

Name	Document & Section	Page Number	Comment	GSA	Date/Time	Attachment(s)	Document Link
Steve Slack (CDFW)	CMA GSP Public Draft (Plan), September 2021 - Chapter 2: Section 2b: Groundwater Conditions	2b-35	Comment #1: Section 2b.6-2 Interconnected Surface Water for the Santa Ynez River Issue: The Draft GSP does not provide enough evidence to conclude there is no interconnected surface water in the CMA. The CMA-Groundwater Conditions Technical Memo (CMA-GC), (page 27) and the Draft GSP (page 2b-35) states, "Because the underflow of the Santa Ynez River is considered part of the surface water flowing in a known and definite channel, there is no interconnected surface water in the CMA. The Santa Ynez River surface water and underflows are managed by the SWRCB for the reach of the Santa Ynez River in the CMA and will not be managed under SGMA by the CMA GSA. Diversions from the Santa Ynez River Alluvium are subject to SWRCB regulation which considers it the same as surface water diversions. As described in the HCM (Section 2a), the Santa Ynez River Alluvium is recharged from the surface water of the river." Page 13 of the CMA-Hydrologic Conceptual Model Technical Memo (CMA-HCM) identifies two principal aquifers for the management area. The Upper Aquifer is described as consisting of the river gravels and younger alluvium along the Santa Ynez River, and the Lower Aquifer is defined as consisting of the Paso Robles and Careaga Formations of the Buellton Upland. As per SGMA regulations, a principal aquifer refers to an aquifer or system of aquifers that stores, transmits, and yields significant or economic quantities of groundwater to wells or surface water (23 CCR 351(a)). The CMA-HCM identifies the river gravels and younger alluvium along the Santa Ynez River as being part of Upper Principal Aquifer system within the CMA. The CMA-HCM further indicates on page 17 that the Santa Ynez River is in direct contact with major bodies of water-bearing deposits near Buellton and Lompoc subarea where it crosses the two ends of the Santa Rita syncline. The CMA-HCM additionally states on page 17 that many of the wells within the Santa Ynez River Alluvium subarea are shallow, and a precise understanding of the Lower Aquifer underneath the Santa Ynez River is poorly understood in the HCM. CDFW acknowledges there are locations within the CMA where the Santa Ynez River is situated within consolidated non-water bearing formations. However, there are portions of the Santa Ynez River with the potential to be in communication with the water-bearing formations of the principal aquifers, and as such additional characterization is required to support the findings of the GSP. The CMA-GC provides groundwater contour elevation maps (Figures 1-1 and 1-2) that indicate the direction of groundwater flow for spring 2020 and fall 2019 events for both the Upper Aquifer and the Lower Aquifer. Interpretation of the data set provided indicates a direction/gradient of groundwater flow from the Buellton Uplands towards the Santa Ynez River, which more than likely provides recharge to the Santa Ynez River via the aquifers. Page 21 of the CMA-HCM states, "Areas with high recharge are dominant in the Buellton Uplands west of Highway 101 to Santa Rosa Creek on the Southern slopes of the Purisima Hills and along the Santa Ynez River. These areas correspond to Careaga Formation in the Buellton Uplands and to the river gravels along the Santa Ynez River." The provided information substantiates the idea that the Santa Ynez River is not completely isolated from the underlying aquifers.	Central Management Area	10/26/2021 14:46	Santa Ynez CMA Draft GSP Comment Letter.pdf	<a href="https://portal.santaynezwater.org/service/document/download/889">https://portal.santaynezwater.org/service/document/download/889</a>
Steve Slack (CDFW)	CMA GSP Public Draft (Plan), September 2021 - Chapter 2: Section 2c: Water Budget	2c-8	Comment #2: Section 2c.1-3 Surface Water and the Santa Ynez River Alluvium Issue: The Draft GSP does not provide enough information to conclude that surface waters do not affect groundwater levels. Page 2c-8 of the Draft GSP states, "In addition, as discussed in the HCM (Section 2a.3), the Santa Ynez River Alluvium is part of the subflow of the river, which is regulated by SWRCB. Because subflow is considered surface water and not groundwater, the Santa Ynez River Alluvium would not be classified as a principal aquifer or managed by a GSP under SGMA. Therefore, the Santa Ynez River Alluvium is considered part of the underflow of the Santa Ynez River and is treated as part of the surface water in the historical, current, and projected water budgets." Page 28 of the CMA-GC states, "Diversions from the Upper Aquifer of the Santa Ynez River Alluvium are subject to SWRCB which considers it the same as surface water. As described in the HCM, the Upper Aquifer is recharged from the surface water of the river." The CMA-HCM states that during downstream water right releases, water infiltrates and recharges the alluvium in Zone A (CMA-HCM, Pg. 23). This is another example of a location that has interconnected surface waters based on groundwater recharge during downstream water right releases. CDFW believes this occurs during natural flows at various seasons throughout the year. CDFW agrees that the Upper Aquifer is recharged from the surface water of the river but is unclear on the basis for the conclusion that the diversions from the Upper Aquifer should be regulated in the same manner as surface water. The CMA-HCM also states that groundwater in the CMA discharges to the Santa Ynez River when the groundwater elevation is higher than the stream channel thalweg. Groundwater discharge to the river will occur during wet winter and spring months. However, during the summer and dry winter months, the streamflow loses water to the groundwater aquifers of the Santa Ynez alluvium subarea (CMA-HCM, p. 27). This is another example of an interconnected surface water that SYR-GSA describes in their CMA-HCM but failed to identify and analyze in the CMA-GC. Recommendation #2(a): CDFW recommends the Final GSP provide justification, based on specific provisions of SGMA, for the conclusion that the Upper Aquifer should not be classified as a principal aquifer or managed by a GSP under SGMA. CDFW believes the GSA must sustainably manage groundwater resources in the Upper Aquifer, in part because it supports GDEs. Furthermore, portions of the Upper Aquifer are interconnected with surface water and is currently identified as a principal aquifer under Department of Water Resources Bulletin 118 (DWR 2020). The communities within the CMA heavily rely on surface and subsurface diversions from the Upper Aquifer. According to the CMA-GC, Lower Aquifer groundwater pumping may not be occurring in the deeper aquifer (or it is unknown). Use of this Lower Aquifer water may become more appealing and economically viable in the future if groundwater pumping practices change. Thus, analyzing the Upper Aquifer as interconnected with surface water is consistent with the sustainability goals of SGMA. Furthermore, identifying and appropriately considering GDEs in the CMA that rely on the Upper Aquifer should be completed irrespective of the amount of groundwater pumped from the Upper Aquifer.	Central Management Area	10/26/2021 14:46	Santa Ynez CMA Draft GSP Comment Letter.pdf	<a href="https://portal.santaynezwater.org/service/document/download/890">https://portal.santaynezwater.org/service/document/download/890</a>

Steve Slack (CDFW)	CMA GSP Public Draft (Plan), September 2021 - Chapter 2: Section 2b: Groundwater Conditions	2b-35	<p>Comment #3: Section 2b.6-3 Interconnected Surface Water for Tributaries to the Santa Ynez River Issue: CDFW disagrees with the Draft GSP conclusion that the tributaries within the CMA do not meet SGMA's definition of interconnected surface waters simply because they do not receive measurable flow at all times of year. Page 30 of the CMA-GC and page 2b-35 of the Draft GSP states, "All tributaries within the CMA (Figure 2b.6-1) are ephemeral. As shown on Figure 2b.6-2, Zaca Creek, the largest CMA tributary, has no measurable flow during half of the period of record. Most flow occurs in wet and above normal years between February to March, with no flow between June to November. This indicates these tributaries are completely depleted during part of the year and do not meet the SGMA definition for interconnected surface water. As shown in the HCM (HCM Figure 2a.5-2) there are no identified springs associated with these tributaries. Groundwater-dependent habitats, including interconnected surface waters, are particularly susceptible to changes in the depth of the groundwater. Lowered water tables that drop beneath the root zones can cut off phreatophyte vegetation from water resources, stressing or ultimately converting vegetated terrestrial habitat. Induced infiltration attributable to groundwater pumping can reverse hydraulic gradients and may cause streams to stop flowing. The frequency and duration of exposure to lowered groundwater tables and low-flow or no-flow conditions caused by groundwater pumping, as well as habitat and species resilience, will dictate vulnerability to changes in groundwater elevation. For example, some species rely on perennial instream flow, and any interruption to flow can risk species survival. Under SGMA, a GSP is required to avoid unreasonable adverse impacts on beneficial uses of interconnected surface waters, defined as surface water that is hydraulically connected at any point by a continuous saturated zone to the underlying aquifer, and the overlying surface water is not completely depleted. (Water Code § 10721(x)(6) and 10727.2(b); 23 CCR § 351(o).) The SYR-GSA has not provided adequate support for its conclusion that lack of measurable flow within the tributaries means the tributaries are completely depleted under this definition. Even assuming the tributaries are completely depleted during part of the year, there is no requirement within SGMA or its implementing regulations that surface waters have measurable surface flows at all times of the year to qualify as an interconnected surface water. To the extent that the tributaries are hydraulically connected and not completely depleted at any time of the year, they qualify as interconnected surface waters and warrant appropriate consideration in the final GSP, including the goal to avoid depletions causing significant and unreasonable adverse impacts on beneficial uses. The interconnected surface water narrative also lacks specific estimations of the quantity and timing of streamflow depletions as required by California Code of Regulations, Title 23 § 354.16(f). Recommendation #3(a): CDFW recommends a more careful review of existing information on surface water-groundwater interconnectivity and recommends the CMA-GSA clarify methods used to categorize losing</p>	Central Management Area	10/26/2021 14:46 Santa Ynez CMA Draft GSP Comment Letter.pdf	<a href="https://portal.santaynezwater.org/service/document/download/891">https://portal.santaynezwater.org/service/document/download/891</a>
Steve Slack (CDFW)	CMA GSP Public Draft (Plan), September 2021 - Chapter 2: Section 2a: Hydrogeologic Conceptual Model	2a-34	<p>Comment #4: Section 2a.4-2-1 Emerging Agricultural Crops: Cannabis Cultivation (Cannabis Priority Watershed) Issue: CDFW is concerned that cannabis groundwater use is not being fully accounted for when evaluating this SGMA area. Ignoring the growth potential of this industry, could result in a lack of groundwater management accountability. Page 2a-34 of the Draft GSP states that "Santa Ynez River Valley is not identified as a Cannabis Priority Watershed with a high concentration of cannabis cultivation." CDFW has identified, in region, the Santa Ynez River Valley as a high priority watershed. Most projects distributed throughout this SGMA area are clustered within the San Miguelito Creek-Santa Ynez River, Nojoqui Creek, Santa Rosa Creek-Santa Ynez River, Salsipuedes Creek, Santa Rita Valley and Canada De La Vina-Santa Ynez River HUC 12 watersheds. This includes San Miguelito Creek, Salsipuedes Creek, and Santa Ynez River (critical southern steelhead streams) as well as Nojoqui Creek and Santa Rosa River, and the SYR tributaries (Dagit et. al 2020). The projects range from cultivation of 1-50 acres within the approximate 52 notifications the Department has received with the main source of water coming from groundwater wells. CDFW expects this type of trend to continue in the future. Groundwater and interconnected surface water are critical resources that do not recognize artificial boundaries. Since the implementation of legal cannabis cultivation, CDFW has received multiple applications within the Santa Ynez River Valley, especially in the HUC 12 watersheds listed above. Some of the cannabis grows can range from 1-50 acres, with multiple licenses on a property (resulting in several acres of cultivation) that are dependent on depths within the alluvium. Surface flows (and surface diversions) are regulated in large degree from dam releases, which emphasizes the large roll groundwater wells have in cannabis cultivation. Santa Ynez has sensitive, natural communities consisting of Oak woodlands, grasslands, sage scrub, chaparral, and riparian woodland habitats along the Santa Ynez River and SYR tributaries. According to the California Natural Diversity Database (CNDDB), the Santa Ynez River Valley provides habitat that supports several sensitive species (some listed as endangered or threatened) throughout their life cycles, including southwestern willow flycatcher (<i>Empidonax traillii extimus</i>), least Bell's vireo (<i>Vireo bellii pusillus</i>), red-legged frog (<i>Rana draytonii</i>), and seaside bird's beak (<i>Cordylanthus rigidus ssp. littoralis</i>) (CDFW. 2019). Habitats that support these species also consist of phreatophytes and other vegetation communities that are dependent on shallow aquifers that support surface water in each of these systems. Phreatophytic vegetation is a critical contributor to nesting and foraging habitat, forage for a wide range of species and can be affected by sensitive depth to groundwater threshold impacts (Naumburg et.al. 2005) and (Froend et. al. 2010). This sensitivity to groundwater level thresholds means that localized pumping and recharge actions altering groundwater levels can impact the health and extent of phreatophyte vegetation health. Both decreasing (drying out) or increasing (drowning) groundwater elevation has the potential to stress phreatophytes depending on the plant species, groundwater elevation and duration (e.g., short term wetness/dryness versus</p>	Central Management Area	10/26/2021 14:46 Santa Ynez CMA Draft GSP Comment Letter.pdf	<a href="https://portal.santaynezwater.org/service/document/download/892">https://portal.santaynezwater.org/service/document/download/892</a>

