COLUSA SUBBASIN

Chapter Number	Section Number	Page Number	Line Number	Figure/ Table Number (if applicable)	Comment

Colusa Subbasin Groundwater Sustainability Plan Chapter Input

Commenter Name: Ben King - Chapter 2 Comments **Commenter Affiliation (if applicable):**

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Chapter Number	Section Number	Page Number	Paragraph Number	Figure/ Table Number (if applicable)	Comment
2.1.1					How were the vertical boundaries of the annexed area of the previous West Butte Subbasin determined since the HCM did not cover this area during previous data collection?
2.1.1					The lateral extent is not bounded by the Sacramento River to the east but it is bounded by the western boundary of RD 1004.
2.1.2.1					How many wells and what is the volume for Del Oro Arbuckle?
2.3					Why is Colusa Drain Mutual Water Company only on the map in Yolo County? All of Colusa County CDMWC is missing from the Map.

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Chapter Number	Section Number	Page Number	Paragraph Number	Figure/ Table Number (if applicable)	Comment
Table 2-3		2-9			There are no entries for Surface Water Supply or Volume Descriptions for CDMWC or RD479. If there is some valid reason for the omission it should be explained in a footnote rather than just omitted.
Appendix 3-D	2.8	21		Table 2-6	Relating to Table 2-3 above there are no diversions cited for Model Input as Diversions attributable to CDMWC acreage. What is the impact of this omission?
Table 2-6		2-21			The USEPA SDWIS system reports violations and maintains a log of monitoring events. This monitoring data and time line of violations does not seem accessible on the Waterboards site. The EPA link should be included. Why isn't the Drinking Water Open Data Portal referenced as it is in 2.6?
		2-21 2-21			The CV Salt information is not online? How do stakeholders access this data. Where can Stakeholders access GAMA data?
		2-21 2-21			Where is the Sacramento Valley Water Coalition Data? Where is the groundwater quality data relating to wells used for groundwater substitution accessible? It is part of the Appendix of the Environmental Assessment for Tehama-Colusa Canal Authority In-Basin Water Transfers.

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Chapter Number	Section Number	Page Number	Paragraph Number	Figure/ Table Number (if applicable)	Comment
2.3.1.3					According to the City of Colusa Policy PRC – 9.2 - The City will prepare a Water Resources bi-annual report to the City Council. The Public Works Department will analyze the quality of drinking water in the City. The description of the General Plan is incomplete because it does not mention that water quality is addressed and included in this bi-annual report to the City Council for the City of Colusa.
2.4					The Human Right to Fresh Water should be addressed somewhere in 2.3 or 2.4. Ultimately this will affect the priority of beneficial use, management actions and minimum thresholds to comply with the requirements of this Law.
2-8		2-30			Don't understand the reference to Human Right to Water as described. Doesn't this Right apply to all residents in the Colusa Subbasin and all water systems?

Colusa Subbasin Groundwater Sustainability Plan Public Review Draft Input

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Chapter Number	Section Number	Page Number	Line Number	Figure/ Table Number (if applicable)	Comment
2	2.1			Table 2-3	Table 2-3 is misleading in that it does not reflect the loss in surface supply due to water transfers. There needs to be a table that reflects the historical amount of water transfers for every water purveyor and how much of the water remains in Basin and out of Basin. Without this stakeholders can not assess the available water supply for the Basin.
	2 generally				The Colusa County GMP does a good job discussing water transfers but the GSP is silent on it. Stakeholders need transparency and understanding how water transfers work and how ground water substitution and fallowing work into the available water supply. The transparency and discussion regarding water transfers, fallowing and groundwater substitution also have potential negative DEI and HRTW outcomes because water transferred out of basin and fallowed acreage means less jobs and ground water pumped for ground water substitution could lead to aquifer degradation if the groundwater pumped is pool quality.
					Again there needs to be discussion about surface water transfers and a Table listing the number of acre feet pumped for groundwater substitution and the acres fallowed by each Settlement Contractor. Stakeholders need to know this for HRTW and DEI concerns and also for the general sustainability of economic health of the Subbasin.
	2.3.2				There needs to be a discussion regarding groundwater trading markets and how this would impact the potential water demands. The California Water Commission are holding hearings regarding groundwater trading and it is very relevant to the effects on water demands and the economic feasibility and sustainability for the subbasin. To not include any discussion is misleading and could lead stakeholders to misallocate resources or make material economic decisions without full

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Chapter Number	Section Number	Page Number	Line Number	Figure/ Table Number (if applicable)	Comment
					knowledge of a likely outcome. The CWC appears to quite committed to groundwater trading and the PPIC has come out strongly in favor of water markets. It is misleading not to discuss this likelihood especially when there is such a focus on recharge in the PMAs. It would seem that some PMAs may not be economically efficient if water could be traded instead. In June of 2021, Steven Springhorn , Acting Director of SGMA discussed the framework for Water Trading for SGMA Implementation – it seems ingenious to go through this process and not discuss what the Acting Director of SGMA is presenting to the California Water Commission.
					There needs to be reference to the ERA Demand Management Actions if they remain in the GSP. If implemented these Management Actions will have the intended effect which is to limited Demand. These PMAs are DEMAND Management Actions and should be referenced and discussed in this section.
	2.5.1				Discussion about water quality testing, determination of appropriate well depth and what happens if the driller finds poor water quality. I think the answer is that this information is not captured or disclosed and therefore it is a concern for water quality and HRTW issues.
	2.6.1				The following was taken verbatim from the DWR's recent Drought Memo. This is from a footnote: DWR formally adopted the Human Right to Water (HRTW) Policy in its Departmental Administrative Manual which outlines how the HRTW should be included in DWR decision-making, program activities, and public engagement. The Water Board adopted a HRTW Resolution, recognizing HRTW as a core value and directing its implementation across programs and activities. The Water Board is also currently drafting a Racial Equity Resolution.

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					There should be a reference to the emerging HRTW and Racial Equity actions by the DRWR and the SWRCB since it is central to Stakeholder HRTW and Diversity Equity and Inclusion (DEI) concerns regarding the GSP and its future implementation.
					I strongly disagree with the statement that the GSA supported and allowed for effective engagement of all stakeholders regarding HRTW and DEI issues. I would urger the DWR to expressing prohibit GSAs taking any action against a stakeholder unless a mediator is brought in especially regarding situations where there are HRTW and DEI or potentially negative racial outcomes.
					I have asked the related emails and the Memorandum distributed to the GSA Members regarding my public comments to the Colusa City Council, Colusa County Board of Supervisors and Williams City Council be included in Appendix 2A as part of the public record. I also want to note that Mr. Ceppos firm was not brought in as a mediator nor do I think he was asked to before the GCA and Colusa County Administrator made the CGA Memo public record prior to the vote of the Colusa County Board of Supervisors vote on approving the Amended JPA. Although the Memo did probably not change the outcome of the Board of Supervisors vote, it effective took away my creditability to argue for HTRW and DEI concerns and generally challenged my reputation as a truthful and fair minded citizen.
					The concerns I expressed during the 3 to 5 minute public comment periods were the following: (1) I am concerned about the long term water quality for the public supply system in Colusa which is my home town. I pointed out that there was arsenic contamination in the abandoned public supply well for the Del Oro Walnut Ranch system and at Grimes and my concern is that it relates to the water quality surrounding the Sutter Buttes, (2) I am concerned about the long term supply and water quality resilience for the public supply system in Williams since the water quality surrounding Williams has elevated TDS levels and water levels will likely drop further due to climate change and the conversion of surrounding areas to

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					permanent crops, and (3) like most residents in Colusa County I was against out of basin water transfers because it would hurt the long term sustainability of the County and potentially hurt groundwater quality due to ground water substitution and fallowing measures by GSA Member water sellers. Since I am against out of Basin water transfers I mentioned that I did not believe that it was the best interest of Colusa County residents to have two law firms from Bakersfield represent the CGA because the firms have an extensive list of clients who benefit from out of Basin Water Transfers and that I believed it would not serve the County well to have a CGA counsel who was also the counsel for the Sites JPA and that the former lead CGA counsel was now a Director at the Bureau or Reclamation overseeing water transfer approval, (4) I suggested that the City of Colusa, City of Williams and County of Colusa would best serve the long term interests of its residents by retaining it sovereignty and entering into a cooperation agreement with the irrigation company GSAs and pointed out that this is how the Butte Basin was structured – which is now similar to the neighboring Sutter Basin. I pointed out that Yolo County had a JPA structure but it has strong representation from UC Davis and the municipal GSAs and had other environmental protections. During the period of making these public comments I also made the same public comment and comment to the CGA in which one Member who represents a Settlement Contractor which fallows land and sells water claimed that what I said about the public record was not true which I disputed.
					Without any prior notice I noted that there was an Agenda item discussing a Memo prepared by the CGA and it was going to be distributed. I was traveling with my son in the Midwest and was not able to attend the CGA meeting which approved the Memo and its distribution. Afterwards when I prepared to comment at the Board of Supervisors meeting that had the approval of the amended JPA on the Agenda I found out that this Memo was included in the Agenda Packet. The first time I saw the Memo was when I received it from the CFO for Colusa County after the Board Meeting.

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					The related emails should be included in Appendix 2A as a public record. I would recommend that in light of the DWRs and SWRCB recent pronouncements on HRTW, DEI and Racial Equity that the GCA does not act in a manner hostile to any Stakeholder before a mediator is brought in to resolve an issue. This should especially be the case if it concerns HRTW issues or if the stakeholder is not a native English speaker or is a person of color. I would also recommend to the DWR that all CGA Members be required to be residents of the Subbasin in order to understand the long term environmental and economic sustainability issues facing the Colusa Subbasin. My experience is an example of the abuse of power granted to the CGA by SGMA and in my opinion it is important that there be accountability to the community by all CGA Board Members. Allowing CGA Board Members to be non-residents will allow this type of abuse to continue especially when there are majority owners, consultants and attorneys who also are not residents. Colusa County requires all its elected office holders to be residents and the members of the Colusa Groundwater Commission need to be residents – the residency requirement should be the same for the CGA. This is a necessary protection for HRTW and DEI concerns because it ensures community accountability.
	Public Engagement				The Stakeholder Engagement Process was materially flawed because there was no discussion about the California Water Commissions initiatives around groundwater water trading. It is unreasonable to have no public engagement and submit a GSP without any public discussion of an issue that the DWR Acting Deputy Director of SGMA is presenting at the California Water Commission. As I said, we are spending a lot of time and money considering and debating potential PMAs when we have spent no time regarding the water trading policies being considered by the California Water Commission. Water Trading will have many intended consequences on the allocation of resources and many unintended consequences – some of which could be extremely detrimental to the long term sustainability of

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Chapter Number	Section Number	Page Number	Line Number	Figure/ Table Number (if applicable)	Comment
	2.7.3.6				the fresh water aquifers of the Sacramento Valley. It seems like the PMA considerations may be a real waste of time – I just found out about the Water Trading discussions of the CWC yesterday which happens to be the last business day for the comment period for this GSP. Where are the GSAs websites. There is a lot of discussion regarding the CGA website but is there any other website. Do they exists for each Member GSA ? If not – why and how can stakeholders gain transparency. Does each Member GSA have an interested person list?

Colusa Subbasin Groundwater Sustainability Plan Chapter Input

Commenter Name: Ben King Chapter 3 Comments Part I **Commenter Affiliation (if applicable):**

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Chapter Number	Section Number	Page Number	Paragraph Number	Figure/ Table Number (if applicable)	Comment
Table 3-1					What change in Data Sources were used to incorporate the annexed area from the West Butte Basin? What sources were used for Geochemistry and water quality?
3.1.5		3-7			The Hydrology of the Colusa Subbasin is also influenced by the Geochemisty and underlying Faults. Since the Subbasin water quality is influence by the volcanic rock of the Sutter Buttes and influences from the marine and lacustrine geologic history of the Subbasin – can Hydrology be determined without Geochemistry? Faults are known to influence Geochemistry and water quality since there may be anoxic water upwhelling and lateral movement of naturally occurring contaminants via faults like the Willows Fault.
3.1.5		3-11		Figure 3-6	Why is part of the CDMWC delivery area included in ColGGWS? The CDMWC on the west side of Colusa Basin Drain south of Hahn Road receives surface water deliveries as the rest of the CDMWC. There are CDMWC subarea components on multiple sides of this area but for some reason this jurisdictional area of the CDMWC is treated differently. This area is also part of the flood zone and receives significant seepage during seasonal winter flows.
		3-16		Table 3-2	What assumptions are included in Model Diversion ID 113? As mentioned above a portion withing the jurisdictional boundaries of the CDMWC and a CDMWC surface water delivery area is left out of the CDMWC budget subarea.

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Chapter Number	Section Number	Page Number	Paragraph Number	Figure/ Table Number (if applicable)	Comment
3.1.7				3-3	See Springhorn Page 22 – Table 2.1 and Page 93 Table 3.3, Need to incorporate Turlock Lake Lacustrine influence to document Corcoran like clay components to the Lithology and also need to incorporate the formation of the Sutter Buttes Rampart and Geomorphic influence of the Sutter Buttes volcanic structure. Both Springhorn and Harwood and Helly differentiate the lithology of the Pilocene and Pleistocene periods this way. Water quality and subsidence issues are related to this geologic history. Figure 3-10 is probably the most complete Geologic Map I have seen for the region – excellent!
				3.11, 3.14&3.15	See Springhorn Page 113 Figure 4.4. This Geologic Crossection needs to be incorporated in Cross Section C-C on Figure 3-11. Otherwise the Cross section leaves out the influence of the most unique Geomorphic Unit in the Sacramento Valley which is the Sutter Buttes. Also there is a critical need to address the Cross Section next to the City of Colusa because of the interrelationships of the Willows Fault, Sutter Buttes Rampart, Colusa Dome and Sacramento River. As it now stands Cross Section C-C is not consistent with the robust Geology set out in Figure 3-10 which seems to be a recent update since it references Springhorn. Regarding 3.14 how can you have a 3 Dimensional Model that omits the geology of the Sutter Buttes? Regarding 3.15 – it is important to map the area of the Corcoran like clays deposited by the Turlock Formation to know the potential area of impact for future subsidence.
3.1.9.2					See USGS Circular 1358 "Water Quality in Basin-Fill Aquifers of the Southwestern United States: Arizona, California, Colorado, Nevada, New Mexico and Utah, 1993-2009. Thiros,Paul, Bexfield and Anning 2014.(USGS Thiros et al 2014) See Page 56 – it is clear that arsenic contamination occurs and translocates along fault zones like the Willows Fault as is currently is the case in the Middle Rio Grande Basin. The water system for the City of Colusa could have the same fate as the water system for the City of Albuquerque.

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3.1.8.2		3-35	2nd and 3rd		The base of freshwater should not include brackish water which is defined by the USGS and others at 1000 ug/L. Water quality definitions should be consistent with the California Human Right to Fresh Water. Brackish water is not potable. The reference to brackish water in the Upper Princeton Valley is inconsistent with the outdated Olmstead and Davis referenced in paragraph 2 . See Springhorn Page 149 for additional references.
		3.37		3.17	The Base of Freshwater Depths in the annexed area from the old West Butte Basin seem incorrect based on the vertical depths included in Springhorn's Cross Section work. Also the area west of Colusa on Lurline near Roberts Ditch is known to have lower fresh water base levels. Levels are probably in the 300 to 400 ft levels or less in both areas.
3.1.10.2		3-39			The potential for vertical movement via abandoned gas wells and faults needs to be mention since it most likely will lead to aquifer degradidation in areas where the subsurface groundwater have elevated TDS levels and/or anoxic conditions.
3.1.10.3		3-42			Arsenic contamination at the abandoned Del Oro Walnut Ranch well and the well at the CIP site which was cited by SWRCB show arsenic contamination has been found in the Colusa City limits. The USEPA reports also show arsenic contamination in the Princeton water supply system.
3.1.12.1		3-50			Additional Areas of Uncertainty: 1. See Springhorn Page 165 Figure 6.1 Areas where subsurface information is needed regarding the area outlined west of the Sutter Buttes, 2. Research regarding the vertical and lateral movement of saline water within and across the Willows Fault as generally described on Page 56 of USGS Thiros et al 2014, 3 The predicted desorption of arsenic from a volcanic structure like the Sutter Buttes in Figure 6-5 of Thiros on Page 58, 3. The breadth and depth of the Corcoran type clays from the Turlock Lake formation highlighting the potential for future

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Chapter Number	Section Number	Page Number	Paragraph Number	Figure/ Table Number (if applicable)	Comment
					subsidence, 4 – the water quality issues near the Freshwater area west of Williams as described in the Colusa County Groundwater Management Plan.
3.1.12.1 3.1.12.3				3-5 3-51	The C2VSimFG Model has to incorporate the saline and anoxic seawater around and south of the Sutter Buttes. According to the Sutter- Yuba investigations (SWRB Bulletin No. 6, 1952) a TDS level as high as 10,000 was observed near Robbins. Others including the DWR and Curtin have observed TDS levels from 4,000 to 6,000 south of the Sutter Buttes. What are the statutory obligations to address the Human Right to Fresh Water in the HCM?
3.2.5				3-64	The worst reported arsenic contamination for any public water system in the Sacramento Valley water supply system is in Grimes. The USEPA has documented arsenic contamination in the Princeton public supply system. There has been two incidences of arsenic contamination in supply wells within the boundaries of the City of Colusa. The wide scope of arsenic contamination around the extent of the Sutter Buttes Rampart and south of the Sutter Buttes in the Colusa Basin needs to be disclosed as an area of grave concern. See Springhorn Page 164 highlighting the need for more research about the need for more work regarding the relationship of arsenic contamination and the health risks from arsenic.
3.2.5.1.1				Figure 3-30	What is the source for this data? Is there a time series? Stakeholders should have access to time series for water quality data and it should be included in the Appendix like the hydrograph data concerning water levels. Arguably water quality data should have a higher level of access and transparency due to the Human Right to Fresh Water.

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Chapter Number	Section Number	Page Number	Paragraph Number	Figure/ Table Number (if applicable)	Comment
		3-66			According to the 2020 Tehama-Colusa Canal Water Authority Initial Study/Environmental Assessment there were several wells used for Groundwater Substitution with elevated Specific Conductance. As reported in the Appendix for the report GCID, 7 of the 16 reported wells had a consistent annual reported level of Specific Conductance greater than 1000 ug/L. Three of these wells had levels greater than 1500 and the other 4 were between 1000 and 1500. Are these wells included in the data points of Figure 3-30 and the discussion on page 3-66?
3.2.5.2.1		3-67			Where is the location of the well near Grimes with Arsenic at 200 ug/L.? Grimes arsenic levels are reported to be approximately 25 ug/L. The USGS publication by Thiros et al has an extensive discussion of the desorption process of arsenic for volcanic rocks in saline groundwater with PH greater than 8. The USGS predictive model predicts the occurrence of arsenic in basin discharge areas like Robbins and the areas south of Grimes. This USGS publication also highlights how arsenic had moved into the groundwater of Albuquerque via a fault. The Willow fault crosses the Sacramento River at Colusa and runs south towards Grimes and the area where the two arsenic contaminated wells were found at the Del Oro Walnut Ranch site and CIP which is now in the boundary of the City of Colusa. The Sutter GMP includes a Figure showing elevated areas of TDS and Arsenic with levels as high as 370 ug/L. There is discussion of a biotic response that coincides with anoxic groundwater becoming oxidated from soil microbial activity that release arsenic as a bi-product. Arsenic contamination of the Colusa public water supply would be disastrous and a violation of the Human Right to Fresh Water.
3.2.6		3-72		Figure 3.31	Figure 3.31 should overlay the area of the Corcoran like clays from the Turlock Lake geological formation to show a potential relationship of subsidence and the presence of this clay formation The relationship between the Corcoran like clay formation and the presence of inelastic subsidence should be discussed based off the history in the San Joaquin Valley.

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3.3.3	3-80 3-81,2			Table 3-9	Using only 2013 and 2015 water diversion data would lead to a wrong outcome if the diverter did not use surface water available during those years. It is an extremely small and not representative data set. Landowners could have not diverted during those years because they were trying to help other landowners out with their surface water allocations since they had wells or the landowner could have been converting land for orchard development with a new filter system. Using Land Use data only for the years of 2003,2009 and 2014 is not representative if there was a conversion from rice to row crops or row crops to orchards. The impact of this narrow assumption set could lead to incorrect Budget Subareas.
3-4	3-102				Management Areas should not be set until the GSP is approved and implemented for several years. The history and genesis of the Colusa Groundwater Authority JPS was for collective management of the Subbasin and there is no basis to change the jurisdictional management of the Subbasin in contravention of those principals. Stakeholders and property owners who are paying Prop 218 Assessments must know there is a rational basis for any changes in jurisdictional oversight within the Basin to maintain confidence in the GCA's governance. What should not happen are actions which may lead to a perception that a few powerful members have manipulated the process for their own benefit.

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Colusa Subbasin Groundwater Sustainability Plan Public Review Draft Input

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Chapter Number	Section Number	Page Number	Line Number	Figure/ Table Number (if applicable)	Comment
3.	3.1.1				Section 3.1.8.2 can not be satisfied because the DWR has not released it revised BFW contours and any updated research. This work was presented by the DWR in 2013. The lateral depths in the current version of the GSP are clearly wrong and are based on outdated TDS levels which are inconsistent with HRTW concerns. Consequently the Water Budget derived from the assumed BFW levels is also wrong and misleading.
				Table 3.1	The work presented by Springhorn et.al at the US Geological Society and GRA in 2013 needs to referenced and incorporated in the BFW. The water budget and HRTW issues will be materially impacted by this new work.
	3.1.5.1.6				Are these all the Streams - Sand Creek near Arbuckle? Is Salt Creek Arbuckle – Elk Creek? We should have consistent names for PMAs and across the GSP
	3.1.7.3.5				Discussion regarding the Sutter Buttes Rampart as described in Springhorn 2008 is necessary to raise the issue of any stratigraphic induced lateral movement of connate saltwater around the Sutter Buttes volcanic rampart footprint.

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Chapter Number	Section Number	Page Number	Line Number	Figure/ Table Number (if applicable)	Comment
	3.1.8.2				The Vertical Boundaries can not be determined with enough reliability to determine Groundwater Storage or to address the existence and sustainability of fresh water for HTRW concerns. The reliance on Olmstead is clearly challenged by the outdated TDS threshold and empirical evidence that the BFW assumptions are wrong for substantial parts of the Colusa County portion of the Subbasin. Please refer to CRC Well 16RIM (Figure 5D-22) which has a depth of 25 to 30 feet. The most recent EC reading is over 6000. Please refer to USGS GAMA Site EASC 21 which is a well with a depth of 369 feet with a Arsenic level of 80.5 ug/L and Boron level of 1,010 ug/L. Clearly Olmstead is wrong for a substantial part of the Subbasin and for a substantial part of the Sacramento Valley as a whole.
				3-17	Clearly this Figure is wrong. The EC threshold is outdated and it relies on the 60 year old Olmstead report rather than the work held by the DWR since at least 2013. The Base of Fresh Water for the Colusa Subbasin is materially different and this Figure is clearly misleading.
					Here is the excerpt from the DWR BFW Work as of 2013: A base of fresh groundwater (BFW) contour map was created to identify the approximate lower limit and the thickness of the fresh groundwater aquifer system in the Sacramento Valley. The BFW map is useful for groundwater resource and storage analyses, groundwater modeling, and delineating structural geologic features in the Sacramento Valley. Two BFW maps covering the Sacramento Valley were previously created; Olmsted and Davis (1961) and Berkstresser (1973). The BFW map in this study relies on a substantial amount of new subsurface geophysical and water quality data that has been collected since the earlier BFW maps. Fresh groundwater is defined in this study as water containing less than 1,000 mg/l total dissolved solids (TDS), approximately 1,550 µmhos/cm specific conductance, instead of 2,000 mg/L TDS used in the earlier studies. The BFW was estimated based on a

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Chapter Number	Section Number	Page Number	Line Number	Figure/ Table Number (if applicable)	Comment
					comparative analysis of geophysical logs and lithologic data from approximately 2,800 geophysical logs from water resource wells and CA Division of Oil and Gas well records. The BFW selection criteria were calibrated using water chemistry data and constrained by comparing multiple well-logs and lithologic information in the same geographic area. The BFW boundary occurs primarily in late Tertiary to Quaternary unconsolidated sediments at depths near land surface to more than 3,500 feet below ground surface. The BFW is an uneven boundary that in some places reflects the major geologic structures underlying the Sacramento Valley, and in other areas, transgresses underlying geologic structures. In some areas, the BFW boundary is well above the base of post-Eocene marine strata. **This is most likely caused by high artesian pressures and upward vertical gradients in deep aquifers in the Sacramento Valley, which have been documented in DWR monitoring wells.** This suggests that migration of poor quality water into continental sediments that previously contained freshwater has occurred over geologic time**. This finding has implications for brackish and saline water upconing beneath areas of prolonged groundwater pumping in the Sacramento Valley.** ***Figure 3-17 should be based off the most recent DWR work as described above for the calculation of the Water Budget , Groundwater Storage, Sustainable Yield and HTRW Concerns***
	3.19				Sutter Buttes Rampart description from Springhorn 2008 is needed.

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Chapter Number	Section Number	Page Number	Line Number	Figure/ Table Number (if applicable)	Comment
	3.1.10.3	3-42			The discussion about water quality should reference the DWR 2013 work and the recent work by Susan Thiros and Laura Bexfield from the USGS regarding Redox and degradation due to overpumping. CRC Well 16R1M in Figure 5D-22 should be highlighted since EC has 4000 to 6000 over the last 17 years. This illustrates that the BFW assumptions are wrong and the upconing identified by the DWR is having a material impact on the fresh water aquifer. Where is this salt water going? Does upconing and Redox degrade our future resiliency for drinking water and other HTRW issues?
		3.1.11.2			How is recharge effected by the upconing and redox discussed by the DWR and USGS? Can you recharge in high water table areas like Maxwell are where there is degraded water and drainage tiles?
		3.1.12			The fact that the DWR has not supplied the most recent BFW studies is fatal to the reliability for the GSP. It can be used as an approximation but raises significant HRTW risks and can not be relied on to develop a reliable Water Budget.
		3.1.12.1			We don't know what is certain or uncertain. The only thing we can be certain about is that we do not have the best and most recent information regarding the BFW and the BFW water quality standards are outdated elevated levels which are not consistent with the DWR's HRTW Departmental Policy.
		3.1.12.3			The requirements of 354.14 can not be met without the DWR BFW research that has been withheld. All that can be achieved is an approximation but substantial HRTW risk exist regarding the potential for the degradation of the fresh water aquifer. CRC Well 16R1M seems to indicate it has been occurring during the last 17 years.

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Chapter Number	Section Number	Page Number	Line Number	Figure/ Table Number (if applicable)	Comment
	3.2.3 3.2.5 3.68	3-64			Groundwater storage can not be adequately calculated without the correct BFW model and correct water quality standards. The area where the TDS standards are above maximum levels for TDS should not be included in the aggregate storage for the Subbasin. Need to discuss the redox process and how overpumping can degrade water quality Discuss elevated Cloride levels and its relationship to redox. Also discuss CRC 16R1M and its location as indicative of the legacy TDS issues east of Maxwell. This well has a known depth of less than 30 feet and is draining into the Subbasin.
	3.2.6 3.28	3-73 3.82 -4			There needs to be a discussion about what we do not know about the cause of sbsidence near Arbuckle. The CGA needs to engage Cal Trans to find out what they think the cause of this is. We cant have I-5 collapse – there already has been issues south of Arbuckle immediately east of Pierce High School. It would be a disaster for the State and County if I-5 had to be diverted at Arbuckle. There should be a discussion regarding the elevated TDS and other naturally occurring contaminants under the GDE around the Sutter Buttes. EASC 21 is a well centrally located in a GDE on the east side of the Subbasin with Boron levels of 1,010 ug/L. Adjacent overpumping could harm the GDE and there have been reports of dead fish in this area caused by the release of contaminated well water from 500 feet in depth.

