a great job of describing groundwater issues and next steps.
8. Next steps and adjourn
   a. Lacey McBride (MSGSA) shared that the 11/16 County Board of Supervisors will be hearing a public presentation on the proposed changes to the groundwater ordinance which may be of interest to stakeholders.
   b. Samantha Salvia (Woodard & Curran) requested that the stakeholders provide feedback as desired on content for future meetings (this can be done by emailing Chris Hewes at cjhewes@woodardcurran.com or Charles Gardiner at Charles@catalystgroupca.com).
   c. Meeting was adjourned at 2:32 PM.

Next Regular Meeting
TBD January 2022
Information also available online at mercedsgma.org

MEETING MINUTES – Merced GSP Stakeholder Advisory Committee

SUBJECT: Stakeholder Advisory Committee Meeting
DATE/TIME: January 31, 2022, 1:00 to 3:00 PM
LOCATION: Zoom Virtual Meeting

Stakeholder Committee Members in Attendance:

	Representative	Community Aspect Representation
☐	Arlan Thomas	MIDAC member
☒	Ben Migliazzo (alternate)	MIDAC member
☒	Bob Kelley	Stevinson Representative
☐	Blake Nervino	Stevinson/Merquin
☒	Breanne Ramos	MCFB
☐	Craig Arnold	Arnold Farms
☒	Darren Olguin	Resident of Merced County
☒	Dave Serrano	Serrano Farms - Le Grand
☐	David Belt	Foster Farms
☐	Emma Reyes	Martin Reyes Farm/Land Leveling
☐	Greg Olzack	Atwater Resident
☒	Jean Okuye	E Merced RCD
☐	Joe Sansoni	Sansoni Farms/MCFB
☒	Joe Scoto	Scoto Brothers/McSwain School Dist.
☐	Jose Moran	Livingston City Council
☒	Lacy Carothers	Cal Am Water
☒	Lisa Baker	Clayton Water District
☒	Lisa Kayser-Grant	Sierra Club
☒	Mark Maxwell	UC Merced
☒	Maxwell Norton	Unincorporated area
☒	Nav Athwal	TriNut Farms
☒	Olivia Gomez	Community of Planada
☒	Nataly Escobedo Garcia (alternate)	Leadership Counsel
☒	Parry Klassen	ESJWQC
☒	Darcy Brown	River Partners
☐	Rick Drayer	Merced/Mariposa Cattlemen
☐	Robert Weimer	Weimer Farms
☒	Simon Vander Woude	Sandy Mush MWC
☒	Susan Walsh	City of Merced
☐	Bill Spriggs (alternate)	Merced resident
☐	Thomas Dinwoodie	Master Gardener/McSwain
☒	Trevor Hutton	Valley Land Alliance
☒	Wes Myers	Merced Grassland Coalition
☐	Lou Myers (alternate)	Benjamin Land LP

Meeting Minutes

1. Call to Order and Welcome
    a. Charles Gardiner (Catalyst) welcomed the group.
2. Introductions and Roll Call
    a. Charles Gardiner (Catalyst) reviewed the agenda and meeting guidelines, conducted roll call, and reminded attendees that past meeting materials are available online at mercedsgma.org.
3. SGMA Implementation Grant Application
    a. Jim Blanke (Woodard & Curran) provided an overview of the existing projects and new projects considered, the project selection approach, application status, and next steps.
        i. $171 million is available in Round 1 grant funding and is not competitive between basins; therefore, funding will be split evenly between critically overdrafted basins, including Merced, at $7.6 million per basin. The $7.6 million may be reduced depending on the types of projects submitted in the San Joaquin Valley, due to complexities of DWR's funding sources.
            1. Round 2 is expected in 2023 and will be open to all medium and high priority basins not receiving money in Round 1.
        ii. Merced is considering 18 existing and new projects, including 11 storage and recharge projects and 7 interties and monitoring/management projects.
            1. Amsterdam Water District Surface Water Conveyance and Recharge Project
            2. Buchanan Hollow Mutual Water Company Floodwater Recharge Project
            3. Crocker Dam Modification (GSP Project 31)
            4. Deadman Creek Canal Off Stream Storage and Recharge
            5. G Ranch Groundwater Recharge, Habitat Enhancement & Floodplain Expansion Project - Planning
            6. G Ranch Groundwater Recharge, Habitat Enhancement & Floodplain Expansion Project - Implementation
            7. Purdy Project (East Pike Recharge Basin) (Project No. 37)
            8. Purdy Project (E. Purdy, W. Purdy, and Kevin Recharge Basins) (Project No. 38)
            9. Tri City's Water Recharge/Underground Storage Feasibility
            10. Vander Dussen Subsidence Priority Area Flood-MAR Project
            11. Vander Woude Storage Reservoir
            12. Filling Data Gaps Identified in Data Gaps Plan
            13. LeGrand-Athlone Water District Intertie Canal - Phase 2
            14. Merced Water Resources Model Enhancement
            15. Merquin County Water District Sustainable Yield Management Plan and Plan Implementation
            16. MIUGSA Groundwater Extraction Measurement Program
            17. Turner Island Water District (TIWD) Water Conservation
            18. TIWD Shallow Well Drilling
        iii. The funds requested by the 18 projects total approximately $27.4 million. In order to select the projects that will be submitted within the application to DWR, each project will be scored using 10 evaluation criteria defined by the state.
            1. Projects are currently being scored by the Coordination Committee, which will be compiled into a ranking.
            2. Modifications to the final rankings may be recommended by the SAC.

a. Modifications should "document and justify why a lower scoring project was included within the Spending Plan versus a higher scoring project." (from the grant's Proposal Solicitation Package)
b. Several factors may drive modifications, including:
i. Feasibility (water rights, realistic recharge potential, project proponent ability to provide materials and meet grant requirements)
ii. Location (subsidence, areas with declining groundwater, areas surrounded by domestic wells, priority areas according to the sustainability indicators, GSAs / geographic distribution)
iii. Others as deemed important by the subbasin

3. GSA staff will review the scores and make recommendations, if any, to address specific, justifiable needs.
4. Lastly, the Coordination Committee will receive the aggregated scores and recommended modifications, and identify projects for submittal as part of the grant application due on February 28. Projects not selected will be retained for future funding opportunities.

b. SAC discussion
i. Parry Klassen: If everything goes according to plan, when can we expect these projects to be implemented?
1. Simon Vander Woude: Our project is designed and ready for construction within the next year.
2. Bob Kelley: Our project is in environmental permitting phase.
3. Matt Beaman: Our project is undergoing review and design; construction likely in next three years.
4. Jim Blanke: Generally, implementation projects will be required to be completed in the next three years to utilize grant funding.

ii. Charles Gardiner: SAC, are these appropriate projects? Are there other projects that should be added for future consideration?
1. Susan Walsh: Is the scoring rubric based on state or local priorities? How can we balance state and county priorities in funding?
a. Jim Blanke: Scoring criteria are set by the state. As long as projects are eligible for funding, the basin is given freedom to select projects that are deemed most beneficial.
b. Matt Beaman: State gave initial preference to select project types (including geotechnical, floodplain enhancement, etc.), but the list of eligible project types is extensive and includes the projects presented today.

iii. Susan Walsh: Are 'Underrepresented Communities', 'Small Water Systems', and 'Human Right to Water' terms defined by the state?
1. Jim Blanke: Yes, there are definitions for each of these terms provided by the state in the grant Proposal Solicitation Package and Guidelines. For example, Underrepresented Communities are mapped by the state using census tract and community boundaries.

iv. Jim Blanke: SAC, what criteria are reasonable for changing rankings or modifying funding amounts?
1. Dave Serrano: Will projects in the northern and northeastern portions of the basin be ranked high due to groundwater aquifers flowing to the rest of the basin?

    a. Jim Blanke: Groundwater flow could be considered as part of potential modifications to scores if desired.
2. Jean Okuye: Can we prioritize projects where recharge could get into the aquifer the fastest and those that benefit underrepresented communities and small water systems? Could we explore other projects to more quickly inject water into aquifers?
    a. Jim Blanke: While there are not any active injection projects under consideration for this grant proposal, there are some similar projects being explored by TIWD and MID. The application gives higher scores to projects that benefit underrepresented communities and small water systems.
3. Darcy Brown: River Partners has worked with Rosemary Knight at Stanford in other basins and data provided by her lab team has been very insightful. Similar geophysical investigations in Merced could be a great addition to this slate of projects.
4. Parry Klassen: Noted that surface water injections may exceed strict drinking water quality standards and, after a few years, well casings can become blocked with biological and mineral accumulation.
5. Maxwell Norton: Be sure to consider, from an engineering perspective, that projects are feasible, not just desirable.
6. Reyn Akiona: Of the $7.6 million, are some projects required to address a few specific criteria (geophysical investigations, groundwater recharge, and floodplain expansion)?
    a. Jim Blanke: When the draft PSP was released, that was a requirement, but the requirements have since been made more broad and such requirements are no longer basin-specific.
7. Maxwell Norton: How realistic is it for the state to grant water rights to the projects?
    a. Matt Beaman: MID and other parties applied for a floodwater right at the end of 2019, but the SWRCB has not yet accepted the application. MID expects to hear somewhat soon, but timeline will depend on drought curtailment activities.
8. Lisa Kayser-Grant: When looking at the TIWD diversion proposal, will there be any impact or assessment of impact to westside seasonal wetlands? If rights are given to stormwater, how will that impact wetlands in the future? Want to ensure that health of wetlands is being considered.
    a. Kel Mitchel: TIWD has no intention of applying for stream diversion applications. As it stands, the project simply manages the TIWD's existing resources.
9. Trevor Hutton: Does any of the scoring take into account the possibility of continued drought? Which projects will be most effective in that case? I keep hearing mention of "wet years", but wet years may well be rarer in the near future.
    a. Jim Blanke: Scoring criteria provided by state doesn't consider duration of drought, but we can add that to list of potential modifications to rankings, if desired.