Steve Slack (CDFW)	CMA GSP Public Draft (Plan), September 2021 - Chapter 2: Section 2a: Hydrogeologic Conceptual Model	2a-35	<p>Comment #5: Section 2a.4-2-1 Emerging Agricultural Crops: Cannabis Cultivation Issue #5.1: Without the designation of the Santa Ynez River Valley as a Cannabis High Priority Watershed, evaluation of cannabis crop water usage may be overlooked throughout the Santa Ynez River Valley Groundwater Basin, especially within the Santa Ynez Alluvium, an area that, as stated on page 2b-35, will not be managed under SGMA by the CMA-GSA. Page 2a-35 of the Draft GSP states "all cannabis applications in the CMA are for parcels that in 2016 were used for agriculture. This indicates primarily a change of crop type, rather than an expansion." Cannabis cultivation is a water intensive crop that can have a significant impact to environmental beneficial users of groundwater. Cannabis groundwater wells provide water for the irrigation of water-intensive cannabis cultivation (assuming six gallons of water per day per plant) (Bauer S. 2015). Just within the Santa Ynez Alluvium, CDFW has received approximately 26 cannabis projects. These projects range from cultivation of 3.5 - 50.0 acres with water supplied from groundwater wells. Many of the wells for the cannabis notifications within Santa Ynez Valley are shallow wells located within or immediately adjacent to tributary streams and the SYR. CDFW is concerned that without management of the Santa Ynez Alluvium under SGMA by the CMA-GSA, significant and unreasonable surface water depletions may occur, compromising groundwater dependent ecosystems within and along the streams. Recommendation #5.1(a): CDFW recommends a more careful review of the existing information on cannabis cultivation within the Santa Ynez Alluvium and recommends the information be considered when evaluating groundwater management. As indicated on page 2a-23, "Areas with high recharge are dominant in the Buellton Upland west of Highway 101 to Santa Rosa Creek on the southern slopes of the Purisima Hills and along the Santa Ynez River. These areas correspond to Careaga Sand Formation in the Buellton Upland and to the river gravels along the Santa Ynez River." The majority reliance on groundwater for cannabis crops irrigation, and the likely interconnected nature of the SYR suggests that such uses (individually or cumulatively) should be considered when evaluating cannabis impacts in the Santa Ynez Alluvium. Recommendation #5.1(b): CDFW recommends the Santa Ynez River Valley be classified as a Cannabis High Priority Watershed. Issue #5.2: The majority reliance on groundwater for cannabis crops irrigation, and the likely interconnected nature of the Santa Ynez River suggests that such uses (individually or cumulatively) should be considered when evaluating cannabis impacts in the Santa Ynez alluvium. As indicated on page 2a-23, "Areas with high recharge are dominant in the Buellton Upland west of Highway 101 to Santa Rosa Creek on the southern slopes of the Purisima Hills and along the Santa Ynez River. These areas correspond to Careaga Sand Formation in the Buellton Upland and to the river gravels along the Santa Ynez River." Recommendation #5.2: CDFW recommends a more careful review of the existing information on cannabis cultivation within the Santa Ynez alluvium and recommends the information be considered when evaluating groundwater management.</p>	Central Management Area	10/26/2021 14:46 Santa Ynez CMA Draft GSP Comment Letter.pdf	<a href="https://portal.santaynezwater.org/service/document/download/893">https://portal.santaynezwater.org/service/document/download/893</a>																				
Steve Slack (CDFW)	CMA GSP Public Draft (Plan), September 2021 - Chapter 2: Section 2b: Groundwater Conditions	2b-37	<p>Comment #6: Section 2b.6-4 Groundwater Dependent Ecosystems in the Central Management Area Issue: The potential GDEs were assessed into three categories based on their relationship to the aquifer but it is unclear if they were categorized any further. It is also unclear and unknown if there are any GDEs in the Draft GSP that will be protected and monitored into the future. Page 2b-37 of the Draft GSP states that "These were assessed into three categories based on the relationship to the aquifer (Figure 2b.6-3). If depth to groundwater has historically exceeded the 30-foot depth identified by the Nature Conservancy as representative of groundwater conditions that may sustain common phreatophytes and wetland ecosystems (Rohde et al. 2018), the potential GDE was identified as unlikely to be affected by groundwater management (Category C on Figure 2b.6-3). Riparian areas of the Santa Ynez River were identified as being managed by the SWRCB as part of Santa Ynez River surface and subflow (Category B on Figure 2b.6-3). The remaining area consists of GDEs likely related to groundwater levels (Category A on Figure 2b.6-3). Part of the Category B area that overlies the Buellton Aquifer may have some influence from the Buellton Aquifer water levels. This area is grouped with the Category A to form the potential GDEs. Table 2b.6-2 below summarizes the land areas involved." Table 2b.6-2 Potential CMA Groundwater Dependent Ecosystem Categorization</p> <table border="1"> <thead> <tr> <th>Potential GDE Category</th> <th>Ecosystem Description</th> <th>Acres</th> <th>Percentage</th> <th>Potential GDE Associated with a Principal Aquifer</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Riparian vegetation not subject to SGMA</td> <td>122370.5</td> <td>5%</td> <td>Unlikely to be Affected by Groundwater Management</td> </tr> <tr> <td>2</td> <td>Category B over Buellton Aquifer</td> <td>80746.5</td> <td>35%</td> <td>Total 1,735,100%</td> </tr> <tr> <td>3</td> <td>Potential GDE Category C</td> <td>110.6</td> <td>0.5%</td> <td>The potential GDEs were assessed into three categories based on their relationship to aquifers, but it is unclear if they were categorized any further. It is also unclear and unknown if there are any GDEs in the Draft GSP that will be protected and monitored into the future. Pursuant to SGMA, the GSP to be developed by CMA-GSA must identify and consider impacts to all GDEs in the basin, including flowing waters and refugia supporting southern steelhead. The final GSP must also avoid depletions of interconnected surface waters that have significant and unreasonable adverse impacts on beneficial uses of the surface water. Specific, surface water flows needed to support southern steelhead life stages at different times of year are as follows: 1) from October through June for river-estuary-Ocean connectivity needed for passage; 2) from January through May for adult migration, spawning and incubation; 3) from January through June for juvenile migration; and, 4) year-round for expression of juvenile life history. CDFW is also concerned that groundwater pumping in the face of climate change and human disturbance will lead to dryer stream reaches incapable of supporting suitable riparian habitat for sensitive species that occupy GDEs, such as least Bell's vireo (<i>Vireo bellii pusillus</i>) and southwestern willow flycatcher (<i>Empidonax traillii extimus</i>). These federally and State-listed species need dense willow thickets and understory vegetation for both nesting and breeding purposes. Recommendation #6(a): CDFW recommends the CMA-GSA evaluate potential effects on each GDE unit based on at</td> </tr> </tbody> </table>	Potential GDE Category	Ecosystem Description	Acres	Percentage	Potential GDE Associated with a Principal Aquifer	1	Riparian vegetation not subject to SGMA	122370.5	5%	Unlikely to be Affected by Groundwater Management	2	Category B over Buellton Aquifer	80746.5	35%	Total 1,735,100%	3	Potential GDE Category C	110.6	0.5%	The potential GDEs were assessed into three categories based on their relationship to aquifers, but it is unclear if they were categorized any further. It is also unclear and unknown if there are any GDEs in the Draft GSP that will be protected and monitored into the future. Pursuant to SGMA, the GSP to be developed by CMA-GSA must identify and consider impacts to all GDEs in the basin, including flowing waters and refugia supporting southern steelhead. 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These federally and State-listed species need dense willow thickets and understory vegetation for both nesting and breeding purposes. Recommendation #6(a): CDFW recommends the CMA-GSA evaluate potential effects on each GDE unit based on at	Central Management Area	10/26/2021 14:46 Santa Ynez CMA Draft GSP Comment Letter.pdf	<a href="https://portal.santaynezwater.org/service/document/download/894">https://portal.santaynezwater.org/service/document/download/894</a>
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Steve Slack (CDFW)	CMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	GENERAL COMMENTS AND RECOMMENDATIONS Comment #7: Sensitive Species and Habitats Issue: Many sensitive species and habitats in the Santa Ynez CMA comprise of GDEs, the natural communities that rely on groundwater to sustain all or a portion of their water needs. Some of the special-status species in the Santa Ynez River watershed that rely on surface water supported and supplemented by groundwater include the federally endangered southern steelhead; southwestern pond turtle (Actinemys pallida), a CDFW species of special concern (SSC) and U.S. Forest Service sensitive species; California red-legged frog (Rana draytonii), a CDFW SSC and ESA-listed species; western spadefoot toad (Spea hammondi), a CDFW SSC and Bureau of Land Management sensitive species; and California tiger salamander (Ambystoma californiense), an ESA-listed and California Endangered Species Act (CESA)-listed species. Southern California Coast Steelhead (Oncorhynchus mykiss (O. mykiss) or southern steelhead), is an endangered species under the Federal Endangered Species Act (ESA). The Santa Ynez River contains important southern steelhead spawning and rearing tributaries. Threats to southern steelhead from groundwater pumping, such as excessively high-water temperatures due to reduced surface flows or groundwater pumping in the spring, summer, and early fall, reduce available juvenile rearing habitat. Low flows in the fall and winter can delay adult passage to critical spawning areas. CDFW is very concerned about the health of the southern steelhead population in the Santa Ynez River. Drought conditions and low flow rates have led CDFW to participate in rescue operations as recently as 2020. Southwestern pond turtle was designated as a California SSC in 1994. Western pond turtle's preferred habitat is permanent ponds, lakes, streams, or permanent pools along intermittent streams associated with standing and slow-moving water. A potentially important limiting factor for western pond turtle is the relationship between water level and flow in off-channel water bodies, which can both be affected by groundwater pumping. California red-legged frog is rarely encountered far from perennial water. Tadpoles require water for at least three or four months while completing their aquatic development. Adults eat both aquatic and terrestrial invertebrates, and the tadpoles graze along rocky stream bottoms. Groundwater pumping that impairs streamflow could have negative impacts on California red-legged frog populations. Western spadefoot toad migrates to seasonal vernal pools to reproduce. They will use small puddles of water, such as small pools to breed. California tiger salamander is also restricted to vernal pools and seasonal ponds for reproduction. If groundwater depletion results in reduced streamflow due to interconnected surface waters, the nesting and foraging success of flycatcher, least Bell's vireo, and other bird species may be diminished due to the reduced nesting habitat and food availability. The unsustainable use of groundwater can impact the shallow aquifers and interconnected surface waters on which these species and GDEs depend. This may lead to adverse impacts on fish and wildlife and the habitat they need to survive. Determining the effects that groundwater levels have on surface water flows in the CMA would provide an	Central Management Area	10/26/2021 14:46 Santa Ynez CMA Draft GSP Comment Letter.pdf	<a href="https://portal.santaynezwater.org/service/document/download/895">https://portal.santaynezwater.org/service/document/download/895</a>
Steve Slack (CDFW)	CMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	GENERAL COMMENTS AND RECOMMENDATIONS Comment #8: Draft GSP vs. Final GSP Issue: The CMA-GSA may need to revise the GSP before it is finalized an adopted. Recommendation #8: CDFW recommends the CMA-GSA provide a red-lined version of the final GSP to understand the changes made between the Draft GSP and final GSP. Alternatively, CDFW recommends the GSA provide a summary of changes made and comments addressed by the GSA in preparation of a final GSP. CONCLUSION CDFW has significant concerns about ISWs for the SYR, and its tributaries, and surface water and the SYR alluvium, interconnected surface water for tributaries to the SYR, cannabis cultivation into the future and CDFW urges the CMA-GSA to plan for and engage in responsible groundwater management that minimizes or avoids these impacts to the maximum extent feasible as required under applicable provisions of SGMA and the Public Trust Doctrine.	Central Management Area	10/26/2021 14:46 Santa Ynez CMA Draft GSP Comment Letter.pdf	<a href="https://portal.santaynezwater.org/service/document/download/896">https://portal.santaynezwater.org/service/document/download/896</a>