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Chapter Number	Section Number	Page Number	Line Number	Figure/ Table Number (if applicable)	Comment
	3.3 3.11 3.3.4.3.1	3.85			The Water Budget can not be relied on until the correct BFW study is included in the GSP. Table 3.11 - Where is the accounting for water transfers. Where is the historical data for water transfers – what are the future assumption for water transfers?

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Chapter Number	Section Number	Page Number	Line Number	Figure/ Table Number (if applicable)	Comment

Colusa Subbasin Groundwater Sustainability Plan Chapter Input

Commenter Name: Ben King Chapter 4 Comments **Commenter Affiliation (if applicable):**

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COLUSA SUBBASIN

Chapter Number	Section Number	Page Number	Paragraph Number	Figure/ Table Number (if applicable)	Comment
4.2.3.3		4-17		Table 4-4	The Monitoring Network is woefully inadequate to protect against groundwater quality degradation and to protect the Human Right to Fresh Water. All wells used for Groundwater Substitution should be used to collect water quality samples and to preserve public accountability against over pumping. There is an incentive for quantity rather than quality and Stakeholders should be entitled to publicly available water quality data from groundwater substitution wells. In order to protect Colusa County Resident's Human Right to Fresh Water Monitoring Wells should be placed in the study area suggested by Springhorn as referenced in the Comments on Section 3. Springhorn raised concerns about high Saline TDS levels and arsenic levels in a large area west and southwest of the Sutter Buttes. Several monitoring wells should be placed in this area. Monitoring wells may also need to be placed around the City of Williams to provide a historical time series to monitor TDS levels over time. If water banking activities start with the development of Sites, this enhanced Monitoring Network and time series will become critical to protect the water supply for the City of Williams.
4.2.3.4		4-19			Springhorn highlighted a wide area where there are water quality monitoring data gaps. Monitoring wells should be placed in this area in consultation with the DWR and Springhorn's personal input since he highlighted this concern in the first place. Additional monitoring wells may be needed around the City of Williams and any potential water banking sites that could cause degradation of drinking water supplies for on the west side of the Subbasin.

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Chapter Number	Section Number	Page Number	Paragraph Number	Figure/ Table Number (if applicable)	Comment
4.2.4.4		4-20			One or two Extensometers need to be installed near Arbuckle and Dunnigan. One site should be near the intersection of Bailey Road and Hwy 99 since it is the site of greatest subsidence and because the infrastructure of I-5 is there in addition to the Arbuckle Cemetery and old railroad tracks. The other Extensometer should be installed near Dunnigan working with the Yolo County GSA to choose a site. There are approximately 500 residences in the area and an evergrowing commercial infrastructure.

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Chapter Number	Section Number	Page Number	Paragraph Number	Figure/ Table Number (if applicable)	Comment

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Chapter Number	Section Number	Page Number	Paragraph Number	Figure/ Table Number (if applicable)	Comment

Colusa Subbasin Groundwater Sustainability Plan Public Review Draft Input

Commenter Name: Ben King **Commenter Affiliation (if applicable):** Chapter 4 and Appendix 5

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COLUSA SUBBASIN

Chapter Number	Section Number	Page Number	Line Number	Figure/ Table Number (if applicable)	Comment
4	4.2.5.2				The Groundwater quality network does not adequate monitor the TDS contamination around Maxwell and Williams. CRC 16R1M is very concerning and represents an area where there is known water quality problems but there are no multi-completion wells to monitor upconing or provide a way to monitor upconing. The lack of multi-completion wells in this area and next to the public supply systems for Williams and Maxwell raise concerns about having enough information to protect the HRTW. Additionally, if the proposed Sites reservoir is completed there will be an urgent need to add monitoring sites to monitor possible contamination caused by the hydraulic head differential from Sites.
				4-7	It is unfortunate that the SVWQC observation wells were placed in areas where there are not any known water quality problems. It was clear from the Colusa County GMP that the problem areas are near Williams and Maxwell. The extreme variance between CRC Well 16 R IM and the nearby SVWQC wells highlight this disparity.
	Appendix 5				Since the public supply systems for Grimes and Princeton are know to have elevated arsenic levels, there should be a Figure monitoring arsenic over time at these sites and included in the GSP. The Appendix should include water level and water quality observations for each observation zone for all the multi-completion wells. Since there is abundant empirical evidence of upconing in the Colusa Subbasin this phenomenon needs to be continuously monitored by zone of depth for both gradient and water quality constituients. Where there is a concern for arsenic the monitoring should be for both EC and Arsenic. Additionally there should be more mulit-completion wells installed on the West side of the Sacramento Valley down hill from Sites since the

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Chapter Number	Section Number	Page Number	Line Number	Figure/ Table Number (if applicable)	Comment
					head gradient could be as much as 800 feet in differential. After an earthquake or in a fault structure this trend should be especially important to monitor.

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Chapter Number	Section Number	Page Number	Line Number	Figure/ Table Number (if applicable)	Comment

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Colusa Subbasin Groundwater Sustainability Plan Chapter Input

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COLUSA SUBBASIN

Chapter Number	Section Number	Page Number	Paragraph Number	Figure/ Table Number (if applicable)	Comment
5.3.1.3		5-6			Last paragraph should include impact of SWRCB water curtailments to TC Contractors. The example just refers to Federal curtailments. Comment should also highlight the fact that TC Member groundwater pumpers will have no alternative but to pump groundwater during curtailments because they need to irrigate their permanent plantings.
	3.1.4				Comment should address the dewatering of small water systems and domestic wells and the impact on DAC and SDAC households in the affected areas. This is not a hypothetical issue – domestic wells in College City and Arbuckle have run dry. This should be highlighted in the GSP.
	3.1.5				Discussion should include the impact on small water systems and domestic wells. The number of reported domestic wells should be recorded and highlighted. It is my understanding that over 19 domestic wells have already ran dry. The impact on households in SDAC and DAC areas should be highlighted.
5.3.4.1		5-10			Discussion of the role of the USEPA should be included. The USEPA has cited the small water systems of Grimes and Princeton for arsenic contamination. It is very important that that the discussion includes the degradation of fresh water aquifers caused by upwhelling of poor quality water. There is a possibility that over pumping could cause or exasperate this undesired outcome.

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Chapter Number	Section Number	Page Number	Paragraph Number	Figure/ Table Number (if applicable)	Comment
	3.4.2	5-11			Impact on SDAC and DAC areas should be identified and discussed by the GSA. Water quality of monitoring wells with multi-completion stages should be documented for each depth stage to identify degraded fresh water aquifers caused by upwhelling. We should avoid water quality monitoring cherry picking and record the data for all depth stages and monitor trends over time to identify possible upwhelling.
	3.4.3	5-11			If Sites is contructed, water quality may be adversely impacted by the elevation gradient between the elevation of sites and the bowels of wells on the valley flow. This gradient could be 600 to 900 feet of elevation head and may take decades to document. Especially around the Sutter Buttes Rampart we need to monitor for potential effects of a redox reaction when connate water upwhells and starts an oxidation process. Arsenic desorption is a predicted outcome when the pH of the connate water is greater than 8. There are also potential biotic outcomes again arsenic related when connate salt water starts the oxidation process. Certain anoxic microbes may add to the arsenic contamination similar to the cause of arsenic contamination in Chesapeake Bay. Earthquake activity could also affect the movement of upwelled contaminants. The west side of the valley has a history of geothermal conditions which could be impacted by earthquakes and earthquakes could also be a catalyst for upwhelling via active faults.
	3.4.4.	5-12			How about birth defects, mother health and other arsenic contamination related outcomes Rather than adverse effect to property values – loss homeowner values and loss of housing if a domestic well becomes contaminated.

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Chapter Number	Section Number	Page Number	Paragraph Number	Figure/ Table Number (if applicable)	Comment
	3.4.5	5.12			USEPA and SWRCB Citations should be evaluated.
	4.1	5-16			The stakeholder input regarding the 80 pct level should be documented and recorded for future public comment. As you may know there has been over 20 domestic wells reported dry with several in the College City area. The domestic well threshold should be an area of future discussion and stakeholder input as the drought progresses. The advocates of the 80 pct threshold should be documented and disclosed and the issue of domestic wells should have a future public discourse. Was there a GSA vote on the 80 percent level?
	5.4.1.1.1				The adverse degradation from the redox process for connate salt water will most likely be permanent. Significant lowering of groundwater near Grimes and the East Side of the Sacramento River could be the most vulnerable are for redox and potential adverse biotic outcomes. On the west side where there is natural geothermal pressures the lowering of groundwater levels could affect the hydrologic balance of groundwater and result in more upwhelling. Again another reason to measure all water quality at all observable depths.
	5.4.4.1				There should be a Minimum Threshold for Arsenic Contamination. There are two small water supply systems in Colusa County with USEPA Citations, two abandoned wells at the southern part of the City of Colusa and a reported observation of 200 ug/L near Grimes. Trends in arsenic contamination should be monitored over time due to the potential for continued redox of connate salt water and potential movement via faults which could be adversely aggravated by future techtonic activity.

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Chapter Number	Section Number	Page Number	Paragraph Number	Figure/ Table Number (if applicable)	Comment
	5.4.4.2				The Measurable Objective for arsenic should be the USEPA MCL of 10 ug/L
	5.4.4.4				The Interim Milestone discussion should include the GSA's role in working with the State of California to guarantee the Human Right to Fresh Water to the residents of the Colusa Subbasin. The State has the responsibility to uphold this Human Right and the GSA will likely have to work with the State on targeted solutions or mitigation efforts.

Colusa Subbasin Groundwater Sustainability Plan Chapter Input

Commenter Name: Ben King **Commenter Affiliation (if applicable):**

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COLUSA SUBBASIN

Chapter Number	Section Number	Page Number	Paragraph Number	Figure/ Table Number (if applicable)	Comment
5A		2	Outreach		Since the majority of the Outreach and Public Involvement Process was done before the severity of the current drought was known the outreach process does not reflect the impact on domestic well users nor does have domestic well users had the opportunity to give their input. The reported number of domestic well problems should be documented and there should be a concerted outreach program to get their input on the Minimum Threshholds and mitigation measures. The GSA has an opportunity to truly understand the impact on domestic wells from lowered groundwater levels and act in a proactive manner to help manage and mitigate adverse outcomes for the future. The current Memorandum does not reflect input from domestic well users.
			Hydrographs		The hydrograph for 14N02W22A002 does not have any data on the two pages it is presented.
5B		1			The statement " This appendix describes an economic analysis of MT's that was developed and presented to the TAC at the May 13,2021 Meeting" is false. While it is clear that the economic analysis was included in the presentation there is no indication that the economic analysis was presented or discussed at the meeting. The Minutes of the May 13, 2021 TAC Meeting do not reflect any discussion of the ERA proposal and states on Page 8 of the Minutes in Agenda Item 4.b Projects and Management Actions (PMAs) - **" This Agenda item was not discussed during the TAC meeting due to time constraints"**

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Chapter Number	Section Number	Page Number	Paragraph Number	Figure/ Table Number (if applicable)	Comment
5B		2			What are the assumed capital cost for refurbishing potentially dewatered domestic wells? What are the assumptions for energy costs caused by additional pumping? What rate schedule? As you probably are aware there are many critical assumptions depending on season and time of use.
		4		Figure 2	What does the Table Crop and Acres mean? There is not explanation for the inclusion of this table of the documentation for and reference source.
		2			Why does the economic analysis assume that demand management would be adopted by the GSA? The economic analysis in Chapter 6 appears to be highly speculative and is difficult to assess since the assumptions for the analysis have not been disclosed.
		All	General Comment		Regarding the costs of replacing the domestic well it is hard to assess whether or not the analysis is based on representative costs because the assumptions were not disclosed. The analysis seems to make rudimentary assumptions and not real life assumptions. In the crisis of a drought, local drilling capacity and well repair services are very limited and usually focused on serving the biggest and best customers. Domestic well owners are likely to have to wait until the growing season is over and pay for the costs to maintain their personal health and livelihood during the loss of the well. Some domestic well owners may not have access to the capital they need to make the repairs and most would not be able to secure 20 year financing unless they had equity in their houses and could refinance. Having a well run dry and being ablet to get an appraisal for refinancing is probably near impossible and ultimately the loss of a well may mean substantial loss of market value of their house.

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Chapter Number	Section Number	Page Number	Paragraph Number	Figure/ Table Number (if applicable)	Comment
					To make this a meaningful analysis, there is a timely opportunity to contact the County administrators and survey the domestic well users that have lost their wells during the current drought and ask them about direct and consequential economic costs and costs due to loss of income due to their well depletions. There are more than 20 such dry domestic wells in Colusa County alone.
5C	General				Arsenic levels should be included for Grimes and Princeton since the USEPA has continuously reported that observed levels are above the USEPA MCL. Arsenic should also be reported for all the wells for the Colusa Supply system since there has been the Del Oro Walnut Ranch well abandonment and the CIP enforcement action. Also the well near Grimes with the 200 ug/L observation should be included and reported for each observable depth if it is a multi-completion well.
					All of the reported locations should have EC observations for each observable stage if any of the reported locations are multi-completion wells. The new well drilled by the County of Darrin Williams property should be included in the appendix and water quality observations should be tracked for each observable depth. Mr. Williams reported upwhelling near the 1000 foot depth and the water quality from the upwhelling aquifer should be observed and tracked.
					Overall the Appendix needs to incorporate the wells discussed in Section 3.2.5.11. There is a multicompletion well near Maxwell with 4 stages and TDS levels as high as 1640 mg/L. There is a shallow well west of Grimes with a measurement of 2,040 mg/L. Wells near College City with TDS concentrations greater than 1000 should be of immediate concern since domestic wells are running dry and bowls are being lowered. Where are the measurements for the shallow wells west of Colusa with TDS levels greater than 2000 mg/L.
					Generally we should have up to date observations for all reported wells. The data for the Maxwell public supply system ends before 2013. The data for the Princeton public supply system ends before 2014 Arbuckle only has 3 observations ending in 2016. Since the Williams supply system has elevated EC levels, all the supply wells for Williams should be reported so as to avoid cherry picking and also to monitor any adverse trends.

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Chapter Number	Section Number	Page Number	Paragraph Number	Figure/ Table Number (if applicable)	Comment

Colusa Subbasin Groundwater Sustainability Plan Public Review Draft Input

Commenter Name: Ben King **Commenter Affiliation (if applicable):** Chapter 5 Comments

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Chapter Number	Section Number	Page Number	Line Number	Figure/ Table Number (if applicable)	Comment
5	5.3.4	5-11	33		Why isn't upconing being addressed since it is a known common occurrence? How does this reconcile with the HRTW goals of the DWR? The public supply systems of Williams and Maxwell seem particularly vulnerable to heightened TDS levels like at least one of its wells has experienced lately. This would be a primary concern from the head gradient from Sites and this trend needs to be monitored more closely than the current monitoring network would do.
	5.3.4.2	5-12			What are the minimum thressholds for each site? These levels should be in a Table because it is confusing to understand what they may be? What are the historical numbers that will be used? Shouldn't there be a Table like Table 5-2 for quality thresholds?
	5.3.4.3	5-12/13			There is no discussion about redox causing degradation? The potential from upwhelling caused by the gradient differential from Sites and possibly in combination with earthquake and fault activity?
	5.3.5	5-13			This SMC seems to be very dangerous because the current problem area for subsidence is so close to I-5. If the subsidence monitoring site next to I-5 dropped by 5 feet would the SMC be triggered? It would seem that there should be zero tolerance for more additional subsidence next to I-5 and that Cal Trans should be engaged now to figure out the cause and what can be done. Perhaps funding could come from Cal Trans – especially given all the infrastructure money being allocated right now.

COLUSA SUBBASIN

Chapter Number	Section Number	Page Number	Line Number	Figure/ Table Number (if applicable)	Comment
	5-4				How does the HTRW fit into the monitoring of these Sustainability Thresholds?

COLUSA SUBBASIN

Chapter Number	Section Number	Page Number	Line Number	Figure/ Table Number (if applicable)	Comment

Colusa Subbasin Groundwater Sustainability Plan Public Review Draft Input

Commenter Name: Ben King **Commenter Affiliation (if applicable):** Chapter 6 and 7 Comments

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COLUSA SUBBASIN

Chapter Number	Section Number	Page Number	Line Number	Figure/ Table Number (if applicable)	Comment
6				6-2, 6-4 ect	The boundary for the CDMWC needs to be corrected to reflect the acreage south of Hahn Road west of the Colusa Basin Drain.
	6.3.1				Since there was not a project submittal for this project how can Stakeholders obtain the proposal submitted? It was mentioned that there was a planned annexation in the public meetings – how can stakeholders know what acreage is intended to be annexed? Who is paying for this PMA development? How can Stakeholders know that proprietary consulting activities are not also being done with public funded 218 assessments since many of the PMAs are being considered by legacy clients of the Consultants? What control procedures are in place to prevent abuse of the PMA financing process by consultants and legacy clients?
	6.5.1.2			Westside Diversions	The Salt Creek potential diversion should be closely analyzed for potential harm to Williams public supply system from both a quantity and quality perspective. There are substantial HRTW and DEI considerations to be considered with any diversion of Salt Creek or any other west side stream above a public supply system or in an area where subsidence is a problem or an emerging problem
	6.5.1.3			Sites	The top of Sites Reservoir is expected to be 500 feet above sea level which is likely 800 feet above the intake levels for the public supply systems of Maxwell and Grimes and all wells generally on the Valley floor. This head gradient could materially degrade water quality generally and/or the public supply systems for Williams and Maxwell. Additionally lateral movement via localized faults and/or future earthquake

COLUSA SUBBASIN

Chapter Number	Section Number	Page Number	Line Number	Figure/ Table Number (if applicable)	Comment
					activity could materially negatively impact groundwater quality at any point in the future. This again has HRTW and DEI potential negative material impacts.
	6.5.2	6-81			Why hasn't the GSP covered the proposed groundwater trading program being considered by the California Water Commission? It appears that this is being seriously considered but it was not discussed our considered in the public engagement process for the GSP.
					The Short Term and Long Term Demand Management Actions need to be reviewed by the Economic Development departments of the Counties and Cities in the Colusa Subbasin. How does the costs of these Demand Actions compare to the cost of groundwater trading as discuss? Who is going to pay to administer these type of Demand Actions and what are the estimated costs for the administration?
	7.1.1				What is the status of the GSA establishment cost reimbursement requests that are part of the JPA? Is this reimbursement possible ? How much is the amount and how much will be paid to each entity? Is this amount included in the estimates? If the GCA is sued for a settlement contractor issue such as the Aqua Alliance suit – who pays for the legal fees for the suit?
	7.1.2				How do Stakeholders have confidence that 218 fees are not being used to pay costs that are not appropriate to charge the GCA bit should be charged to the Member GSA.? What type of audit and control procedures are in place to protect against abuse

COLUSA SUBBASIN

Chapter Number	Section Number	Page Number	Line Number	Figure/ Table Number (if applicable)	Comment

COLUSA SUBBASIN

Chapter Number	Section Number	Page Number	Line Number	Figure/ Table Number (if applicable)	Comment

Colusa Subbasin Groundwater Sustainability Plan Chapter Input

Commenter Name: Evan Markey/Michael Bolzowski **Commenter Affiliation (if applicable):** GGA/Cal Water

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COLUSA SUBBASIN

Chapter Number	Section Number	Page Number	Paragraph Number	Figure/ Table Number (if applicable)	Comment
2	2.1.2.1	8	4	-	The plan states Willows used 1.6 MGD. Our records show and average of 1.2 MGD for the same time.
Appendix	2.7.3	121	-	2-4	Table shows Willows average per capita as 231 Gallons per Capita Per Day from 1990 to 2015. Our current average 2015 to 2020 is much lower, 143 Gallons per Capita Per Day. The model maybe overestimating our demands for the basin.

COLUSA SUBBASIN

Chapter Number	Section Number	Page Number	Paragraph Number	Figure/ Table Number (if applicable)	Comment

COLUSA SUBBASIN

Chapter Number	Section Number	Page Number	Paragraph Number	Figure/ Table Number (if applicable)	Comment

Colusa Subbasin Groundwater Sustainability Plan Chapter Input

Commenter Name: Lester Messina **Commenter Affiliation:** Colusa Glenn Subwatershed Program (SVWQC)

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COLUSA SUBBASIN

Chapter Number	Section Number	Page Number	Paragraph Number	Figure/ Table Number (if applicable)	Comment
2	**2.2.1.2**	**2-20**	**2**		Recommended Change: Irrigated Lands Regulatory Program The Central Valley Regional Water Quality Control Board (CVRWQB) has adopted waste discharge requirements (WDRs) for discharges from irrigated commercial croplands to protect both surface water and groundwater supplies. When land is in agricultural production it is irrigated and fertilized. It is assumed that portions of the soil amendments, particularly fertilizer, is converted to ***nitrate which has the potential to percolate into groundwater*** The ILRP regulates such discharges, growers can ***minimize the percolation of nitrate to groundwater through the implementation of effective management practices***. Commercial irrigated lands, including managed wetlands are required to obtain regulatory coverage.

COLUSA SUBBASIN

Chapter Number	Section Number	Page Number	Paragraph Number	Figure/ Table Number (if applicable)	Comment

COLUSA SUBBASIN

Chapter Number	Section Number	Page Number	Paragraph Number	Figure/ Table Number (if applicable)	Comment

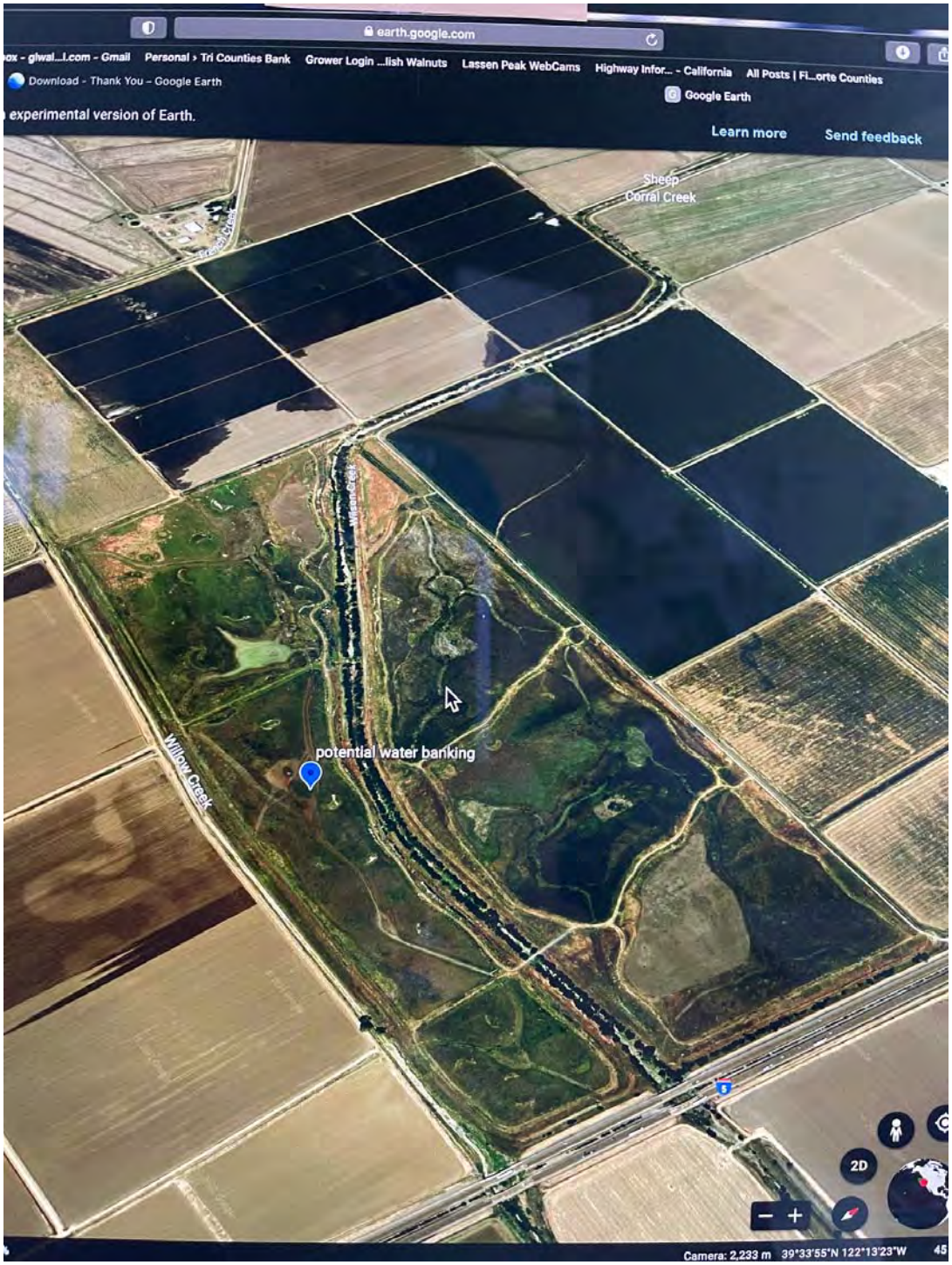
COLUSA SUBBASIN

Chapter Number	Section Number	Page Number	Paragraph Number	Figure/ Table Number (if applicable)	Comment

From: Leslie Nerli < >
Sent: Monday, April 26, 2021 10:12 AM
To: Grant Davids <grant@davidsengineering.com>; Lisa Hunter <LHunter@countyofglenn.net>
Subject: Fwd: attached map and ideas for potential recharge

HI Grant and Lisa
Sorry the previous emails were hand written and hopefully legible for you to review. I have been very busy spraying long hours for potential blight from the past rain prediction that panned out to be a waste of time and money in spray as very little precipitation.
I could not get a hold of the people I wanted to over the weekend to give you more information to use for this potential project.
First off, the land owner of the property has changed hands from Pete Galaya to:
RD 45 , LLC
1380 East Ave, Ste 124
Chico, CA
Parcel number 020-240-0140
There is 41.5 acres of Glide water district in the block of Habitat, not waterfowl wetlands like I thought. Not sure what plain ole Habitat is but definitely good percolation in this area. Of course this is a statement made only by experience and not as a geologist/hydrologist which would have to be confirmed by science. A rice farmer to the west of the proposed property for recharge used almost 10 acre feet one year for his crop. Again, the cost of water and other crop costs combined with returns have forced this farmer to sell part of his land using the sale of his land from many generations in his family to develop orchards so that he can keep some of the remaining 4rth or 5th generation family farm. Sad but true for many farmers.
From what I was told by Mike Alves regarding there are 41.5 acres of glide district land within the 300+/- acres of Habitat. When available from the Bureau, water can be surface water that can be purchased at each year's allocation rate for the **only the 41.5**, but not more than the allocation for each year. In addition to the glide surface water yearly allocation, any Bureau excess flow water could be captured in the 41.5 acres **and** remaining property acres as well. So using the Glide means of transportation from the TC canal, possible surface water available year to year could increase throughout the year time to time as the Bureau sees fit to call in "excess flows available" Of course, they still charge a fee and Glide a fee as well, but usually at a more reasonable price.
Because this property lies between the 2 creeks, it does flood during wet years. So, maybe some improvements could be made to capture more of the flood water that flows so quickly away and allow for more time to capture excess flood water to our groundwater storage. Maybe it will be so simple and cost effective as placing Check damns? and/or doesn't need them just some drainage management.
I do not know who the RD 45 LLc people are or if they would even consider working with the ground water recharge project. Even to the north of Wilson Creek is land in the habitat. It is a very large piece of property. 300 +/- acres.