4. DWR GSP Comments
    a. Jim Blanke (Woodard & Curran) provided an update on DWR comments on the GSP and requested that SAC Representatives review the final determination letter ahead of the next meeting when potential solutions will be presented.
        i. The GSP was developed in a collaborative stakeholder environment, completed in November 2019, adopted in January 2020, and is currently being implemented.
        ii. Initial comments from DWR were provided in a consultation letter dates November 2021 and a final determination was released on January 28, 2022. The final determination identifies three potential deficiencies and potential corrective actions.
        iii. The three deficiencies were summarized.
        iv. The GSAs held a meeting with DWR staff on January 10, 2022 to discuss the potential deficiencies and pathways to approval. A technical team is currently evaluating new data and approaches to respond to the comments, focused on groundwater level thresholds and subsidence, and drafting approaches to be developed and shared with CC and SAC.
            1. Likely endpoint will be an updated version, with redline, for all or certain portions of the GSP that will be adopted by GSAs by late July 2022.
    b. SAC discussion
        i. Bob Kelley: Has the GSAs looked at the other studies cited by DWR regarding minimum thresholds?
            1. Jim Blanke: The GSAs are in the process of reviewing these studies and will incorporate relevant findings as necessary when revisiting the sustainable management criteria.
        ii. Susan Walsh: Finds the language posed by the state challenging; wants to thank those who thoughtfully worked on the GSP, including the SAC. It can be difficult to interpret the criticism provided by the state.
        iii. Bob Kelley: Seems that the most difficult deficiency to address will be subsidence, especially as it continues. In absence of other information, the state suggests zero subsidence, which will be a challenge to achieve without immediately addressing sub-Corcoran pumping.
5. Drought Update
    a. Jim Blanke (Woodard & Curran) provided an update on the drought.
        i. The Merced subbasin is still in a severe drought, but precipitation is slightly above the 1991-2020 average for the water year. Forecast is for continued dry conditions, however.
        ii. Self-Help Enterprises and the California Partnership for the San Joaquin Valley developed a map (https://arcg.is/WqOGD) of tanked water locations in the San Joaquin Valley.
    b. SAC discussion
        i. Maxwell Norton: There appears to be less tanked water locations than last year, maybe suggests that some wells have been drilled deeper?
            1. Lacey McBride: Between November and this meeting, no new tanked water participants were added in Merced County. Self-Help is now receiving applications to fund drilling of deeper wells.
6. GSA Reports
    a. Jim Blanke (Woodard & Curran) provided a brief overview of the 12/21/21 Coordination Committee (CC) meeting:

i. Focused on identifying projects to consider for inclusion in the SGM grant application and on the scoring process.

b. Lacey McBride provided an update for the Merced Subbasin GSA:
   i. The GSA has been working on Phase 1 of their two-phase GSP implementation, which seeks to achieve reductions in groundwater consumption.
      1. Phase 1 focuses on land repurposing and fallowing. The GSA is working through elements of the program to eventually achieve 15,000 AF annually in groundwater reduction.
      2. A public workshop was held in November 2021 to kick off Phase 1 of the implementation approach.
      3. Proposition 218 will be used to fund Phase 1. The target date for a public hearing and election is summer 2022 and a subcommittee is currently making recommendations for the fee structure.
         a. Next meeting is February 10, both virtual and in-person
   ii. The GSA is also developing a well consistency determination policy to address potential changes from the County of Merced Department of Environmental Health, which would require GSAs to ensure that wells are consistent with the goals of the GSP.

c. Matt Beaman provided an update for the Merced Irrigation-Urban GSA:
   i. The GSA has been holding several stakeholder guidance committee meetings to discuss agricultural reductions. At this point, no allocation volume has been set, but stakeholders are expressing a desire for high certainty (e.g., low allocation) while still providing some flexibility. The GSA is currently considering the stakeholder committee's feedback and preparing a recommendations document that will be presented at a meeting in March.

d. Kel Mitchel provided an update for the Turner Island Water District GSA #1:
   i. The GSA is currently preparing for the for 2022 irrigation season. Most recent work pertains to the water conservation project (discussed today), which is emblematic of what TIWD wants to achieve moving forward. Both the GSA Board and staff are working closely with other GSAs on collective plans to achieve these goals.

e. SAC discussion
   i. None.

7. Public Comment
   a. None.
8. Next steps and adjourn
   a. Meeting was adjourned at 2:56 PM.

Next Regular Meeting
TBD March 2022
Meeting to be conducted virtually (subject to change)
Information also available online at mercedsgma.org

MEETING MINUTES – Merced GSP Stakeholder Advisory Committee

SUBJECT: Stakeholder Advisory Committee Meeting

DATE/TIME: March 21, 2022, 1:00 to 3:00 PM

LOCATION: Hybrid meeting with physical location at Merced Irrigation District, Franklin Yard Facility, 3321 North Franklin Road, Merced, CA 95348 and online via Zoom

---

Stakeholder Committee Members in Attendance:

	Representative	Community Aspect Representation
☒	Arlan Thomas	MIDAC member
☒	Ben Migliazzo (alternate)	MIDAC member
☐	Bob Kelley	Stevinson Representative
☐	Blake Nervino	Stevinson/Merquin
☒	Breanne Ramos	MCFB
☐	Craig Arnold	Arnold Farms
☐	Darren Olguin	Resident of Merced County
☒	Dave Serrano	Serrano Farms - Le Grand
☐	David Belt	Foster Farms
☐	Emma Reyes	Martin Reyes Farm/Land Leveling
☐	Greg Olzack	Atwater Resident
☒	Jean Okuye	E Merced RCD
☐	Joe Sansoni	Sansoni Farms/MCFB
☒	Joe Scoto	Scoto Brothers/McSwain School Dist.
☐	Jose Moran	Livingston City Council
☒	Lacy Carothers	Cal Am Water
☐	Lisa Baker	Clayton Water District
☒	Lisa Kayser-Grant	Sierra Club
☐	Mark Maxwell	UC Merced
☒	Maxwell Norton	Unincorporated area
☒	Nav Athwal	TriNut Farms
☐	Olivia Gomez	Community of Planada
☐	Nataly Escobedo Garcia (alternate)	Leadership Counsel
☐	Parry Klassen	ESJWQC
☐	Darcy Brown	River Partners
☐	Rick Drayer	Merced/Mariposa Cattlemen
☐	Robert Weimer	Weimer Farms
☒	Simon Vander Woude	Sandy Mush MWC
☒	Susan Walsh	City of Merced
☐	Bill Spriggs (alternate)	Merced resident
☒	Thomas Dinwoodie	Master Gardener/McSwain
☒	Trevor Hutton	Valley Land Alliance
☒	Wes Myers	Merced Grassland Coalition
☐	Lou Myers (alternate)	Benjamin Land LP

Meeting Minutes

1. Call to Order and Welcome
    a. Charles Gardiner (Catalyst) welcomed the group.
2. Introductions and Roll Call
    a. Charles Gardiner (Catalyst) reviewed the agenda and meeting guidelines, conducted roll call, and reminded attendees that past meeting materials are available online at mercedsgma.org. Attendees were also reminded that we're planning to meet again in April, May, and June.
3. Grants Updates
    a. SGM Implementation Planning and Projects Grant Update
        i. Jim Blanke (Woodard & Curran [W&C]) described the completed grant application and shared that DWR has recently approved the $7.6 million of requested project funding.
        ii. Q: How soon will grant agreements be in place? A: Likely a few months.
    b. Prop 68 Round 3 Planning
        i. Lacey McBride (MSGSA) shared that staff-level conversations have been occurring on the second phase of the Data Gaps Plan to fund 2 shallow or 1 deep well, plus some other activities to incorporate existing wells. Surrounding subbasins are also using Technical Support Services funding available from DWR and the Merced GSAs plan to make use of this funding as well. There's a running list of wells to be considered and conversations are continuing.
        ii. Jim Blanke (W&C) shared that the Remote Sensing Decision Support Tool is ongoing, largely based on what kind of data is available. Time has been spent looking for accurate and cost-effective data. OpenET has been the latest focus, but the data is not quite available yet, though a preliminary copy has been obtained for initial review.
            1. The Committee discussed CIMIS stations vs meters vs remote sensing.
            2. Madeline Harris (Leadership Counsel) provided comments and asked a question:
                a. Leadership Counsel has doubts about accuracy of remotely sensed evapotranspiration (ET) data. Strongly recommends basinwide metering. ET is OK to use as validation, but not primary source of measurement.
                b. Q: What is the timeline for the GSAs to start measuring GW use? A: Waiting for OpenET dataset finalization in next few months. Tool will be wrapped up by October 2022.
    c. 2020 SGM Implementation Grant
        i. Matt Beaman (Merced Irrigation District [MID]) shared the latest information on the two funded projects, both of which are in progress and on track (Le Grand-Athlone Water District [LGAWD] Intertie and Recharge Project & El Nido Conveyance System Improvements).
        ii. Comment (Dave Serrano) : Complications with LGAWD project. At a meeting held last Thursday, the Proposition 218 election was discussed which is coming up at end of March 2022. There is a land classification issue that has been noted where some parcels aren't registered in the right land use category.
    d. SDAC Grant

i. Matt Beaman (MID) provided an update on a 2019 grant agreement covering three projects serving underrepresented communities.