Joseph Hughes	WMA GSP Public Draft (Plan), September 2021 - Executive Summary	N/A	Please see attached file for comments on entire draft GSP.	Western Management Area	10/26/2021 14:12 Letter to WMA GSA RE Draft GSP (FINAL).pdf	<a href="https://portal.santaynezwater.org/service/document/download/888">https://portal.santaynezwater.org/service/document/download/888</a>
Joseph Hughes	CMA GSP Public Draft (Plan), September 2021 - Executive Summary	N/A	Please see attached file for comments regarding entire draft GSP.	Central Management Area	10/26/2021 14:10 Letter to CMA GSA Re Draft GSP (FINAL).pdf	<a href="https://portal.santaynezwater.org/service/document/download/887">https://portal.santaynezwater.org/service/document/download/887</a>
Steve Slack (CDFW)	WMA GSP Public Draft (Plan), September 2021 - Chapter 2: Section 2b: Groundwater Conditions	2b-40	Comment #1: Section 2b.6-1 Interconnected Surface Water for the Santa Ynez River Issue: The Draft GSP still does not provide enough information to conclude that the surface water is not hydraulically connected to the underlying water table. Page 2b-40 of the Draft GSP states, "The portion of the Santa Ynez River between the Lompoc Narrows and the Pacific Ocean is identified as seasonally interconnected surface water because at times surface water in this reach is hydraulically connected to the underlying water table in the principal aquifer. The reach is considered seasonally interconnected because the Santa Ynez River is dry for significant periods of time during the year, and as a result is not hydraulically connected to the underlying water table." Groundwater-dependent habitats, including ISWs, are particularly susceptible to changes in the depth of the groundwater. Lowered water tables that drop beneath the root zones can cut off phreatophyte vegetation from water resources, stressing or ultimately converting vegetated terrestrial habitat. Induced infiltration attributable to groundwater pumping can reverse hydraulic gradients and may cause streams to stop flowing such as in this case. This will compromise instream dissolved oxygen and cause temperature fluctuations that certain species cannot survive. The frequency and duration of exposure to lowered groundwater tables and low-flow or no-flow conditions caused by groundwater pumping, as well as habitat and species resilience, will dictate vulnerability to changes in groundwater elevation. Various aquatic species, such as the federal Endangered Species Act (FESA) listed species (NMFS 2013) SYR southern California steelhead (Oncorhynchus mykiss; steelhead), rely on perennial instream flow, and any interruption to flow can risk species survival. Recommendation #1(a): CDFW agrees that the Santa Ynez River (SYR) between Lompoc Narrows and the Pacific Ocean is an interconnected surface water. CDFW disagrees that this portion of the river is not hydraulically connected to the underlying water table. CDFW recommends the final GSP identify this area as potentially hydraulically connected, until the WMA-GSA collects enough data to prove otherwise. Recommendation #1(b): The Draft GSP indicates there is abnormal groundwater elevation fluctuations in this portion of the river. CDFW recommends a detailed evaluation of surface water-groundwater interactions, understanding the associated underground lithology is critical to understanding the reason this section of the river has low or no flow throughout the year. Furthermore, impacts caused by changes in groundwater elevation should also be considered in the evaluation of groundwater management effects on GDEs and ISW.	Western Management Area	10/26/2021 10:18 Santa Ynez WMA Draft GSP Comment Letter.pdf	<a href="https://portal.santaynezwater.org/service/document/download/879">https://portal.santaynezwater.org/service/document/download/879</a>

Steve Slack (CDFW)	WMA GSP Public Draft (Plan), September 2021 - Chapter 2: Section 2c: Water Budget	2c-8	<p>Comment #2: Section 2c.1-3 Surface Water and the Santa Ynez River Alluvium Issue: The Draft GSP does not provide enough information to conclude that surface waters do not affect groundwater levels. Page 2c-8 of the Draft GSP states, "In addition, as discussed in the HCM (Section 2a.2), the Santa Ynez River Alluvium upstream of the Lompoc Narrows is part of the subflow of the River, which is regulated by SWRCB. Because subflow is considered surface water and not groundwater, the Santa Ynez River Alluvium would not be classified as a principal aquifer or managed by a GSP under SGMA. Therefore, the Santa Ynez River Alluvium is considered part of the underflow of the Santa Ynez River and is treated as part of the surface water in the historical, current, and projected water budgets." The WMA-Hydrologic Conceptual Model (HCM) Memo states during downstream water right releases, water infiltrates and recharges the alluvium (WMA-HCM Memo, Page 27). The HCM Memo acknowledges that the younger alluvium in the upper aquifer is being recharged from water right releases. However, the WMA GSA has not provided enough information to properly identify and analyze the interconnectivity between the three zones of the upper aquifer and the relationship with the lower aquifer. The alluvium upstream of the Lompoc Narrows is an example in the Basin that has groundwater-surface water interactions based on groundwater recharge during downstream water right releases. CDFW believes this interaction also occurs during the natural flows of various seasons throughout the year. CDFW agrees that the Upper Aquifer is recharged from the surface water, but it is unclear how Upper Aquifer groundwater pumping should be regulated without direct input from the State Water Resources Control Board (SWRCB). The WMA-HCM Memo also states that groundwater in the WMA discharges to the Santa Ynez River when the groundwater elevation is higher than the stream channel thalweg. Groundwater discharge to the river will occur during wet winter and spring months. However, during the summer and dry winter months, the streamflow loses water to the groundwater aquifers of the Santa Ynez alluvium subarea and Lompoc Plain (WMA-HCM Memo, p.33). This is another example of an interconnected surface water that WMA-GSA describes in their WMA-HCM Memo but did not identify and analyze in the WMA-GC Memo. Recommendation #2(a): CDFW recommends the WMA-GSA provide justification, based on specific provisions of SGMA, for the conclusion that the Upper Aquifer should not be classified as a principal aquifer or managed by a GSP under SGMA. Alternatively, the WMA-GSA can provide direct input from SWRCB on the classification of the Upper Aquifer. CDFW believes the WMA-GSA must sustainably manage groundwater resources in the Upper Aquifer, in part because it supports GDEs. Furthermore, portions of the Upper Aquifer are interconnected with surface water and is currently identified as a principal aquifer under Department of Water Resources Bulletin 118 (DWR 2020). The communities within the WMA heavily rely on surface and subsurface diversions from the Upper Aquifer. Use of this Lower Aquifer water may become more appealing and economically viable in future years as Upper Aquifer pumping restrictions are placed to meet SGMA sustainable</p>	Western Management Area	10/26/2021 10:18 Santa Ynez WMA Draft GSP Comment Letter.pdf	<a href="https://portal.santaynezwater.org/service/document/download/880">https://portal.santaynezwater.org/service/document/download/880</a>
Steve Slack (CDFW)	WMA GSP Public Draft (Plan), September 2021 - Chapter 2: Section 2b: Groundwater Conditions	2b-43	<p>Comment #3: Section 2b.6-2 Interconnected Surface Water for Tributaries to the Santa Ynez River Issue: The Draft GSP still does not provide enough information to conclude that there are no interconnected surface waters within SYR tributaries. Page 2b-43 of the Draft GSP states, "All of the tributaries within the WMA (Figure 2b.6-1) are ephemeral. Several small streams flow year-round in canyons outside of the WMA and south of the Lompoc Plain (Bright et al. 1997). Once these flows reach the unconsolidated alluvial deposits within the boundary of the WMA, all of the flow infiltrates and recharges the groundwater. Thus, the perennial flows in these tributaries are not influenced by groundwater management actions in the WMA and would not be classified as having interconnected surface water under SGMA because they are disconnected from the water table in the primary aquifer and completely depleted." The Draft GSP does not provide enough information to conclude SYR tributaries do not meet the SGMA definition for interconnected surface water nor there are no interconnected surface waters within SYR tributaries. CDFW believes WMA-GSA has not provided adequate justification for its conclusion that the tributaries within the WMA do not meet SGMA's definition of interconnected surface waters simply because they do not receive measurable flow at all times of year. Under SGMA, a GSP is required to avoid unreasonable adverse impacts on beneficial uses of interconnected surface waters, defined as "surface water that is hydraulically connected at any point by a continuous saturated zone to the underlying aquifer, and the overlying surface water is not completely depleted." (Water Code 10721(x)(6) and 10727.2(b); 23 CCR 10721(x)(6); 23 CCR 351(o).) The WMA-GSA has not provided sufficient information for its conclusion that lack of measurable flow within the tributaries means the tributaries are completely depleted under this definition. Even assuming the tributaries are completely depleted during part of the year, there is no requirement within SGMA or its implementing regulations that surface waters have measurable surface flows at all times of the year to qualify as an interconnected surface water. To the extent that the tributaries are hydraulically connected and not completely depleted at any time of the year, they qualify as interconnected surface waters and warrant appropriate consideration in the GSP, including the goal to avoid depletions causing significant and unreasonable adverse impacts on beneficial uses. The interconnected surface water narrative also lacks specific estimations of the quantity and timing of streamflow depletions as required by California Code of Regulations, Title 23 354.16(f). The health of the steelhead population is a significant concern to CDFW. Managing the groundwater within the Santa Ynez River Valley is particularly critical to the survival and recovery of steelhead. Drought conditions and low flow rates have led CDFW to participate in rescue operations as recently as 2020. The SYR contains important steelhead spawning and rearing tributaries. Threats to steelhead, such as excessively high-water temperatures due to reduced surface flows or groundwater pumping in the spring, summer, and early fall, reduce</p>	Western Management Area	10/26/2021 10:18 Santa Ynez WMA Draft GSP Comment Letter.pdf	<a href="https://portal.santaynezwater.org/service/document/download/881">https://portal.santaynezwater.org/service/document/download/881</a>

Steve Slack (CDFW)	WMA GSP Public Draft (Plan), September 2021 - Chapter 2: Section 2a: Hydrogeologic Conceptual Model	2a-39	<p>Comment #4: Section 2a.4-2-1 Emerging Agricultural Crops: Cannabis Cultivation (Cannabis Priority Watershed)Issue: CDFW is concerned that cannabis groundwater use is not being fully accounted for when evaluating this SGMA area. Ignoring the growth potential of this industry could result in a lack of groundwater management accountability. Page 2a-39 of the Draft GSP states that the Santa Ynez River Valley is not identified as a Cannabis Priority Watershed with a high concentration of cannabis cultivation. CDFW has identified, in region, the Santa Ynez River Valley as a high priority watershed. Most projects distributed throughout this SGMA area are clustered within the San Miguelito Creek-Santa Ynez River, Nojoqui Creek, Santa Rosa Creek-Santa Ynez River, Salsipuedes Creek, Santa Rita Valley and Canada De La Vina-Santa Ynez River HUC 12 watersheds. This includes San Miguelito Creek, Salsipuedes Creek, and Santa Ynez River (critical steelhead streams) as well as Nojoqui Creek, Santa Rosa River, and the SYR tributaries (Dagit et. al 2020). The projects range from cultivation of 1-50 acres within the approximate 52 notifications the Department has received with the main source of water coming from groundwater wells. CDFW expects this type of trend to continue in the future. Groundwater and interconnected surface water are critical resources that do not recognize artificial boundaries. Since the implementation of legal cannabis cultivation, CDFW has received multiple applications within the Santa Ynez River Valley, especially in the HUC 12 watersheds listed above. Some of the cannabis grows can range from 1 - 50 acres, with multiple licenses on a property (resulting in several acres of cultivation) that are dependent on depths within the alluvium. Surface flows (and surface diversions) are regulated in large degree from dam releases, which emphasizes the large roll groundwater wells have in cannabis cultivation. Santa Ynez has sensitive, natural communities consisting of Oak woodlands, grasslands, sage scrub, chaparral, and riparian woodland habitats along the Santa Ynez River and SYR tributaries. According to the California Natural Diversity Database (CNDDB), the Santa Ynez River Valley provides habitat that supports several sensitive species (some listed as endangered or threatened) throughout their life cycles, including southwestern willow flycatcher (<i>Empidonax traillii extimus</i>), least Bell's vireo (<i>Vireo bellii pusillus</i>), red-legged frog (<i>Rana draytonii</i>), and seaside bird beak (<i>Cordylanthus rigidus ssp. littoralis</i>) (CDFW. 2019). Habitats that support these species also consist of phreatophytes and other vegetation communities that are dependent on shallow aquifers that support surface water in each of these systems. Phreatophytic vegetation is a critical contributor to nesting and foraging habitat, forage for a wide range of species and can be affected by sensitive depth to groundwater threshold impacts (Naumburg et.al. 2005) and (Froend et. al. 2010). This sensitivity to groundwater level thresholds means that localized pumping and recharge actions altering groundwater levels can impact the health and extent of phreatophyte vegetation health. Both decreasing (drying out) or increasing (drowning) groundwater elevation has the potential to stress phreatophytes depending on the plant species, groundwater elevation and duration (e.g., short term wetness/dryness versus</p>	Western Management Area	10/26/2021 10:18 Santa Ynez WMA Draft GSP Comment Letter.pdf	<a href="https://portal.santaynezwater.org/service/document/download/882">https://portal.santaynezwater.org/service/document/download/882</a>