Hope all this helps and let me know if you have any questions.
Thank you
Leslie Nerli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Learn more
Send feedback
Sheep
Corral Creek
potential water banking
Willow Creek
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From: Leslie Nevli GGA Board

COLUSA SUBBASIN

Chapter Number	Section Number	Page Number	Paragraph Number	Figure/ Table Number (if applicable)	Comment
2	2.1.2		1	Plan Area	Paragraph 2 The obvious and probably already corrected is... Primary urban . . . . Colusa & Williams in Glenn Co. . . . wrongly printed for both counties
2	2.4	23		Conjunctive use Programs	Paragraph 3 – Purveyors (water) along TC Canal — Re: 0% – 100% depending on available water – truely dependant on what Bureau feels to allow each year and is announced very early in year. Thus Paragraph 4 – also wrote well but I would like to add that Ag users try to utilize these transfers which are always at a very high price per A/F instead of pumping ground water. Or some Ag user combine the very costly cost of transfers with ground water pumping to survive and turn a profit. These costs are what have driven the Agriculture users to change crop planting from row crops to tree crops due to costs. (or rice)

cont 2.2.4 Conjunctive Use programs

Some Ag users have no groundwater availible and dare not plant trees, therefore fallow when either cost of water is prohibited and/or Not availible to buy - Fallow ground means less money for county in many ways - labor / Tractor equip purchases for improvements / taxes etc. . . . Not sure how or if this needs to be addressed but just saying . . . Ag $ cost of transfers should be reognized - Nothing is reasonable and is driving land use to demand more ground water and less land use to replenshish what is taken.

From: Leslie Nerki GGA Board

Joint TAC
April 23 Mtng

COLUSA SUBBASIN

Potential Recharge Project

Chapter Number	Section Number	Page Number	Paragraph Number	Figure/ Table Number (if applicable)	Comment
		32		Areas of Sustainability Concerns	- Glide Water District - Please see attached MAP
					of what I believe to be an excellent area of land to recharge. The land owner is Pete Galaya from Colusa
					Not sure how to approach the whole thing but maybe Grant David can - It is wetlands for waterfowl
					hunting and between the 2 creeks where as you could divert water from creek when flow allows. I know it floods when wet years flood. Maybe build
					up catch ment areas to hold flood water longer. Surface water from Glide could be used

cont'

when excess Bureau water is available. This past February we were offered excess flow water, of course always for a fee from both the Bureau and Glide wheeling fees — Maybe we can lease the ground from Pete and somehow determine what we put into ground water system could be credit for when we have to pump — Could approach Districts or a group of local ag. users to develop land to better utilize rain/s.w. for recharge and somehow get credit to pump g.w. when s.w. is not available. >> Maybe the land just needs some check dams? Might be already to capture (recharge) water.

Colusa Subbasin Groundwater Sustainability Plan Public Review Draft Input

Commenter Name: Pamela Plemmons **Commenter Affiliation (if applicable):**

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COLUSA SUBBASIN

Chapter Number	Section Number	Page Number	Line Number	Figure/ Table Number (if applicable)	Comment
Executive Summary			22-27		(Executive summary-Line 22-27 and corresponding sections in the text) I believe that the foundational assumptions with the water budgets do not reflect the reality of future climate change and the assumptions of data used as the baseline were not indicative of drought years. In addition, the idea that using a central tendency for climate change is short sighted at best. It seems to me that a "critical' tendency for climate change should also be included in the analysis—one that looks at a serious increase in overall earth temperature above 2.5*C. Otherwise, we are just putting our heads in the sand with regard to future water/crop issues. What mitigation factors could be planned for? How is water distributed equitably in times like that? What future cropping patterns might be considered? (maybe more annual crops when water is available..)
Executive Summary			17-21		(Executive summary-Line 17-21 and corresponding sections in the text)) I also would like to add that the assumptions of surface water use and a reduction in irrigated acreage from Shasta in critical years would be less is actually inaccurate. Since much of the irrigated agriculture in the Glenn and Colusa area are permanent crops (almonds and walnuts), they need to be irrigated no matter what…what it does trigger is a significant increase in ground water use.
Additional Comment					Finally, what I find distinctly disturbing is that in the entire plan there is no individual accountability for ground water use by individual growers, no monitoring of private wells or individuals who are excessive consumers of our precious and shared resource. For example, I am aghast at the practice of almond farmers extensively irrigating to "fatten up" the nuts just prior to harvest. Seriously!!! What a waste of water!!! The extra moisture has to be dried out using more energy in the drying process. Why is there no individual accountability for each well and that each grower pay the price for water just like most consumers have to do? I believe this is something that truly needs to be included in the plan.

COLUSA SUBBASIN

Chapter Number	Section Number	Page Number	Line Number	Figure/ Table Number (if applicable)	Comment

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Chapter Number	Section Number	Page Number	Line Number	Figure/ Table Number (if applicable)	Comment

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Chapter Number	Section Number	Page Number	Line Number	Figure/ Table Number (if applicable)	Comment

Colusa Subbasin Groundwater Sustainability Plan Chapter Input

Commenter Name: Holly Reimers **Commenter Affiliation (if applicable):** _____

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COLUSA SUBBASIN

Chapter Number	Section Number	Page Number	Paragraph Number	Figure/ Table Number (if applicable)	Comment
1	1.1	1-1	2		The priority being to halt overdraft and bring basins into balance? This is not even close to being complied with. The overdraft is far greater than the recharge with the ground water tables lowering each year.
1	1.1	1-1		1, 2 & 6	Sounds good but is NOT will not work and is not doable.
1	1.1	1-1	4		Achieving the groundwater management within 20 years WILL BE TOO LATE.
1	1.2	1-2	1		SEE ABOVE!
1	354-10	3 OF 7		1-1	The whole process has been trotally lacking in "public engagement". Nor has the GGA encuraged any "active involvement". As the times we have given input we have been overridden by councel.

COLUSA SUBBASIN

Chapter Number	Section Number	Page Number	Paragraph Number	Figure/ Table Number (if applicable)	Comment
2	2.1.2	2-4	2.1.2.1		With the Colusa Subbasin depending on ground water for their potable water the ground water for these wells should be closely watched as the number of wells are going dry or having to be lowered at an alarming rate.
2				2-6	The table shows the density of Ag. wells around Orland. Is anyone reporting the number of domestic wells that are being affected by this?
2	2.2	2-16	2.2.1.1		"Manage and reduce invasive plant populations" This has been one of my main talking points for many years. The Salt Ceder and the Bamboo are non native and are using more water than any other source. Especally in this dry year these plants need to be eradicated!
2	2.2	2-17	2.2.1.1		"Ensure long-term Gropundwater Sustainability" At the rate this is going and where it is headed the train has left the station and we in Glenn County will have little or no ground water in the very near future. Domestic and livestock wells MUST be protceted.
same as above					The defination of sustainable: "related to, or being a method of harvesting or using a resource so that the resource is NOT depleted or PERMANENTLY damaged". To date all that I have seen and hear coming from the GGA has been a JOKE!!!

COLUSA SUBBASIN

Chapter Number	Section Number	Page Number	Paragraph Number	Figure/ Table Number (if applicable)	Comment
2		2-23	2.2.4		With 2021 being one of if not the dryest years on record to transfer serfice water OUT of the subbasin should be at the very least suspended. To transfer serfice water then pump ground water as a substitute should not be allowed.
2		2-29	2.5.1.2		Chowchilla?????
3		ALL	OF IT!		Anyone reading this needs a Masters degree in Geology. Anyone looking for something to put them to sleep at night can try this chapter. Most of what is contained is FAR above most people and especally those here in Nrthern California. Maybe this chapter is necessary but it is way over the top on so much detail that it loses the normal person. It certently lost me.
4		ALL OF IT.			There is no mention of using those locals that are drillers and or anyone that repairs pumpa and wells. It should be noted that those working in the "field" just might have a better idea as to what is happening to our groundwater than someone sitting at a computer someplace other then in the field in Glenn County.
	FINAL THOUGHTS				After reading through this whole draft. Witch I will have to admit was in many places very boring, I see no offers of solutions. Lots of "we will Keep lookionmg at it" but nothing to address what some are saying is a major overdraft of our gropund water. Domestic and stock wells are having to be lowered or are running out of water. The word on the street is that the ground water is dropping by over 1' per year and that was BEFORE the current very dry year. To me this is nothing more than a "make someone feel good" and a waste of time and energy of some that are well meaning but this is NOT getting the job done.

Comments on the Glenn Subbasin GSA
Comments by Holly E. Reimers, Landowner

Page	Line	Table	Figure	Comments
ES-14	14-15			What happened to the wells between 200' and 2,000'?
ES-16		ES-3		Wells falling below their MT should be monitored more often than every 24 months. Every two years allows for a severe lowering of the ground water level that might not be recoverable. Any well falling below it's MT should be checked at least twice a year. Any land subsidence should not be acceptable. This is not something that is recoverable.
ES-17	12-15			"..not currently occurring..." WHAT?? Has anyone noted the number of dry and going dry wells in Glenn County? Granting that this is an usually dry year and that Stony Creek has not run all year it is almost amazing that there have not been more dry wells. Yet there are those around the County that continue to pump great amounts of ground water from their deep wells. Sort of like putting a straw on a glass and sucking. The top part of the glass will go dry first as the water is pulling from the bottom.
2-1				The basin boundaries should be redrawn to exclude those lands that do not have access to groundwater primarily those lands in the western portion of the basin. Not only is there little to no groundwater these lands are receiving no benifit from being in the basin, only an expense.
3-15	3.1.5.16			Why is Hambright creek not mentioned? When running it is a major source of groundwater recharge.
6.5.1		6-27		The OUWUA is acknowledged as direct Groundwater Recharge. The land owners in the OUWUA should also be acknowledged as having the ability to assist in the ground water recharge. Those that apply only surface water should be given credit and not charges as they are helping the recharge when ever they apply surface water.
7.6	8-23			Charging the landowners on the west side of the basin, with no groundwater, the same amounts as those that have the water under their ground and are pumping for their perennial crops is unfair. Paying a "tax" or "fee" when

there is no benefit to the landowner, there should be some benefit but so far we on the west side are seeing none. To place this additional burden on these land owners may force them to look at other uses of their ground to be able to "pay" for your additional fees.

Appendix 7A
Page 3 Table 1

All "fees" should be passed only by a majority approval vote. Any "vote" should be conducted on a per/acre basis and should take into consideration what benefit there is to the landowner(s). You can call it is "fee" BUT if it looks like a duck, quacks like a duck IT IS A DUCK! A "fee" by any other name is still a tax on our property.

General Comments

It has been said that there are outside groups purchasing ground in the basin with the only purpose of mining the ground water. This is not a supportable option for the basin to be able to sustain its self. **NO GROUND WATER SHOULD BE EXPORTED FROM THE BASIN - EVER!**

Chapters 3, 4 & 5 one needs to have a Doctorate Degree in Hydrology, Geology and Engineering to even start to understand any of this. This should be written so that the general public and landowners would have some kind of understanding as to what some of these proposals are and how they as landowners will be effected. Or at least put in a summary that the landowner can understand, it may be included I might have missed it in all the other "stuff".

Colusa Subbasin Groundwater Sustainability Plan Chapter Input

Commenter Name: Emily Reinhart **Commenter Affiliation (if applicable):** Davis Ranches/Sycamore Mutual Water Company

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   - *Colusa Subbasin GSP Chapter Input (Jones).docx*

5. If you are located in the Glenn Groundwater Authority, please send your comment file to:
   - Lisa Hunter – Program Manager - Glenn Groundwater Authority: lhunter@countyofglenn.net

6. If you are located in the Colusa Groundwater Authority, please send your comment file to
   - Mary Fahey – Program Manager - Colusa Groundwater Authority: mfahey@countyofcolusa.com

7. If you don't affiliate specifically with either the CGA and/or GGA, please send your comments to both Mary and Lisa.

8. Please make sure that your comments are submitted by midnight May 5, 2021.

COLUSA SUBBASIN

Chapter Number	Section Number	Page Number	Paragraph Number	Figure/ Table Number (if applicable)	Comment
6	5.1.7	6-70	1 (above Table 6-35)		**Question**: What do you mean by "newly formed water storage district"? We are already within an existing water district (Sycamore Mutual Water Company). Davis Ranches is the participating Landowner within the district that will be hosting the recharge site.
6	5.1.7	6-70	1 (above Table 6-35)		Water would be sources from Sacramento River during high flows in the system. Currently, Sycamore Mutual Water Company (a Sacramento River Settlement Contractor). We will be looking to rely on our Riparian water rights in order to do winter flooding (beneficial use). We will not have 215 water from the Colusa Drain. Should project start before Nov. 1, we would use some of our settlement contract water to recharge.
6	5.1.7	6-70	1 (above Table 6-35)		Habitat benefits also include winter floodplain habitat for migrating shorebirds/waterfowl as we pulse flood the field
6	5.1.7	6-71	Table 6-35	Water Source & Reliability	Source is Sacramento River. Reliability is good, but still unknown at this time.
6	3.5.1	6-42	1		30 – 45 days during fall/winter. We aren't tied to a specific start date. There is flexibility built into the project to allow for water availability, etc. The target is Fall/Winter for the habitat benefits as well as availability of water in the system. Settlement contract waters would be used if the project starts before Nov. 1.

COLUSA SUBBASIN

Chapter Number	Section Number	Page Number	Paragraph Number	Figure/ Table Number (if applicable)	Comment
6	3.5.1	6-42	2		We do not have contract for 215 water. We do have riparian rights that we would be exercising for this project for beneficial use (habitat).
6	3.5.1	6-42	2		5,000 acre feet over 10-years is our goal.
6	3.5.5	6-44	1		No 215 water.
6	3.5.7	6-45	2		No 215 water.
		6-8		Table 6-2	Diversion of winter flows from Sacramento River (riparian) or settlement contract flows (should project start before Nov.1).

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Appendix 2C

Distribution Lists

2C-1: GSA-Specific Coordination Meetings

2C-2: Media and Outreach Contacts

Note: Some information has been redacted for confidentiality purposes and GSA commitments.

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2C-1. GSA-Specific Coordination Meetings

Note: Some information has been redacted for confidentiality purposes and GSA commitments.

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Appendix 2C-1
Colusa Subbasin
GSA-Specific Beneficial Users

Category of Interest	Examples of Beneficial User Groups	Engagement Purpose
General Public	• Citizens groups • Community leaders • Interested individuals • Universities/Academia	Inform to improve public awareness of sustainable groundwater management
Land Use	• Municipalities • Local land use agencies • Regional land use agencies • Community Service Districts	Consult and involve to ensure land use policies are supporting GSPs and there are no conflicting policies between the GSAs / GSP and said local government agencies
Private Users	• Private pumpers (domestic and agricultural) • Schools and colleges • Hospitals	Inform and involve in assessing impacts to groundwater users
Urban/ Agricultural Users	• Water agencies • Irrigation districts • Municipal water companies • Mutual water companies • Resource conservation districts • Farmers/Farm Bureaus • Water Districts • Water users associations • Irrigated Lands Regulatory Program Coalition	Collaborate to ensure sustainable management of groundwater
Industrial Users	• Commercial and industrial self-suppliers • Local trade associations or groups	Inform and involve in assessing impacts to users
Environmental and Ecosystem Uses	• Federal and State agencies • Wetland managers • Environmental groups	Inform and involve to consider/incorporate potential ecosystem impacts to GSP process
Surface Water Users	• Irrigation Districts • Water Districts • Water users associations • Agricultural users	Inform and involve to collaborate to ensure sustainable water supplies
Economic Development	• Chambers of commerce • Business groups/associations • Elected officials • State Assembly members • State Senators • Economic Development Team	Inform and involve to support a stable economy
Human Right	• Disadvantaged communities	Inform and involve to provide safe and

Category of Interest	Examples of Beneficial User Groups	Engagement Purpose
to Water	• Small water systems • Environmental justice groups/community-based organizations • De minimis well owners	secure groundwater supplies to all communities reliant on groundwater
Tribes	• Federally Recognized Tribes • Non-Federally Recognized Tribes	Inform, involve and consult with tribal government
Federal Lands	• U.S. Fish and Wildlife Service • U.S. Bureau of Reclamation • U.S. Army Corps of Engineers	Inform, involve and collaborate to ensure basin sustainability
Integrated Water Management	• Regional water management groups (IRWM regions) • Flood agencies	Inform, involve and collaborate to improve regional sustainability

2C-2. Media and Outreach Contacts

Note: Some information has been redacted for confidentiality purposes and GSA commitments.

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Appendix 2C-2
Colusa Subbasin
Media and Outreach Contacts

The following media outlets and outreach partner organizations are contacted to publicize every Colusa Subbasin outreach event and to publish associated press releases and associated narrative materials (e.g. Op-Ed, newsletter publications, etc.).

Media Contacts

The Sacramento Valley Mirror
Glenn County Transcript
Colusa County Sun Herald
Colusa Appeal Democrat
Chico Enterprise Record
Williams Pioneer Review
Action News Now
KRCR
NSPR
CPAY Radio

Outreach Partners

California Department of Water Resources
Colusa County Farm Bureau
Colusa County Resource Conservation District
Colusa Glenn Subwatershed Program
Colusa County Farm Service Agency
Colusa County Cooperative Extension
Colusa County Department of Agriculture
Colusa Basin Drainage District
Glenn County Farm Bureau
Glenn County Resource Conversation District
Glenn County Rangeland Association
Northern California Water Association
Orland Unit Water Users Association
Ord Bend Community Services District
UC Cooperative Extension – Colusa County
UC Cooperative Extension – Glenn County

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Appendix 2D

Public and Engagement Materials

2D-1: Interbasin SGMA Coordination Meetings

2D-2: Initial SGMA Information Workshops

2D-3: GSA Financing – Proposition 218 Public Information Meetings and Hearings

2D-4: SGMA General Information, Basin Setting and Sustainable Management Criteria Workshops

2D-5: SGMA-Series Public Events

2D-6: Subbasin Branding

2D-7: Media Materials

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2D-1. Interbasin SGMA Coordination Meetings

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Northern Sacramento Valley Inter-basin Coordination Report

Antelope | Bowman | Butte | Colusa | Corning | Los Molinos | Red Bluff | Sutter | Vina | Wyandotte Creek | Yolo

Table of Contents

Glossary of Acronyms

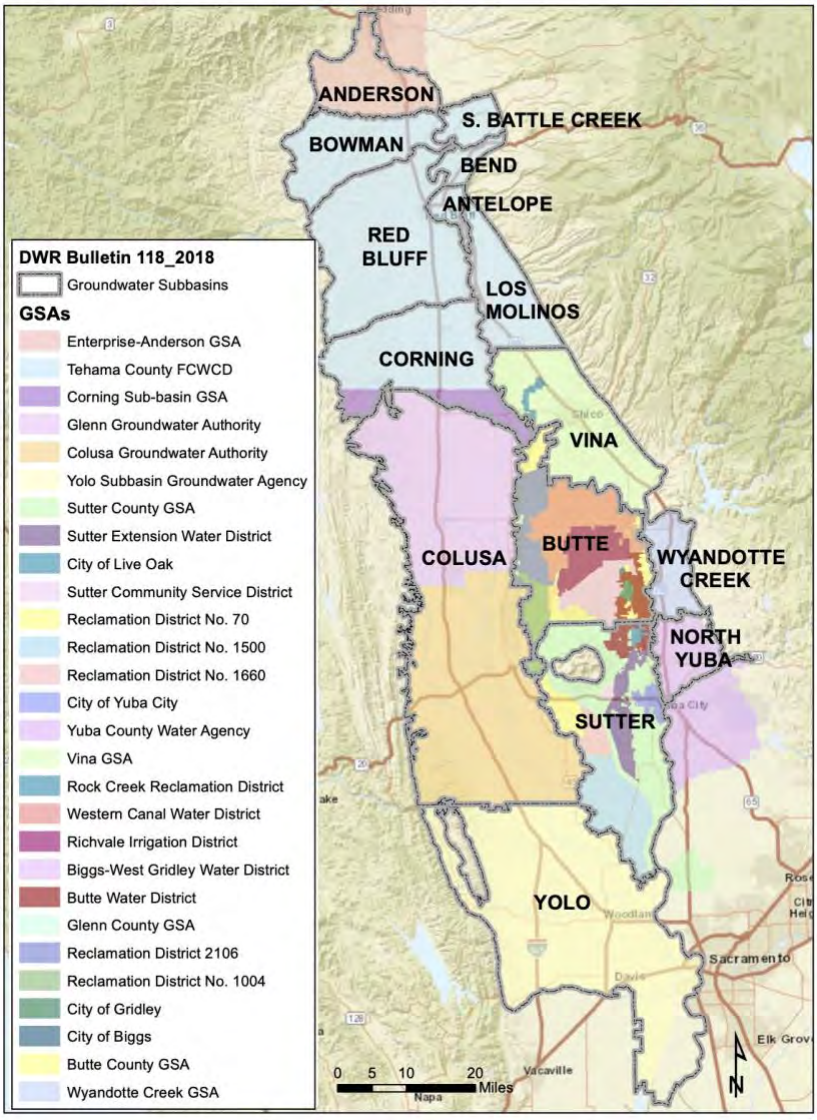
- ***CBI*** – *Consensus Building Institute [link]*
- ***DWR*** – *California Department of Water Resources*
- ***GSA*** – *Groundwater Sustainability Agency*
- ***GSP*** – *Groundwater Sustainability Plan*
- ***MOU*** – *Memorandum of Understanding*
- ***NCWA*** – *Northern California Water Association*
- ***NSV IRWM***– *Northern Sacramento Valley Integrated Regional Water Management*
- ***PMAs*** – *Projects and Management Actions*
- ***SGMA*** – *Sustainable Groundwater Management Act*
- ***SMC*** – *Sustainable Management Criteria*

1. Introduction & Background

The content of the report is the result of staff recommendations resulting from regional inter-basin coordination staff meetings in the Northern Sacramento Valley (2020-2021). The content will be presented to inform discussions among Groundwater Sustainability Agencies (GSAs) and gather public input through existing public venues, such as advisory committees, groundwater commissions, and GSA Board meetings.

Inter-basin coordination is critical in the Northern Sacramento Valley as GSAs develop and implement Groundwater Sustainability Plans (GSPs). Since groundwater subbasins in the Northern Sacramento Valley are hydrologically interconnected, water management decisions and actions in subbasins (i.e., groundwater pumping and processes affecting recharge, water demand, and supply including climate change) could change aquifer conditions. Understanding and accounting for these processes is important towards achieving sustainability in all subbasins.

Figure 1. Map of the Northern Sacramento Valley



Inter-basin coordination is described in the GSP Regulations in Article 8. Under the regulations, GSAs must describe how they coordinate with adjoining subbasins to demonstrate implementation will not adversely affect adjoining subbasins. The Department of Water Resources (DWR) is required to evaluate whether a GSP adversely affects the ability of an adjacent basin to implement their GSP or impedes achievement of sustainability goals in an adjacent basin (Water Code 17033(c)). Coordination among GSAs can be formalized in different ways and inter-basin agreements are voluntary. Appendix A describes components of Sec 357.2.

Inter-basin coordination discussions among staff representatives from 11 subbasins (Antelope, Bowman, Butte, Colusa, Corning, Los Molinos, Red Bluff, Sutter, Vina, Wyandotte Creek, and Yolo), with facilitation support from the Consensus Building Institute (CBI) began during the summer of 2020. While efforts have focused on these subbasins, coordination will occur, as warranted, with other neighboring subbasins (Anderson and North Yuba).

Initial stages of inter-basin coordination efforts (May-December 2020) were closely aligned with the GSP Regulations in Article 8 components and delineated in Section 3 *Evolution of Inter-basin Coordination Efforts*. After an initial attempt to compile technical information to better understand basin conditions at respective boundaries, staff realized differing timelines for the completion of Basin Setting content in each subbasin meant there would not be sufficient time during initial GSP development to fully characterize or address major inconsistencies. Therefore, the goal for regional inter-basin coordination shifted towards establishing a framework for long-term inter-basin coordination and dialogue (post GSP submittal in 2022). Informal coordination discussions among staff and consultants between neighboring subbasins continued during the GSP development process.

This report outlines the intent and purpose of inter-basin coordination in the Northern Sacramento Valley. It describes the process followed and materials developed throughout the process. It also outlines foundational elements, referred to as "key pillars," of a framework for sustained coordination through GSP implementation.

2. Intent & Purpose

Inter-basin coordination efforts in the Northern Sacramento Valley are focused on establishing a foundation and guidelines for sustained inter-basin coordination through GSP implementation, following the initial submittal of GSPs by January 31, 2022. GSAs intend to:

1. *Establish a framework allowing for continued dialogue and a venue to address issues and discrepancies during the implementation of the GSPs;*
2. *Coordinate on consistent messaging and communicate shared expectations at a regional level;*
3. *Demonstrate regional coordination efforts and outcomes; and*
4. *Leverage existing agreements and arrangements in the region (e.g., Northern Sacramento Valley Integrated Regional Water Management (NSV IRWM), the Six County Memorandum of Understanding among Butte, Colusa, Glenn, Tehama, Shasta, and Sutter).*

The proposed deliverable from this effort is the development of a common approach and draft language for incorporation into each subbasin's GSP. This narrative describes the facilitated effort as well as the framework and scope for long-term coordination during plan implementation. The public will have opportunities to weigh in and provide input on the proposed framework through each subbasin's existing public venues, such as advisory committees, groundwater commissions, and GSA board meetings.

3. Evolution of Inter-basin Coordination Efforts

Inter-basin coordination efforts, facilitated by the Consensus Building Institute (CBI) began in summer 2020 among Subbasin staff from Antelope, Bowman, Butte, Colusa, Corning, Los Molinos, Red Bluff, Vina, and Wyandotte Creek subbasins to identify priorities and resources available for inter-basin coordination. Soon after, staff representatives from the Sutter and Yolo subbasins joined the meetings. To date, CBI has facilitated nine inter-basin coordination meetings with staff and periodically with technical consultants from the subbasins. Subbasin staff and/or CBI communicated regular updates to GSA Boards and advisory committees in each of the subbasins regarding the status of inter-basin coordination activities [Access Webpage Here].

Initial stages of inter-basin coordination efforts were closely aligned with the GSP Regulations in Article 8:

1. ***General information*** *of subbasins, plans and agencies participating in the coordination agreement,*
2. ***Technical information*** *including consistent and coordinated data or methodology for inter-basin boundary flows and stream-groundwater interactions at basin boundaries, and information on sustainable management criteria and monitoring that would confirm that no adverse impacts of implementing the GSPs would result to any party to the agreement,*
3. *A description of the* ***process for identifying and resolving conflicts*** *between Agencies that are parties to an inter-basin coordination agreement.*
   Reference: *Sections 10727.2, 10733, and 10733.2, Water Code.*

The goal at the initial stage was to compile general and technical information identified by DWR in a consistent manner to establish an accurate basis of comparison and to identify any significant inconsistencies that may need to be addressed or resolved. This included developing a series of information-sharing documents and outreach materials, summarized below.