1. Q: What is the result/action coming out of the Meadowbrook Study? A: The study does not prescribe any particular recommendation option.
2. Q: Based on the Meadowbrook Study, what about wastewater treatment for agriculture or recharge? A: Hasn't been talked about yet. Lacey Carothers (Cal Am) shared that she's interested in talking about it more offline.
3. Q (Susan Walsh): Is the plan for Planada now to put in dry wells instead of a recharge basin? A: Yes. Matt Beaman provided some more technical information about the results of the recharge tests done at the site and the follow-up decision-making.
4. Q (Susan Walsh): For LGAWD, would City of Atwater or City of Merced need to vote? Are there potential political complications? A: MID is not one of those agencies, but shared that the intent of the study was to assess feasibility of intertie connection(s) for emergency and drought purposes. The grant funding only covered the feasibility study.

4. Water Year 2021 Annual Report

a. Chris Hewes (W&C) provided key highlights from the recently drafted WY 2021 Annual Report that will be submitted to DWR by April 1.

i. Comment (Arlan Thomas): The sub-Corcoran subsidence area has always been a problem.

1. Response: Yes, it may always have been a problem, but the question here is if it is better or worse than last year.

ii. Q: What are the estimated data points on the groundwater level change maps? A: These represent where Fall 2020, Fall 2021, or both were not recorded (or had a quality control issue noted), and an estimate was made based on historical and surrounding trends. It is anticipated that future mapping will require fewer estimates with better data collection.

iii. Q: Does DWR read and provide comments on the annual report? A: The reports are available for public comment on the SGMA data portal, but typically haven't received comments from public or DWR.

iv. Q: Will the Annual Report be on the website? Can it be emailed to the Committee? A: Yes, it will be published to Merced SGMA website and SGMA portal website. W&C will email a copy to the Committee once published.

5. Sustainable Management Criteria refresher

a. Jim Blanke (W&C) walked the Committee through a description of the SGMA terminology for sustainable management criteria, including minimum thresholds, undesirable results, measurable objectives, etc.

6. Comments on Groundwater Sustainability Plan by the Department of Water Resources

a. DWR comments overview
   i. Jim Blanke (W&C) reviewed the three comments from DWR on the GSP which was determined "incomplete".
b. Groundwater levels

i. Jim Blanke (W&C) walked through some options that are being evaluated for different minimum thresholds, including (1) 2015 levels, (2) historical low, or (3) deeper of historical low or shallowest domestic well + 10 ft. He also described the pros and cons (challenges) of each potential option. It's challenging to know what DWR will accept. It's likely that all options are workable. There is more risk of disapproval by DWR with options 2 and 3, but they are harder to achieve.
ii. Comment (Arlan Thomas): 2015 groundwater levels are not achievable, even with several flood years.
iii. Public comment: "ET is incomplete, because it only measures evapo-transpiration, but would not measure water being sold out of area. ET also does not account for the water moving in the opposite direction, from soil to ground water because of plants. Cover-cropping, riparian buffers (native plants and trees bordering waterways), and trees all promote increased soil moisture, decrease rain water runoff and help carry water to the ground aquifers. Habitat restoration, and keeping cover crops on ag land (no bare soil) are necessary to restore water retention in both our soils and groundwater. This does not solve the abuse of the past decades but these practices do begin to address the issues we face with predicted, more severe and further spaced severe weather events such as droughts and precipitation."
iv. Q: When will you have extraction rates associated with each option? A: Next SAC meeting in April.
v. Q: Do we know what's happening in other areas of the Valley for these kinds of GSP comments? Are the methodologies similar or different for other basins? Can you give a quick rundown of how GSPs have been kicked back? A: North & South Yuba Subbasins and a few coastal aquifers have been approved but rest are not. The DWR comments have varied for other Central Valley GSPs. There is some level of coordination occurring between basins, but limited due to short timeframe to respond. Some interbasin coordination is occurring with subsidence.
vi. Q (Madeline Harris from Leadership Counsel): With the different options, such as #3 – is shallowest domestic well based on data available in 2015? Want the most protective option for drinking water. A: Updated domestic well data comes from the County and runs through December 2021.
vii. Q: When you get a permit to drill a well in Merced County, is other information recorded other than the construction depth? A: Information on the pump setting or water level after the well was constructed are not available in the permit record.
viii. Jim Blanke (W&C) provided an update on the domestic well analysis and other technical components related to the minimum threshold analysis. He also shared some options for managing Undesirable Results for groundwater levels and asked the SAC for their input on whether these are the right management considerations. Various questions and comments included:
    1. Q: Are there are areas where pumping levels aren't declining at the same rate? A: Likely yes, such as near rivers.
    2. A SAC member who is also a ranch owner shared that their ranch's Above Corcoran wells don't have much year-to-year variation in levels while Below Corcoran wells do have noticeable declines.
    3. This all seems to boil down to the need to reduce pumping and use more surface water.
    4. Group agreed that pumping reductions have to start ASAP with a sloping ramp down.

5. We may not ultimately know how much total pumping reduction is required until incremental reductions have been occurring for some time, like 10 years, and observations through time inform what the ultimate total should be.
6. If we make recharge projects viable, that mitigates a lot of the groundwater pumping reductions.
7. Waiting until 2040 is not an option.
8. 2024-2027 is too short of a time period for reduction implementations. Needs to be minimum 5 years of a ramping as long as it can be done without undesirable results.
    a. Others thought 5-year check-ins would be ideal over a 10 year ramp-down period.
    b. Ideal to get some results by 2035 for last GSP update before 2040.
    c. The Stakeholder Advisory Committee recommended faster cuts to hit goal by 2035 to be able to evaluate results before the Basin arrives at 2040.
9. Bay Area legislator is suggesting speeding up of SGMA implementation.
10. Recharge projects should be sooner than later and more the better.
11. Implementation of reductions in response to drought years – open to opportunities, but unsure how to evaluate against that given the number of variables.
12. Q: Have you looked at Madera for their ramp-down? A: A little, but not in great detail.

c. Subsidence
    i. Jim Blanke (W&C) shared information about the subsidence comment from DWR and some context for subsidence in the basin.
    ii. The group discussed about delayed subsidence occurring even after pumping reductions.
    iii. Comment: There is a hazard of setting the subsidence goal at 0 ft/yr: risk to have the SWRCB come in and take over control of the subbasin.
    iv. Q: Can the geographic discussion be brought into subsidence as well as for groundwater levels? And are there considerations for interbasin issues? A: Probably can't have a differing geographic area for minimum thresholds for subsidence, but SGMA does indicate that neighboring subbasins can't interfere with our ability to meet our sustainability goals.

d. Schedule
    i. Jim Blanke (W&C) described the schedule for incorporating edits into the GSP by end of July to address DWR's comments.
    ii. In April, W&C will be presenting some updated potential pumping reduction numbers to meet the different minimum threshold levels.
    iii. A request was made to focus on the topic of pumping reductions and not additional topics at the April SAC meeting.

7. GSA Reports
    a. Lacey McBride provided an update for the Merced Subbasin GSA:
        i. A land repurposing program is being developed (short-term 3-5 years) to achieve phase 1 goal that will be funded through a Proposition 218 effort. Public workshops will be coming up in the next several weeks.
        ii. MSGSA is looking to apply for Department of Conservation long-term 10+ year land repurposing funding.

iii. Lacey also provided an update on the well consistency policy that is being developed by the GSA.

b. Matt Beaman provided an update for the Merced Irrigation-Urban GSA: the MIUGSA stakeholder guidance committee met four times and has made recommendations for implementation of an allocation program, with a 1.1 AFY/ac that is averaged over a 3-year period, so that MIUGSA would allocated 3.3 AF/AC to be used over a 3 year allocation period.

c. Kel Mitchel did not have an update for the Turner Island Water District GSA #1.

d. SAC discussion

i. Q (Joe Scoto): Has there been any interest in voluntary land repurposing? A (Lacey McBride): While the Nov 2021 survey response was low, what was heard was that there was more interest in short-term programs for a portion of any individual parcel, which will also depend on the incentive provided by the GSA.

8. Public Comment
   a. None.
9. Next steps and adjourn

   a. Lacey McBride requested that the Stakeholder Advisory Committee meeting should be scheduled to occur before the Coordination Committee.

   b. Meeting was adjourned at 3:17pm.