Steve Slack (CDFW)	WMA GSP Public Draft (Plan), September 2021 - Chapter 2: Section 2a: Hydrogeologic Conceptual Model	2b-41-44	<p>Comment #5: Section 2a.4-2-1 Emerging Agricultural Crops: Cannabis CultivationIssue #5.1: Without the designation of the Santa Ynez River Valley as a Cannabis High Priority Watershed, evaluation of cannabis crop water usage may be overlooked throughout the Santa Ynez River Valley Groundwater Basin, especially within the eastern and northern portions of the Lompoc Plain near the SYR and tributaries to the SYR, areas that, as stated on pages 2b-41 to 2b-44, will not be managed under SGMA by the WMA GSA. Page 2a-40 of the Draft GSP states, Table 2a.4-3 summarizes the status of current applications by parcel within the WMA to the County of Santa Barbara for cannabis Land Use Permits. Within the WMA, 78% of the cannabis applications are for parcels that in 2016 were used for agriculture. This indicates primarily a change of crop type, rather than an expansion of agriculture land use. Cannabis cultivation is a water intensive crop that can have a significant impact to environmental beneficial users of groundwater. Cannabis groundwater wells provide water for the irrigation of water-intensive cannabis cultivation (assuming six gallons of water per day per plant) (Bauer S. 2015). Just within the Santa Ynez Alluvium, CDFW has received approximately 26 cannabis projects. These projects range from cultivation of 3.5-50.0 acres with water supplied from groundwater wells. Many of the wells for the cannabis notifications within Santa Ynez Valley are shallow wells located within or immediately adjacent to tributary streams and Santa Ynez River. CDFW is concerned that without management of the Santa Ynez Alluvium under SGMA by the WMA GSA, significant and unreasonable surface water depletions may occur, compromising groundwater dependent ecosystems within and along the streams. Recommendation #5.1(a): CDFW recommends a more careful review of the existing information on cannabis cultivation within the Santa Ynez alluvium and recommends the information be considered when evaluating groundwater management. As indicated on page 2a-27, Key areas for recharge to the Lower Aquifer include along the Purissima Hills in the Lompoc Upland and Santa Rita Upland, and to a lesser extent in the Lompoc Terrace and Burton Mesa. Additionally, the Lompoc Plain receives most of its substantial recharge from the Santa Ynez River and much lesser quantities from percolation of runoff in the tributaries in the adjoining subareas. Percolation from the Santa Ynez River channel is the most important source of recharge for the Lompoc Plain, and is controlled by the magnitude and timing of releases from Cachuma Reservoir. The majority of cannabis cultivation rely on groundwater for cannabis crops irrigation, and the likely interconnected nature of the Santa Ynez River suggests that such uses (individually or cumulatively) should be considered when evaluating cannabis impacts in the Santa Ynez alluvium. Recommendation #5.1(b): CDFW recommends the Santa Ynez River Valley be classified as a Cannabis High Priority Watershed. Issue #5.2: The majority reliance on groundwater for cannabis crops irrigation, and the likely interconnected nature of the Santa Ynez River suggests that such uses (individually or cumulatively) should be considered when evaluating cannabis impacts in the Santa Ynez alluvium. As indicated on page 2a-27, Key areas for recharge to</p>	Western Management Area	10/26/2021 10:18 Santa Ynez WMA Draft GSP Comment Letter.pdf	<a href="https://portal.santaynezwater.org/service/document/download/883">https://portal.santaynezwater.org/service/document/download/883</a>

Steve Slack (CDFW)	WMA GSP Public Draft (Plan), September 2021 - Chapter 2: Section 2b: Groundwater Conditions	2b-45	<p>Comment #6: Section 2b.6-3 Groundwater Dependent Ecosystems in the Western Management Area Issue: The Draft GSP still does not provide enough information to conclude that potential GDEs should be excluded from the GSP and has not addressed CDFW comments on the previously released technical memos. Page 2b-45 of the Draft GSP states that "These potential GDEs were assessed into three categories based on the relationship to the aquifer (Figure 2b.6-3). If depth to groundwater has historically exceeded the 30-foot depth identified by the Nature Conservancy as representative of groundwater conditions that may sustain common phreatophytes and wetland ecosystems (Rohde et al. 2018), the potential GDE was identified as unlikely to be affected by groundwater management (Category C on Figure 2b.6-3). Riparian areas of the Santa Ynez River were identified as being managed by the SWRCB as part of Santa Ynez River surface and subflow (Category B on Figure 2b.6-3). The remaining area consists of GDEs likely related to groundwater levels (Category A on Figure 2b.6-3). Table 2b.6-2 below summarizes the land areas involved."</p> <p>Table 2b.6-2: Potential WMA Groundwater Dependent Ecosystem Categorization</p> <table border="1"> <thead> <tr> <th>Potential GDE Category</th> <th>Description</th> <th>Acres</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Potential GDE Associated with a Principal Aquifer</td> <td>2,256</td> <td>44%</td> </tr> <tr> <td>B</td> <td>Riparian vegetation not subject to SGMA</td> <td>1,201</td> <td>23%</td> </tr> <tr> <td>C</td> <td>Unlikely to be Affected by Groundwater Management</td> <td>1,704</td> <td>33%</td> </tr> <tr> <td><b>Total</b></td> <td></td> <td><b>5,161</b></td> <td><b>100%</b></td> </tr> </tbody> </table> <p>The potential GDEs were assessed into three categories based on their relationship to the aquifer but it is unclear if they were categorized any further. It is also unclear and unknown if there are any GDEs in the Draft GSP that will be protected and monitored into the future. Recommendation #6(a): CDFW recommends the WMA-GSA evaluate potential effects on each GDE unit based on at least four criteria, such as: 1) groundwater dependence; 2) ecological value (high, moderate, low); 3) ecological condition (good, fair, poor) using Normalized Difference Vegetation Index/ Normalized Difference Moisture Index data; and, 4) susceptibility to changing groundwater conditions (high, moderate, low) based on available hydrologic data, climate change projections and GDE susceptibility classifications using a baseline range to consider future changes in groundwater conditions. Recommendation #6(b): CDFW recommends the WMA-GSA include, at a minimum, the GDEs identified within the Basin in the final GSP. The WMA-GSA has not provided enough data to conclude that the Lower Aquifer groundwater pumping definitively does not affect GDEs within the Basin. If the WMA-GSA reaches that conclusion in the future, then then Sustainable Management Criteria for GDEs would no longer be needed. CDFW strongly disagrees with entirely excluding GDEs present in the Basin without enough data to conclude GDEs are not impacted by groundwater pumping. Recommendation #6(c): CDFW recommends the WMA-GSA identify potential impacts to fish and wildlife beneficial uses, users of groundwater, and interconnected surface waters caused by depletions of groundwater. Furthermore, the evaluation should consider species water needs for all life history stages when defining undesirable results and setting minimum thresholds required by SGMA. For example, CDFW recommends the evaluation describe flow conditions necessary</p>	Potential GDE Category	Description	Acres	Percentage	A	Potential GDE Associated with a Principal Aquifer	2,256	44%	B	Riparian vegetation not subject to SGMA	1,201	23%	C	Unlikely to be Affected by Groundwater Management	1,704	33%	<b>Total</b>		<b>5,161</b>	<b>100%</b>	Western Management Area	10/26/2021 10:18 Santa Ynez WMA Draft GSP Comment Letter.pdf	<a href="https://portal.santaynezwater.org/service/document/download/884">https://portal.santaynezwater.org/service/document/download/884</a>
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Steve Slack (CDFW)	WMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	<p>GENERAL COMMENTS AND RECOMMENDATIONS</p> <p>Comment #7: Sensitive Species and Habitat Issue: Many sensitive species and habitats in the Santa Ynez WMA comprise of GDEs, the natural communities that rely on groundwater to sustain all or a portion of their water needs. Some of the special-status species in the Santa Ynez River watershed that rely on surface water supported and supplemented by groundwater include the federally endangered steelhead; southwestern pond turtle (<i>Actinemys pallida</i>), a CDFW species of special concern (SSC) and U.S. Forest Service sensitive species; California red-legged frog (<i>Rana draytonii</i>), a CDFW SSC and ESA-listed species; western spadefoot toad (<i>Spea hammondi</i>), a CDFW SSC and Bureau of Land Management sensitive species; and California tiger salamander (<i>Ambystoma californiense</i>), an ESA-listed and California Endangered Species Act (CESA)-listed species. Some of the special-status species in the SYR watershed that rely on surface water supported and supplemented by groundwater include the federally endangered steelhead; southwestern pond turtle (<i>Actinemys pallida</i>), a CDFW species of special concern (SSC) and U.S. Forest Service sensitive species; California red-legged frog (<i>Rana draytonii</i>), a CDFW SSC and ESA-listed species; western spadefoot toad (<i>Spea hammondi</i>), a CDFW SSC and Bureau of Land Management sensitive species; and California tiger salamander (<i>Ambystoma californiense</i>), an ESA-listed and California Endangered Species Act (CESA)-listed species. Southwestern pond turtle was designated as a California SSC in 1994. Western pond turtle's preferred habitat is permanent ponds, lakes, streams, or permanent pools along intermittent streams associated with standing and slow-moving water. A potentially important limiting factor for western pond turtle is the relationship between water level and flow in off-channel water bodies, which can both be affected by groundwater pumping. California red-legged frog is rarely encountered far from perennial water. Tadpoles require water for at least three or four months while completing their aquatic development. Adults eat both aquatic and terrestrial invertebrates, and the tadpoles graze along rocky stream bottoms. Groundwater pumping that impairs streamflow could have negative impacts on California red-legged frog populations. Western spadefoot toad migrates to seasonal vernal pools to reproduce. They will use small puddles of water, such as small pools to breed. California tiger salamander is also restricted to vernal pools and seasonal ponds for reproduction. If groundwater depletion results in reduced streamflow due to interconnected surface waters, the nesting and foraging success of flycatcher, least Bell's vireo, and other bird species may be diminished due to the reduced nesting habitat and food availability. The unsustainable use of groundwater can impact the shallow aquifers and interconnected surface waters on which these species and GDEs depend. This may lead to adverse impacts on fish and wildlife and the habitat they need to survive. Determining the effects that groundwater levels have on surface water flows in the WMA would provide an understanding of how the groundwater levels may be associated with the health and abundance of riparian vegetation. Poorly managed groundwater pumping, and surface water flows have the potential to reduce the</p>	Western Management Area	10/26/2021 10:18 Santa Ynez WMA Draft GSP Comment Letter.pdf	<a href="https://portal.santaynezwater.org/service/document/download/885">https://portal.santaynezwater.org/service/document/download/885</a>																				
Steve Slack (CDFW)	WMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	<p>GENERAL COMMENTS AND RECOMMENDATIONS</p> <p>Comment #8: Draft GSP vs. Final GSP Issue: The GSA may need to revise the GSP before it is finalized an adopted by the GSA. Recommendation #8: CDFW recommends the WMA-GSA provide a red-lined version of the final GSP to understand the changes made between the Draft GSP and final GSP. Alternatively, CDFW recommends the GSA provide a summary of changes made and comments addressed by the GSA in preparation of a final GSP. CONCLUSION CDFW has significant concerns about ISWs for the SYR, and its tributaries, and surface water and the SYR alluvium, interconnected surface water for tributaries to the SYR, cannabis cultivation into the future and CDFW urges the WMA-GSA to plan for and engage in responsible groundwater management that minimizes or avoids these impacts to the maximum extent feasible as required under applicable provisions of SGMA and the Public Trust Doctrine.</p>	Western Management Area	10/26/2021 10:18 Santa Ynez WMA Draft GSP Comment Letter.pdf	<a href="https://portal.santaynezwater.org/service/document/download/886">https://portal.santaynezwater.org/service/document/download/886</a>																				