1. ***Inter-basin Coordination Directory–*** *This document provides an updated and centralized directory with contact information for GSA managers, technical consultants, and facilitators in the various subbasins. This document seeks to facilitate communication among the various representatives leading GSP development [Access Here].*
2. ***Technical Information-Sharing Template–*** *This template was developed among the managers and technical consulting teams to compile and compare information on modeling tools and water budget results for inter-basin flows, stream-aquifer interactions, and hydro-geologic conditions in the subbasins. Potentially, this document could be used to compile information about Sustainable Management Criteria and Monitoring Networks [Access Draft Template Here]. The first output from the technical information-sharing template summarizes the highlights of compiled model information across the subbasins [Access Here].*
3. ***Outreach Presentation****–This PowerPoint presentation provides updates on inter-basin coordination activities to the various SGMA public venues (GSA boards, advisory committees, etc.) and an overview of the scope and timeline of inter-basin coordination efforts. This presentation is continuously updated*

after each inter-basin coordination staff meeting for use in consistently communicating with GSA Boards/advisory committees and the public throughout the region [Access Here].

4. ***Outreach Factsheet–*** *The inter-basin coordination factsheet aims to support public outreach and information sharing in the various subbasins. This two-page flier or factsheet summarizes why regional coordination is important under SGMA, who is involved in ongoing efforts, what the coordination priorities are, and includes a table with links to each subbasin's website for additional subbasins' specific information [Access Here].*
5. ***Inter-basin Coordination Webpage****– Butte County hosts a webpage to provide the most up-to-date information on inter-basin coordination efforts in the Northern Sacramento Valley. The webpage provides an overview of the scope and makes available documentation and results of the inter-basin coordination work, including meeting agendas, summaries, and outputs [Access Here].*
6. ***Meeting Summaries****–CBI develops meeting summaries after each regional inter-basin coordination staff meeting to summarize key discussion themes, action items, and next steps. These summaries are publicly available on the inter-basin coordination webpage [Access Here].*

After an initial attempt to compile technical information, staff realized the broad aspirations were not feasible during the initial stages of GSP development. The process of compiling and comparing modeling outputs from the diverse regional hydrological models required a significant amount of time, resources, and varying levels of data. Further, subbasins were at different stages of GSP development and GSAs were facing tight timelines, competing priorities, and capacity limitations to meet the regulatory deadline. While communication on a neighbor-to-neighbor basis on technical components was encouraged through GSP development, subbasin staff representatives realized more robust technical analysis and coordination between and among subbasins was not possible until initial plans (including water budgets) were more fully developed or after adoption of the initial GSPs.

Following reflection from the separate inter-basin efforts and priorities moving forward, subbasin staff recommended shifting the focus of regional coordination meetings to establishing a framework for long-term inter-basin coordination and dialogue following GSP submission in January 2022. To do so, subbasin staff identified desired outcomes in the short-term (during initial GSP development), mid-term (first 5-year update), and long-term (GSP Implementation through 2042) [Access Here]. This approach recognizes adoption of the 2022 GSPs as an initial step in sustainable groundwater management, not the final step. Subbasin staff acknowledged while model outputs may not match perfectly, the main objective is to identify and acknowledge significant discrepancies, understand why those differences exist, and evaluate to the extent they need to be reconciled. Inter-basin coordination has been characterized as "a marathon not a sprint," and current efforts will serve to pave the path for long-term collaboration. Further, GSAs can take advantage of annual reporting and five-year GSP updates to identify and address discrepancies. Lastly, subbasin staff representatives acknowledge public participants are interested in inter-basin coordination efforts and concerns from some subbasins can easily affect others. Subbasin staff understand the need to share and educate the public on what is in the various GSPs, and the SGMA requirements for inter-basin coordination. Staff will continue to provide updates and gather GSA Board and public input related to the direction of current efforts and desired priorities, shared concerns, and possible ideas for inter-basin coordination during GSP implementation.

4. Inter-basin Coordination Framework

This section outlines the foundational pillars that comprise the framework for inter-basin coordination under SGMA between and among subbasins in the Northern Sacramento Valley. These pillars build upon a long-standing history of regional collaboration and embody a commitment for continued coordination, collaboration, and communication for successful groundwater management in the region. Honoring the individual authorities of the GSAs, these pillars represent a menu of options neighboring subbasins can draw upon, based on individual or neighboring subbasins' needs and challenges. GSA Boards can decide which of these options they would like to support and implement, acknowledging circumstances may change over time.

Pillars	Scale(s)	Timing
1. Information-sharing a. Inform each other on changing conditions (i.e., surface water cutbacks, land use changes, policy changes that inform groundwater management) b. Share annual reports and interim progress reports c. Share data and technical information and work towards building shared data across and/or along basin boundaries (e.g., monitoring data, water budgets, modeling inputs and outputs, and Groundwater Dependent Ecosystems)	• Neighbor-to-neighbor • Coordination groups [Refer to section 4.1 below]	• *Ongoing (GSP Development)* • *Near-term (5-year update)* • *Long-term (GSP implementation)*
2. Joint analysis & evaluation a. Evaluate and compare contents of GSPs with a focus on establishing a common understanding of basin conditions at boundaries b. Identify significant differences, uncertainties, and potential issues of concern related to groundwater interaction at the boundaries c. Engage in analysis and evaluation of SMCs between GSPs to assess impacts and identify significant differences and possible impacts between subbasins that could potentially lead to undesirable results	• Neighbor-to-neighbor • Coordination groups [Refer to section 4.1 below]	• *Near-term (5-year update)* • *Long-term (GSP implementation)*
3. Coordination on mutually beneficial activities a. Communicate, coordinate, and collaborate on mutually beneficial activities, which could include joint monitoring, joint reporting, regional modeling, and other efforts to address data gaps at subbasin boundaries b. Collectively pursue funding and collaborate on mutually agreed upon projects and management actions that provide benefits across boundaries c. Leverage existing collaboratives (NSV IRWM, NCWA etc.)	• Neighbor-to-neighbor • Coordination groups • Regional: NSV IRWM, NCWA Groundwater Task Force	• *Ongoing (GSP Development)* • *Near-term (5-year update)* • *Long-term (GSP implementation).*
4. Coordinated communication and outreach a. Coordinate and collaborate on regional-scale public engagement and communication strategies that promote awareness on groundwater sustainability, enhance public trust, and maintain institutional knowledge b. Maintain list of GSP/subbasin staff contacts and websites	• Regional: NSV IRWM and NCWA Groundwater Task Force	• *Ongoing (GSP Development)* • *Near-term (5-year update)* • *Long-term (GSP implementation)*
5. Issue-resolution process a. Establish and follow an agreed-upon process for identifying and resolving conflicts between GSAs by the first five-year update [Refer to Appendix D for more details and discussion prompts on issue resolution processes]	• Neighbor-to-neighbor • Coordination groups	• *Near-term (5-year update)* • *Long-term (GSP implementation).*

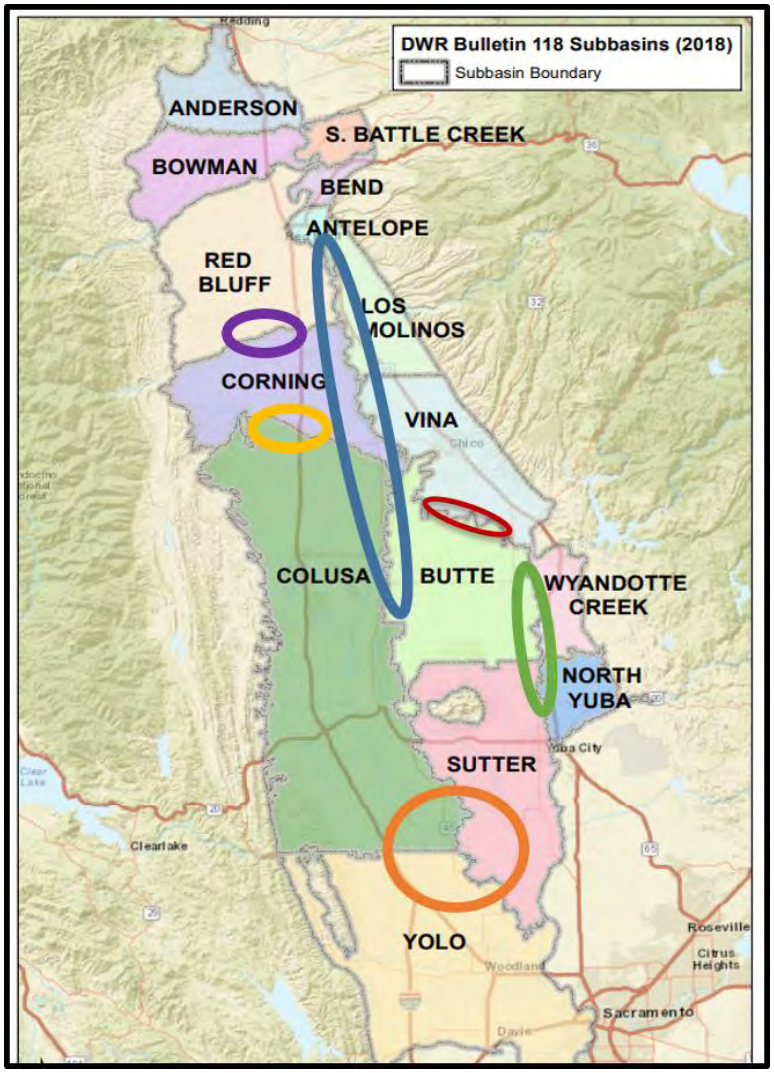
4.1. Inter-basin Coordination Groups

Inter-basin coordination efforts, as outlined in the pillars above, would require resources and technical support. Subbasin staff recommend organizing inter-basin coordination priorities by specific subbasin boundaries. One suggested approach identifies specific "Coordination Groups" (see Figure 3 and list below). Some of these groups are pairs and others include multiple subbasins around a river boundary.

1. ***Feather River Corridor***- *Butte, Wyandotte Creek, North Yuba, Sutter*
2. ***North Sacramento River Corridor***- *Antelope, Los Molinos, Red Bluff, Corning, Vina, Butte, Colusa*
3. ***South Sacramento Corridor***- *Colusa, Sutter, Yolo*

Neighbor to Neighbor, examples:

4. ***Stony Creek***- *Corning, Colusa*
5. ***Thomes Creek***- *Red Bluff, Corning*
6. ***Butte/Vina***- *Vina, Butte*



5. Conclusion and Next Steps

In sum, this report outlines a framework for inter-basin coordination for sustainable groundwater management in the Northern Sacramento Valley. The inter-basin coordination framework describes a menu of options for ongoing communication and collaboration around substantive issues over the twenty-year implementation of SGMA.

The pillars and other content from this report could be used by GSAs to support GSP development and implementation in a number of ways. This inter-basin coordination report could be included as an Appendix to the GSP and could be updated on a yearly basis. Individual subbasins can incorporate sections of the report into the body of the GSP, depending upon specific boundary conditions at adjoining subbasins. Finally, subbasins could draw on the inter-basin coordination framework if they would like to consider entering into one or more voluntary inter-basin agreements during GSP implementation.

The content of the report is the result of staff recommendations resulting from regional inter-basin coordination staff meetings. Staff will present the framework as a supporting document to guide and inform discussions with the GSA Boards and other existing public venues, such as advisory committees or groundwater commissions. GSAs in turn will discuss the menu of options for inter-basin coordination outlined in this report to determine their priorities and desired approach to draw on the inter-basin coordination framework in their individual GSPs. Lastly, Subbasin staff will come together to share input received and determinations from their respective GSAs.

Subbasin staff acknowledge that while this report builds upon a long-standing history of regional collaboration, this is just the beginning of inter-basin coordination efforts under SGMA. Therefore, this framework and inter-basin coordination activities will be continually refined throughout GSP implementation.

Appendices

Appendix A: GSP Emergency Regulations, Article 8: Interagency Agreements §357.2

§ 357.2. Inter-basin Agreements (access here)

Two or more Agencies may enter into an agreement to establish compatible sustainability goals and understanding regarding fundamental elements of the Plans of each Agency as they relate to sustainable groundwater management. Inter-basin agreements may be included in the Plan to support a finding that implementation of the Plan will not adversely affect an adjacent basin's ability to implement its Plan or impede the ability to achieve its sustainability goal. Inter-basin agreements should facilitate the exchange of technical information between Agencies and include a process to resolve disputes concerning the interpretation of that information. Inter-basin agreements may include any information the participating Agencies deem appropriate, such as the following:

(a) General information:
  (1) Identity of each basin participating in and covered by the terms of the agreement.
  (2) A list of the Agencies or other public agencies or other entities with groundwater management responsibilities in each basin.
  (3) A list of the Plans, Alternatives, or adjudicated areas in each basin.

(b) Technical information:
  (1) An estimate of **groundwater flow across basin boundaries**, including consistent and coordinated data, methods, and assumptions.
  (2) An estimate of **stream-aquifer interactions** at boundaries.
  (3) A **common understanding of the geology and hydrology** of the basins **and the hydraulic connectivity** as it applies to the Agency's determination of groundwater flow across basin boundaries and description of the different assumptions utilized by different Plans and how the Agencies reconciled those differences.
  (4) **Sustainable management criteria and a monitoring network** that would confirm that no adverse impacts result from the implementation of the Plans of any party to the agreement. If minimum thresholds or measurable objectives differ substantially between basins, the agreement should specify how the Agencies will reconcile those differences and manage the basins to avoid undesirable results. The Agreement should identify the differences that the parties consider significant and include a plan and schedule to reduce uncertainties to collectively resolve those uncertainties and differences.

(c) A description of the **process for identifying and resolving conflicts** between Agencies that are parties to the agreement.

(d) Inter-basin agreements submitted to the Department shall be posted on the Department's website.

Note: Authority cited: Section 10733.2, Water Code.
Reference: Sections 10727.2, 10733, and 10733.2, Water Code.

Northern Sacramento Valley | Sustainable Groundwater Management Act

Regional Coordination Between Subbasins

Antelope | Bowman | Butte | Colusa | Corning | Los Molinos | Red Bluff | Sutter | Vina | Wyandotte Creek | Yolo

Sustainable Groundwater Management Act

What is SGMA? California enacted the Sustainable Groundwater Management Act (SGMA) in 2014 to better manage groundwater over the long term. Sustainability is achieved by avoiding significant and unreasonable conditions for the six "sustainability indicators."

- Lowering of Groundwater Levels
- Reduction of Groundwater Storage
- Land Subsidence
- Surface Water Depletion
- Water Quality Degradation
- Sea Water Intrusion

Why is regional coordination important? In the Sacramento Valley, inter-basin coordination is critical as Groundwater Sustainability Agencies (GSA) develop their Groundwater Sustainability Plans (GSP). Since groundwater subbasins in the Northern Sacramento Valley (NSV) are hydrologically interconnected, water management decisions and actions in one subbasin (e.g. groundwater pumping) and processes like climate change could change aquifer conditions and affect flows to other subbasins. Understanding and accounting for these processes is key to achieve sustainability in all subbasins.

Who is involved in ongoing efforts?

Collaborative efforts have begun among representatives from 11 subbasins (Antelope, Bowman, Butte, Colusa, Corning, Los Molinos, Red Bluff, Sutter, Vina, Wyandotte Creek, Yolo), with facilitation support from the Consensus Building Institute. While efforts have focused on the subbasins mentioned, coordination will occur, as warranted, with other neighboring subbasins (Anderson and North Yuba).

What are the coordination priorities?

Groundwater Sustainability Agencies are working together to establish a foundation for open and transparent inter-basin coordination and communication by developing tools to:

- SHARE & COMPILE INFORMATION IN A CONSISTENT WAY
- OUTLINE A PROCESS TO IDENTIFY & RESOLVE ISSUES
- DOCUMENT COORDINATION EFFORTS

CBI CATALYZING COLLABORATION

Learn More & Get Involved

Receive Updates
Sign up for your GSA's interested parties list.

Contact Your GSA
Talk to your GSA representative

Attend Meetings
Attend public workshops, Advisory Board, and GSA Board meetings

Subbasin	GSA(s)	Website
Antelope	Tehama County Flood Control and Water Conservation District (FCWCD)	Website
Bowman	Tehama County FCWCD	Website
Butte	Biggs West Gridley WD, Butte County, Butte WD, City of Biggs, City of Gridley, Colusa Groundwater Authority, Glenn County, RD 1004, RD 2106, Richvale ID, Western Canal WD	Website
Los Molinos	Tehama County FCWCD	Website
Red Bluff	Tehama County FCWCD	Website
Corning	Corning Sub-basin GSA, Tehama County FCWCD	Website
Colusa	Glenn Groundwater Authority; Colusa Groundwater Authority	Websites (Glenn) | (Colusa)
Sutter	Butte WD, City of Live Oak, Sutter Community Service District, Sutter County, Sutter Extension Water District, RD 70, RD 1660, RD 1500, City of Yuba City	Website
Vina	Rock Creek Reclamation District, Vina GSA	Websites (Vina) | (RCDC)
Wyandotte Creek	Wyandotte Creek GSA	Website
Yolo	Yolo Subbasin Groundwater Agency	Website

Find more information about regional inter-basin coordination at:
ButteCounty.net/waterresourceconservation/Sustainable-Groundwater-Management-Act/Inter-basin-Coordination

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APPENDIX C

Memorandum of Understanding
Four County (Butte, Colusa, Glenn, and Tehama Counties)
Regional Water Resource Coordination, Collaboration, and Communication

Memorandum of Understanding
Four County (Butte, Colusa, Glenn, and Tehama Counties) Regional Water Resource Coordination, Collaboration, and Communication

1. BACKGROUND
The counties of Butte, Colusa, Glenn, and Tehama share common surface water and groundwater resources. Based on these common resources, local water resource managers understand that regular coordination, collaboration, and communication can result in an improved water resource understanding at both the county and regional level.

2. PURPOSE
The purpose of this document is to establish the mutual understandings of the four counties with respect to their voluntary joint efforts toward regional coordination, collaboration, and communication.

3. GOALS
The goals of the Four County Memorandum of Understanding (MOU) are:

2.1. To foster coordination, collaboration and communication between the four counties on water-related issues, to achieve greater efficiencies, and enhance public services.

2.2. To provide a framework for the management and disbursement of funding associated with activities pursued jointly under this MOU.

2.3. To improve competitiveness for State and Federal grant funding.

4. DEFINITIONS
4.1. Four County. Participants including the counties of Butte, Colusa, Glenn, and Tehama, with representation by the following:

- Butte County: Department of Water and Resource Conservation
- Colusa County: Department of Planning and Building
- Glenn County: Department of Agriculture
- Tehama County: Flood Control and Water Conservation District

4.2. Project Manager. A project manager will be determined by the Counties signatory to this MOU for any given project regardless of funding source to meet the goals set forth in this MOU.

5. MUTUAL UNDERSTANDINGS
5.1. Participation. Signatories to this MOU constitute the current participants. Participation is strictly on a voluntary basis and may be

terminated at any time without recourse. Neighboring counties who share water resources common to the participating counties and who are engaged in similar activities will be invited to be signatory to this MOU. Signatories aspire to work collaboratively with other regional programs and technical outreach efforts.

5.2. Activities. Efforts pursued under this agreement will remain consistent with and will not exceed the current authority for any individual participating county. Efforts will include the study and investigation of water resources common to participants, monitoring and reporting, information dissemination and sharing between counties and with other county departments, public outreach and education, and other activities at the agreement and direction of individual county governing bodies.

5.3. County Funding. Counties are not required to commit funding associated with activities completed under this MOU. It is understood that activities under this MOU may result in the more efficient use of existing and future department funding resulting from improved collaboration and coordination.

5.4. External Funding. Signatories will work collaboratively in pursuit of external funding associated with common interest activities based on voluntary participation and agreement. When required, a mutually agreed upon County representative will serve as the Project Manager for activities completed under a contract with an external funding source. Existing county contracting mechanisms will be utilized where available for contractual and invoicing purposes between participating counties. Nothing in this MOU precludes individual counties from the individual pursuit, contracting and completion of work from an externally funded source regardless of a real or perceived regional interest.

5.5. Decision-making. Consensus will be sought when the need for a decision arises.

5.6. Non-binding nature. This document and participation under this MOU are nonbinding, and in no way suggest that a county may not continue its own activities as each county is expected to continue its own policies and procedures and undertake efforts to secure project funding from any source. A county may withdraw from participation at any time.

5.7. Termination. Because the MOU will require periodic review and updating for use into the future, it is envisioned that the joint efforts of those involved will be ongoing in maintaining a living document. Thus this document will remain as a reflection of the understandings of the participants. Individual signatories of this MOU may terminate their involvement at any time with no recourse.

6. SIGNATORIES TO THE MEMORANDUM OF UNDERSTANDING

We, the undersigned representatives of our respective counties, acknowledge the above as our understanding of how the Four County Coordination, Collaboration, and Communication MOU will be implemented.

MAR 14 2006 APPROVED JAN 24 2006

Date

Curt Josiassen, Chairman
Butte County Board of Supervisors

2/28/06

Approved As To Form:
Bruce Alpert, Butte County Counsel

6. SIGNATORIES TO THE MEMORANDUM OF UNDERSTANDING
We, the undersigned representatives of our respective counties, acknowledge the above as our understanding of how the Four County Coordination, Collaboration, and Communicative MOU will be implemented.

Date April 4, 2006

Christy Scofield, Chairperson
Colusa County Board of Supervisors

Approved As To Form:
Henry Rodegerdts, Colusa County Counsel

EXHIBIT B
PAGE 3 OF 3

6. SIGNATORIES TO THE MEMORANDUM OF UNDERSTANDING

We, the undersigned representatives of our respective counties, acknowledge the above as our understanding of how the Four County Coordination, Collaboration, and Communication MOU will be implemented.

12-13-05
Date

Vice Chairman, Tehama County Flood Control
And Water Conservation District

Approved As To Form:

by
County Counsel, Tehama County

Date

By Board Chair

County
Approved As To Form:

County Counsel

Date

By Board Chair

County
Approved As To Form:

County Counsel

Date

By Board Chair

County
Approved As To Form:

TEHAMA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
MINUTE ORDER

December 13, 2005

8. Approval of Four-County Regional Water Resource Coordination- MOU: Ernie Ohlin reviewed that in August 2004, the Board authorized staff to participate in the four county water effort. The MOU attached is allowing all counties to participate together in water resource collaboration and communication. This non-binding voluntary MOU recognizes coordination among Butte, Colusa, Glenn and Tehama County.

Roger Sherrill encouraged the four-county groups to participate and noted in Item 5.1 "Participation" is strictly voluntary. Shasta County provides a major part of the recharge for the northern part of the Sacramento Valley and to move forward could only make for a stronger overall group.

Mark Black, Ag Commissioner for Glenn County, added this will be presented to Glenn County next Tuesday for support. Discussions with Sutter and Yuba County brings interest and they are awaiting the outcome of the four counties. This is a good collaborative effort, giving us strength of possible capturing of funding.

Motion by Director Warner to approve the MOU for signature.

Director Willard questioned if this has been reviewed by County Counsel. Upon his approval, signature will be completed.

Motion revised by Director Warner to approve the MOU for signature by the Chair upon review of County Counsel. Second by Director Avilla and carried by those present 3-0 with 2 absent.

Ayes: Directors':, Charles Willard; Ron Warner; Gregg Avilla
Noes: None
Absent or Not Voting: Director's: Ross Turner, George Russell

STATE OF CALIFORNIA)
) ss
COUNTY OF TEHAMA)

I, Gary Antone, Director of the Tehama County Flood Control and Water Conservation District of the County of Tehama, State of California, hereby certify the above and foregoing to be full, true and correct copy of an order adopted by said Tehama County Flood Control and Water Conservation District on this **13th day of December, 2005**

Dated: This 13th day of **December, 2005**.

Gary Antone
Director of the Tehama County Flood Control and Water Conservation District of the County of Tehama, State of California

By Linda Madea
Linda Madea, Deputy

F:\ADMIN\MEETING\MINORDER\05MinOrd\Dec.wpd

FOUR COUNTY MEMORANDUM OF UNDERSTANDING
ADDENDUM ONE:
Statement of Principles Regarding Water Related Programs and Projects

In recognition that certain activities related to water resources do not recognize jurisdictional boundaries and require regional solutions, the parties identified in the Four County Memorandum of Understanding hereby agree to adhere to the following Statement of Principles Regarding Water Related Programs and Projects:

1. Programs and projects related to groundwater level and water quality monitoring shall be conducted in a cooperative manner and related data shall be shared between the participants to prevent negative impacts to our constituents.
2. Environmental documents associated with water projects and programs will automatically be circulated to all four counties for review and comment.
3. Incidents of abnormal water level or water quality readings will be immediately communicated to all participating counties resulting in a collaborative review and dissemination of related information.
4. Project and program related information will be disseminated on a regional basis through the independent county websites, augmented by regional public outreach meetings.
5. The parties will work cooperatively to acquire grant funding to conduct aquifer studies that further identify the linkages of the common groundwater resources.
6. Efforts pursued under this agreement will remain consistent with and will not exceed the current authority of any participating county.

We, the undersigned representatives of our respective counties, agree to adhere to the conditions of **Addendum One to the Four County MOU: Statement of Principles Regarding Water Related Programs and Projects.** The original MOU was signed by the Counties of Butte, Glenn, Colusa and Tehama in 2006.

Chair, Butte County Board of Supervisors	3-8-07 Date	County Counsel Approved As to Form	2/23/07 Date
Chair, Glenn County Board of Supervisors	Date	County Counsel Approved As to Form	Date
Chair, Tehama County Board of Supervisors	Date	County Counsel Approved As to Form	Date

Vice-Chair Colusa County
Board of Supervisors

4-17-07
Date

County Counsel
Approved As to Form

Date

EXHIBIT A
PAGE 2 OF 2

COUNTY CONTRACT
1788

FOUR COUNTY MEMORANDUM OF UNDERSTANDING
ADDENDUM ONE:
Statement of Principles Regarding Water Related Programs and Projects

In recognition that certain activities related to water resources do not recognize jurisdictional boundaries and require regional solutions, the parties identified in the Four County Memorandum of Understanding hereby agree to adhere to the following Statement of Principles Regarding Water Related Programs and Projects:

1. Programs and projects related to groundwater level and water quality monitoring shall be conducted in a cooperative manner and related data shall be shared between the participants to prevent negative impacts to our constituents.
2. Environmental documents associated with water projects and programs will automatically be circulated to all four counties for review and comment.
3. Incidents of abnormal water level or water quality readings will be immediately communicated to all participating counties resulting in a collaborative review and dissemination of related information.
4. Project and program related information will be disseminated on a regional basis through the independent county websites, augmented by regional public outreach meetings.
5. The parties will work cooperatively to acquire grant funding to conduct aquifer studies that further identify the linkages of the common groundwater resources.
6. Efforts pursued under this agreement will remain consistent with and will not exceed the current authority of any participating county.

We, the undersigned representatives of our respective counties, agree to adhere to the conditions of **Addendum One to the Four County MOU: Statement of Principles Regarding Water Related Programs and Projects.** The original MOU was signed by the Counties of Butte, Glenn, Colusa and Tehama in 2006.

Chair, Butte County Board of Supervisors	Date	County Counsel Approved As to Form	Date
Chair, Glenn County Board of Supervisors	4/3/2007 Date	County Counsel Approved As to Form	3/26/07 Date
Chair, Tehama County Board of Supervisors	Date	County Counsel Approved As to Form	Date

1

FOUR COUNTY MEMORANDUM OF UNDERSTANDING
ADDENDUM TWO:
Adding Sutter County to the Four County MOU

In recognition that certain activities related to water resources do not recognize jurisdictional boundaries and therefore require regional solutions, the parties identified in the original Four County Memorandum of Understanding: Counties of Butte, Colusa, Glenn and Tehama are hereby joined by Sutter County in the regional efforts discussed in the Four County MOU and the Statement of Principles Regarding Water Related Programs and Projects as discussed in Addendum One to the Four County MOU.