Next Regular Meeting
TBD in late April 2022
Meeting to be conducted hybrid (physical + virtual; subject to change)
Information also available online at mercedsgma.org

MEETING MINUTES – Merced GSP Stakeholder Advisory Committee

SUBJECT: Stakeholder Advisory Committee Meeting

DATE/TIME: April 25, 2022, 1:00 to 3:00 PM

LOCATION: Hybrid meeting with physical location at Merced Irrigation District, Franklin Yard Facility, 3321 North Franklin Road, Merced, CA 95348 and online via Zoom

---

Stakeholder Committee Members in Attendance:

	Representative	Community Aspect Representation
☒	Arlan Thomas	MIDAC member
☒	Ben Migliazzo (alternate)	MIDAC member
☐	Bob Kelley	Stevinson Representative
☐	Blake Nervino	Stevinson/Merquin
☐	Breanne Ramos	MCFB
☒	Craig Arnold	Arnold Farms
☐	Darren Olguin	Resident of Merced County
☒	Dave Serrano	Serrano Farms - Le Grand
☐	David Belt	Foster Farms
☐	Emma Reyes	Martin Reyes Farm/Land Leveling
☐	Greg Olzack	Atwater Resident
☒	Jean Okuye	E Merced RCD
☐	Joe Sansoni	Sansoni Farms/MCFB
☒	Joe Scoto	Scoto Brothers/McSwain School Dist.
☐	Jose Moran	Livingston City Council
☐	Lacy Carothers	Cal Am Water
☒	Lisa Baker	Clayton Water District
☒	Lisa Kayser-Grant	Sierra Club
☐	Mark Maxwell	UC Merced
☒	Maxwell Norton	Unincorporated area
☒	Nav Athwal	TriNut Farms
☒	Olivia Gomez	Community of Planada
☐	Nataly Escobedo Garcia (alternate)	Leadership Counsel
☒	Parry Klassen	ESJWQC
☐	Darcy Brown	River Partners
☐	Rick Drayer	Merced/Mariposa Cattlemen
☐	Robert Weimer	Weimer Farms
☒	Simon Vander Woude	Sandy Mush MWC
☒	Susan Walsh	City of Merced
☐	Bill Spriggs (alternate)	Merced resident
☒	Thomas Dinwoodie	Master Gardener/McSwain
☐	Trevor Hutton	Valley Land Alliance
☒	Wes Myers	Merced Grassland Coalition
☐	Lou Myers (alternate)	Benjamin Land LP

Meeting Minutes

1. Call to Order and Welcome
    a. Charles Gardiner (Catalyst) welcomed the group.
2. Introductions and Roll Call
    a. Charles Gardiner (Catalyst) reviewed the agenda and meeting guidelines, conducted roll call, and reminded attendees that past meeting materials are available online at mercedsgma.org.
    b. Jim Blanke (W&C) reminded the group that we are meeting again in May and June to stay up to date on the GSP update in response to DWR comments.

3. Potential Revisions to the Groundwater Sustainability Plan

a. DWR comments overview
    i. Jim Blanke (W&C) reviewed the three comments from DWR on the GSP which was determined "incomplete". He also refreshed the group on SGMA terminology related to sustainable management criteria.
b. Groundwater levels minimum threshold
    i. Jim Blanke (W&C) reminded the group about several options that have been evaluated for different minimum thresholds (MTs), including (1) 2015 levels, (2) historical low, (3) deeper of historical low or shallowest domestic well + 10 ft, or (4) a combination of #2 in the area of subsidence and #3 elsewhere in the Subbasin.
        1. Jim clarified that option 1 (2015 levels) is based on the year delineated by SGMA before which the basin is not responsible for responding to undesirable results (e.g. for conditions prior to 2015).
    ii. Q (Thomas Dinwoodie): Do you have depths for each of these three choices? Want to be able to put numbers to each of the depths. A: It varies for ~30 representative wells; we have the information and can share it, but it's not easy to show visually because of the variability throughout the Subbasin.
    iii. Q (Susan Walsh): Are the historical domestic well levels estimates? A: No, they are based on well permit records kept by Merced County.
    iv. Q (Thomas Dinwoodie): What do the colors on the map mean? A: The colors represent Above, Below, or Outside Corcoran Clay principal aquifer associated with each representative monitoring well.
    v. Q (Lisa Kayser-Grant): If a well went dry in 2015, are you removing them from the dataset? A: Not directly, no, as we don't have access to that level of information. If regional groundwater levels declined below the shallowest domestic well in a particular area, there is an assumption that it has been dewatered and the destruction was not recorded. The assumption is that shallowest domestic well has been replaced.
    vi. Comment (Lisa Kayser-Grant): If the GSP takes longer to finish updating and implement, does that mean groundwater levels can get deeper and the threshold can be deepened? That seems unreasonable as a process. For residential wells, it's not hard to figure out when they were replaced because they hook up to City water. Well destruction takes time but doesn't take time to have City water hookup and those records should be available.
    vii. Q (Nav Athwal): When you say options, what do you mean? Would all of these options pass muster with DWR? Why not choose the one that gives most flexibility? A: Generally shallower levels are more likely to be accepted, but we'll get into this in a little more detail in the next steps.
    viii. Q (Matt Beaman): Should we be comfortable with assigning a 5 mile radius laterally vs considering depth and location of principal aquifer? A: Shallow domestic wells completed within the Above Corcoran Clay tend to be located up

in the northwest of the Subbasin where there are more Above Corcoran Clay principal aquifer representative monitoring wells. There just aren't a lot of shallow domestic wells in the southern portion of the Subbasin. This can be something we look into a little more.

ix. Q (Kel Mitchel): For MT option 3's component of historical low, is it similar to the historical low used exclusively in option 2 where it could be a more recent Fall 2021 GWL? Would the measurable objective need to be revisited with MT options 1 and 2? A: It's the same historical low as option 2. The figure on the slide was just a schematic, but yes generally the MO would probably need to be revisited to make sure it's got some buffer above the MT.

x. Q (Thomas Dinwoodie): Would it be useful to share that domestic wells aren't located in the foothills in the GSP? A: Yes, that's a good idea to include percentage of map to confirm some numbers.

c. Jim Blanke (W&C) shared that we've expanded the domestic well search radius from 2 miles to 5 miles and included public water supply wells. He also shared that the GSAs are working on filling data gaps to add new representative wells, particularly in Merced Subbasin GSA.

i. Q (Arlan Thomas): Doesn't that make the representative wells more general with an expanded representative area? A: Yes, to some extent. It's a tradeoff between including consideration of more domestic wells within that radius to be protective vs having values that represent a larger area and could be a little less meaningful.

d. Jim Blanke (W&C) expanded on some additional considerations incorporated into the latest round of modeling for ongoing/future subsidence, including no cumulative change in storage (to avoid additional subsidence) over the long term, as well as no cumulatively negative storage in any year (e.g. dry years). These criteria are generally more protective than the MTs that take into consideration groundwater levels only.

i. Q (Lisa Kayser-Grant): It sounds like instead of reducing groundwater lost, criteria are being added that average it out over an area so subsidence may occur? A: We'll still be looking at the representative monitoring wells in the subsidence area. There's some averaging across the subsidence region, but it helps to focus on this region separately from rest of the Subbasin.

ii. Q (Wes Myers): For the eastern side of Merced where there are data gaps, is there a grant program where there can be a cost-share for installing wells that can be used for both ranching and monitoring purposes? (e.g. solar pumps for cattle?) This is specifically for punching in new wells because there are old wells going dry. A: For existing wells, always open to folks who think they have a suitable well. Matt Beaman (MIUGSA) clarified that pretty much all monitoring has been volunteering to date so the GSAs welcome additional volunteers. Jim clarified that grant funding usually requires the well to be fully dedicated to monitoring, but ranching usually has low volume usage so that is worth exploring further if there is interest in volunteering a well.

iii. Q (Thomas Dinwoodie): Thomas has seen good forecasts of climate data from a Nebraska data source. Has the GSP team looked at projections of hydrology and basin conditions under climate change? A: As part of the GSP, the GSP included an evaluation of climate change impacts on future conditions. Both higher evapotranspiration and changes in precipitation in the Central Valley, and also changes in snowpack in the mountains and associated impacts on reservoir systems. What we don't know (additional uncertainty), is when the droughts are going to occur and how frequent or how long.

e. Jim Blanke (W&C) walked the group through the model results table.

i. Q (Matt Beaman): Does the sustainable yield scenario include developed supply as extractions? A: Yes, it does include it.
    1. In the GSP, there's a bucket of water called "developed supply" and the bulk sourced by Merced Irrigation District (MID), ~120,000 AF. The GSP describes that this isn't available for allocation to the GSAs. This volume needs to be subtracted from the sustainable yield number. Once you take that out, you end up with a larger magnitude pumping reduction number. This developed supply is reallocated back to the entity that brings in the supply.
ii. Comment in chat (Nav Athwal): Downside of 2015 levels MT option is that it has a large negative impact on the economy and job market.
iii. Q (Simon Vander Woude): Do you think the DWR will have a problem with option C and the single-year cumulative change in storage of -40,000 AF? As a farmer and considering economic sustainability of farming, that's our best option. A: Yes, the DWR would have an issue with -40,000 AF shown as-is for single-year cumulative storage change in the subsidence area, but it might be possible to craft a project or management action that can address it with some different actions.
    1. Has the model taken into account the Prop 68 funded supply-side projects? A: No, but these can fairly interchangeably be used with demand reductions (e.g. reduce the reported demand reductions in the table by the amount of supply side projects).
iv. Comment (Arlan Thomas) – going to have to run closer to Option B, maybe starting with Option C. If stay at 70,000 AF pumping reduction, the basin condition will continue to worsen.
v. Comment (Wes Myers): Seconded comments that support Option C. Projections won't be right in 50 years. Issues with Option C might be addressed with region-specific pumping.
vi. Q (Nav Athwal): The sustainable yield scenario that we have is what DWR rejected and now we're coming up with a new threshold? Or how do these options correspond to the Sustainable Yield? A: Yes, but DWR rejected the GSP for several reasons besides just groundwater level minimum thresholds. The new pumping reduction scenario(s) take into account several additional factors beyond long-term basin-wide storage.
vii. Q (Lisa Kayser-Grant): Where does the 2- vs 5-mile radius come into the modeling results? A: The domestic well depths are considered in Options "GSP", C, and D. Options A and B are based on groundwater levels only.
viii. Q (Lisa Kayser-Grant): Highly concerned about happy-looking green colors in the table. 2015 groundwater level were a bad (dry) year. Given lack of snowpack and disappearance of glacial water sources, we would have to be extremely optimistic to expect developed supply numbers to continue as-is. To what extent is that factored in? A: Green colors are because groundwater levels today are well below 2015 levels. Future scenarios would have to involve dramatic reductions in pumping to return to previous conditions.
    1. Comment: 2015 levels aren't enough – can't wait longer to continue using 2015 dry year as a goal, especially when we know that the produced water supply is dwindling.
ix. Q (Susan Walsh): Am I hearing this right, that the scenario we are discussing will have substantially altered numbers next time we see it because as it is, it will not pass DWR review?? A: If group wanted to pursue Option C, there might need to be a project or management action included to address single year cumulative negative storage, but otherwise the modeling results are probably similar.