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-34	<p>4a.3-3-1 The GSP states that, "These Annual Pumping Allocations could be used for the purpose of assigning pumping fees (Augmentation Fees). There should be some explanation as to how these Augmentation Fees are different than the Tiered Fees described above."</p>	Western Management Area	10/25/2021 18:55 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/868">https://portal.santaynezwater.org/service/document/download/868</a>																				

Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-36	4a.3-3-3&#x2013;The GSP states, &#x201c;The WMA GSA will work with groundwater users in the WMA to determine an equitable process for assigning allocations. The beneficial uses of groundwater will subsequently be evaluated based on water rights priorities. Accordingly, all groundwater users and uses will be equitably considered and prioritized, as required by SGMA.&#x201d;These sentences do not make it clear whether the GSA will attempt to follow a water right priority-based approach or some other equitable approach. To avoid concern or confusion, suggest stating that the allocation criteria will be developed at a future date.	Western Management Area	10/25/2021 18:55	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/869">https://portal.santaynezwater.org/service/document/download/869</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-36	4a.3-3-3&#x2013;The GSP states, &#x201c;The WMA GSA will work with groundwater users in the WMA to determine an equitable process for assigning allocations. The beneficial uses of groundwater will subsequently be evaluated based on water rights priorities. Accordingly, all groundwater users and uses will be equitably considered and prioritized, as required by SGMA.&#x201d;These sentences do not make it clear whether the GSA will attempt to follow a water right priority-based approach or some other equitable approach. To avoid concern or confusion, suggest stating that the allocation criteria will be developed at a future date.	Western Management Area	10/25/2021 18:55	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/870">https://portal.santaynezwater.org/service/document/download/870</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	Thank you for your consideration of these comments, and Lompoc looks forward to continued cooperation on developing/finalizing the GSP and moving forward through its implementation.	Western Management Area	10/25/2021 18:55	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/871">https://portal.santaynezwater.org/service/document/download/871</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	Thank you for your consideration of these comments, and Lompoc looks forward to continued cooperation on developing/finalizing the GSP and moving forward through its implementation.	Western Management Area	10/25/2021 18:55	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/872">https://portal.santaynezwater.org/service/document/download/872</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management	Page 4a-19	4a.2-2-8&#x2013;As noted previously, Water Code section 10725.4 concerns investigations. The specific fee authority is in Water Code sections 10730 and 10730.2.	Western Management Area	10/25/2021 18:55	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/862">https://portal.santaynezwater.org/service/document/download/862</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management	Page 4a-23	4a.2-3-5&#x2013;The reduction in wastewater flow associated with this recycled water project would require approval by the State Water Board. See Water Code section 1211.	Western Management Area	10/25/2021 18:55	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/863">https://portal.santaynezwater.org/service/document/download/863</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management	Page 4a-23	4a.2-3-5&#x2013;The reduction in wastewater flow associated with this recycled water project would require approval by the State Water Board. See Water Code section 1211.	Western Management Area	10/25/2021 18:55	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/864">https://portal.santaynezwater.org/service/document/download/864</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management	Page 4a-31	4a.3-1-1&#x2013;Explain the criteria that SYRWCD&#x201c;s uses to assess a request for a Below Narrows Account&#x201c;release.	Western Management Area	10/25/2021 18:55	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/865">https://portal.santaynezwater.org/service/document/download/865</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management	Page 4a-31	4a.3-1-1&#x2013;Explain the criteria that SYRWCD&#x201c;s uses to assess a request for a Below Narrows Account&#x201c;release.	Western Management Area	10/25/2021 18:55	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/866">https://portal.santaynezwater.org/service/document/download/866</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-34	4a.3-3-1&#x2013;The GSP states that, &#x201c;These Annual Pumping Allocations could be used for the purpose of assigning pumping fees (Augmentation Fees).&#x201d;There should be some explanation as to how these Augmentation Fees are different than the Tiered Fees described above.	Western Management Area	10/25/2021 18:55	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/867">https://portal.santaynezwater.org/service/document/download/867</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-8	B. Specific Comments 3b.2-1 Chronic Lowering of Groundwater Levels&#x2013;Undesirable Results (URs) are defined by water levels below the MT in 50% of the RMS. However, the text is not clear whether this definition applies to each principal aquifer or both aquifers and all the RMS combined. The criteria should apply to each principal aquifer as follows: 50% of the RMS in the Upper Aquifer and 50% of the RMS in the Lower Aquifer.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/730">https://portal.santaynezwater.org/service/document/download/730</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-8	B. Specific Comments 3b.2-1 Chronic Lowering of Groundwater Levels&#x2013;Undesirable Results (URs) are defined by water levels below the MT in 50% of the RMS. However, the text is not clear whether this definition applies to each principal aquifer or both aquifers and all the RMS combined. The criteria should apply to each principal aquifer as follows: 50% of the RMS in the Upper Aquifer and 50% of the RMS in the Lower Aquifer.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/731">https://portal.santaynezwater.org/service/document/download/731</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	4.The GSP identifies increased water conservation as a potential PMA, and cites data regarding the current per capita water use of Lompoc, Mission Hills CSD, Vandenberg AFB, and Vandenberg Village CSD. This water use data demonstrates that Lompoc (and its citizens) have proactively taken the steps necessary to achieve significant water conservation. The GSP should reflect this fact and acknowledge that any conservation-based efforts to address WMA groundwater conditions must be enforced in an equitable manner, recognizing the past and present efforts of those jurisdictions that are already contributing to a sustainable WMA basin through water conservation programs.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/732">https://portal.santaynezwater.org/service/document/download/732</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management	Page 4a-13	Section 4a.2-1-2&#x2013;What is the basis for the estimated potential yield from water conservation activities?	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/733">https://portal.santaynezwater.org/service/document/download/733</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	4.The GSP identifies increased water conservation as a potential PMA, and cites data regarding the current per capita water use of Lompoc, Mission Hills CSD, Vandenberg AFB, and Vandenberg Village CSD. This water use data demonstrates that Lompoc (and its citizens) have proactively taken the steps necessary to achieve significant water conservation. The GSP should reflect this fact and acknowledge that any conservation-based efforts to address WMA groundwater conditions must be enforced in an equitable manner, recognizing the past and present efforts of those jurisdictions that are already contributing to a sustainable WMA basin through water conservation programs.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/734">https://portal.santaynezwater.org/service/document/download/734</a>



Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-8	B. Specific Comments3b.2-1 Chronic Lowering of Groundwater Levels&#x2013;The Triggers appear to be arbitrarily selected and will likely be ineffective. For example, the Trigger for the Upper Aquifer RMS &#x2013;Lompoc 2&#x2013;5 feet below the Spring 2020 water level. During extended dry periods, the observed water level decline in Lompoc 2 was 4 to almost 6 ft/yr. Hence, during a period of declining water levels the MT (10 feet below 2020 water level) would be reached in 1 to 2 years after reaching the Trigger. Any mitigation must therefore be effective within one year of implementation. Other than requesting a water rights release, which is dependent on the Below Narrows Account, what other specific projects and management actions would be effective in this short time frame should a water rights release not occur? This fallback plan must be made clear as part of GSP implementation, and its effectiveness verified using the numerical groundwater model. Without this plan, the definition of URs and action levels for the Trigger Points must be revised to be more protective of the City&#x2013;s water supply. For example, the percentage of RMS exceeding the MT/Trigger Point can be reduced to something less than 50%. Alternatively, the RMS that represent conditions near and within the City can be weighted higher than the RMS west of the City, ensuring that actions to protect the City water supply are initiated promptly. The numerical groundwater model can be employed to confirm that these revised definitions and action levels provide adequate time for the groundwater system to respond to the specific projects and management actions that form the requested fallback plan.	Western Management Area	10/25/2021 18:54 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/735">https://portal.santaynezwater.org/service/document/download/735</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-8	B. Specific Comments3b.2-1 Chronic Lowering of Groundwater Levels&#x2013;The Triggers appear to be arbitrarily selected and will likely be ineffective. For example, the Trigger for the Upper Aquifer RMS &#x2013;Lompoc 2&#x2013;5 feet below the Spring 2020 water level. During extended dry periods, the observed water level decline in Lompoc 2 was 4 to almost 6 ft/yr. Hence, during a period of declining water levels the MT (10 feet below 2020 water level) would be reached in 1 to 2 years after reaching the Trigger. Any mitigation must therefore be effective within one year of implementation. Other than requesting a water rights release, which is dependent on the Below Narrows Account, what other specific projects and management actions would be effective in this short time frame should a water rights release not occur? This fallback plan must be made clear as part of GSP implementation, and its effectiveness verified using the numerical groundwater model. Without this plan, the definition of URs and action levels for the Trigger Points must be revised to be more protective of the City&#x2013;s water supply. For example, the percentage of RMS exceeding the MT/Trigger Point can be reduced to something less than 50%. Alternatively, the RMS that represent conditions near and within the City can be weighted higher than the RMS west of the City, ensuring that actions to protect the City water supply are initiated promptly. The numerical groundwater model can be employed to confirm that these revised definitions and action levels provide adequate time for the groundwater system to respond to the specific projects and management actions that form the requested fallback plan.	Western Management Area	10/25/2021 18:54 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/736">https://portal.santaynezwater.org/service/document/download/736</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	5. There may be opportunities for the GSA members to implement projects and management actions to benefit the basin. The GSP should acknowledge and encourage its members to undertake such projects/actions, and the GSA should incentivize members with a system of rules that provide groundwater credits. For example, members with recycled water might be able to use or transfer that water to be used in lieu of groundwater. Or, members may engage in groundwater recharge and recovery projects that are best incentivized with a system of credits.	Western Management Area	10/25/2021 18:54 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/739">https://portal.santaynezwater.org/service/document/download/739</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-14	4a.2-1-3&#x2013;The GSP states that &#x2013;conservation efforts are a necessary tool to achieve the WMA&#x2013;s sustainability goal.&#x2013;The estimated average annual deficit, however, is 1,000-2,000 AFY. The potential yield from the conservation measures, metering, and fees is 2,000-4,000 AFY. Thus, it is not clear that developing and expanding conservation efforts are &#x2013;necessary&#x2013;to reach sustainability. The GSP should state that the actions are recommended to maintain sustainability under future projected conditions. See comments above about Lompoc&#x2013;s significant existing conservation efforts.	