We, the undersigned as representative of our respective counties, agree to adhere to the conditions of the **Four County Memorandum of Understanding; Addendum One to the Four County MOU: Statement of Principles Regarding Water Related Programs and Projects. And Addendum Two: Adding Sutter County to the Four County MOU.**

The original MOU was signed by the Counties of Butte, Glenn, Colusa and Tehama in 2006. Through approval of this addendum, Sutter County makes the same commitment to regional cooperation and coordination that is outlined in the original MOU.

Bill Connelly	05 MAY 2009	Bruce L. Alpert	
Chair, Butte County Board of Supervisors	Date	County Counsel Approved As to Form	Date
Chair, Glenn County Board of Supervisors	Date	County Counsel Approved As to Form	Date
Chair, Tehama County Board of Supervisors	Date	County Counsel Approved As to Form	Date
Chair, Colusa County Board of Supervisors	Date	County Counsel Approved As to Form	Date

C09-082

FOUR COUNTY MEMORANDUM OF UNDERSTANDING
ADDENDUM TWO:
Adding Sutter County to the Four County MOU

In recognition that certain activities related to water resources do not recognize jurisdictional boundaries and therefore require regional solutions, the parties identified in the original Four County Memorandum of Understanding: Counties of Butte, Colusa, Glenn and Tehama are hereby joined by Sutter County in the regional efforts discussed in the Four County MOU and the Statement of Principles Regarding Water Related Programs and Projects as discussed in Addendum One to the Four County MOU.

We, the undersigned as representative of our respective counties, agree to adhere to the conditions of the **Four County Memorandum of Understanding; Addendum One to the Four County MOU: Statement of Principles Regarding Water Related Programs and Projects. And Addendum Two: Adding Sutter County to the Four County MOU.**

The original MOU was signed by the Counties of Butte, Glenn, Colusa and Tehama in 2006. Through approval of this addendum, Sutter County makes the same commitment to regional cooperation and coordination that is outlined in the original MOU.

Chair, Butte County Board of Supervisors	Date	County Counsel Approved As to Form	Date
Chair, Glenn County Board of Supervisors	Date	County Counsel Approved As to Form	Date
Chair, Tehama County Board of Supervisors	Date	County Counsel Approved As to Form	Date
Chair, Colusa County Board of Supervisors	5/5/09 Date	County Counsel Approved As to Form	Date 5/5/09

C09-082

FOUR COUNTY MEMORANDUM OF UNDERSTANDING
ADDENDUM TWO:
Adding Sutter County to the Four County MOU

In recognition that certain activities related to water resources do not recognize jurisdictional boundaries and therefore require regional solutions, the parties identified in the original Four County Memorandum of Understanding: Counties of Butte, Colusa, Glenn and Tehama are hereby joined by Sutter County in the regional efforts discussed in the Four County MOU and the Statement of Principles Regarding Water Related Programs and Projects as discussed in Addendum One to the Four County MOU.

We, the undersigned as representative of our respective counties, agree to adhere to the conditions of the **Four County Memorandum of Understanding; Addendum One to the Four County MOU: Statement of Principles Regarding Water Related Programs and Projects. And Addendum Two: Adding Sutter County to the Four County MOU.**

The original MOU was signed by the Counties of Butte, Glenn, Colusa and Tehama in 2006. Through approval of this addendum, Sutter County makes the same commitment to regional cooperation and coordination that is outlined in the original MOU.

Chair, Butte County Board of Supervisors	Date	County Counsel Approved As to Form	Date
Chair, Glenn County Board of Supervisors	5/21/09 Date	County Counsel Approved As to Form	Date
Chair, Tehama County Board of Supervisors	Date	County Counsel Approved As to Form	Date
Chair, Colusa County Board of Supervisors	5/5/09 Date	County Counsel Approved As to Form	5/5/09 Date

Chair, Sutter County
Board of Supervisors

Date

William J. Vanasek

County Counsel
Approved as to Form

4/14/09
Date

FOUR COUNTY MEMORANDUM OF UNDERSTANDING
ADDENDUM TWO:
Adding Sutter County to the Four County MOU

In recognition that certain activities related to water resources do not recognize jurisdictional boundaries and therefore require regional solutions, the parties identified in the original Four County Memorandum of Understanding: Counties of Butte, Colusa, Glenn and Tehama are hereby joined by Sutter County in the regional efforts discussed in the Four County MOU and the Statement of Principles Regarding Water Related Programs and Projects as discussed in Addendum One to the Four County MOU.

We, the undersigned as representative of our respective counties, agree to adhere to the conditions of the **Four County Memorandum of Understanding; Addendum One to the Four County MOU: Statement of Principles Regarding Water Related Programs and Projects. And Addendum Two: Adding Sutter County to the Four County MOU.**

The original MOU was signed by the Counties of Butte, Glenn, Colusa and Tehama in 2006. Through approval of this addendum, Sutter County makes the same commitment to regional cooperation and coordination that is outlined in the original MOU.

Chair, Butte County Board of Supervisors	Date	County Counsel Approved As to Form	Date
Chair, Glenn County Board of Supervisors	Date	County Counsel Approved As to Form	Date
George Runner Chair, Tehama County Flood Control & Water Conservation District	6-23-09 Date	County Counsel Approved As to Form	Date
Chair, Colusa County Board of Supervisors	Date	County Counsel Approved As to Form	Date

FOUR COUNTY MEMORANDUM OF UNDERSTANDING:
ADDENDUM THREE
Expression of a Commitment to Begin An
Integrated Regional Water Management Planning Process
Within the Counties of Butte, Colusa, Glenn, Tehama and Sutter

Through adoption of this addendum, the signatories agree to begin a regional water management planning process pursuant to the Four County MOU, geographically covering the area of Butte, Colusa, Glenn, Tehama and Sutter Counties. The planning process shall utilize and incorporate existing plans and processes. The California legislature has recently adopted new criteria associated with the Integrated Regional Water Management Planning process. This new legislative criteria requires that acceptance and approval of the composition of all Integrated Regional Water Management Planning Areas be completed prior to accepting public funding associated with IRWMP grant funds. All IRWMP planning Regions and Plans must comply with the requirements as set forth in the Final Regional Acceptance Process Program Guidelines.

We, the undersigned as representative of our respective counties, agree to adhere to the conditions of **The Four County Memorandum of Understanding; Addendum One to the Four County MOU: Statement of Principles Regarding Water Related Programs and Projects; Addendum Two: Adding Sutter County to the Four County MOU; Addendum Three: Expression of a Commitment to Begin An Integrated Regional Water Management Planning Process Within the Counties of Butte, Colusa, Glenn, Tehama and Sutter.**

Bill Connelly	05 MAY 2009	Bruce L. Alpert	
Chair, Butte County Board of Supervisors	Date	County Counsel Approved As to Form	Date
Chair, Glenn County Board of Supervisors	Date	County Counsel Approved As to Form	Date
Chair, Tehama County Board of Supervisors	Date	County Counsel Approved As to Form	Date

Chair, Colusa County Board of Supervisors	5/5/09 Date	County Counsel Approved As to Form	5/6/09 Date
Chair, Sutter County Board of Supervisors	Date	County Counsel Approved as to Form	Date

C09-095
5-5-09

FOUR COUNTY MEMORANDUM OF UNDERSTANDING:
ADDENDUM THREE
Expression of a Commitment to Begin An
Integrated Regional Water Management Planning Process
Within the Counties of Butte, Colusa, Glenn, Tehama and Sutter

Through adoption of this addendum, the signatories agree to begin a regional water management planning process pursuant to the Four County MOU and geographically covering the area of Butte, Colusa, Glenn Tehama and Sutter Counties. The planning process shall utilize and incorporate existing plans and processes. The California legislature has recently adopted new criteria associated with the Integrated Regional Water Management Planning process. This new legislative criteria requires that acceptance and approval of the composition of all Integrated Regional Water Management Planning Areas be completed prior to accepting public funding associated with IRWMP grant funds. All IRWMP planning Regions and Plans must comply with the requirements as set forth in the Final Regional Acceptance Process Program Guidelines.

We, the undersigned as representative of our respective counties, agree to adhere to the conditions of **The Four County Memorandum of Understanding; Addendum One to the Four County MOU: Statement of Principles Regarding Water Related Programs and Projects; Addendum Two: Adding Sutter County to the Four County MOU; Addendum Three: Expression of a Commitment to Begin An Integrated Regional Water Management Planning Process Within the Counties of Butte, Colusa, Glenn, Tehama and Sutter.**

Chair, Butte County Board of Supervisors	Date	County Counsel Approved As to Form	Date
Chair, Glenn County Board of Supervisors	5/21/09 Date	County Counsel Approved As to Form	Date
Chair, Tehama County Board of Supervisors	Date	County Counsel Approved As to Form	Date

CBI
CATALYZING COLLABORATION

Chair, Colusa County Board of Supervisors	Date	County Counsel Approved As to Form	Date
Chair, Sutter County Board of Supervisors	Date	County Counsel Approved as to Form	4/14/09 Date

FOUR COUNTY MEMORANDUM OF UNDERSTANDING:
ADDENDUM THREE
Expression of a Commitment to Begin An
Integrated Regional Water Management Planning Process
Within the Counties of Butte, Colusa, Glenn, Tehama and Sutter

Through adoption of this addendum, the signatories agree to begin a regional water management planning process pursuant to the Four County MOU and geographically covering the area of Butte, Colusa, Glenn, Tehama and Sutter Counties. The planning process shall utilize and incorporate existing plans and processes. The California legislature has recently adopted new criteria associated with the Integrated Regional Water Management Planning process. This new legislative criteria requires that acceptance and approval of the composition of all Integrated Regional Water Management Planning Areas be completed prior to accepting public funding associated with IRWMP grant funds. All IRWMP planning Regions and Plans must comply with the requirements as set forth in the Final Regional Acceptance Process Program Guidelines.

We, the undersigned as representative of our respective counties, agree to adhere to the conditions of **The Four County Memorandum of Understanding; Addendum One to the Four County MOU: Statement of Principles Regarding Water Related Programs and Projects; Addendum Two: Adding Sutter County to the Four County MOU; Addendum Three: Expression of a Commitment to Begin An Integrated Regional Water Management Planning Process Within the Counties of Butte, Colusa, Glenn, Tehama and Sutter.**

Chair, Butte County Board of Supervisors	Date	County Counsel Approved As to Form	Date
Chair, Glenn County Board of Supervisors	Date	County Counsel Approved As to Form	Date
George Lowell Chair, Tehama County Flood Control & Water Conservation District	6-23-09 Date	County Counsel Approved As to Form	Date

FOUR COUNTY MEMORANDUM OF UNDERSTANDING:
ADDENDUM FOUR
Expression of a Commitment to Begin An
Integrated Regional Water Management Planning Process
Within the Counties of Butte, Colusa, Glenn, Tehama, Sutter and Shasta

Through adoption of this addendum, the signatories agree:

1. Shasta County shall join the parties involved in the original Four County Memorandum of Understanding (MOU) and Addendum Two;

2. Signatories to the MOU and its addenda shall be called the Northern Sacramento Valley Integrated Regional Water Management Planning Group; and,

3. Begin a regional water management planning process pursuant to the Four County MOU, geographically covering the area of Butte, Colusa, Glenn, Tehama, Sutter and Shasta Counties. The planning process shall utilize and incorporate existing plans and processes. The California legislature has recently adopted new criteria associated with the Integrated Regional Water Management Planning process. This new legislative criteria requires that acceptance and approval of the composition of all Integrated Regional Water Management Planning Areas be completed prior to accepting public funding associated with IRWMP grant funds. All IRWMP planning Regions and Plans must comply with the requirements as set forth in the Final Regional Acceptance Process Program Guidelines.

4. The signatories to the MOU and its addenda reaffirm the provisions of section 5.6 of the MOU that the MOU and its addenda and participation under the MOU and its addenda are nonbinding.

We, the undersigned as representative of our respective counties, agree to adhere to the conditions of **The Four County Memorandum of Understanding; Addendum One to the Four County MOU: Statement of Principles Regarding Water Related Programs and Projects; Addendum Two: Adding Sutter County to the Four County MOU; Addendum Three: Expression of a Commitment to Begin An Integrated Regional Water Management Planning Process Within the Counties of Butte, Colusa, Glenn, Tehama and Sutter; Addendum Four: Expression of a Commitment to Begin An Integrated Regional Water Management Planning Process Within the Counties of Butte, Colusa, Glenn, Tehama, Sutter and Shasta.**

Bill Connelly — Chair, Butte County Board of Supervisors

APR 13 2010 — Date

County Counsel Approved As to Form

4.9.10 — Date

Chair, Glenn County Board of Supervisors	Date	County Counsel Approved As to Form	Date
Chair, Tehama County Board of Supervisors	Date	County Counsel Approved As to Form	Date
Chair, Colusa County Board of Supervisors	Date	County Counsel Approved As to Form	Date
Chair, Sutter County Board of Supervisors	Date	County Counsel Approved as to Form	Date
Chair, Shasta County Board of Supervisors	4/27/10 Date	County Counsel Approved as to Form	5/6/10 Date

Chair, Glenn County Board of Supervisors	Date	County Counsel Approved As to Form	Date
Chair, Tehama County Board of Supervisors	Date	County Counsel Approved As to Form	Date
Chair, Colusa County Board of Supervisors	Date	County Counsel Approved As to Form	Date
Chair, Sutter County Board of Supervisors	4/20/10 Date	County Counsel Approved as to Form	4/13/10 Date
Chair, Shasta County Board of Supervisors	Date	County Counsel Approved as to Form	Date

Appendix D: Issue Resolution Process for Discussion Purposes

This document aims to guide discussions and provide pertinent information as subbasins consider inclusion of an issue resolution process in the Northern Sacramento Valley inter-basin coordination framework. These discussions will take place in the period leading up to the first five-year GSP update.

Discussion Prompts

1. *What are potential benefits/challenges or concerns of including an issue/dispute resolution process in the inter-basin coordination framework?*
2. *What are shared expectations between and among subbasins?*
3. *What are the GSAs preferences for addressing conflicts if/when they arise?*

Background

The Groundwater Sustainability Plan Regulations in Article 8 recommend including a "description of a process for identifying and resolving conflicts between Agencies" as a part of inter-basin coordination (Sections 10727.2, 10733, and 10733.2, Water Code). A recent study by Tara Moran, Janet Martinez, and William Blomquist, part of Stanford University's Water in the West found that the ability of interagency coordination "to solve complex challenges will be contingent on the ability of these organizations to effectively prevent and manage conflicts before they arise and to resolve these conflicts equitably and efficiently when they do." (Moran, Martinez, and Blomquist, 2021). Further, given how likely it is for disagreements at a local level to occur during SGMA implementation, the study suggests investing in establishing issue resolution processes before disagreements arise. Meanwhile, deferring their development could complicate the resolution process in times of conflict. Given these recommendations, consider the following questions for reflection and discussion.

Purposes of issue resolution processes

There are many options to identify and resolve issues that involve different parties, goals/objectives, and resources. Ideally, issue resolution processes are thoughtfully designed and tailored to specific contexts. **The broader goal for such a process can be to meet the agencies' long-term needs, considering local dynamics, desired outcomes, and expected uses**. Goals can include keeping things simple and efficient, maintaining relationships, ensuring quality of the process, fostering participation and community engagement, etc.

The figure below shows different types of dispute resolution processes. In some cases, agencies draft clauses that outline a tiered approach. They often begin with negotiation, which gives the parties control over the process and outcomes. Then, mediation, which brings in a neutral third-party (mediator) to facilitate the discussion and help parties work towards resolving issues. Often, negotiation and mediation lead to "non-binding" outcomes, non-enforceable by courts. Parties could opt to move towards arbitration or litigation, which are controlled by a third party (arbitrator or judge/jury) and can lead to binding and non-binding outcomes (Moran, Martinez, and Blomquist, 2019).

Figure 2. The spectrum of dispute resolution process. Modified from Amsler et al. (2020a).

Negotiation	Mediation	Arbitration	Trial
• No third party	• Third part (mediator)	• Third party (arbitrators)	• Third party (judge/jury)
• Non-binding	• Non-binding	• Non-binding or binding	• Binding

From Moran, Martinez, and Blomquist, 2019

Examples

1. Example from Moran, Martinez, and Blomquist, 2019

Box 2. A Draft Dispute Resolution Clause.

The blue text notes indicate how each of the preceding five questions are incorporated into the dispute resolution language.

In the event that any dispute [Q1: Provides instruction on what disputes can be addressed. Additional process goals, while not explicit should be subject to discussion.] arises among the Members relating to (i) this Agreement, (ii) the rights and obligations arising from this Agreement, (iii) a Member proposing to withdraw from membership in the Agency, or (iv) a Member proposing to initiate litigation within the Basin or the management of the Basin, the aggrieved Member or Members proposing to withdraw from membership shall provide written notice to the other Members of the controversy or proposal to withdraw from membership [Q2: Provides instruction on who can initiate and participate in the process.]. Within forty-five (45) days after such written notice, the Members shall attempt in good faith to resolve the controversy through informal negotiation [Q3: Describes a series of processes for dispute resolution, beginning with negotiation. Also includes a timeline for process stages.]. If the Members cannot agree upon a resolution of the controversy within forty-five (45) days from the providing of written notice specified above, the dispute shall be submitted to mediation prior to commencement of any legal action or prior to withdrawal of a Member proposing to withdraw from membership. The mediation shall be no less than a full day (unless agreed otherwise among the Members) and the cost of mediation shall be paid in equal proportion among the Members [Q4: Provides instruction on who will pay for dispute resolution processes.]. The mediator shall be either voluntarily agreed to or appointed by the Superior Court upon a suit and motion for appointment of an impartial mediator [Q3a: Provides a clear process for choosing an impartial mediator.]. Upon completion of mediation, if the controversy has not been resolved, any Member may exercise all rights to bring a legal action relating to the controversy or withdraw from membership as otherwise authorized pursuant to this Agreement. The Agency may, at its discretion, participate in mediation upon request by a stakeholder [to be defined by the parties to the Agreement] concerning a dispute alleged by the stakeholder concerning the management of the Basin or rights to extract groundwater from the Basin, with the terms of such mediation to be determined in the sole discretion of the Member Directors [Q2: Allows third-party participation in the dispute resolution process].

Note: This above dispute resolution clause is not intended to serve as an endorsement or illustration of effective practice.

2. Example from Butte Subbasin Cooperation Agreement

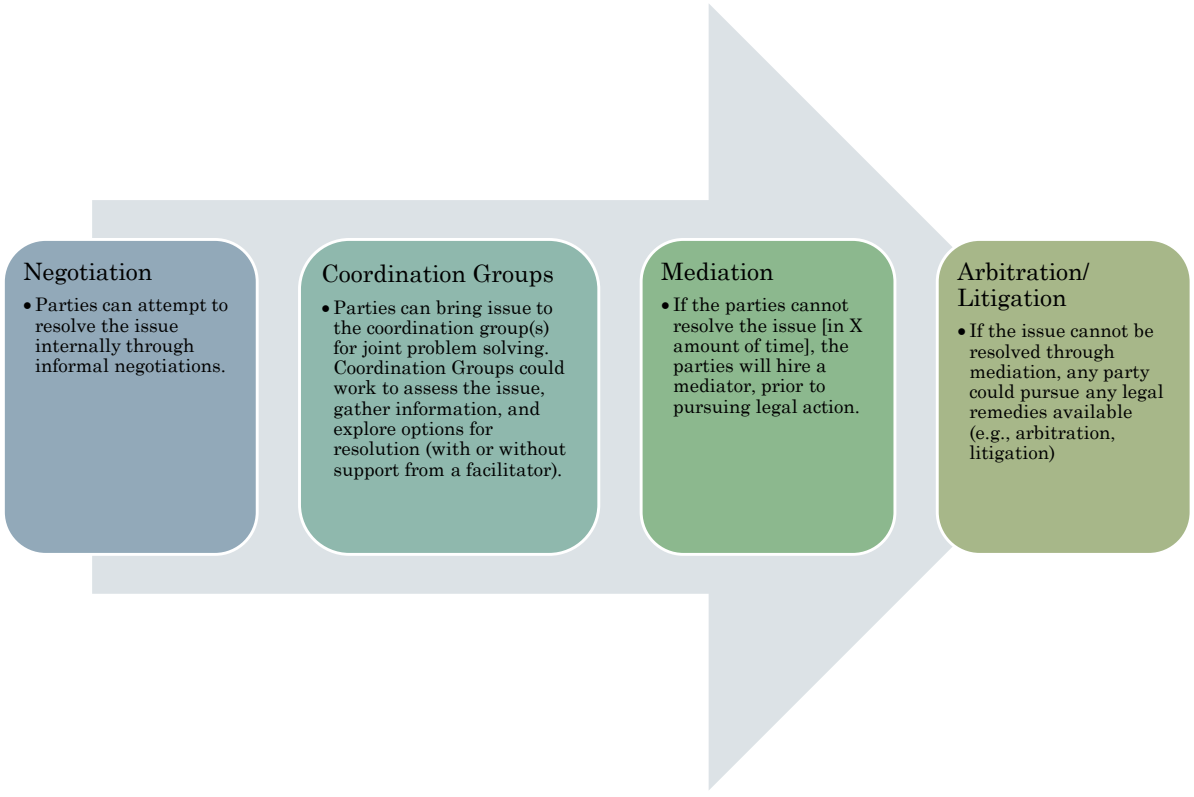
Note: This example doesn't provide much specificity. However, acknowledges shared intent to resolve disputes.

ARTICLE 9. DECISION-MAKING AND DISPUTE RESOLUTION

9.1. Decision-making Authority. Topics where the Members desire coordinated decision-making will be considered by the Advisory Board, and the Member Directors will strive for unanimous recommendations that will be presented to each Member's governing body for consideration. Such topics include, but are not limited to, development and implementation of the GSP, and associated financial arrangements. When unable to reach unanimous recommendations, the Advisory Board will outline the areas in which it does not agree, providing some explanation to inform the respective GSAs' governing bodies. Despite the recommendations of the Advisory Board, ultimate decision-making authority for topics considered by the Advisory Board resides with each Member's governing body.

9.2. Dispute Resolution. It is the desire of Members to informally resolve all disputes and controversies related to this Agreement, whenever possible, at the least possible level of formality and cost. If a dispute occurs, the disputing Members shall meet and confer in an attempt to resolve the matter. If informal resolution cannot be achieved, the matter will be referred to the Advisory Board for resolution. The Advisory Board may engage the services of a trained mediator or resort to all available legal and equitable remedies to resolve disputes.

Possible Process in the Northern Sacramento Valley



Worksheet: Key Questions and Considerations for Issue Resolution Process

The questions below could be used to guide the development of a specific issue resolution process in the context of inter-basin coordination in the Northern Sacramento Valley by the first 5-year GSP update. These questions could help to clarify the level of specificity that subbasins would find beneficial and mutually agreeable when/if conflict occurs.

Adapted from Moran, Martinez, and Blomquist, 2019

1) What are the process goals? a) Consider what disputes the process aims to address – all disputes arising at basin boundaries or only a subset? b) Consider inclusivity and transparency of the process, cost efficiency for parties and the GSA(s), timeframes, and other factors important to your agency(ies). c) Other potential objectives include dispute prevention, enhanced relationships, procedural and substantive fairness, legal compliance, durability of resolution and organizational improvement.	
2) Who can initiate and participate in the dispute resolution process? a) Consider what parties can initiate the dispute resolution process – is it only parties to the agreement or can external parties invoke it? There are pros and cons to both choices, so discussing this in advance will ensure thoughtful consideration.	
3) What processes are used to make decisions related to dispute resolution and what information is necessary? a) What is the process for selecting a mediator, facilitator, lawyer or other impartial party? b) Consider including a range of processes beginning with internal negotiations and escalating based on clear timelines.	
4) Who pays for the dispute resolution process? a) Consider who will pay for the mediator, facilitator, lawyer or other impartial party. Will it be paid for by the disputing parties, the GSA(s) or through a state-funded program? b) How could you assess whether the outcome of the dispute resolution process was successful?	

Other Resources

- Dutton, A. SGMA Updates, Coordination Considerations, and Potential Next Steps, Cosumnes Subbasin Working Group. February 21, 2018. http://cosumnes.waterforum.org/wp-content/uploads/2018/02/EKI_Cosumnes_TAC_meeting_2018-02-21.pdf
- Moran T., Martinez, J., and Blomquist W. Dispute Resolution Processes: Thinking through SGMA Implementation. Water in the West. Fall, 2019. https://waterinthewest.stanford.edu/publications/dispute-resolution-processes-thinking-through-sgma-implementation
- Moran T. Basin-scale Coordination is Key to SGMA's Success: Thoughts on DWR's Draft GSP Regulations. March 1, 2016. Stanford University. Water in the West. https://waterinthewest.stanford.edu/news-events/news-press-releases/basin-scale-coordination-key-sgma%E2%80%99s-success-thoughts-dwr%E2%80%99s-draft-gsp
- Moran et al. Dispute Resolution Clauses in Interorganizational Coordination Agreements: A Comparative Analysis. 2021. pending publication.
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- Butte County. 2017. Inter-basin Groundwater Flows Fact Sheet. Available at: https://www.buttecounty.net/wrcdocs/Reports/SpecialProjects/InterbasinGWFlow/FactSheet.pdf
- Buck, Christina. 2017. Butte County Inter-Basin Groundwater Flows Presentation, https://www.buttecounty.net/wrcdocs/Reports/SpecialProjects/InterbasinGWFlow/NSVBoardAssessment20170615.pdf

2D-2. Initial SGMA Information Workshops

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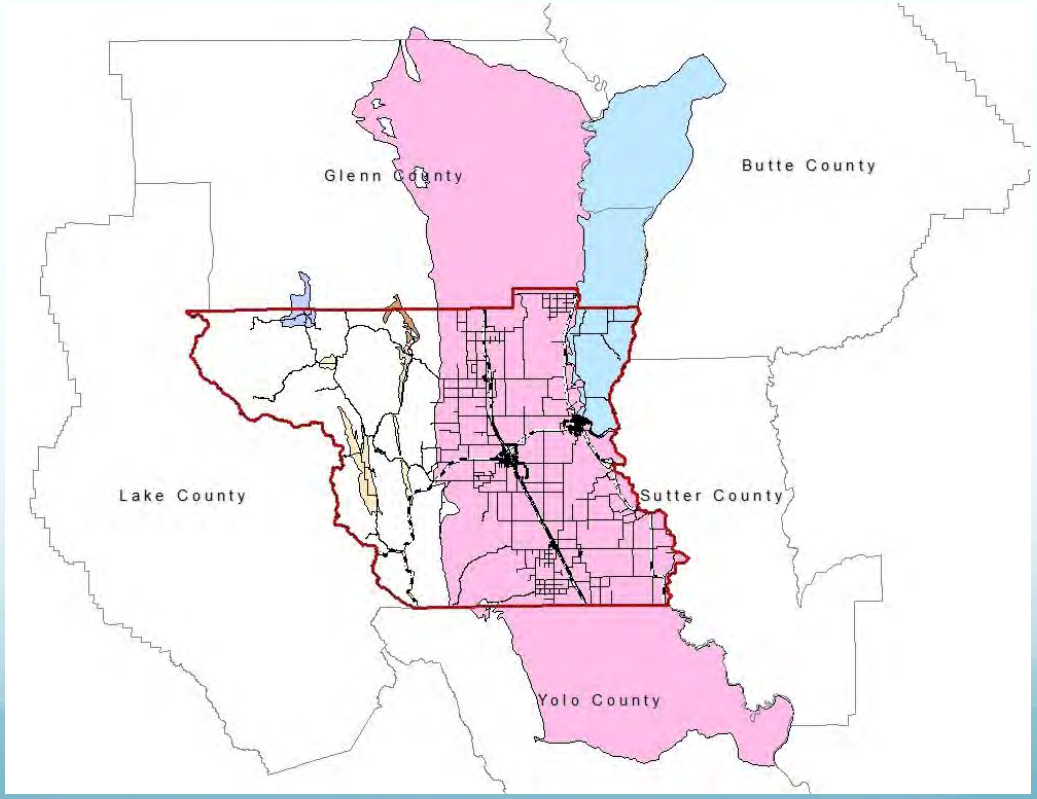
The Sustainable Groundwater Management Act

Key elements of the law, early implementation steps and expected benefits for Colusa County



Presentation Outline

I. SGMA Background

II. Preparing to Advance SGMA Locally

III. Recent SGMA Activities

IV. Early Implementation in Colusa County

V. Next Steps

SGMA Background

Comprehensive statewide legislation that creates a framework for sustainable groundwater management

- Became law on January 1, 2015
- All medium and high priority basins managed sustainably
- Emphasis on local control with State oversight
- Groundwater Sustainability Agencies
- Groundwater Sustainability Plans

SGMA Background

SGMA affects all citizens of Colusa County

- Offers beneficial opportunities to achieve sustainable groundwater conditions
- Supports agriculture, industry and domestic/public uses
- Requires residents to work together and address our common interest in groundwater resources
- The County supports a collaborative approach to implement SGMA

SGMA Background

How does SGMA define sustainability?