x. Comment in chat (Nav Athwal): Agreed… The cost of putting up a little fight with DWR will be a fraction of the economic cost to the region if we limit more pumping than we have to. Filling data gaps in the next few years will paint a much different picture.
xi. Comment (Susan Walsh): DWR has accessed past reports and discussions – can't do "just" anything. Has to be based on something solid. Has similar concerns that we can't wait to get to a bad year; have to talk about finding a place between 11% and 28% reductions.
xii. Q (Thomas Dinwoodie): Will DWR take into account that we will have good or bad 5-year reports in the GSP Updates? A: Based on today's information, in order to have a complete GSP, we shouldn't have a GSP that includes a negative single-year cumulative storage change below zero. DWR is flexible and amendable to management strategies that are backed up to address actions that would be taken to avoid this situation.
xiii. Q (Joe Scoto): Stakeholders are working now to install recharge basins that use floodwaters. Are these taken into account in the modeling? A: They're not directly included in the model, but you can put them into place instead of the demand reductions (e.g. supply-side efforts offset pumping reduction).
xiv. Comment (Arlan Thomas): Suggestion to modify between modeled scenarios B & C – probably not optimistic to get all the demand reductions offset by recharge projects.
xv. Q (Thomas Dinwoodie): Is there a short-term forecast (like 5- to 10-year projection in the modeling) instead of 50 years? e.g. restructure GSP to be just a 5-year plan. A: It is a 5-year plan to some extent in that there are 5-year evaluations, and it is a living document open to changes. But it has to focus on the long-term goal of sustainable conditions by 2040.
xvi. Comment (Susan Walsh): If DWR is open to adaptive management caveats in the plan, including the supply side efforts currently underway, that may be the way to go.
xvii. Comment (Jean Okuye): We have 18 years until 2040. We have developed supply. Climate change is real. We've really got to address demand reductions. Need to choose A or B. Concerned because supply won't be enough.
xviii. Q (Wes Myers): Is there anywhere in the model where all four categories are green? Until we have data gaps figured out, we don't have the hydrology of the area. Assuming there's certain geology in areas without eyes on it. So can we say we want to move for Option C and we'll fill in data down the road in a few years? e.g. model shows green conditions through 2026 and then re-evaluate. Thinks too much too early in earlier options. A: Model scenario B is the one where everything is green. Option C is likely green until there's a drought. Likely would need reduced pumping or temporary fallowing after some kind of drought trigger.
xix. Comment (Arlan Thomas): Problem with modeling scenario C is that if there's extreme drought weather, then pumping reductions would need to be reduced significantly. Moderate years can be increased pumping.
xx. Comment (Lisa Kayser-Grant): Adjustments to the baseline period for groundwater levels or pumping reductions are not ideal.
xxi. Comment (Ben Migliazzo): Economically in the area, drastically stopping pumping right now would be very negative. Need to ramp up to reductions. Lots of impacts on employment.
xxii. Q (Jean Okuye): Do we know how much reduction has occurred (maybe in other counties) because they don't have the water? Fallowing that has occurred more frequently elsewhere.

1. Because of surface water, several farming folks confirmed they have been fallowing this year.

xxiii. Comment from chat (Susan Walsh): I agree we need to be more aggressive that 11% but there is room to discuss middle options. the ramp up should be steeper as time goes on and data looks worse. This may support economic issues today but the speed at which we get to the cliff's edge is much faster.

xxiv. Q (Thomas Dinwoodie): When do the pumping reductions for the modeling scenarios go into place? A: 2025-2035 as a 10-year implementation/rampdown period.

1. Jim clarified that the basin-wide pumping reduction doesn't necessarily translate directly to individual farms – there are a lot of intervening factors like allocation between and within the GSAs and consideration of developed supply, etc.
2. Jim also clarified that the model is extended hydrologically through 2021 per the last Annual Report, but then starts on a 50-year projected hydrology because we don't know what's going to happen next year.

xxv. Comment from chat (Nav Athwal): I think a vote is in order so we can see where folks stand. We're almost at 11:30. Maybe a follow up survey so we can get responses in writing.

xxvi. Matt Beaman (MIUGSA): Mitigation for domestic well impacts (lowered groundwater levels, but maybe also electrical costs) is a concern. MIUGSA supports the modeling scenario A (2015 groundwater levels), primarily to avoid domestic well mitigation and water quality impacts.

xxvii. Comment (Thomas Dinwoodie): By the time we get to 2025, scenario A may be the only option because we're continuing to experience and contribute to subsidence.

xxviii. Q (Thomas Dinwoodie): Does the state have the ability to come in immediately and make changes? A (Matt Beaman, MIUGSA): Yes if the plan is not accepted, and also in the future if an initially-accepted plan violates minimum thresholds.

xxix. Comment (Lisa Kayser-Grant): Recommendation to make clear in future presentations/plans that the ramp-down occurs over 10 years (2025-2035) and that these percentage reductions shown in the model results table are not immediate reductions in 2025 (less of a shock to stakeholders).

xxx. Comment (Craig Arnold): Bounce between model scenarios C and A. Tends to be a little more cautious.

xxxi. Comment (Lisa Baker): Farmer in El Nido area, and would lean towards modeling scenario C.

xxxii. Q (Thomas Dinwoodie): If the delay in 3-4 years is for agencies to get plans together, could you in 2025 look at what's happened and make adjustments immediately between C and A? A: 2025 is first GSP update and is a first chance to course-correct.

xxxiii. Q (Ben Migliazzo): When the is the next plan update due? A: We'll have to check, either Jan 2025 or Jan 2026.

f. Schedule

i. Jim Blanke (W&C) described the schedule for incorporating edits into the GSP by end of July to address DWR's comments.

4. GSA Reports

a. Adriel Ramirez provided an update for the Merced Subbasin GSA: Department of Conservation invited MSGSA to interview for land repurposing grant application (long-term program), along with several partners on application. This is separate and in addition to the shorter-term Prop 218 land repurposing effort.

b. Matt Beaman provided an update for the Merced Irrigation-Urban GSA: Stakeholder Guidance Committee on May 4 from 1-3pm at MID Franklin Yard (specific to MIUGSA policies and the County's amended well ordinance impacts). Will be posted to the MIUGSA website.
c. Kel Mitchel provided an update for Turner Island Water District GSA #1: Recent Board meeting was held to discuss ongoing groundwater sustainability issues similar to what was discussed today.

5. Public Comment

a. None.

6. Next steps and adjourn

a. Meeting was adjourned at 11:49am.

Next Regular Meeting
TBD in late May 2022
Meeting to be conducted hybrid (physical + virtual; subject to change)
Information also available online at mercedsgma.org

MEETING MINUTES – Merced GSP Stakeholder Advisory Committee

SUBJECT: Stakeholder Advisory Committee Meeting

DATE/TIME: June 1, 2022, 9:30 to 11:30 AM

LOCATION: Hybrid meeting with physical location at Merced Irrigation District, Franklin Yard Facility, 3321 North Franklin Road, Merced, CA 95348 and online via Zoom

---

Stakeholder Committee Members in Attendance:

	Representative	Community Aspect Representation
☒	Arlan Thomas	MIDAC member
☒	Ben Migliazzo (alternate)	MIDAC member
☐	Bob Kelley	Stevinson Representative
☐	Blake Nervino	Stevinson/Merquin
☒	Breanne Vandenberg	MCFB
☒	Craig Arnold	Arnold Farms
☐	Darren Olguin	Resident of Merced County
☒	Dave Serrano	Serrano Farms - Le Grand
☐	David Belt	Foster Farms
☐	Emma Reyes	Martin Reyes Farm/Land Leveling
☐	Greg Olzack	Atwater Resident
☒	Jean Okuye	E Merced RCD
☐	Joe Sansoni	Sansoni Farms/MCFB
☒	Joe Scoto	Scoto Brothers/McSwain School Dist.
☐	Jose Moran	Livingston City Council
☐	Lacy Carothers	Cal Am Water
☐	Lisa Baker	Clayton Water District
☒	Lisa Kayser-Grant	Sierra Club
☐	Mark Maxwell	UC Merced
☐	Maxwell Norton	Unincorporated area
☒	Nav Athwal	TriNut Farms
☐	Olivia Gomez	Community of Planada
☒	Nataly Escobedo Garcia (alternate)	Leadership Counsel
☒	Parry Klassen	ESJWQC
☐	Darcy Brown	River Partners
☒	Rick Drayer	Merced/Mariposa Cattlemen
☐	Robert Weimer	Weimer Farms
☒	Simon Vander Woude	Sandy Mush MWC
☒	Susan Walsh	City of Merced
☐	Bill Spriggs (alternate)	Merced resident
☒	Thomas Dinwoodie	Master Gardener/McSwain
☒	Trevor Hutton	Valley Land Alliance
☒	Wes Myers	Merced Grassland Coalition
☐	Lou Myers (alternate)	Benjamin Land LP