Western Management Area	10/25/2021 18:54 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/737">https://portal.santaynezwater.org/service/document/download/737</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	5. There may be opportunities for the GSA members to implement projects and management actions to benefit the basin. The GSP should acknowledge and encourage its members to undertake such projects/actions, and the GSA should incentivize members with a system of rules that provide groundwater credits. For example, members with recycled water might be able to use or transfer that water to be used in lieu of groundwater. Or, members may engage in groundwater recharge and recovery projects that are best incentivized with a system of credits.	Western Management Area	10/25/2021 18:54 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/738">https://portal.santaynezwater.org/service/document/download/738</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-9	3b.2-2 Cumulative Change in Groundwater Storage &#x2013;Section 2b.2-1 reports 15,000 AF cumulative decline in storage during 1982-2018, whereas Table 2c.2-6 reports 36,734 AF cumulative decline in storage during the same period. The two results represent different areas, yet only one value is needed for the GSP and should be reported (the one for the entire WMA). Reporting more than one value confuses the issue and will confuse DWR.	Western Management Area	10/25/2021 18:54 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/740">https://portal.santaynezwater.org/service/document/download/740</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-9	3b.2-2 Cumulative Change in Groundwater Storage &#x2013;Section 2b.2-1 reports 15,000 AF cumulative decline in storage during 1982-2018, whereas Table 2c.2-6 reports 36,734 AF cumulative decline in storage during the same period. The two results represent different areas, yet only one value is needed for the GSP and should be reported (the one for the entire WMA). Reporting more than one value confuses the issue and will confuse DWR.	Western Management Area	10/25/2021 18:54 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/741">https://portal.santaynezwater.org/service/document/download/741</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	6. The GSP references a contractual water supply from the State Water Project (SWP) as a potential PMA to address conditions in the basin. Lompoc&#x2013;s citizens have twice been presented with the option of pursuing a SWP water contract and twice rejected the funding mechanism. The GSP should recognize this reality and remove SWP supplies as a potential PMA.	Western Management Area	10/25/2021 18:54 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/742">https://portal.santaynezwater.org/service/document/download/742</a>

Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-15	4a.2-1-8 By relying on Water Code section 10726.4, it implies that this management action is focused on mandatory conservation, i.e., an allocation plan. See the comment above about mandatory conservation. It seems like Group 1 should be voluntary and rebate based, and allocations should remain in Group 3. Also, Water Code section 10725.4 should not be cited for a GSA's fee-imposition authority because it concerns investigations. The specific fee authority is in Water Code sections 10730 and 10730.2, though it does not appear that conservation measures will depend on fee-imposition authority.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/743">https://portal.santaynezwater.org/service/document/download/743</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-12	Section 4a-2-1-1 The GSP states in conjunction with County staff, the WMA GSA can explore whether industrial water demands can be met by alternative non-potable supplies (e.g., recycled water and/or brackish water). Is this considered part of a Group 1 recycled water project? If not, this seems out of place in Group 1, and should perhaps be part of a supplemental supply program in Group 4.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/724">https://portal.santaynezwater.org/service/document/download/724</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	3. The GSP provides no explanation of how the groundwater storage benefits from the Project and Management Actions (PMA) were quantified, which precludes third-party assessment of their certainty and reliability.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/725">https://portal.santaynezwater.org/service/document/download/725</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-7	B. Specific Comments 3b.2-1 Chronic Lowering of Groundwater Levels The number of wells with exposed well screens, expressed as a percentage, is utilized as a quantitative indicator for significant and unreasonable effects. However, the Minimum Threshold (MT) for the Upper and Lower aquifers was based primarily on historical water levels. A substantial amount of work is reported calculating the differences between the percentage of exposed well screens under 2020 water levels and proposed MTs, but there is no meaningful difference in the results. The MT for the Upper Aquifer was ultimately defined as 10-feet below the Spring 2020 levels, and in the Lower Aquifer the MT was defined as 20-feet below Spring 2020 levels. A more direct argument would develop the MTs from the historical water levels and then utilize the small differences in exposed well screen percentages to confirm the MTs protect against significant and unreasonable effects.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/727">https://portal.santaynezwater.org/service/document/download/727</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-13	Section 4a.2-1-2 States that conservation measures will reduce demand from baseline conditions to approximately 10% to 20% of current groundwater production. Is this with mandatory conservation? See comment above regarding moving mandatory conservation to Group 3. If mandatory conservation is moved to Group 3, this savings number may change. Also, it looks like the 10-20% reduction assumes implementation of tiered fees, but see the comment above concerning tiered fees, which are not management actions of their own, but rather a means to implement management actions.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/726">https://portal.santaynezwater.org/service/document/download/726</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-7	B. Specific Comments 3b.2-1 Chronic Lowering of Groundwater Levels The number of wells with exposed well screens, expressed as a percentage, is utilized as a quantitative indicator for significant and unreasonable effects. However, the Minimum Threshold (MT) for the Upper and Lower aquifers was based primarily on historical water levels. A substantial amount of work is reported calculating the differences between the percentage of exposed well screens under 2020 water levels and proposed MTs, but there is no meaningful difference in the results. The MT for the Upper Aquifer was ultimately defined as 10-feet below the Spring 2020 levels, and in the Lower Aquifer the MT was defined as 20-feet below Spring 2020 levels. A more direct argument would develop the MTs from the historical water levels and then utilize the small differences in exposed well screen percentages to confirm the MTs protect against significant and unreasonable effects.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/728">https://portal.santaynezwater.org/service/document/download/728</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	3. The GSP provides no explanation of how the groundwater storage benefits from the Project and Management Actions (PMA) were quantified, which precludes third-party assessment of their certainty and reliability.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/729">https://portal.santaynezwater.org/service/document/download/729</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-8	B. Specific Comments 3b.2-1 Chronic Lowering of Groundwater Levels Undesirable Results (URs) are defined by water levels below the MT in 50% of the RMS. However, the text is not clear whether this definition applies to each principal aquifer or both aquifers and all the RMS combined. The criteria should apply to each principal aquifer as follows: 50% of the RMS in the Upper Aquifer and 50% of the RMS in the Lower Aquifer.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/763">https://portal.santaynezwater.org/service/document/download/763</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-8	B. Specific Comments 3b.2-1 Chronic Lowering of Groundwater Levels Undesirable Results (URs) are defined by water levels below the MT in 50% of the RMS. However, the text is not clear whether this definition applies to each principal aquifer or both aquifers and all the RMS combined. The criteria should apply to each principal aquifer as follows: 50% of the RMS in the Upper Aquifer and 50% of the RMS in the Lower Aquifer.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/762">https://portal.santaynezwater.org/service/document/download/762</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-29	3b.3-4 Degraded Water Quality Minimum Thresholds There appear to be conflicting statements regarding salt and nutrient concentrations. The text states their concentrations currently exceed the WQOs. To support efforts to improve groundwater quality the MT concentrations are established near current concentrations. If current concentrations exceed the WQOs, how does establishing the criteria at current concentrations improve water quality? Similarly, the text states that the average MT concentrations are below the WQOs. It is not clear how current concentrations can be both greater than and less than WQOs.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/764">https://portal.santaynezwater.org/service/document/download/764</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management	Page 4a-31	4a.3-1-1 Explain the criteria that SYRWCD uses to assess a request for a Below Narrows Account release.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/765">https://portal.santaynezwater.org/service/document/download/765</a>

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Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-29	3b.3-4 Degraded Water Quality Minimum ThresholdsThe GSA is not required to address URs that occurred before and have not been corrected by January 1, 2015 (A, A§ 10727.2(b)(4)). The approach toward water quality thresholds should be do no harm relative to 2015 conditions. Accordingly, the MT should be set at the Water Quality Objectives determined by the CCWQCP, and the Measurable Objectives (MO) should be set at some fraction (e.g., 80%) of the MT. As a result, the sustainability goal for the GSP is to maintain groundwater quality acceptable to the prescribed beneficial uses, and URs occur when GSP implementation causes the water quality to exceed Water Quality Objectives.	Western Management Area	10/25/2021 18:54 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/767">https://portal.santaynezwater.org/service/document/download/767</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-8	B. Specific Comments3b.2-1 Chronic Lowering of Groundwater LevelsThe Triggers appear to be arbitrarily selected and will likely be ineffective. For example, the Trigger for the Upper Aquifer RMS is 5 feet below the Spring 2020 water level. During extended dry periods, the observed water level decline in Lompoc 2 was 4 to almost 6 ft/yr. Hence, during a period of declining water levels the MT (10 feet below 2020 water level) would be reached in 1 to 2 years after reaching the Trigger. Any mitigation must therefore be effective within one year of implementation. Other than requesting a water rights release, which is dependent on the Below Narrows Account, what other specific projects and management actions would be effective in this short time frame should a water rights release not occur? This fallback plan must be made clear as part of GSP implementation, and its effectiveness verified using the numerical groundwater model. Without this plan, the definition of URs and action levels for the Trigger Points must be revised to be more protective of the City's water supply. For example, the percentage of RMS exceeding the MT/Trigger Point can be reduced to something less than 50%. Alternatively, the RMS that represent conditions near and within the City can be weighted higher than the RMS west of the City, ensuring that actions to protect the City water supply are initiated promptly. The numerical groundwater model can be employed to confirm that these revised definitions and action levels provide adequate time for the groundwater system to respond to the specific projects and management actions that form the requested fallback plan.	Western Management Area	10/25/2021 18:54 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/768">https://portal.santaynezwater.org/service/document/download/768</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-30	3b.3-4-1 Nitrate Minimum ThresholdThere is confusion in concentration units for the Water Quality Objectives in Table 3b.2-2, the MT reported in Table 3b.3-2, and the MT reported in the text. Use one consistent set of units.	Western Management Area	10/25/2021 18:54 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/769">https://portal.santaynezwater.org/service/document/download/769</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-34	4a.3-3-1The GSP states that, These Annual Pumping Allocations could be used for the purpose of assigning pumping fees (Augmentation Fees). There should be some explanation as to how these Augmentation Fees are different than the Tiered Fees described above.	