Sustainability: Manage groundwater to prevent undesirable results (significant and unreasonable):

- Chronic lowering of groundwater levels
- Reduction of groundwater storage
- Seawater intrusion
- Degraded water quality
- Land subsidence
- Depletions of interconnected surface waters

SGMA Background

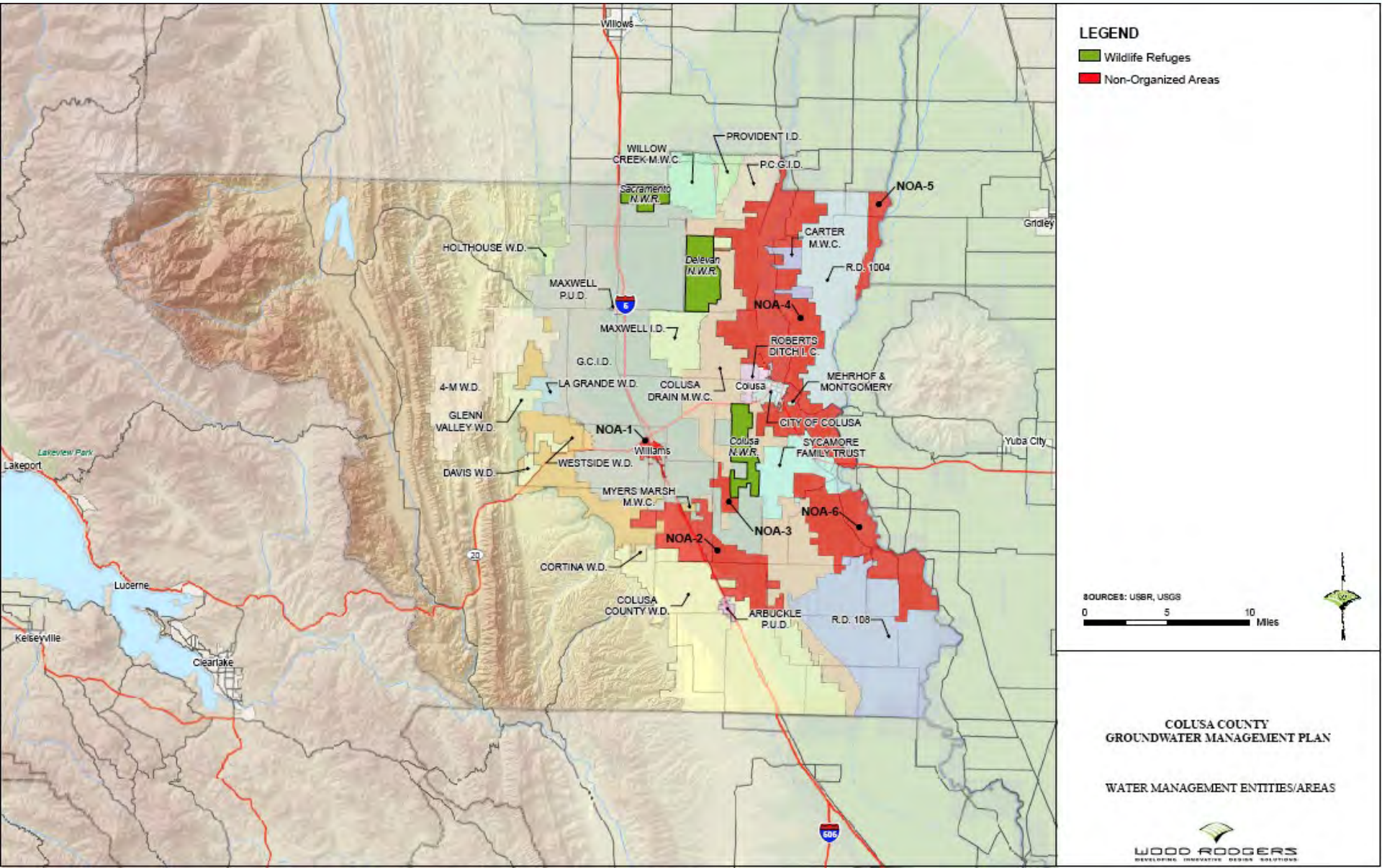
Formation of Groundwater Sustainability Agencies (GSAs)

- SGMA requires formation of GSAs to implement SGMA at the local level

- Public agencies with land or water use authority are eligible to become GSAs
  - Counties, cities, water agencies, irrigation districts, PUDs
  - GSA may include one or more local public agencies

- May include a single GSA or multiple GSAs per basin
  - Multiple GSAs must coordinate planning efforts

Colusa Water Management Entities/Areas



SGMA Background

GSA Roles and Responsibilities – *At their discretion, GSAs may…*

- Adopt rules, regulations and ordinances
- Conduct groundwater studies / investigations
- Register and monitor wells
- Require reports of groundwater extraction
- Implement capital projects to meet goals
- Assess fees to cover management costs

SGMA Background

GSA Roles and Responsibilities – *Interested parties must be included in SGMA planning:*

- All Groundwater Users
- Holders of Overlying Rights (agriculture and domestic)
- Municipal Well Operators and Public Water Systems
- Tribes
- County
- Planning Departments / Land Use
- Local Landowners
- Disadvantaged Communities
- Business
- Federal Government
- Environmental Uses
- Surface Water Users (*if connection between surface and ground water*)

SGMA Background

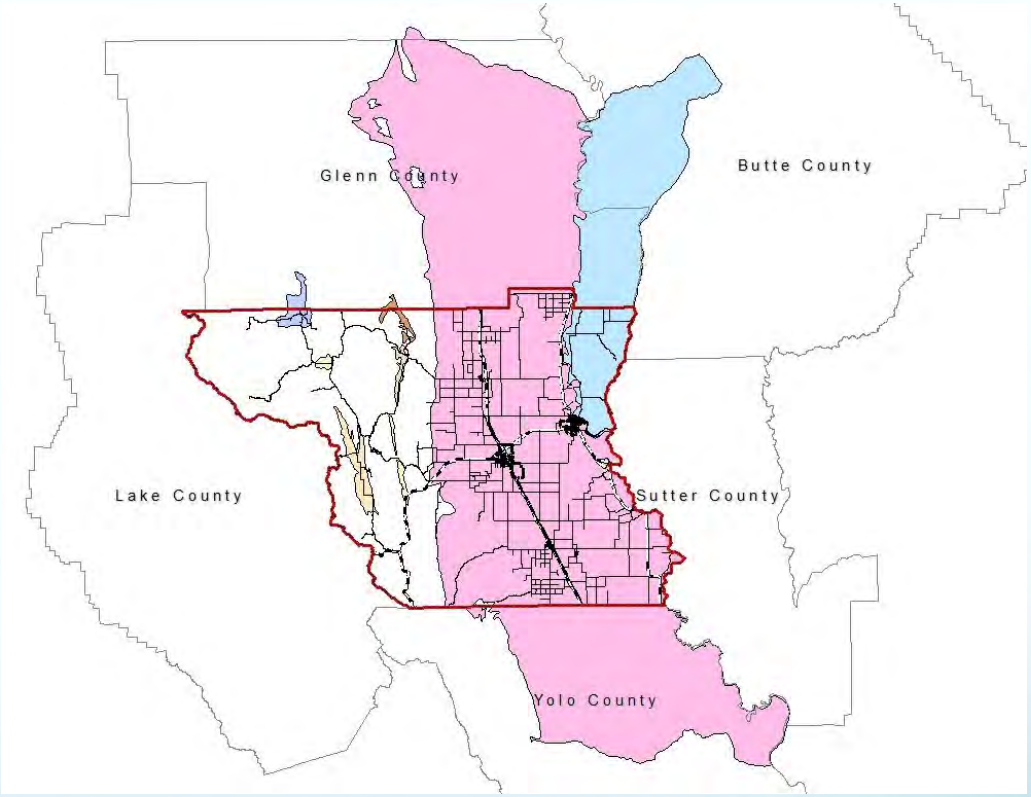
How are domestic well owners affected by SGMA?

- Referred to in SGMA as "de minimis" users IF…
  - Use 2 acre-feet per year or less for domestic purposes
- De minimis users are subject to SGMA, depending on local needs
  - GSAs will decide how de minimis users are addressed
  - GSAs can decide to exclude or include
  - GSAs can decide on fees but *cannot* require metering
  - May be subject to reporting / fees to State if intervention occurs
- Domestic wells can also be regulated by authorities (counties, water districts, etc.) outside scope of SGMA

SGMA Background

"White Areas"

- County is presumed to be the GSA over areas that are not covered by another GSA-eligible agency
- If the County opts out, the State will manage those areas



SGMA Background

Development of Groundwater Sustainability Plans (GSPs)

- GSAs are responsible to develop GSPs
- Every high and medium priority groundwater basin must be covered by a GSP or GSPs
- Option of a single GSP covering the entire basin, or a combination of GSPs, developed by multiple GSAs, covering the entire basin
- Multiple GSPs must coordinate, utilize the same data / methodologies, and have a coordination agreement

SGMA Background

Key Implementation Milestones

- June 1, 2016 – GSP regulations
- **June 30, 2017 – GSAs formed**
- July 1, 2017 – Counties affirm GSA status
- January 31, 2020 – GSPs complete for critically over-drafted basins
- **January 31, 2022 – All other GSPs complete**

SGMA Background

DWR and State Water Board Roles

- DWR:
  - Develop Basin Boundary and GSP regulations
  - Review GSPs, decide on adequacy, implementation

- State Water Board:
  - Implement State intervention
  - Reporting
  - Assess fees
  - Designate Probationary Basins
  - Develop Interim Plans, implement those Plans

SGMA Background

State Water Board Intervention – In all triggering events, intervention is the result of failure by locals to create a GSA(s) and/or adopt and implement a GSP.

- Data
  - Same data needed by a GSA, but now managed by State
  - Higher frequency (monthly minimum reporting)
- Fees
  - Fees associated with reporting
  - Board recovers cost for all intervention-related activities (monitoring plans, well construction, facilitation, technical studies, models)
- Interim plans
  - Pumping restrictions are most straight-forward
  - State developed physical solutions are unlikely

Initial comments and/or questions

Preparing to Advance SGMA Locally

What has the County done to advance SGMA locally?

- Dedicated staff resources
- Fostered early communication with GSA filers, many of whom are here tonight to join the conversation
- Maintained communication with surrounding counties
- Received grant for impartial facilitation services from the Center for Collaborative Policy
- Initiated a local groundwater assessment
- Pursued DWR grant to support local planning efforts
- Committed to sharing resources with local partners

Recent SGMA Activities

GSA Notifications in Colusa County

- Provident Irrigation District and Princeton-Codora-Glenn Irrigation District
- Glenn-Colusa Irrigation District
- Colusa County Water District
- Reclamation District 1004
- Reclamation District 108
- County of Colusa

Recent SGMA Activities

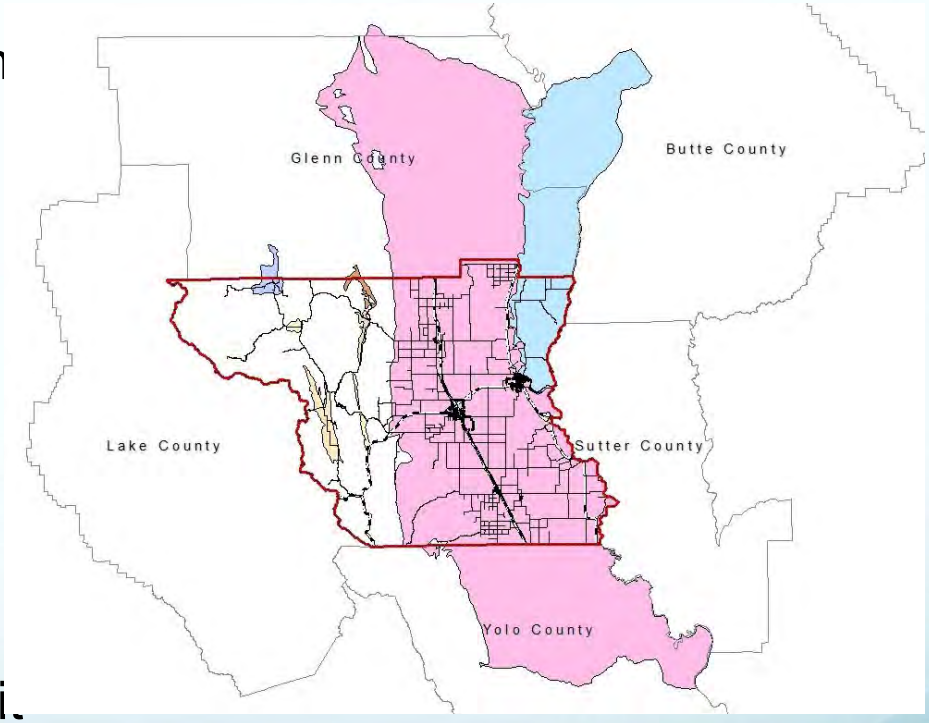
SB 13 Amendment – Interpreted by DWR as retroactive

- Removed the Notice of Intent to be a GSA
- Allows a mutual water company to be part of a GSA through a legal agreement
- **Prohibits overlap of service area boundaries**
- **Prohibits local agencies from imposing fees or reg. requirements on entities outside their boundaries**
- Requires DWR to post all “complete” notices within 15 days of receipt

Recent SGMA Activities

Basin Boundary Modifications

- Existing groundwater basins or subasins defined in DWR's Bulletin 118
- Local agencies may request boundary modifications
- May include scientific or jurisdictional modifications
- Starting January 1, 2016: 90 day window for local agencies to submi requests for DWR consideration



Recent SGMA Activities

Groundwater Sustainability Plan Regulations

- By June 1, 2016 DWR shall adopt regulations for:
  - Evaluating GSPs
  - Implementing GSPs
  - Coordination agreements

- The regulations shall identify:
  - Required GSP components and additional elements
  - Coordination of multiple GSPs in a basin
  - Additional information that assists GSAs

Proposed Process in Colusa County

Background Preparation

- Review background materials
- Conduct initial interviews with eligible GSA agencies
- Prepare 90-Day Plan
- Prepare initial facilitation strategy

Proposed Process in Colusa County

Outreach and Education

- Prepare education and outreach materials
- Coordinate and facilitate local outreach and education meetings for agencies and private well owners
- Facilitate collaboration so all interested parties can participate and work together towards sustainability

Proposed Process in Colusa County

GSA Governance

- Coordinate and facilitate public meetings about governance
- Coordinate and facilitate meetings of several GSA eligible agencies
- Conduct meetings with individual GSA eligible agencies
- Support representation of domestic well owner interests

Panel Discussion with Eligible GSAs

Summary of Steps Towards Sustainability

Step 1

- Local agencies form GSAs by June, 2017

Step 2

- Local agencies in medium and high priority basins adopt GSPs by January, 2022 (faster if in critical overdraft)

Step 3

- Local agencies have 20 years to demonstrate they are meeting measurable goals and achieving sustainability

Key Considerations as We Move Forward

The County believes a partnered approach is best

- We all have a vested interest in our groundwater
- GSA formation, GSP preparation, and and long-term implementation will create costs for many users
- Pooling resources will improve efficiencies and capitalize skills and strengths of various partners

Panel Questions / Topics

- Implications of SGMA to your District members and all groundwater users in the County?
- Steps you've taken so far to form a GSA?
- What you want to be sure your District achieves and avoids as you, the other organizations, and the County form GSAs?
- Thoughts you have about impacts to private well owners?

Next Steps

So where do we go from here?

- Convene Governance Workgroup
- Hold additional public meetings
- Continued coordination with adjacent subbasins

Discussion

Your comments, questions and input

Colusa Subbasin
Sustainable Groundwater Management Act |Public Meeting
Local Planning Effort

Monday, January 11, 2016
6:00 p.m. – 8:00 p.m.
Location: Colusa County Fairgrounds, Atwood Hall

Meeting purpose

- Provide an overview of the Sustainable Groundwater Management Act (SGMA)
- Review expected SGMA benefits and early implementation steps in Colusa County
- Create an opportunity for public input: questions, comments and considerations

Time	Topic
6:00	**Introduction** • Welcome and opening remarks • Agenda review and meeting purpose
6:15	**SGMA Background, Overview and Requirements** • Need and rationale for sustainable groundwater management • Implementation across the State • Core SGMA elements, associated requirements and timeline • Expected benefits for Colusa County and its residents • Q&A session
6:35	**Early SGMA Outreach and Implementation Steps in Colusa County** • County support role to-date • Process to form Groundwater Sustainability Agencies • Partnerships between County and other Water Managers • Role and involvement of private well owners • Q&A session
7:15	**Open Discussion / Public Comment** • Comments, questions, suggested considerations
7:45	**Next Steps** • Groundwater Sustainability Agency formation and function • Ongoing outreach / role of the public and groundwater users
8:00	**Meeting Adjourns**

Sustainable Groundwater Management Act (SGMA)
Public Meeting on Local Planning Efforts

For immediate release

Contact: Mary Fahey, Colusa County Water Resources Coordinator
mfahey@countyofcolusa.org
530-458-7709

Colusa County officials and other local groundwater managers will host a public meeting on the Sustainable Groundwater Management Act (SGMA). SGMA is a new law that offers beneficial opportunities to achieve sustainable groundwater conditions and support Colusa County's vital agricultural economy, industry, and domestic and public water uses.

The meeting will provide an overview of SGMA, expected responsibilities and benefits for groundwater users, and describe early steps taken to implement the new law. The public is encouraged to attend to learn more about SGMA, ask questions of local water managers and submit comments.

"SGMA implementation has begun throughout California," says Supervisor Denise Carter. "We hope groundwater users throughout Colusa County will attend to learn more. SGMA is an important change in how groundwater is managed and everyone needs to be aware and involved to manage and sustain our precious water resources."

To support local planning efforts, the County has secured facilitation support from the Department of Water Resources (DWR), initiated a county-wide groundwater assessment and applied for a groundwater planning grant through the Water Bond. The County is committed to sharing these resources with local SGMA partners.

"County officials have worked closely for decades with managers of local water agencies and knows them to be exceptional water leaders and partners," says Water Resources Coordinator Mary Fahey. "We expect these water leaders to fill a similar role as partners implementing SGMA, and thereby working together to keep our citizens ahead of the curve on groundwater management policies."

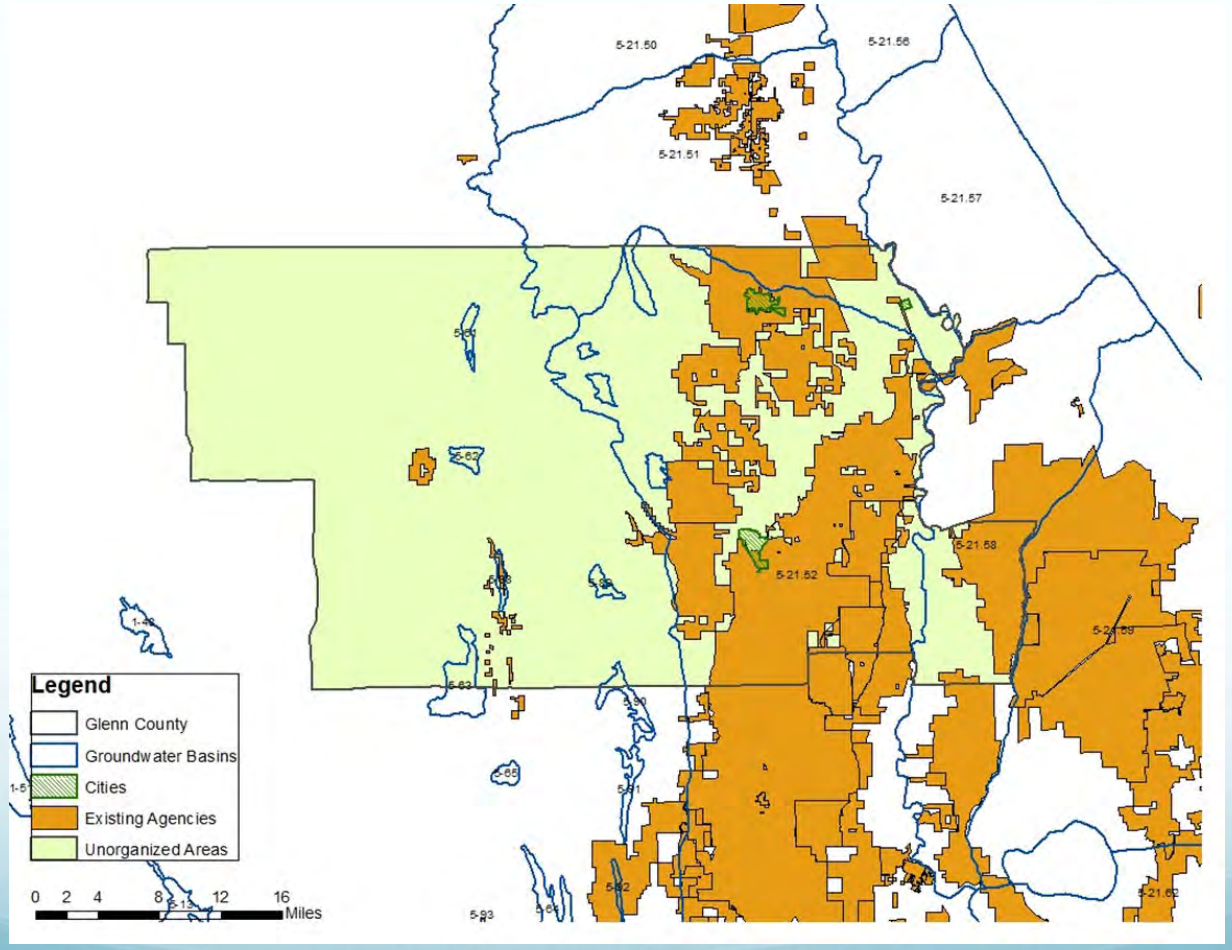
Meeting date, time and location:

January 11, 2016
6:00 p.m. – 8:00 p.m.
Colusa County Fairgrounds
1303 10th Street (Highway 20)
Colusa, CA 95932
Atwood Hall

For more information please visit DWR's SGMA webpage: http://groundwater.ca.gov/

The Sustainable Groundwater Management Act

Implementation in Glenn County



Presentation Outline

I. SGMA Background

II. Preparing to Advance SGMA Locally

III. Recent SGMA Activities

IV. Early Implementation

V. Next Steps

SGMA Background

Comprehensive statewide legislation that creates a framework for sustainable groundwater management

- Became law on January 1, 2015
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- Emphasis on local control with State oversight
- Groundwater Sustainability Agencies
- Groundwater Sustainability Plans

SGMA Background

SGMA affects <u>all citizens</u> of Glenn County

- Offers beneficial opportunities to achieve sustainable groundwater conditions
- Supports agriculture, industry and domestic/public uses
- Requires residents to work together and address our common interest in groundwater resources
- Glenn County supports a collaborative approach to implement SGMA

SGMA Background

How does SGMA define sustainability?

Sustainability: Manage groundwater to prevent undesirable results (significant and unreasonable):

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- SGMA requires formation of GSAs to implement SGMA at the local level

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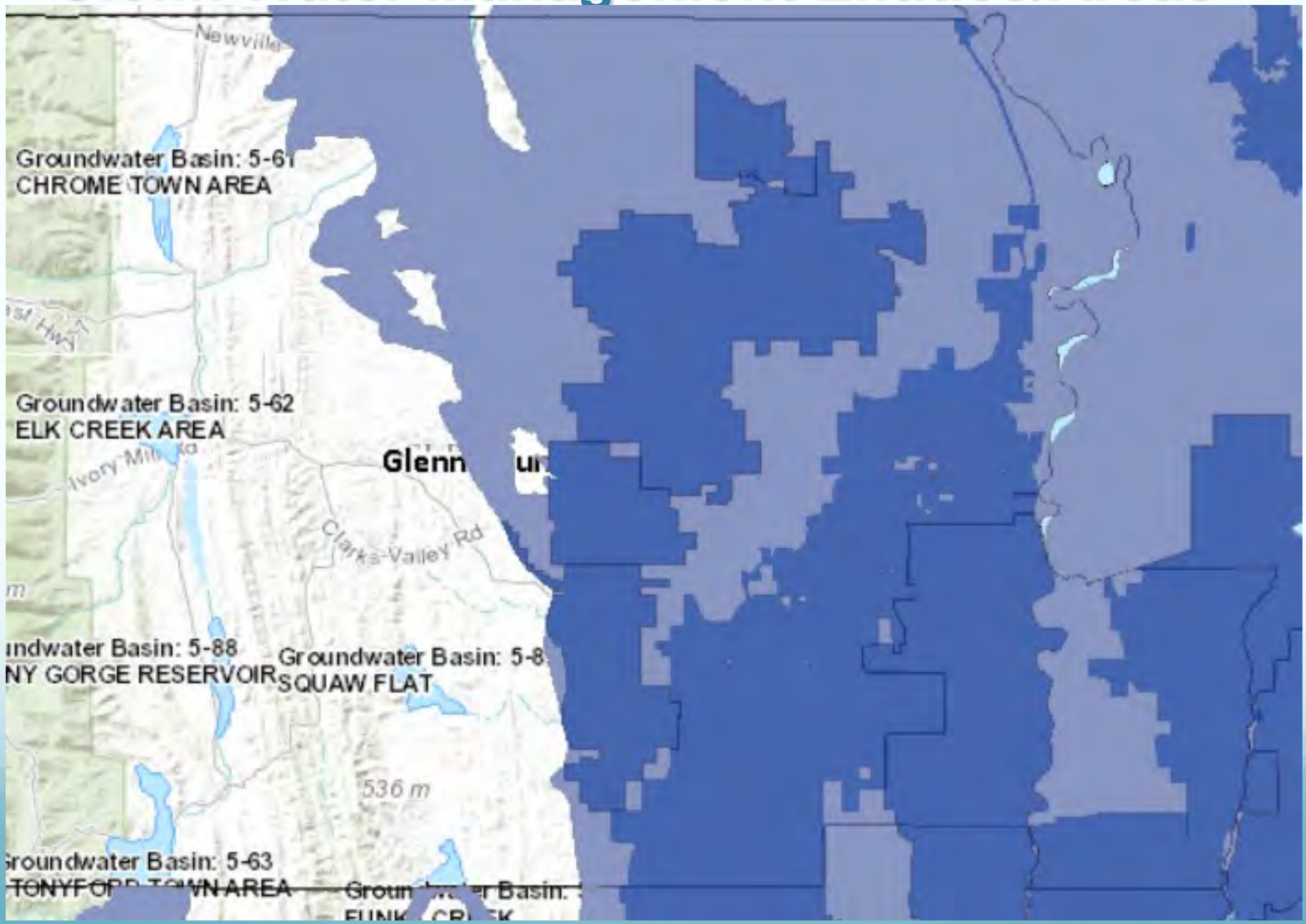
- May include a single GSA or multiple GSAs per basin
  - Multiple GSAs must coordinate planning efforts

Glenn Water Management Entities/Areas



SGMA Background

GSA Roles and Responsibilities
At their discretion, GSAs may…

- Adopt rules, regulations and ordinances
- Conduct groundwater studies / investigations
- Register and monitor wells
- Require reports of groundwater extraction
- Implement capital projects to meet goals
- Assess fees to cover management costs

SGMA Background

GSA Roles and Responsibilities

Interested parties must be included in SGMA planning:

- All Groundwater Users
- Holders of Overlying Rights (agriculture and domestic)
- Municipal Well Operators and Public Water Systems
- Tribes
- County
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How are domestic well owners affected by SGMA?