Meeting Minutes

1. **Call to Order and Welcome**
    a. Charles Gardiner (Catalyst) welcomed the group.
2. **Introductions and Roll Call**
    a. Charles Gardiner (Catalyst) reviewed the agenda and meeting guidelines, conducted roll call, and reminded attendees that past meeting materials are available online at mercedsgma.org.
3. **Drought Check-in**
    a. Allocation started at 13 inches and is now at 27 inches due to series of late storms and demand remaining low.
    b. Merced Farm Bureau: Newsom administration has put out materials for land purchasing, pending final budget.
4. **Potential Revisions to the Groundwater Sustainability Plan**
    a. Jim Blanke (W&C) reminded the group that DWR's comments focused on chronic lowering of groundwater levels, impacts to beneficial users, and land subsidence.
    b. Groundwater levels
        i. Jim Blanke (W&C) shared that, after considering input from the committees, the GSAs have decided to pursue historical lows (Option B, as presented at the April meeting) as the minimum threshold approach. The GSAs are also incorporating a domestic well mitigation program, with primary financial responsibility with MSGSA, and a management action to explore different levels above Corcoran in the subsidence area for more flexibility in responding to subsidence issues.
        ii. Jim Blanke (W&C) reiterated that the GSA decision was based on balancing two competing interests (protecting beneficial uses and users and using available water resources) and noted that all sustainable management criteria can be reevaluated during the 5-year update if needed.
            1. Comment (Jean Okuye): Believe the Subbasin should go with 2015 groundwater levels (Option A) to get state approval. The GSAs should review Madera's Sustainable Agricultural Land Conservation (SALC) grant application and pull ideas and coordination techniques. The GSP should focus more on demand and land repurposing and less on supply. The GSAs should also consider the effects of climate change in the modeling scenarios.
            2. Comment (Nataly Escobedo Garcia): I second Jean's comments.
            3. Public Comment (Stacie Ann Silva): CDFW/WCB also have funding available for another Regional Conservation Investment Strategy which is a non-regulatory program which identifies areas for redevelopment and allows landowners to engage in the process to garner mitigation dollars.
            4. *Additional comments were provided, but details were lost due to technical issues.*
        iii. Jim Blanke (W&C) reviewed the modifications of measurable objectives and interim milestones to retain consistency with the revised minimum thresholds. The measurable objective will be developed to provide operational flexibility, while interim milestones will be developed based on phasing in of projects and management actions (which hope to stabilize and increase groundwater levels).
    c. Comments were provided, but details were lost due to technical issues. Subsidence
        i. Jim Blanke (W&C) presented the subsidence minimum threshold option under consideration by the GSAs: 0 feet per year, with condition of uncertainty. Other options include total subsidence (rather than rate) or the stipulation of a 5-year rolling average. USBR measurement issue is approximately +/- 1 inch and will be

discussed with DWR. The final option is to set groundwater levels as a proxy for subsidence, which would involve extensive rework of the subsidence section.

1. Public Q (Geoff Vanden Heuvel): How do you explain the zero subsidence demand in light of the language of the SGMA law that talks about an undesirable result being damage to infrastructure of statewide importance. The undesirable result is what SGMA requires us to avoid, confused as to why working toward zero subsidence now. Suggest not conceding to DWR at this point.
    a. A: Clarified that DWR is leaning heavily on the legislative intent of SGMA and, in particular for Merced, concerns about Eastside bypass and impacts to this critical infrastructure.
    b. Wes Myers: Agreed. "0" Subsidence is an impossible objective considering residual subsidence/geology/etc. We should push back on DWR.
2. Name not given: How will residual subsidence be accounted for in the minimum threshold?
    a. A: Interim milestones will assume some level of subsidence through 2040, both residual and new.
3. Public Comment (Stacie Ann Silvia): If the IM are going to assume subsidence through 2040 it would seem that MT need to be rethought to include consideration that subsidence can occur without violating a Minimum Threshold over the implementation period.
4. Additional comments were provided, but details were lost due to technical issues.

ii. Jim Blanke (W&C) introduced the proposed management action for the subsidence area: goal is to target pumping reduction (or recharge activities) within Subsidence Focus Area (defined by region with 2015-2021 average less than -0.15 ft/yr) to achieve positive annual storage change. Noted that exact details will be developed as part of the management action determined after GSP is updated.

1. Hicham ElTal (MIUGSA) clarified that the area with maximum subsidence is within the Chowchilla Subbasin. Noted that GSAs and neighboring Subbasins will need to work together to ensure all are working to prevent subsidence.

d. Domestic well mitigation
    i. Jim Blanke (W&C) provided an overview of the management action for a domestic well mitigation program. Explained that, while identification of the need for such a program will occur during GSP implementation, it is envisioned that a board or committee will review claims (which would need to be tied to regional groundwater conditions), with the primary financial responsibility coming from MSGSA, through negotiations. Details to be developed.
e. Adoption / public input opportunities
    i. Jim Blanke (W&C) provided an overview of the remaining GSP revision process, which includes a meeting with DWR to review proposed changes and continued development of MOs/IMs to complete the redline GSP for Board review and adoption.

5. GSA Reports

a. Adriel Ramirez provided an update for the Merced Subbasin GSA: Applied for land repurposing grant funding (long-term program); unsuccessful in first round, but future funds may be available from the Department of Conservation next year. Committed to working with both the Department of Conservation and partners to strengthen application.

b. Matt Beaman provided an update for the Merced Irrigation-Urban GSA: MIUGSA performed a water balance analysis for 2016 to 2021. In the scenario used, pumping was set at 1.1 AF per developed acre; results show a large discrepancy in groundwater storage balance among the three GSAs. MIUGSA has been a positive contributor to the basin, even as groundwater levels have declined.
    i. Hicham ElTal stated that MIUGSA believes that setting the minimum thresholds lower than 2015 levels may expose the GSAs to additional liability for those impacts, and the need for additional liability for impacts that may occur. MIUGSA should not bear mitigation or liability for setting minimum thresholds at historical lows.

c. *No update provided for Turner Island Water District GSA #1.*

d. SAC questions and discussion
    i. Q (Jean Okuye): How does Merced River compare to Stanislaus and Tuolumne Rivers as to low groundwater levels?
        1. Hicham ElTal (MIUGSA) noted that all have similar issues depending on the groundwater levels modelled.
    ii. Comment (Jean Okuye): Think we should stick with 2015 GWLs as MTs.

6. Public Comment

a. None.

7. Next steps and adjourn

a. Meeting was adjourned at 11:53am.

Next Regular Meeting
Tentatively scheduled as a joint meeting of the Stakeholder Advisory Committee and the Coordination committee at 1:00pm June 27, 2022
Meeting to be conducted hybrid (physical + virtual; subject to change)
Information also available online at mercedsgma.org

DEPARTMENT OF THE AIR FORCE
AIR FORCE CIVIL ENGINEER CENTER

October 11, 2019

AFCEC/CIBE
2261 Hughes Avenue, Suite 155
JBSA Lackland TX 78236-9853

[redacted]

[redacted]

The Air Force is currently investigating whether perfluorooctane sulfonate (PFOS) and/or perfluorooctanoic acid (PFOA) is present in the groundwater near the former Castle Air Force Base (Castle AFB) in Atwater, California. Samples of groundwater on the former Castle AFB have confirmed the presence of PFOS and/or PFOA. The next steps in the Air Force investigation are to determine whether PFOS/PFOA are present in the water from private drinking water wells near Castle AFB.

While PFOS and PFOA are not regulated under the Safe Drinking Water Act, the United States Environmental Protection Agency (EPA) has issued Lifetime Health Advisories (LHA) and is continuing to study PFOS/PFOA to determine if regulation is needed. Please see the attached Fact Sheet for further information on these substances.

A review of the water well record databases maintained by the Air Force, the California Department of Water Resources, the City of Winton, and the City of Atwater indicates you may have drinking water wells on your property. If you do, the Air Force requests permission to take water samples from your drinking water wells. The Air Force will sample your wells at no cost to you and will share any information obtained from the well sampling.

To that end, we would very much appreciate it if you could take a few minutes to complete the enclosed Private Well Survey form and allow us to take samples from your wells at a mutually agreeable time. The Air Force, through its authorized agent, Wood Environment & Infrastructure Solutions, Inc. (Wood), will contact you soon to schedule the sampling and discuss the procedure and requirements. Please return the Private Well Survey form in the enclosed self addressed, postage paid envelope or email a copy to Ms. Mary Jo Heassler at maryjo.heassler@woodplc.com.

If you have any questions or concerns, please contact Roy Willis at 210-395-9452 or roy.willis@us.af.mil.