Western Management Area	10/25/2021 18:54 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/771">https://portal.santaynezwater.org/service/document/download/771</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-9	3b.2-2 Cumulative Change in Groundwater StorageSection 2b.2-1 reports 15,000 AF cumulative decline in storage during 1982-2018, whereas Table 2c.2-6 reports 36,734 AF cumulative decline in storage during the same period. The two results represent different areas, yet only one value is needed for the GSP and should be reported (the one for the entire WMA). Reporting more than one value confuses the issue and will confuse DWR.	Western Management Area	10/25/2021 18:54 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/770">https://portal.santaynezwater.org/service/document/download/770</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-29	3b.3-4 Degraded Water Quality Minimum ThresholdsThere appear to be conflicting statements regarding salt and nutrient concentrations. The text states their concentrations currently exceed the WQOs. support efforts to improve groundwater quality the MT concentrations are established near current concentrations. If current concentrations exceed the WQOs, how does establishing the criteria at current concentrations improve water quality? Similarly, the text states that the average MT concentrations are below the WQOs. It is not clear how current concentrations can be both greater than and less than WQOs.	Western Management Area	10/25/2021 18:54 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/773">https://portal.santaynezwater.org/service/document/download/773</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-9	3b.2-2 Cumulative Change in Groundwater StorageSection 2b.2-1 reports 15,000 AF cumulative decline in storage during 1982-2018, whereas Table 2c.2-6 reports 36,734 AF cumulative decline in storage during the same period. The two results represent different areas, yet only one value is needed for the GSP and should be reported (the one for the entire WMA). Reporting more than one value confuses the issue and will confuse DWR.	Western Management Area	10/25/2021 18:54 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/772">https://portal.santaynezwater.org/service/document/download/772</a>

Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-36	4a.3-3-3&#x2013;The GSP states, &#x201c;The WMA GSA will work with groundwater users in the WMA to determine an equitable process for assigning allocations. The beneficial uses of groundwater will subsequently be evaluated based on water rights priorities. Accordingly, all groundwater users and uses will be equitably considered and prioritized, as required by SGMA.&#x201c;These sentences do not make it clear whether the GSA will attempt to follow a water right priority-based approach or some other equitable approach. To avoid concern or confusion, suggest stating that the allocation criteria will be developed at a future date.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/775">https://portal.santaynezwater.org/service/document/download/775</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-31	3b.3-6 Depletion of Interconnected Surface Water &#x201c; Minimum Thresholds&#x201c; This section lacks a discussion of the relationships between recharge, pumping, and surface water depletions. Per 23 C.C.R. &#x201c; 354.28(c)(6) the MT for depletions of interconnected surface water shall be the rate or volume of surface water depletions, and supported by (A) the location, quantity, and timing of depletions of interconnected surface water; and (B) A description of the groundwater and surface water model used to quantify surface water depletion (if a numerical groundwater and surface water model is not used to quantify surface water depletion, the Plan shall identify and describe an equally effective method, tool, or analytical model to accomplish these requirements). This information is available from the numerical model developed for the WMA and needs to be extracted, analyzed and discussed in the GSP.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/774">https://portal.santaynezwater.org/service/document/download/774</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management	Page 4a-13	Section 4a.2-1-2&#x201c;What is the basis for the estimated potential yield from water conservation activities?	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/815">https://portal.santaynezwater.org/service/document/download/815</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-10	3b.2-2 Cumulative Change in Groundwater Storage&#x201c; The regulations define the MT for groundwater storage as a volume: &#x201c;The minimum threshold for reduction of groundwater storage shall be a total volume of groundwater that can be withdrawn from the basin without causing conditions that may lead to undesirable results.&#x201c; 23 C.C.R. &#x201c; 354.28 (c)(2). The GSP seeks to employ water levels as proxy to storage volumes, however it fails to demonstrate a correlation between the water level changes at the RMS and the corresponding calculated groundwater storage changes in the WMA. Alternatively, the GSP could show that when water levels at the RMS decline to the MTs, the resulting change in groundwater storage is not significant and unreasonable (in other words, the Sustainable Management Criteria [SMCs] for Chronic Lowering of Groundwater Levels protect against significant and unreasonable changes in groundwater storage).	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/744">https://portal.santaynezwater.org/service/document/download/744</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	6.The GSP references a contractual water supply from the State Water Project (SWP) as a potential PMA to address conditions in the basin. Lompoc&#x201c;s citizens have twice been presented with the option of pursuing a SWP water contract and twice rejected the funding mechanism. The GSP should recognize this reality and remove SWP supplies as a potential PMA.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/745">https://portal.santaynezwater.org/service/document/download/745</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	7.The GSP contains questionable implementation schedules. For example, the GSP requires two years to survey a single well (see 5a.1-1 &#x201c;Surveying Representative Wells&#x201c;) and plans to phase meter installation over &#x201c;multiple years&#x201c; yet complete that task by the end of 2023 (less than 2 years from the GSP submittal date).	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/746">https://portal.santaynezwater.org/service/document/download/746</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-10	3b.2-2 Cumulative Change in Groundwater Storage&#x201c; The regulations define the MT for groundwater storage as a volume: &#x201c;The minimum threshold for reduction of groundwater storage shall be a total volume of groundwater that can be withdrawn from the basin without causing conditions that may lead to undesirable results.&#x201c; 23 C.C.R. &#x201c; 354.28 (c)(2). The GSP seeks to employ water levels as proxy to storage volumes, however it fails to demonstrate a correlation between the water level changes at the RMS and the corresponding calculated groundwater storage changes in the WMA. Alternatively, the GSP could show that when water levels at the RMS decline to the MTs, the resulting change in groundwater storage is not significant and unreasonable (in other words, the Sustainable Management Criteria [SMCs] for Chronic Lowering of Groundwater Levels protect against significant and unreasonable changes in groundwater storage).	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/747">https://portal.santaynezwater.org/service/document/download/747</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-17	4a.2-1-1&#x201c;Again, the GSA cannot simply establish tiered fees to try to promote conservation. Under Proposition 218 law, all fees, including tiered fees need to be justified by costs and proportional benefits associated with groundwater management actions. Tiered fees need to be designed to reflect the costs necessary to ensure adequate groundwater is available to serve the demands associated with each tier.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/749">https://portal.santaynezwater.org/service/document/download/749</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	7.The GSP contains questionable implementation schedules. For example, the GSP requires two years to survey a single well (see 5a.1-1 &#x201c;Surveying Representative Wells&#x201c;) and plans to phase meter installation over &#x201c;multiple years&#x201c; yet complete that task by the end of 2023 (less than 2 years from the GSP submittal date).	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/748">https://portal.santaynezwater.org/service/document/download/748</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-6	B.Specific Comments3b.2-1 Chronic Lowering of Groundwater Levels&#x201c;EKI extracted the water level data for Representative Monitoring Sites (RMS) located in the City of Lompoc from the Data Management System (DMS). The MT values were then calculated and found to be 3 feet greater than the values reported in Table 3b.3-1. This discrepancy needs to be reconciled.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/750">https://portal.santaynezwater.org/service/document/download/750</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-10	3b.2-2 Cumulative Change in Groundwater Storage&#x201c;Note that &#x201c;356.2(b)(5)(a) of the regulations require that the Annual Report include &#x201c;change in groundwater storage maps&#x201c; for each principal aquifer. In the WMA, there are two principal aquifers monitored by different RMS and managed by different SMCs.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/751">https://portal.santaynezwater.org/service/document/download/751</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-10	3b.2-2 Cumulative Change in Groundwater Storage&#x201c;Note that &#x201c;356.2(b)(5)(a) of the regulations require that the Annual Report include &#x201c;change in groundwater storage maps&#x201c; for each principal aquifer. In the WMA, there are two principal aquifers monitored by different RMS and managed by different SMCs.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/752">https://portal.santaynezwater.org/service/document/download/752</a>

Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-19	4a.2-2-7 The GSP states Prior to implementing tiered groundwater extraction fees, the WMA GSA will determine an acceptable fee structure based in part on an analysis of historical and current water production volumes. What about costs? What costs are the GSA incurring to justify the fees?	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/753">https://portal.santaynezwater.org/service/document/download/753</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable	Page 3b-29	3b.3-4 Degraded Water Quality Minimum Thresholds This section needs to be rewritten. It includes conflicting statements and confuses units.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/754">https://portal.santaynezwater.org/service/document/download/754</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-7	B. Specific Comments 3b.2-1 Chronic Lowering of Groundwater Levels The number of wells with exposed well screens, expressed as a percentage, is utilized as a quantitative indicator for significant and unreasonable effects. However, the Minimum Threshold (MT) for the Upper and Lower aquifers was based primarily on historical water levels. A substantial amount of work is reported calculating the differences between the percentage of exposed well screens under 2020 water levels and proposed MTs, but there is no meaningful difference in the results. The MT for the Upper Aquifer was ultimately defined as 10-feet below the Spring 2020 levels, and in the Lower Aquifer the MT was defined as 20-feet below Spring 2020 levels. A more direct argument would develop the MTs from the historical water levels and then utilize the small differences in exposed well screen percentages to confirm the MTs protect against significant and unreasonable effects.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/756">https://portal.santaynezwater.org/service/document/download/756</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-6	B. Specific Comments 3b.2-1 Chronic Lowering of Groundwater Levels KEI extracted the water level data for Representative Monitoring Sites (RMS) located in the City of Lompoc from the Data Management System (DMS). The MT values were then calculated and found to be 3 feet greater than the values reported in Table 3b.3-1. This discrepancy needs to be reconciled.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/755">https://portal.santaynezwater.org/service/document/download/755</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management	Page 4a-19	4a.2-2-8 As noted previously, Water Code section 10725.4 concerns investigations. The specific fee authority is in Water Code sections 10730 and 10730.2.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/757">https://portal.santaynezwater.org/service/document/download/757</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-7	B. Specific Comments 3b.2-1 Chronic Lowering of Groundwater Levels The number of wells with exposed well screens, expressed as a percentage, is utilized as a quantitative indicator for significant and unreasonable effects. However, the Minimum Threshold (MT) for the Upper and Lower aquifers was based primarily on historical water levels. A substantial amount of work is reported calculating the differences between the percentage of exposed well screens under 2020 water levels and proposed MTs, but there is no meaningful difference in the results. The MT for the Upper Aquifer was ultimately defined as 10-feet below the Spring 2020 levels, and in the Lower Aquifer the MT was defined as 20-feet below Spring 2020 levels. A more direct argument would develop the MTs from the historical water levels and then utilize the small differences in exposed well screen percentages to confirm the MTs protect against significant and unreasonable effects.