- Referred to in SGMA as "de minimis" users IF…
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"White Areas"

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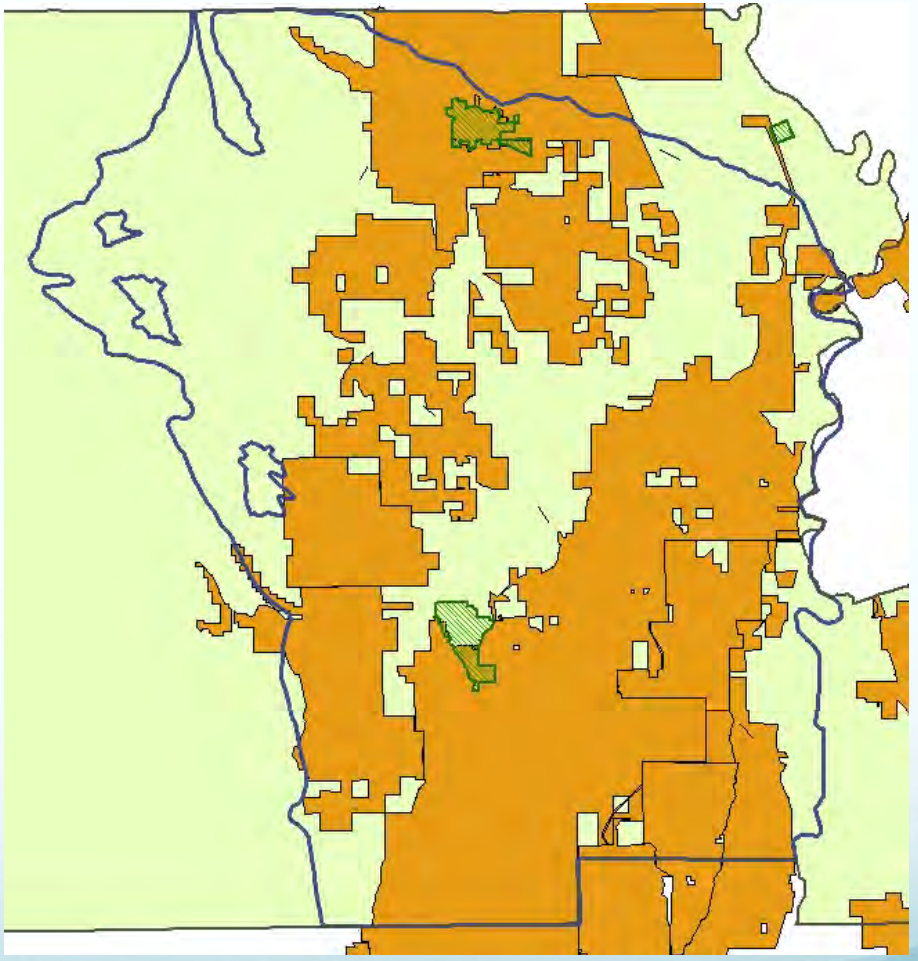

SGMA Background

Development of Groundwater Sustainability Plans (GSPs)

- GSAs are responsible to develop GSPs
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- Option of a single GSP covering the entire basin, or a combination of GSPs, developed by multiple GSAs, covering the entire basin
- Multiple GSPs must coordinate, utilize the same data / methodologies, and have a coordination agreement

SGMA Background

Key Implementation Milestones

- February 18, 2016 - Draft GSP regulations released
- June 1, 2016 – Final GSP regulations approved by CWC
- June 30, 2017 – GSAs must be formed
- July 1, 2017 – Counties affirm GSA status
- January 31, 2020 – GSPs complete for critically over-drafted basins
- January 31, 2022 – All other GSPs complete

SGMA Background

Department of Water Resources (DWR) and State Water Board Roles and Oversight

- DWR:
  - Develop Basin Boundary and GSP regulations
  - Review GSPs, decide on adequacy, implementation

- State Water Board:
  - Implement State intervention
  - Reporting
  - Assess fees
  - Designate Probationary Basins
  - Develop Interim Plans, implement those Plans

SGMA Background

State Water Board Intervention

In all triggering events, intervention is the result of failure by locals to create a GSA(s) and/or adopt and implement a GSP.

- Data
  - Same data needed by a GSA, but now managed by State
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- Interim plans
  - Pumping restrictions are most straight-forward
  - State developed physical solutions are unlikely

Initial comments and/or questions

Preparing to Advance SGMA Locally

What has the County done to advance SGMA locally?

- Dedicated staff resources
- Fostered early communication with GSA filers
- Maintained communication with surrounding counties
- Received grant for impartial facilitation services from the Center for Collaborative Policy
- Committed to sharing resources with local partners

Recent SGMA Activities

GSA Notifications in Glenn County

- Glenn-Colusa Irrigation District
- Reclamation District No. 1004
- County of Glenn
- Orland-Artois Water District
- City of Orland
- Glide Water District
- Kanawha Water District
- Provident Irrigation District and Princeton-Cordora-Glenn Irrigation District
- Western Canal Water District

Recent SGMA Activities

SB 13 Amendment – Interpreted by DWR as retroactive

- Removed the Notice of Intent to be a GSA
- Allows a mutual water company to be part of a GSA through a legal agreement
- Prohibits overlap of service area boundaries
- Prohibits local agencies from imposing fees or reg. requirements on entities outside their boundaries
- Requires DWR to post all “complete” notices within 15 days of receipt

Recent SGMA Activities

Basin Boundary Modifications

- Existing groundwater basins or subasins defined in DWR's Bulletin 118
- Local agencies may request boundary modifications
- May include scientific or jurisdictional modifications
- Starting January 1, 2016: 90 day window for local agencies to submit requests for DWR consideration

Recent SGMA Activities

Groundwater Sustainability Plan Regulations

- By June 1, 2016 DWR shall adopt regulations for:
  - Evaluating GSPs
  - Implementing GSPs
  - Coordination agreements

- The regulations identify:
  - Required GSP components and additional elements
  - Coordination of multiple GSPs in a basin
  - Additional information that assists GSAs

Draft GSP Regulations

- Require a course to achieve sustainable groundwater management within 20 years of plan implementation
- Fundamental Principle - Local control and management
  - Preserve role of local agencies to manage basins and achieve sustainability,
  - Local flexibility to define problems in basins,
  - Establish minimum thresholds,
  - Set measurable objectives,
  - Determine projects and management actions that will be required to achieve sustainability.
  - Recognize adaptive management as an important tool to address plan uncertainties and improve

Draft GSP Regulations - Timeline

- 57 Pages
- Available for public review at www.water.ca.gov/groundwater/sgm/gsp.cfm
- Public comments in writing through March 25, 2016.
- 3 public meetings and a statewide webinar in March
- Final GSP Regulations Completed – June 1, 2016

Draft GSP Regulations - Timeline

Public Meetings and Webinar

- Monday, March 21, 2016 - Visalia
  - 4:00 P.M. to 6:00 P.M.
- Tuesday, March 22, 2016 – Santa Ana
  - 1:00 P.M. to 3:00 P.M.
- Thursday, March 24, 2016 - Webinar
  - 1:00 P.M. to 3:00 P.M.
- Friday, March 25, 2016 - Sacramento
  - 9:00 A.M. to 11:00 A.M.

Proposed Process In Glenn County

The County received Department of Water Resources grant funding for facilitation services from the Center For Collaborative Policy.

- Background preparation
- Outreach and education
- GSA Governance development

Proposed Process in Glenn County

Background Preparation

- Review background materials
- Conduct initial interviews with eligible GSA agencies
- Prepare 90-Day Plan
- Prepare initial facilitation strategy

Proposed Process in Glenn County

Outreach and Education

- Prepare education and outreach materials
- Coordinate and facilitate local outreach and education meetings for agencies and private well owners
- Facilitate collaboration so all interested parties can participate and work together towards sustainability

Proposed Process in Glenn County

GSA Governance

- Coordinate and facilitate public meetings about governance
- Coordinate and facilitate meetings of several GSA eligible agencies
- Conduct meetings with individual GSA eligible agencies
- Support representation of domestic well owner interests

Key Considerations as We Move Forward

The County believes a collaborative approach is best

- We all have a vested interest in our groundwater
- GSA formation, GSP preparation, and and long-term implementation will create costs for many users
- Pooling resources will improve efficiencies and capitalize skills and strengths of various partners

Next Steps

So where do we go from here?

- Convene Governance Workgroup
- Hold additional public meetings
- Continued coordination with adjacent subbasins

Discussion

Your comments, questions and input

Sustainable Groundwater Management Act (SGMA)
Public Meeting on Local Planning Efforts

For immediate release
Contact: Lisa Hunter, Glenn County Water Resources Coordinator
LHunter@countyofglenn.net
(530) 934-6501

Willows, California- Glenn County officials and other local groundwater managers will host a public meeting on the Sustainable Groundwater Management Act (SGMA). SGMA is a new law that offers beneficial opportunities to achieve sustainable groundwater conditions and support Colusa County's vital agricultural economy, industry, and domestic and public water uses.

The meeting will provide an overview of SGMA, expected responsibilities and benefits for groundwater users, and describe early steps taken to implement the new law. The public is encouraged to attend to learn more about SGMA, ask questions of local water managers and submit comments.

"Water supply issues in Glenn County are challenging, but SGMA provides the tools to develop local solutions for local problems" said Willow-area farmer Larry Domenighini. "In the next couple of years we will need to craft a plan to address the sustainability issues we all face here. Water supply sustainability issues affect everyone in the County whether they recognize it or not. This is not going to be a quick or easy solution, so it is important that everyone keeps up with our local water issues and be engaged so that we can develop our solutions."

To support local planning efforts, the County has secured facilitation support from the Department of Water Resources (DWR), initiated a county-wide groundwater assessment and applied for a groundwater planning grant through the Water Bond.

"Glenn County is committed to working through local challenges to ensure that our groundwater resources are protected" said Lisa Hunter, the County's Water Resources Coordinator". "Groundwater resources are especially important for our household water uses and our agricultural economy, as well as other water uses in our area. Glenn County is committed to work collaboratively with local water managers to ensure sustainable water supplies into the future for all County citizens."

Meeting date, time and location:

March 8, 2016
6:00 p.m. – 8:00 p.m.
Orland Memorial Hall
320 Third Street
Orland, CA 95963

For more information please visit DWR's SGMA webpage: http://groundwater.ca.gov/

Save the Date! Save the Date!

Glenn County

is Hosting a Public Meeting

About California's

Sustainable Groundwater Management Act (SGMA)

Tuesday, March 8, 2016
6:00-8:00 PM
Orland Memorial Hall
320 Third Street, Orland

The meeting will include:

- An overview of the Sustainable Groundwater Management Act (SGMA)
- A presentation of SGMA early implementation in Glenn County
- Discussion of anticipated SGMA benefits and impacts
- Public input: questions, comments and considerations

For more information on this meeting and SGMA implementation in Glenn County visit our website at:

www.glenncountywater.org

Glenn County Water Resources: 530-934-6501

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2D-3. GSA Financing – Proposition 218 Public Information Meetings and Hearings

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Affidavit of Publication

State of California, County of Colusa

COLUSA COUNTY GROUNDWATER AUTHORITY

NOTICE OF PUBLIC HEARING

I am a citizen of the United States and a resident of Colusa County; I am over the age of eighteen years, and not a part to or interested in the above entitled matter. I am the principal clerk, and publisher of the **Williams Pioneer Review**, a newspaper of general circulation, published in the County of Colusa, and which newspaper has been adjudged to be a newspaper of general circulation by the Superior Court of the County of Colusa, State of California, under the date of September 19, 2017, Case No. CV24253, that the notice of which the annexed is a true printed copy, has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to wit:

- **05/08/2019**
- **05/15/2019**

I certify (or declare) under the penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed at Colusa, Colusa County, California, on:

DATE: MAY 15, 2019

Lloyd M. Green Jr., Publisher

DOCUMENT No.: 2019-0683

WILLIAMS PIONEER REVIEW
310 5th St., Colusa, CA
(530) 458-4141

PIONEER REVIEW
COLUSA COUNTY NEWS

LEGAL NOTICE

COLUSA GROUNDWATER AUTHORITY
NOTICE OF PUBLIC HEARING

NOTICE IS HEREBY GIVEN THAT the COLUSA GROUNDWATER AUTHORITY (hereinafter "Authority"), in accordance with (i) Authority Resolution 2019-01, adopted on March 26, 2019, (ii) Article XIIID, Section 6, of the California Constitution, and (iii) Section 10730(b)(2) of the California Water Code, will hold a public hearing on a proposed Operations Fee on June 5, 2019 at 5:00 p.m. at the Colusa Industrial Properties, 100 Sunrise Blvd., Colusa, CA 95932 to consider a proposal by the Authority to adopt a new fee in the amount of $1.21 per acre annually, indexed to Consumer Price Index, Western Region, for the 2019 Fiscal Year and the subsequent four fiscal years for everyday operations of the CGA.

Further information regarding this matter is available online at https://colusagroundwater.org, by calling the Authority's consultant at (916) 918-2002, or visiting the Authority's office at Colusa Industrial Properties, 100 Sunrise Blvd., Suite A, Colusa, CA 95932.

Date: March 26, 2019

/s/ Mary Fahey
Secretary of the Colusa Groundwater Authority

WPR - 05/08, 05/15/2019 · #2019-0683

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Notice of Workshop Regarding Implementation of SGMA by the Colusa Groundwater Authority, and Proposed Funding

The Colusa Groundwater Authority (CGA or Agency) is a 12-Member, multi-agency Joint Powers Authority that was formed on June 29, 2017 to meet the Groundwater Sustainability Agency formation deadline under the Sustainable Groundwater Management Act (SGMA). The CGA is responsible for implementation of SGMA in the County of Colusa (County) portion of the Colusa Subbasin (8-21.52) and the County portions of the West Butte Subbasin (5.21-58) outside of Reclamation District 1004. The Board of the CGA is composed of representatives of the following Agencies (1 seat per agency): County, City of Colusa, City of Williams, Colusa County Water District, Glenn-Colusa Irrigation District, Princeton-Codora-Glenn/Provident Irrigation District, Westside Water District/Maxwell Irrigation District, Reclamation District 108, Reclamation District 479, and Colusa Drain Mutual Water Company. In addition, there are two Private Pumper representatives appointed by the Colusa County Board of Supervisors, as recommended to the Board by the County Groundwater Commission. The CGA was formed to comply with and implement SGMA.

As a groundwater regulating agency, the CGA (in partnership with other adjacent GSAs such as the Glenn Groundwater Authority [GGA]) is tasked with achieving and maintaining sustainable groundwater conditions in the above mentioned subbasins over a 20-year window starting on January 31, 2022 and extending to 2042. Compliance with SGMA during this time period is done through the preparation and implementation of a Groundwater Sustainability Plan (GSP or Plan). GSP development is just getting underway in the Colusa and West Butte Subbasins and the Plans must be adopted by the aforementioned January 31, 2022 date. If any of the SGMA deadlines are not met, or if the CGA cannot fund the necessary activities committed to in the GSPs, the State Water Resources Control Board will take over groundwater management responsibilities. In order to ensure initial SGMA compliance and as an effective start to this long-range effort, the Member Agencies on the CGA Board agreed to fund CGA activities for the first two years of operation (July 2017 – June 2019), after which a long-term funding plan would need to be in place including contributions from landowners. The CGA has retained Provost & Pritchard Consulting Group to prepare a fee study to review the best options to fund CGA operations over the next five years. An operations cost and fee analysis is to be included in the study.

A public workshop will be held January 31, 2019, at 6:00 pm at the Colusa Indian Community Event Center, 3720 Highway 45, Colusa, CA 95932 to provide information about the cost and fee analysis and what this may mean for landowners. The public workshop will also provide an opportunity for you to provide input for the study, will inform you of SGMA requirements and current implementation status in the CGA jurisdictional area, and the consequences of not managing the groundwater subbasins (e.g. State intervention). One of the foundational Guiding Principles committed to by all CGA Members during the Agency's inception is to ensure that the areas under CGA jurisdiction **avoid extremely expensive and intrusive State groundwater intervention actions** to all beneficial users of groundwater.

Additional Background:

CGA operations include a variety of administrative activities, development of the GSP, monitoring groundwater conditions, annual reporting to the California Department of Water Resources, five-year updates to the GSP, and potentially conducting special studies. As stated above, the CGA is just beginning development of the GSP for the CGA jurisdictional areas, in coordination with other GSAs in the basins, including the Glenn Groundwater Authority, among others. State Proposition 1 grant funding has been awarded to cover a large portion of GSP development, however this grant does not and cannot support long-range operations and implementation of SGMA. The member agencies of the CGA will continue to pursue any grant funding opportunities that become available to support SGMA activities.

More information about the CGA and additional SGMA outreach meetings can be found at https://colusagroundwater.org/

Protest Process Required for any CGA Operations Fee or Charge:

If after the cost and fee analysis study is completed, the CGA Board opts to propose a fee or charge for its operations to avoid State intervention fees, landowners will have the option to protest under California's Proposition 218 requirements. More information about CGA, SGMA, and alternatives for funding SGMA compliance activities and Proposition 218 requirements will be provided at the January 31st public workshop.

Opportunity to Provide Input:

SGMA is a complex and important new law requiring statewide management of groundwater. The upcoming workshop is an opportunity for you to be informed about SGMA implementation, the funding process, and to ask questions. Please come to the public workshop. If you are unable to attend and want to be notified of other opportunities to provide input, please contact Mallory Serrao (mserrao@ppeng.com; 916-918-2002).

Colusa Groundwater Authority
Attn: Mary Fahey
100 Sunrise Blvd., Suite A
Colusa, CA 95932

Customer APN#
Customer Name
Customer Address
City, CA Zip

Colusa Groundwater Authority Information Meeting

Sustainable Groundwater Management Act Implementation and Funding

January 31, 2019

Program

1. Sustainable Groundwater Management Act (SGMA) Overview
2. Colusa Groundwater Authority (CGA) Background
3. Financing SGMA Implementation
   - CGA Activities and the Need for Funding
   - Proposition 218 Majority Protest
4. SGMA Local Compliance and Potential State Intervention
5. CGA Panel Questions and Answers

SGMA: Who is Affected

Agriculture

Municipal

Industrial

Environmental

SGMA Foundations

- Sustainable Groundwater Management Act of 2014
- **Groundwater Sustainability Agency(ies) (GSA)** by **June 30, 2017**
- **Groundwater Sustainability Plan(s) (GSP)** by **January 31, 2022**
- Yearly reporting and GSP Update every 5 years, demonstrating progress towards sustainability
- 20 years to achieve Sustainability – 2042
- **SGMA is a completely different program than the Irrigated Lands Regulatory Program!**

SGMA Foundations

- 517 Groundwater Basins / Subbasins Statewide
- 127 Basins / Subbasins required to comply with SGMA
- Compliance based on basin prioritization as mandated by State Legislature in 2009.
- Prioritization variables include (but not limited to):
  - Population
  - Socioeconomics
  - Number of wells
  - Groundwater elevation
- Approx. 18 Basins / Subbasins in Sacramento Valley are High or Medium priority

SGMA Foundations

- One or more GSAs must be formed per Basin / Subbasin
- A GSA may be formed by a single eligible agency or by legal agreement between two or more eligible agencies.
- Two or more GSAs must prepare a Coordination Agreement (a legal agreement) between them if preparing more than one GSP. (Water Code§10721, 10727)(b)(3), etc.)
- Counties represent / manage all groundwater conditions outside another managed area (Water Code§10724)

SGMA Foundations

Six "**Undesirable Results**"

1. Chronic lowering of groundwater levels
2. Land subsidence
3. Reduction of groundwater storage
4. Depletions of interconnected groundwater and surface water
5. Degraded water quality
6. Seawater intrusion (*not applicable in the Colusa Subbasin*)

SGMA: Who is Affected

Agriculture

Municipal

Industrial

Environmental

<u>De minimis</u> (less than 2 acre/feet pumped per year for domestic purposes)

SGMA: Who is Affected

De Minimis Well Owners

- **Pump less than 2 acre/feet per year for domestic purposes**
- **GSAs can include De Minimis in GSP**
- **CGA will seek to avoid impacts**

SGMA Foundations

Beneficial Users (Water Code§10723.2)

- All Groundwater Users
- Holders of Overlying Rights (agriculture and domestic)
- Municipal Well Operators
- Public Water Systems
- Tribes
- Local Land Use Planning Agencies
- Counties
- Local Landowners
- Disadvantaged Communities
- Business
- Federal Government
- Environmental Users
- Surface Water Users (*if connection between surface and ground water*)

GSA Roles and Responsibilities

- **Governance** – Colusa Groundwater Authority
- **Outreach/Engagement (Transparency)** with all beneficial users
- **Compliance** with local ordinances, state and federal laws and regulations, and similar
- **Funding** which may include one or more of the following: regulatory fees, property-related fees or assessments, local taxes, local general obligation bonds, contributions from member agencies, grants from other state or federal agencies

GSA Roles and Responsibilities

- **Authorities**

  General:

  - Do anything "necessary and proper" to carry out SGMA's purposes
  - Adopt rules, regulations, ordinances and resolutions
  - Use any other authority allowed to the GSA to apply and enforce SGMA requirements

  Information Gathering

  Groundwater Extraction Oversight

  Property Acquisition and Management

  Enforcement:

  - Sue to collect delinquent fees, interest, or penalties or order extraction stopped until delinquent fees are paid
  - Pursue civil penalties for extraction exceedances
  - Pursue civil penalties for violations of SGMA-related rules, regulations, ordinances, or resolutions

GSA Roles and Responsibilities

- **Coordination** with adjacent Subbasins and Counties (if applicable), and between Management Areas (if applicable)
- **Technical** – access technical expertise; conduct/oversee monitoring, data collection and reporting; develop water budget and identify sustainable yield; assess basin history and potential paths to sustainable management; remediate or oversee remediation of polluted groundwater.

GSA Roles and Responsibilities

- **Summary**
  - SGMA is the law.
    - Foundational change to groundwater management in California
  - SGMA allows for significant Local Control
  - SGMA has "Few Shalls…Many Mays…"
    - Shall…Create GSA
    - Shall…Prepare GSP
    - Shall…Do Public Engagement
  - GSAs are new, local government, **Regulating Agencies**

Colusa Groundwater Authority

- CGA Formation; 2 years, Guiding Principles
- CGA formed June 29, 2017 as mandated by SGMA
- CGA is the GSA-covering the Colusa County portions of the Subbasins within the county, outside of RD 1004
- CGA is a 12-member Joint Powers Authority Board
- Board includes two Private Pumper representatives

Colusa Groundwater Authority

Board of Directors

County of Colusa
Denise Carter (Chair) / Alternate: Gary Evans

City of Colusa
Tom Reische / Alternate: Dave Markss

City of Williams
Alfred Sellers, Jr. / Alternate: TBD

Colusa County Water District
Knute Myers / Alternate: Shelly Murphy

Glenn-Colusa Irrigation District
Blake Vann / Alternate: Thad Bettner

Maxwell I.D. and Westside I.D.
Zachary Dennis / Alternate: Dan Ruiz

Princeton-Codora-Glenn I.D. and Provident I.D.
David Alves / Alternate: Lance Boyd

RD 108
Hilary Reinhard, PE (Vice Chair)
Alternate: Bill Vanderwaal

RD 479
Charles Marsh / Alternate: Derick Strain

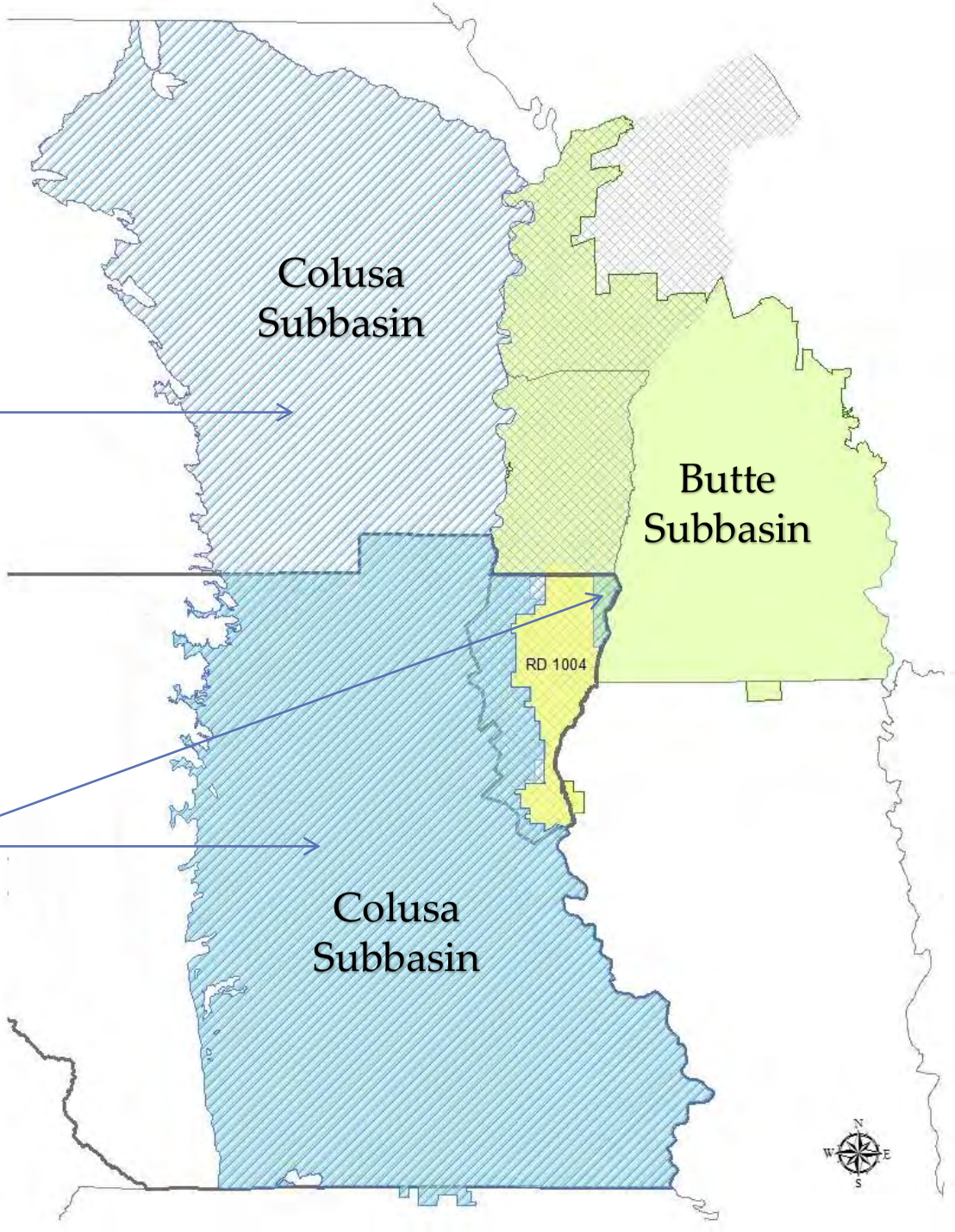
Colusa Drain Mutual Water Company
Jim Wallace / Alternate: Lynell Pollock

2 Private Pumper Representatives from the Colusa County Groundwater Commission:
Darrin Williams and Jeff Moresco

Subbasin Locations

Glenn Groundwater Authority (GGA) GSA

Colusa Groundwater Authority (CGA) GSA



CGA Activities

- Groundwater Sustainability Plan (GSP) for the Colusa Subbasin (CGA & GGA)
  - Awarded $1 million Proposition 1 grant funding for GSP development
  - Consultant team is developing Basin Setting for GSP
- Installing a new monitoring well in the Arbuckle area (DWR funded)
- Coordinating with GGA on GSP development and other activities in the Colusa Subbasin
- Coordinating with GSAs in other surrounding basins/counties
- Organizing ongoing public meetings and public outreach activities
- Developing long-term funding strategy for the CGA to maintain local control of Groundwater Management under SGMA

Financing SGMA

- CGA members working together, pooling resources to keep costs to a minimum
- Leveraging grant funding, Facilitation Support and Technical Support services
- **Need for Long-term funding for day to day operations of the CGA:**
  - **Technical:** GSP development ($1.5 million), technical studies, monitoring and data management, coordination and outreach efforts, implementation of the GSP, yearly reporting to DWR, Plan updates every five years
  - **O&M:** Staff, insurance, legal services, bookkeeping, office needs, etc.
- CGA Member Agencies agreed to fund the JPA for the first two years (July, 2017 – June, 2019) = $616,181.00 + over $150,000 in donated staffing and special studies prior to GSA formation
- Fees are needed to comply with SGMA and fund the GSP and basin monitoring activities

Financing SGMA

Proposition 218 Option

- Approved by voters in 1996, Prop 218 imposes certain requirements relative to the imposition of certain assessments, fees and charges by local agencies.
- Procedures act to fully inform the Agency's landowners while simultaneously giving them a direct say in the matter.
- Two processes for approval of revenue generation under Proposition 218
  - Land-based assessments (per acre charge)
  - Fees or charges on a unit basis.