Merced Irrigation-Urban GSA
Merced Subbasin GSA
Turner Island Water District GSA #1

Summary of Merced Subbasin Groundwater Sustainability Plan Community Workshop #1

Issued August 20, 2018

Overview

The first Merced Subbasin Community Workshop was held on August 2, 2018 in the Sam Pipes Room, 678 W. 18th Street, Merced, CA from 6 pm to 8:30 pm. The total attendance was approximately 35 of which 8 were members of the GSP Coordinating Committee, Stakeholder Committee, or staff from the County, City, or Merced Irrigation District (MID).

The workshop goals included the following:

1. Provide an introduction to:
    a. What are the requirements of the Sustainable Groundwater Management Act (SGMA),
    b. What are the roles of the three Groundwater Sustainability Agencies (GSAs), and
    c. What is the schedule and requirements for the Groundwater Sustainability Plan (GSP) being prepared for the Merced Subbasin.
2. Provide an overview of the Merced Subbasin conditions.
3. Encourage attendees to share their knowledge and experiences with groundwater in the Merced Subbasin and to talk about what groundwater sustainability means for them.

The workshop presentations covered the following topics:

1. What is SGMA -- what is required, who is responsible, and how will the GSP be developed?
2. Current Merced Subbasin groundwater conditions.
3. What are the undesirable effects of overuse of groundwater?
4. What does groundwater sustainability mean to people?

The workshop was publicized using a number of methods including:

1. Press Release was issued to the Merced Sun Times and posted on the GSP website.
2. Display Advertisement/Notice was placed in the Merced Sun Times.
3. Workshop Notices (in English and Spanish) were widely distributed by partner organizations to their email distribution lists and were posted on the three GSA websites as well as several partner websites.

4. SelfHelp Enterprises also distributed a workshop notice in several communities within the Merced Subbasin.

Questions about SGMA, GSAs, and the GSP

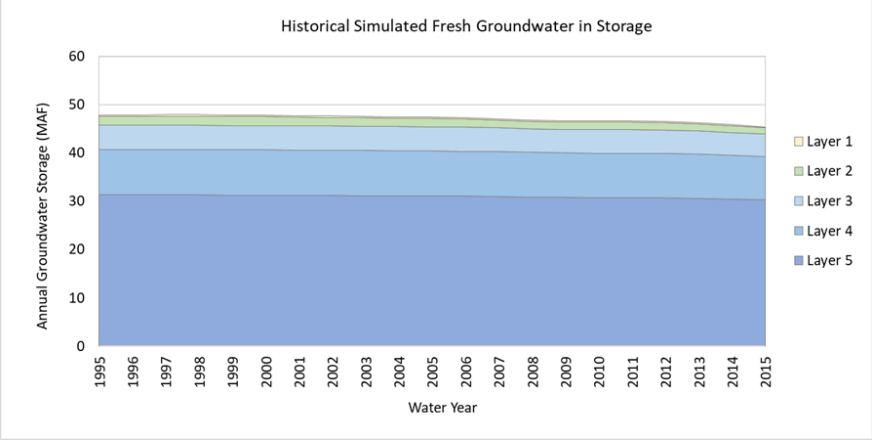
After a presentation about what is SGMA, the formation of the three GSAs and their roles, and the decision for all three GSAs to work together to develop one GSP for the Merced Subbasin, the following questions were asked:

1. What is the approval process from the State?
2. How many other GSPs are being prepared now in California?
3. Does the public get to review the draft GSP?
4. What will the process be for the public to get to review the draft GSP?
5. What is the website to go to for information about the Merced Subbasin GSP?
6. Who hired the consultants to prepare the GSP?

Questions about Current Merced Subbasin Groundwater Conditions

After a presentation about current Merced Subbasin groundwater conditions, the following questions were raised:

1. Is it possible to capture water from Bear Creek as the water flows to the ocean?
2. What is the definition of a Disadvantaged Community (DAC)?
3. Questions asked when the Total Storage slide (below) was discussed:



a) What is the significance of the “brackish water” layer?

b) Is there a correlation between the levels shown and depth in feet?

c) Is the lower water level from the High Sierras and the top level from recent events like rain?

d) Are there water quality differences in the levels shown?

4. When it comes to measuring well depths, will it be the responsibility of each individual to recharge their own well if the elevation drops? Are people going to have to track their individual well water usage?
5. Will there be a loss in storage in areas with land subsidence?
6. Is there a lot of data on interconnected surface water?
7. For the groundwater model being used, will there be "ground truthing" or validation of the model with real time well data? If so, how is it done?
8. Will there be any monitoring wells that can measure a number of different elements including groundwater levels, direction of flow, and flow rate?

Discussion about Undesirable Effects

In the initial workshop presentation, it was explained that under SGMA, sustainability is the management of groundwater to prevent significant and unreasonable undesirable results. There are six undesirable results defined under SGMA. They include: Chronic lowering of groundwater levels indicating a significant and unreasonable depletion of supply; significant and unreasonable degraded water quality; significant and unreasonable reduction of groundwater storage; significant and unreasonable land subsidence; significant and unreasonable seawater intrusion; and depletions of interconnected surface water that have significant and unreasonable adverse impacts on beneficial uses of the surface water.

Attendees were asked "What Do You See as the Undesirable Effects of Groundwater Use?" and the following responses were shared:

Responses Related to Land Use Planning and Groundwater Use

Improved Land Use Planning is Important. In the Merced General Plan, when new ground is broken for a project, water use parameters need to be established. A grading ordinance is needed when changing the function of the land use. Changes in land use when irrigation is added should be addressed or regulated in some way.

Consider Using Recycled Water for Urban Use. An example was provided that in Salt Lake City, a dual piping system is used where water goes to houses as two water supplies: one for recycled water used for lawns and other non-potable (non-drinking water) uses, and one for drinking water.

Coordination of Private Well Groundwater Use is needed between Suburban Areas and Agricultural Areas. What are the depth of the wells, and how can the water use be coordinated? When comparing water use between a subdivision and agricultural use, which uses more?

Responses about Educational Needs for Efficient Use of Water

More Education about Water Use Efficiency is Needed. An attendee asked about the allowable watering schedule in Merced County as he observed people watering their lawns during the day

and kids' pools overflowing, with no way to capture that water. Can the GSP include water efficiency actions and education? It was mentioned that some examples of efficiency and educational tools can be found and have been implemented in the City of Merced.

Responses Related to Surface and Ground Water Use

Land Subsidence Creates Loss of Water Storage. These areas are no longer able to be recharged as the soils will no longer hold water.

More Surface Water is Needed. The Proposed Temperance Flat Dam Project was voiced as a potential solution.

With Water Cutbacks, Water for Trees and Landscaping is Reduced. There needs to be a balanced approach.

Lower Groundwater Levels Negatively Affects Drinking Water Supplies for Rural Schools. There are areas around Merced where the elementary schools have come close to not having drinking water because of wells drying up.

No Water Transfers out of Merced

What prevents someone from buying land, putting in high capacity pumps, and pumping groundwater and selling it southern CA? This has happened. There should be no transfers out of the area but with surface water, water districts can transfer between water districts. There is, however, a County ordinance that prevents an individual from purchasing land, pumping the water, and selling it elsewhere.

Responses Related to Water Quality

Water Shortages Increase Contamination. In Planada, the contaminants from whatever is sprayed on the fields is getting into water that is available.

Monitoring Movement of Contaminant Plumes. With the groundwater modeling, can there be plumes of contaminants? How are they monitored? Plumes worsening or moving is the undesirable result.

Responses Related to Water and Economics

Smaller farmers are not able to afford deeper wells.

Responses Related to How Specific Items of Concern will be Addressed in the GSP

How will the GSP address groundwater being used at water bottling plants?

How will the GSP address population growth and crop changes?

Discussion about Sustainability

Following the discussion about undesirable results, attendees were asked for their thoughts and ideas about what sustainability means to them. They were asked to share about "What do

you see as sustainability goals for you? What does sustainability mean to you, what does sustainability look like for you? The following input was received.

Responses Related to Sustainability Solutions

- Use conservation techniques.
- Water is required to be recharged, so increase recharge in wet years.
- Increase groundwater banking.
- Harvest water in urban areas.
- Use the groundwater model for land use decisions.
- Capture Merced River flood flows.
- Consider use of groundwater credits.
- Secure reliable surface water supply for recharge.
- In wet years, turn water into fields for recharge.
- Capture water from creeks in the Merced Subbasin for recharge.
- Provide equitable access to whatever the water resources are for all. If good, then good for everyone. If bad, then bad for everyone.
- Identify subsidence areas and focus recharge efforts there.
- Capture and retain storm water from Owens Creek.
- Merced Irrigation District (MID) Canal draining to recharge lands.

Responses Related to Economics and Sustainability

- Farming and economics -- need to keep the economy healthy, water is the driver of the whole area.
- What protects the value of the land?

Responses Related to Funding

- Is Department of Water Resources funding the GSP?
- What constraints on management actions or projects are anticipated such as funding? Are there others?

Responses Related to Other Ideas

- If more water retention is the only answer, how do we carry that message forward?
- Consider climate change factors.
- SED (the Substitute Environmental Document) if approved and implemented would be devastating as it will reduce San Joaquin River flows.

Discussion about Additional Concerns about Land Subsidence

1. Identify subsidence areas and have recharge areas put in.
2. Supply surface water to subsidence areas.
3. Capture urban runoff in subsidence areas.

4. Federal funding needed [for management actions and projects].
5. Appropriate monitoring of layers is needed to understand where subsidence occurs.
6. Flood benefits – flood and storm waters should be used for recharge.

Roles and Responsibilities for Developing the Merced Subbasin GSP

Governing Boards

Consistent with the requirements of SGMA, water management and land management agencies in Merced Subbasin formed three Groundwater Sustainability Agencies (GSAs): the Merced Irrigation-Urban Groundwater Sustainability Agency, the Merced Subbasin Groundwater Sustainability Agency, and the Turner Island Water District Groundwater Sustainability Agency. The three GSAs are collaborating on developing one Groundwater Sustainability Plan (GSP) for the entire Merced Groundwater Subbasin by January 2020. To develop the Plan, the GSAs will review groundwater conditions and identify means to ensure the long-term sustainability of the Merced Groundwater Subbasin.

Coordinating Committee

The three GSAs for the Merced Groundwater Subbasin have formed a Coordinating Committee of senior staff and governing board members to coordinate day-to-day planning activities and public outreach. Meetings of the Coordinating Committee will be noticed and open to the public and are held the fourth Monday of the month.

Stakeholder Committee

The three GSAs have also approved the formation of a Stakeholder Committee. The Stakeholder Committee serves as community representatives to advise the Coordinating Committee and the GSA governing boards on groundwater conditions, management issues and needs, and projects and management actions to improve sustainability in the basin. Meetings of the Stakeholder Committee are open to the public and are held on the fourth Monday of the month.

General Public, Landowners, Farmers, Ranchers in the Merced Subbasin

Your role is to provide input as the GSP is developed. You can submit comments through the GSP website: www.mercedsgma.org. Consider attending a Board meeting, Coordinating Committee meeting, or Stakeholder Committee meeting, or a Community Workshop to learn more, ask questions, and provide input.

Merced Irrigation-Urban GSA
Merced Subbasin GSA
Turner Island Water District GSA #1

Summary of Merced Subbasin Groundwater Sustainability Plan Community Workshops in Planada and Franklin

December 4 and 13, 2018

Overview

A second round of Merced Subbasin Community Workshops were held in Planada and Franklin in December 2018.

Tuesday, December 4, 2018
6 p.m. to 8 p.m.
Planada Community Center
Main Hall
9167 Stanford Ave., Planada, CA 95365

Thursday, December 13, 2018
6 p.m. to 8 p.m.
Franklin Elementary School
Multipurpose Room
2736 Franklin Rd, Merced, CA 95348

The goals for the public workshops included the following:

1. Provide information about options for sustainable management for the Merced Subbasin Groundwater and obtain participant feedback including input on preliminary ideas for projects and management actions.
2. Encourage attendees to share their knowledge and experiences with groundwater in the Merced Subbasin.

Both workshops were publicized using the following methods:

1. Press Release was issued to the Merced Sun-Star, Merced County Times, and posted on the GSP website. The workshops were mentioned by Mike Jenkins, Merced Irrigation District (MID) during a Merced radio station interview several days prior to the first workshop.
2. Workshop Notices (in English and Spanish) were widely distributed by partner organizations to their email distribution lists and were posted on the three GSA websites as well as several partner websites.
3. Self-Help Enterprises and The Leadership Counsel for Justice and Accountability assisted with outreach by distributing flyers and calling contacts that they have in Planada, South Merced, and Franklin.

The attendance at the December 4, 2018, Planada workshop included approximately 30 members of the public. The December 11, 2018 Franklin workshop was attended by approximately 24 members of the public. Self-Help Enterprises (SHE) provided a communications system at both workshops to support simultaneous Spanish translation. At the

Planada workshop two people took advantage of translation; no one utilized the translation option at the Franklin workshop.

The presentations for both workshops included the following topics with discussion questions (included below) asked of the participants after each presentation:

1. **Project Overview** – This presentation provided a review of the Sustainable Groundwater Management Act, the Groundwater Management Agencies involved and the Groundwater Sustainability Plan.
2. **Sustainable Management for the Merced Subbasin** – This presentation covered both reducing water use and allocating groundwater pumping as well as options for increasing water supplies and groundwater recharge.
3. **Groundwater Conditions –** This presentation was tailored for each workshop to include groundwater information relative to each area.

Presentation 1 - Project Overview

The following three questions were asked of the participants following the presentation.

1. Do you have any questions and discussion about what SGMA requires and the agencies preparing the Groundwater Sustainability Plan?
2. Do you have any questions and discussion about the Merced Subbasin groundwater conditions?
3. What thoughts do you have about current or future conditions?

There were no questions from the participants at the Planada workshop and at the Franklin workshop, two questions were asked:

Question: What is the projected acre-feet (amount of water) that will be allowed for pumping and will that vary across the Merced Subbasin?

> Answer: This question was answered during the second portion of the presentation. On average, a reduction of 25% in pumping is estimated as needed to achieve sustainability over time. The goal is to halt overdraft and get to a sustainable condition. The estimate of future pumping is 660 thousand acre feet (TAF) per year. The estimated amount of pumping for a sustainable groundwater basin is 500 TAF. The difference is what is needs to be reduced in pumping, which could be achieved looking at options for increasing supply, increasing groundwater recharge, or decreasing demand. The Coordinating Committee (CC) and the Stakeholder Committee (SC) are looking at possible approaches for allocating groundwater pumping. The team will be developing projects and management actions including options such as groundwater recharge projects and surface water projects for consideration by the CC and SC. The availability and benefits of these actions vary across the basin.

Question: What is the current status of connections at Meadowbrook?

> Answer: There are 3 groundwater wells that range from 300 to 500 feet deep to provide water to 1,730 connections.

Presentation 2 - Sustainable Management for Merced Subbasin Groundwater

Four questions were posed to participants at each workshop. The comments and questions received are summarized by workshop location.

1. What do you see as the most important issues related to groundwater pumping and water use? For residents and businesses? For agriculture?

Planada Workshop Questions and Comments

Question: Are there or will there be more projects beyond the Planada area? There must be other areas where there can be recharge projects.

> Answer: Yes. Merced Irrigation District (MID) is working with farmers on this now. Le Grand and Livingston have good soil for recharge. Recharge projects in the eastern side of the basin, such as LeGrand and Planada have the potential to benefit the entire basin (groundwater generally flows from east to west).

Question: Is the land subsidence in the El Nido area due to pumping? What can be done about it?

> Answer: There is land subsidence in the El Nido area. Generally, land subsidence is caused by pumping below the Corcoran clay layer (a layer of clay that separates upper and lower groundwater aquifers in the western portion of the basin). Pumping can lower groundwater levels, which dewaters the clay layer, which in turn compresses, lowering the ground levels. It cannot necessarily be reversed, but it can be slowed. If there is recharge in El Nido, it will take a long time to be able to raise the level of groundwater to reduce the subsidence.

Question: Will Planada recharge benefit Planada or flow to El Nido?

> Answer: This is the purpose of doing a feasibility study—to evaluate how much water can be infiltrated into the groundwater, how it moves, and where the benefits would be. There is an MID recharge basin in El Nido putting water into the ground to benefit that area.

Question: Can forest management (e.g., tree thinning) help with groundwater recharge and groundwater levels by allowing more water to flow into the groundwater?

Answer: UC Merced conducted studies of forest management in the foothills and headwaters areas. The studies had difficulties getting measurement equipment installed on federal lands (including concerns about impacts to endangered species in the area).

Franklin Workshop Questions and Comments

Question: How many acre feet of water can be stored in the ground? Is there a model that can tell us how much storage we have?

Answer: In terms of total storage, the model estimates a capacity of 50 million acre-feet of water. The challenge is access. As the storage is depleted, groundwater levels decline, potentially dewatering wells, which is one of the undesirable results the plan seeks to avoid. The goal is to increase recharge and storage in wet years, when there is additional supply. The challenge is finding locations where flooding is occurring and where floodwaters can be stored to help the Merced Subbasin.

Question: What does recharge represent in terms of bringing the Merced Subbasin to sustainability?

Answer: Recharge is one important component of management actions and projects that can be effective.

Question: There a number of dry creeks like Bear Creek, as well as canals that have dried up. Where is that water going?

Answer: The creeks and canals provide recharge to the groundwater when there is water flowing in them. When the rain stops, there is not a constant flow of water in these areas. The flow of water depends on seasonal rainfall.

Question: Recharge projects involve a lot of time, available ground, planning, and approvals to put the infrastructure in place. The State requires a permit and that process is challenging. Will the State make the permit process easier?

Answer: All water has to be used for beneficial use. Recharge by itself is not consider a beneficial by the State Water Resources Control Board (State Board). The State Water Board prefers projects that show additional benefits, such as reducing subsidence, assistance to Disadvantaged Communities (DACs), or improved water quality. Recharge projects should be combined with benefits to other uses. MID is working on Flood-MAR (using flood water for managed aquifer recharge) with the Department of Water Resources (DWR).

Question: The participant had recently purchased property with several 80-foot irrigation wells that have gone dry. They sought a permit for a new, deeper well, but they can't drill below the Corcoran Clay layer. How will the GSP development process take into account the Corcoran Clay layer when considering management actions and projects, e.g. recharge projects. We need to understand the Corcoran Clay layer.

Answer: When drilling you can only go so deep until you hit the Corcoran Clay, then you would have to drill below the clay layer. However, additional pumping below the Corcoran Clay can increase land subsidence, therefore, the County restricts new wells