Financing SGMA

Proposition 218 Majority Protest Requirements

- CGA contracted with Provost and Pritchard Engineering to initiate a Proposition 218 Majority Protest
- Consultants will complete a rate study to determine a fee structure based on CGA budget and acreages in the CGA's jurisdiction
- Amount of fee cannot exceed the reasonable cost of the activity to be funded
- Public information meetings being planned, January – March
- A similar process is beginning in the GGA portion of the Colusa Subbasin

Financing SGMA

Proposition 218 Majority Protest Requirements

- Fees must be based on the reasonable cost of providing service
  - CGA's annual operating budget
- Fees must proportionally recover costs from ratepayers (i.e. no subsidies)
  - $/acre fee
- Fees in the Prop 218 notice are the max fees that may be adopted
  - Board may lower fees without conducting another Prop 218 notice and hearing process

Financing SGMA

Proposition 218 Majority Protest Requirements

- Hold public informational meeting (NOT required)
- Mail a protest notice to property owners
- Hold a public hearing minimum of 45 days later – anticipated in May, 2019
- Absent majority protest, CGA may adopt fees
- If the Proposition 218 effort passes, a fee will appear on December 2019 property tax roll

Financing SGMA

Initial Estimate: Proposition 218 Majority Protest Fee Calculation

	Estimates
Budget	$540,000
Acres	413,256
Fee ($/acre)	$1.31

- Pending outcome of fee study
- Pending CGA Board approval and budget review
- SGMA is a new program, many unknowns
  - Budget is the best estimate at this time
  - The fee cannot exceed the reasonable costs of the CGA activities
- This fee is for day to day operations of the CGA. Additional project-specific fees may also apply in the future

Financing SGMA

Statewide GSA Fee Examples

1. GSA 1 – in Fresno County - $19.00/acre – entirely dependent on groundwater

2. GSA 2 – in Kings County - $5.00/acre initially, reduced to $3.00/acre in second year

3. GSA 3 – Salinas Valley - $2.27/non-ag acre to $4.81 irrigated ag acre

Financing SGMA

Who is Subject to Fees?

- All property owners have an overlying right and benefit from a healthy groundwater system
- Small Community Water Systems: homeowners in the Cities of Colusa and Williams and the small communities of Arbuckle, Grimes, Maxwell and Princeton may be charged through their water suppliers.
  - This will save money processing multiple property tax bills on these small parcels

Financing SGMA

What if the Prop 218 Effort Fails?

- If the CGA cannot be funded, it will dissolve.
- If a basin is not covered entirely by a GSA(s) and/or approved GSP, the State Water Resources Control Board assumes SGMA responsibilities.
- Lose local control of the groundwater resource.

State Intervention

- **State Board intervention actions can include:**
  - Well Head fees
  - Volumetric fees (fee per acre-foot of water pumped)
  - Late fees (subject to backdating to 2017)
  - Mandatory extraction reporting including monthly pumping data
  - May require installation of meters on wells at owner's expense
  - Technical reporting and special studies at landowners' expense
  - Any corrective actions will likely result in pumping restrictions

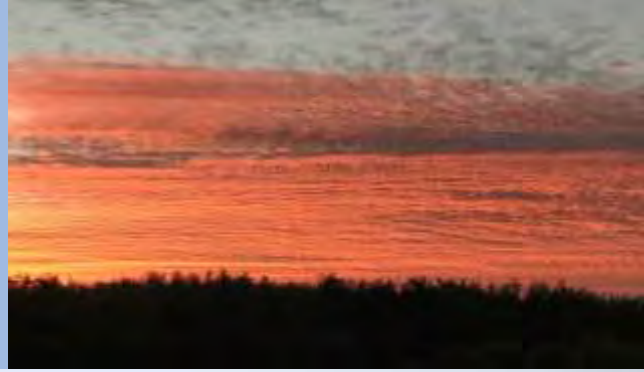
State Intervention

SWRCB Fees, 2018

BASE FEE (per well)	**$300**
Volumetric Fee (per AF)	
Unmanaged, metered	**$10/AF**
Unmanaged, unmetered	**$25/AF**
An unmanaged area is a part of a basin not within the management area of a GSA before July 1, 2017	
Probation	**$40/AF**
If locals fail to form a GSA, fail to develop an adequate sustainability plan, or fail to implement the plan successfully, the Board may designate the entire basin probationary. The Board may require the use of a meter to measure extractions and reporting of additional information.	
Interim Plan	**$55/AF**
If local agencies are unable to fix the deficiencies, the Board will develop an interim plan to directly manage groundwater extractions.	
De minimis (less than 2 AF/year)	**$100/well**
Late Fee	**25% per month**

https://www.waterboards.ca.gov/water_issues/programs/gmp/sgma.html

State Intervention



Sample Fee Comparison

100 acre irrigated parcel with one well, probationary basin

- **SWRCB Fees: $14,300**
  - 1 well = $300
  - 3.5 AF/ac = 350 AF X $40 = $14,000

- **Estimated CGA Fee: $131**
  - 100 Acres X $1.31 = $131

CGA Panel Questions & Answers

Panel Members:

- Denise Carter, County Supervisor, CGA Board Chair
- Hilary Reinhard, RD 108, CGA Vice Chair
- Darrin Williams, Private Pumper
- Jesse Cain, City Manager, City of Colusa

Thank You

Landowner input is essential to GSP development and SGMA planning and implementation.

Please visit the website or contact Staff to get on the contact list:

Mary Fahey
Program Manager, Colusa Groundwater Authority
530-458-0719
mfahey@countyofcolusa.com

CGA Website: www.colusagroundwater.org

Colusa County Groundwater Commission Informational Forum
February 13
10:00 a.m. – noon
Colusa Industrial Properties Conference Room

COLUSA GROUNDWATER AUTHORITY
NOTICE OF PROPOSED FEE

In compliance with California State Law, a **public hearing will be held:**

June 5, 2019 at 5:00 p.m. at the Colusa Industrial Properties, 100 Sunrise Blvd., Colusa, CA 95932 to consider a proposal by the Colusa Groundwater Authority (CGA) to adopt a **new fee in the amount of $1.21 per acre annually**, indexed to Consumer Price Index, Western Region, for the 2019 Fiscal Year and the subsequent four fiscal years, for everyday operations of the CGA.

Background:

The Colusa Groundwater Authority is a 12-Member, multi-agency Joint Powers Authority that was formed on June 29, 2017 to meet the Groundwater Sustainability Agency (GSA) formation deadline under the Sustainable Groundwater Management Act (SGMA). The CGA is responsible for implementation of SGMA in the County of Colusa (County) and Yolo County portions of the Colusa Subbasin (5-021.52) and the County portions of the Butte Subbasin (5.021-70) outside of Reclamation District 1004 (Basins). The Board of the CGA is composed of representatives of the following Agencies (1 seat per agency): County of Colusa, City of Colusa, City of Williams, Colusa County Water District, Glenn-Colusa Irrigation District, Princeton-Codora-Glenn Irrigation District / Provident Irrigation District, Westside Water District / Maxwell Irrigation District, Reclamation District 108, Reclamation District 479, and Colusa Drain Mutual Water Company. In addition, the Board includes two Private Pumper representatives appointed by the Colusa County Board of Supervisors, as recommended to the Board by the County Groundwater Commission. The CGA was formed to comply with and implement SGMA.

As a groundwater regulating agency, the CGA (in partnership with other adjacent GSAs such as the Glenn Groundwater Authority [GGA]) is tasked with achieving and maintaining sustainable groundwater conditions in the Basins. Compliance with SGMA is done through the preparation and implementation of a Groundwater Sustainability Plan (GSP or Plan). GSP development is underway in the Basins and the Plans must be adopted by January 31, 2022. If any of the SGMA deadlines are not met, or if the CGA cannot fund preparation of the GSP(s) or the necessary activities committed to in the GSPs, the State Water Resources Control Board may take over groundwater management responsibilities.

Long-Term Funding:

In order to ensure initial SGMA compliance and as an effective start to this long-range effort, the CGA Member agencies agreed to fund the CGA for the first two years of operation (July 2017 – June 2019), after which a long-term funding plan (proposed CGA Operations Fee) would be initiated to cover everyday operations of the CGA related to SGMA implementation and compliance. CGA operations include administration, legal services, consultant services, insurance, office and outreach materials, accounting, monitoring and reporting to DWR, and potentially some special studies. The CGA has received Proposition 1 grant funding to cover a majority of the work to develop a GSP however, costs for GSP preparation and initial implementation that can't be covered by grants will also need to be covered by the CGA Operations Fee. It is anticipated that any necessary management actions resulting from GSP implementation that cause a funding shortfall will be funded by other localized fees or assessments.

CGA has developed a budget for annual operations expenses and GSP preparation costs not covered by grant funding for a five-year period spanning fiscal years 2019/20 to 2023/24. Based on the Agency's needs, the CGA Board of Directors is seeking to collect the Operations Fees to generate sufficient revenue to fund CGA operations. GSP development is scheduled to occur over the next several years and GSA operations expenses are anticipated to be on-going during that period and beyond.

The proposed CGA Operations Fee is a property-related fee governed by Proposition 218. Each parcel of land within the CGA's boundary that will be subject to the CGA Operations Fee shall pay the CGA Operations Fee in proportion to the cost of providing services to each acre of land comprising each parcel. SGMA provides authority for CGA to charge fees to support its operations. The CGA has retained Provost & Pritchard Consulting Group to prepare a fee study to review the best options to fund CGA operations over the next five years. An operations cost and fee analysis is included in the study.

One of the foundational Guiding Principles committed to by all CGA Members is to ensure that the areas under CGA jurisdiction **avoid extremely expensive and intrusive State groundwater intervention actions**.

If the State Water Resources Control Board intervenes in the Basins, it may impose annual fees ranging from $100 per de minimis well, to $300 per well plus up to $55 per acre-foot pumped per well, with no guarantee of assistance in bearing costs to address the groundwater issues that prompt its intervention. See https://www.waterboards.ca.gov/water_issues/programs/gmp/docs/intervention/intervention_fs.pdf. for more complete information. By collecting the Operations Fees, CGA will provide landowners with a more affordable and locally managed option for managing the Basins.

As stated above, the CGA is just beginning development of the GSP for the CGA jurisdictional areas, in coordination with other GSAs in the Basins. State Proposition 1 grant funding has been awarded to cover a large portion of GSP development, however this grant does not and cannot support long-range operations and implementation of SGMA. The CGA will continue to pursue any grant funding opportunities that become available to support SGMA activities.

Proposed Charges:

This notice is for the CGA's proposal to implement a per-acre charge to fund the CGA operations, supplement GSP preparation, and begin initial GSP implementation. The CGA is requesting a maximum charge of:

- **$1.21 per acre** (in 2019 dollars, indexed for Consumer Price Index, Western Region, for the subsequent four years).
- The proposed charges, if approved, will become effective for the 2019/20 Colusa County fiscal year, with the first payment due by December 10, 2019.

The actual amount of the CGA Operations Fee may vary from time to time however, absent a subsequent Proposition 218 proceeding, it will not exceed the fee set forth above, plus the indexed inflation factor.

For more information, including the fee study summarizing the findings, please visit the CGA website at **https://colusagroundwater.org/long-term-funding/**

Public Hearing:

Under the California State Constitution, owners of land subject to the proposed CGA Operations Fee have the right to protest its adoption. If you have received this notice, parcel(s) under your ownership will be subject to the CGA Operations Fee if adopted. In the event of a majority protest, the fee will not be instituted.

Landowners desiring to protest the proposed CGA Operations Fee should send their written protest to:

Colusa Groundwater Authority
c/o Provost & Pritchard Consulting Group
P.O. Box 8929
Chico, California 95927

Protests may also be submitted to the Board Secretary at the Public Hearing, located at 100 Sunrise Blvd., Colusa, California. **All protests must be received by 5:00 p.m. June 5, 2019 or in person by the close of the Public Hearing on June 5, 2019**.

There are multiple ways to obtain additional information about this topic:

- Call CGA's Consultant at **(916) 918-2002.**
- View more information online at **https://colusagroundwater.org**
- To read this notice in Spanish, please visit the CGA website: https://colusagroundwater.org/long-term-funding/
- For more information about SGMA, see the California Department of Water Resources website: https://water.ca.gov/Programs/Groundwater-Management/SGMA-Groundwater-Management

If you do not wish to protest the proposed CGA Operations Fee, you need not take any action.

To Protest:

All protests must include:

- Landowners printed name(s),
- Parcel number for each property affected by the CGA Operations Fee,
- Reason for the protest, and
- Valid signature(s)

Each parcel is entitled to one protest. If a parcel has more than one owner, all must sign the protest; otherwise the protest will be counted in accordance with the percentage of ownership of the person or persons signing the protest.

For your convenience, you may utilize the Protest Form below:

PROTEST FORM FOR THE ADOPTION OF PROPOSED CGA OPERATIONS FEE

Landowner(s) printed name: _____

_____

_____

_____

_____

Parcel Number(s): _____

_____

Reason for Protest:

Landowner(s) signature: _____

_____

_____

_____

_____

COLUSA GROUNDWATER AUTHORITY
AVISO DE PROPUESTA DE TARIFA

En cumplimiento de la Ley del Estado de California, se **llevará a cabo una audiencia pública:**

El día 5 de Junio del 2019 a las 5:00 p.m. en las Propiedades Industriales de Colusa, 100 Sunrise Blvd. Colusa, CA 95932 para considerar una propuesta de la Colusa Groundwater Authority (CGA) para adoptar **una nueva tarifa anual de $1.21 por acre**, indexada de acuerdo al Índice de Precios al Consumidor, Región Occidental, para el Año Fiscal del 2019 y los cuatro años fiscales subsiguientes, para la operación regular de la CGA.

Antecedentes:

La Colusa Groundwater Authority es una Autoridad de Poderes Conjuntos y una multi-agencia de 12 miembros que se formó el 29 de Junio del 2017 para cumplir con la fecha límite de formación de la Agencia de Sostenibilidad de Aguas Subterráneas (GSA) bajo la Ley de Administración Sostenible del Agua Subterránea (SGMA). La CGA es responsable de la implementación de SGMA en las porciones del Condado de Colusa (Condado) y el Condado de Yolo de la Subcuenca de Colusa (5-021.52) y las porciones del Condado de la Subcuenca Butte (5.021-70) fuera del Reclamation District 1004 (Cuencas). La Junta de la CGA está compuesta por representantes de las siguientes Agencias (1 asiento por agencia): Condado de Colusa, Ciudad de Colusa, Ciudad de Williams, Colusa County Water District, Glenn-Colusa Irrigation District, Princeton-Codora-Glenn Irrigation District / Provident Irrigation District, Westside Water District / Maxwell Irrigation District, Reclamation District 108, Reclamation District 479, y la Colusa Drain Mutual Water Company. Además, la Junta incluye dos representantes privados nombrados por la Junta de Supervisores del Condado de Colusa, según lo recomendado por la Comisión del Agua Subterránea del Condado. La CGA se formó para cumplir e implementar SGMA.

Como una agencia reguladora del agua subterránea, la CGA (en asociación con otras GSA adyacentes como la Glenn Groundwater Authority [GGA]) tiene la tarea de lograr y mantener condiciones sostenibles del agua subterránea en las Cuencas. El cumplimiento con SGMA se realiza a través de la preparación e implementación de un Plan de Sostenibilidad del Agua Subterránea (GSP o Plan). El desarrollo del GSP está en marcha en las Cuencas y los Planes deben adoptarse antes del 31 de enero del 2022. Si no se cumple alguno de los plazos de SGMA, o si la CGA no puede financiar la preparación del (los) SGP o las actividades necesarias a las que se han comprometido en los GSPs, la State Water Resources Control Board pueden asumir las responsabilidades de la administración del agua subterránea.

Financiamiento a Largo Plazo:

Con el fin de garantizar el cumplimiento inicial de la SGMA y como un inicio efectivo de este esfuerzo de largo alcance, las agencias de Miembros de la CGA acordaron financiar la CGA durante los primeros dos años de operación (Julio de 2017 - Junio de 2019), después del cual se iniciaría un plan de financiamiento de largo plazo (Tarifa Propuesta para las Operaciones del CGA) se iniciaría para cubrir las operaciones diarias de la CGA relacionadas con la implementación y el cumplimiento de SGMA. Las operaciones de CGA incluyen administración, servicios legales, servicios de consultoría, seguros, materiales de oficina y educación, contabilidad, monitoreo e informes a DWR, y potencialmente algunos estudios especiales. La CGA ha recibido fondos de la Proposición 1 para cubrir la mayor parte del trabajo para desarrollar un GSP. Sin embargo, los costos para la preparación del GSP y la implementación inicial que no pueden ser cubiertos por los fondos recibidos también deberán cubrirse con la Tarifa Propuesta para las Operaciones del CGA. Se anticipa que cualquier acción de administración necesaria que resulte de la implementación del GSP que cause un déficit de financiamiento será financiada por otras tarifas o evaluaciones puntuales que sean necesarias.

CGA ha desarrollado un presupuesto para los gastos de operación anuales y los costos de preparación del SGP no cubiertos por los fondos recibidos para un período de cinco años que abarca los años fiscales 2019/20 al 2023/24. Basado en las necesidades de la agencia, la Junta de Directores de CGA está buscando cobrar la Tarifa de Operaciones para generar ingresos suficientes para financiar las operaciones de CGA. El desarrollo del SGP está programado para ocurrir en los próximos años y se anticipa que los gastos de operaciones de GSA continúen durante ese período y más allá.

La Tarifa de Operaciones del CGA propuesta es una tarifa relacionada con la propiedad y gobernada por la Proposición 218. Cada parcela de tierra dentro del límite de la CGA estará sujeta a la Tarifa de Operaciones de la CGA y pagará la Tarifa de Operaciones de la CGA en proporción al costo de proporcionar servicios a cada acre de terreno que incluye cada parcela. SGMA otorga autoridad a CGA para cobrar tarifas para respaldar sus operaciones. La CGA ha contratado a Provost & Pritchard Consulting Group para preparar un estudio de tarifas para revisar las mejores opciones para financiar las operaciones de CGA en los próximos cinco años. Se incluye un análisis de costos y tarifas de operaciones en el estudio.

Uno de los Principios Rectores fundamentales a los que se comprometen todos los Miembros de la CGA es el de garantizar que las áreas bajo jurisdicción de la CGA **eviten acciones de intervención del agua subterránea extremadamente costosas e intrusivas por parte del Estado**.

Si la State Water Resources Control Board interviene en las cuencas, puede imponer tarifas anuales con un mínimo de $100 por pozo, y hasta de $300 por pozo, y adicionalmente hasta $55 por acre-pie bombeado por pozo, sin garantía de asistencia en los costos de soporte para resolver los problemas de agua subterránea que causan su intervención. Consulte https://www.waterboards.ca.gov/water_issues/programs/gmp/docs/intervention/intervention_fs.pdf. para información más completa. Al cobrar la Tarifa de Operaciones, CGA les brindará a los propietarios una opción más accesible y localmente administrada en relación con la administración de las Cuencas.

Como se indicó anteriormente, la CGA está recién comenzando el desarrollo del GSP para las áreas jurisdiccionales de la CGA, en coordinación con otras GSA en las Cuencas. La financiación que ofrece la Proposición Estatal 1 se ha otorgado para cubrir una gran parte del desarrollo del GSP, sin embargo, este fondo no apoya y no puede respaldar las operaciones de largo plazo y la implementación de SGMA. La CGA continuará buscando cualquier oportunidad de financiamiento que esté disponible para apoyar las actividades de SGMA.

Cobros Propuestos:

Este aviso es para la propuesta de la CGA de implementar un cobro por acre para financiar las operaciones de la CGA, complementar la preparación del GSP, y empezar la implementación inicial del GSP. La CGA está solicitando un cargo máximo de:

- **$1.21 por acre** (en dólares corrientes del año 2019, indexados por el Índice de Precios al Consumidor, Región Occidental, para los siguientes cuatro años).
- Los cargos propuestos, si se aprueban, entrarán en vigor para el año fiscal 2019/20 del Condado de Colusa, con el primer pago que debe realizarse antes del 10 de Diciembre del 2019.

El monto real de la Tarifa de Operaciones de la CGA puede variar de vez en cuando, sin embargo, en ausencia de un procedimiento posterior de la Propuesta 218, no excederá la tarifa establecida anteriormente, más el factor de inflación indexado.

Para más información, incluido el estudio de tarifas que resume las recomendaciones, visite el sitio web de CGA en **https://colusagroundwater.org/long-term-funding/**

Audiencia Pública:

Según la Constitución del Estado de California, los propietarios de tierras sujetas a la Tarifa de Operaciones propuesta del CGA tienen derecho a protestar por su adopción. Si ha recibido este aviso, las parcelas de su propiedad estarán sujetas a la Tarifa de Operaciones de CGA si se adoptan. En el caso de una protesta mayoritaria, la tarifa no será instituida.

Propietarios que deseen protestar por la Tarifa de Operaciones propuesta del CGA deben enviar su protesta por escrito a:

Colusa Groundwater Authority
c/o Provost & Pritchard Consulting Group
P.O. Box 8929
Chico, California 95927

Las Protestas también pueden presentarse al Secretario de la Junta en la Audiencia Pública, ubicada en el 100 Sunrise Blvd., Colusa, California. **Todas las protestas deben ser recibidas antes de las 5:00 p.m. día 5 de Junio del 2019 o en persona al cierre de la Audiencia Pública el 5 de Junio del 2019.**

Hay varias maneras de obtener información adicional sobre este tema:

- Llame al Consultor del CGA al **(916) 918-2002.**
- Vea más información en línea en la página **https://colusagroundwater.org**
- Para leer este aviso en Español, visite el sitio web de CGA: https://colusagroundwater.org/long-term-funding/
- Para más información sobre SGMA, consulte el sitio web del Departamento de Recursos Hídricos de California: https://water.ca.gov/Programs/Groundwater-Management/SGMA-Groundwater-Management

Si no desea protestar por la Tarifa de Operaciones propuesta del CGA, no necesita realizar ninguna diligencia.

Para Protestar:

Todas las protestas deben incluir:

- Nombre escrito del dueño(s),
- Número de parcela para cada propiedad afectada por la Tarifa de Operaciones del CGA.
- Razón para la protesta, y
- Firma(s) válida(s)

Cada parcela tiene derecho a una protesta. Si una parcela tiene más de un propietario, todos deben firmar la protesta; de lo contrario, la protesta se computará de acuerdo con el porcentaje de propiedad de la persona o personas que firman la protesta.

Para su conveniencia puede utilizar el Formulario de Protesta que está a continuación:

FORMULARIO DE PROTESTA PARA LA ADOPCIÓN DE LA TARIFA DE OPERACIONES PROPUESTA DEL CGA

Nombre escrito del Dueño(s): _____

_____

_____

_____

_____

Número de Parcela(s): _____

_____

Razón para la Protesta:

Firma del propietario(s): _____

_____

_____

_____

_____

COLUSA GROUNDWATER AUTHORITY

AFFIDAVIT OF MAILING OF NOTICE OF HEARING AND MAJORITY PROTEST FORM TO CERTAIN LANDOWNERS WITHIN THE BOUNDARIES OF THE COLUSA GROUNDWATER AUTHORITY

STATE OF CALIFORNIA)
) ss.
COUNTY OF COLUSA)

The undersigned says:

That I, Linda G. Sloan, am Vice President of Provost & Pritchard Consulting, an agent of the Colusa Groundwater Authority, and was responsible for managing the mailing the Notice of Public Hearing to landowners from a list prepared from the County's tax roll on the Authority's proposed property-related fee.

I declare that at or before 5:00 p.m. on April 17, 2019, I supervised the mailing of copies of the "**NOTICE OF PROPOSED FEE**", and protest form, both in the form attached hereto marked Exhibit "A", to all landowners that would be affected by the Authority's proposed fee within the boundaries of the Authority as shown on the roll attached as Exhibit "B". Each Notice contained the specific applicable information taken from the roll.

That said mailing was accomplished by depositing in the United States Mail at Chico, California, with proper and necessary postage prepaid, envelopes addressed as aforesaid.

I CERTIFY under penalty of perjury that the foregoing is true and correct.

Executed at ~~Colusa~~ Siskiyon County, California, this 30th day of May, 2019.

Linda G. Sloan

Please see attached sheet
for CA Acknowledgment/Jurat
As per CA Civil Codes 1189/8202

Exhibit A: Notice and Protest Form
Exhibit B: County's Tax Roll

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity

State of California)
)
County of Siskiyou)

On 05-30-2019 before me, Dustin Balma, Notary Public, personally appeared

Linda G Sloan, who proved to me on the basis of satisfactory evidence to be the person(s) whose name is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

DUSTIN BALMA
COMM. # 2239858
NOTARY PUBLIC • CALIFORNIA
SISKIYOU COUNTY
Comm. Exp. APRIL 26, 2022

SIGNATURE OF NOTARY