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/758">https://portal.santaynezwater.org/service/document/download/758</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-29	3b.3-4 Degraded Water Quality Minimum Thresholds The GSA is not required to address URs that occurred before and have not been corrected by January 1, 2015 (A, B, 10727.2(b)(4)). The approach toward water quality thresholds should be do no harm relative to 2015 conditions. Accordingly, the MT should be set at the Water Quality Objectives determined by the CCWQCP, and the Measurable Objectives (MO) should be set at some fraction (e.g., 80%) of the MT. As a result, the sustainability goal for the GSP is to maintain groundwater quality acceptable to the prescribed beneficial uses, and URs occur when GSP implementation causes the water quality to exceed Water Quality Objectives.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/759">https://portal.santaynezwater.org/service/document/download/759</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable	Page 3b-29	3b.3-4 Degraded Water Quality Minimum Thresholds This section needs to be rewritten. It includes conflicting statements and confuses units.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/760">https://portal.santaynezwater.org/service/document/download/760</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management	Page 4a-23	4a.2-3-5 The reduction in wastewater flow associated with this recycled water project would require approval by the State Water Board. See Water Code section 1211.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/761">https://portal.santaynezwater.org/service/document/download/761</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-10	3b.2-2 Cumulative Change in Groundwater Storage The regulations define the MT for groundwater storage as a volume: The minimum threshold for reduction of groundwater storage shall be a total volume of groundwater that can be withdrawn from the basin without causing conditions that may lead to undesirable results. C.C.R. A, A, 354.28 (c)(2). The GSP seeks to employ water levels as proxy to storage volumes, however it fails to demonstrate a correlation between the water level changes at the RMS and the corresponding calculated groundwater storage changes in the WMA. Alternatively, the GSP could show that when water levels at the RMS decline to the MTs, the resulting change in groundwater storage is not significant and unreasonable (in other words, the Sustainable Management Criteria [SMCs] for Chronic Lowering of Groundwater Levels protect against significant and unreasonable changes in groundwater storage).	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/777">https://portal.santaynezwater.org/service/document/download/777</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-10	3b.2-2 Cumulative Change in Groundwater Storage The regulations define the MT for groundwater storage as a volume: The minimum threshold for reduction of groundwater storage shall be a total volume of groundwater that can be withdrawn from the basin without causing conditions that may lead to undesirable results. C.C.R. A, A, 354.28 (c)(2). The GSP seeks to employ water levels as proxy to storage volumes, however it fails to demonstrate a correlation between the water level changes at the RMS and the corresponding calculated groundwater storage changes in the WMA. Alternatively, the GSP could show that when water levels at the RMS decline to the MTs, the resulting change in groundwater storage is not significant and unreasonable (in other words, the Sustainable Management Criteria [SMCs] for Chronic Lowering of Groundwater Levels protect against significant and unreasonable changes in groundwater storage).	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/778">https://portal.santaynezwater.org/service/document/download/778</a>

Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-31	3b.3-6 Depletion of Interconnected Surface Water " Minimum Thresholds The GSP may establish a representative MT based on groundwater elevations, as is advocated in Section 3b.3-6, but the GSP must demonstrate with adequate evidence that groundwater elevation is a reasonable proxy. This information is available from the numerical model and needs to be extracted and evaluated against measured water level conditions in the RMS for interconnected surface water.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/776">https://portal.santaynezwater.org/service/document/download/776</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable	Page 3b-30	3b.3-4-1 Nitrate Minimum Threshold There is confusion in concentration units for the Water Quality Objectives in Table 3b.2-2, the MT reported in Table 3b.3-2, and the MT reported in the text. Use one consistent set of units.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/779">https://portal.santaynezwater.org/service/document/download/779</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	Thank you for your consideration of these comments, and Lompoc looks forward to continued cooperation on developing/finalizing the GSP and moving forward through its implementation.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/780">https://portal.santaynezwater.org/service/document/download/780</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-33	3B.4 Measurable Objectives The Measurable Objective (MO) is the sustainability goal for the basin and represented by a quantitative value at each RMS. The sustainability goal is reached when the SMC is met at all the RMS. The MO values are allowed to vary between RMS and within a margin of operational flexibility, but the overall trends should be toward the MO. This is a key aspect of demonstrating the efficacy of proposed PMAs. Typically, the numerical groundwater flow model is employed to show the effects on groundwater levels, groundwater storage changes, and interconnected surface water. Furthermore, when water levels are used as proxy, the model can show effects on seawater intrusion and subsidence. If a numerical model is not used, the GSP shall identify and describe an equally effective method, tool, or analytical model to accomplish these requirements. This analysis is lacking in the GSP. A A	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/781">https://portal.santaynezwater.org/service/document/download/781</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-10	3b.2-2 Cumulative Change in Groundwater Storage Note that 356.2(b)(5)(a) of the regulations require that the Annual Report include recharge in groundwater storage maps for each principal aquifer. In the WMA, there are two principal aquifers monitored by different RMS and managed by different SMCs.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/782">https://portal.santaynezwater.org/service/document/download/782</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-33	3B.4 Measurable Objectives The GSP fails to define interim milestones (IM) as required by 23 C.C.R. 354.30(a) which states that the GSA shall establish measurable objectives, including interim milestones in increments of five years, to achieve the sustainability goal for the basin within 20 years of Plan implementation and to continue to sustainably manage the groundwater basin over the planning and implementation horizon. IMs are not optional, and they are required for each RMS and its associated SMC.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/784">https://portal.santaynezwater.org/service/document/download/784</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-10	3b.2-2 Cumulative Change in Groundwater Storage Note that 356.2(b)(5)(a) of the regulations require that the Annual Report include recharge in groundwater storage maps for each principal aquifer. In the WMA, there are two principal aquifers monitored by different RMS and managed by different SMCs.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/785">https://portal.santaynezwater.org/service/document/download/785</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-31	3b.3-6 Depletion of Interconnected Surface Water " Minimum Thresholds This section lacks a discussion of the relationships between recharge, pumping, and surface water depletions. Per 23 C.C.R. 354.28(c)(6) the MT for depletions of interconnected surface water shall be the rate or volume of surface water depletions, and supported by (A) the location, quantity, and timing of depletions of interconnected surface water; and (B) A description of the groundwater and surface water model used to quantify surface water depletion (if a numerical groundwater and surface water model is not used to quantify surface water depletion, the Plan shall identify and describe an equally effective method, tool, or analytical model to accomplish these requirements). This information is available from the numerical model developed for the WMA and needs to be extracted, analyzed and discussed in the GSP.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/783">https://portal.santaynezwater.org/service/document/download/783</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable	Page 3b-29	3b.3-4 Degraded Water Quality " Minimum Thresholds This section needs to be rewritten. It includes conflicting statements and confuses units.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/786">https://portal.santaynezwater.org/service/document/download/786</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-31	3b.3-6 Depletion of Interconnected Surface Water " Minimum Thresholds The GSP may establish a representative MT based on groundwater elevations, as is advocated in Section 3b.3-6, but the GSP must demonstrate with adequate evidence that groundwater elevation is a reasonable proxy. This information is available from the numerical model and needs to be extracted and evaluated against measured water level conditions in the RMS for interconnected surface water.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/788">https://portal.santaynezwater.org/service/document/download/788</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable	Page 3b-29	3b.3-4 Degraded Water Quality " Minimum Thresholds This section needs to be rewritten. It includes conflicting statements and confuses units.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/787">https://portal.santaynezwater.org/service/document/download/787</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-1	Section 4A-1 The GSP evaluates PMAs based on their estimated contribution to groundwater storage (the water budget). However, SGMA defines groundwater sustainability as the absence of URS. 23 C.C.R. 354.22. Hence, the avoidance of URS as defined by MTs and the sustainability goals defined by the MOs (e.g., water levels) are central to sustainable groundwater management and critical to the success of the GSP. The GSP fails to connect the assumed/estimated additions to the water budget to water level changes relative to the MTs/MOs. This is most effectively accomplished utilizing the numerical groundwater model, and indeed is one of the key reasons for developing the tool. Instead, the GSP assumes a one-to-one (or direct) response between the estimated/assumed volume of water added (or saved) and storage increase. The assumed one-to-one response has not been established in the GSP using the model or an equally effective method, tool, or analytical model. Moreover, the assumption is questionable owing to head-dependent boundaries (e.g., the Santa Ynez River and Pacific Ocean) and the spatial distribution of recharge and pumping stresses.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/790">https://portal.santaynezwater.org/service/document/download/790</a>

Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-29	3b.3-4 Degraded Water Quality $\leq$ Minimum Thresholds The GSA is not required to address URs that occurred before and have not been corrected by January 1, 2015 (10727.2(b)(4)). The approach toward water quality thresholds should be $\leq$ relative to 2015 conditions. Accordingly, the MT should be set at the Water Quality Objectives determined by the CCWQCP, and the Measurable Objectives (MO) should be set at some fraction (e.g., 80%) of the MT. As a result, the sustainability goal for the GSP is to maintain groundwater quality acceptable to the prescribed beneficial uses, and URs occur when GSP implementation causes the water quality to exceed Water Quality Objectives.	Western Management Area	10/25/2021 18:54 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/789">https://portal.santaynezwater.org/service/document/download/789</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-29	3b.3-4 Degraded Water Quality $\leq$ Minimum Thresholds The GSA is not required to address URs that occurred before and have not been corrected by January 1, 2015 (10727.2(b)(4)). The approach toward water quality thresholds should be $\leq$ relative to 2015 conditions. Accordingly, the MT should be set at the Water Quality Objectives determined by the CCWQCP, and the Measurable Objectives (MO) should be set at some fraction (e.g., 80%) of the MT. As a result, the sustainability goal for the GSP is to maintain groundwater quality acceptable to the prescribed beneficial uses, and URs occur when GSP implementation causes the water quality to exceed Water Quality Objectives.	Western Management Area	10/25/2021 18:54 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/791">https://portal.santaynezwater.org/service/document/download/791</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-33	3B.4 Measurable Objectives The Measurable Objective (MO) is the sustainability goal for the basin and represented by a quantitative value at each RMS. The sustainability goal is reached when the SMC is met at all the RMS. The MO values are allowed to vary between RMS and within a margin of operational flexibility, but the overall trends should be toward the MO. This is a key aspect of demonstrating the efficacy of proposed PMAs. Typically, the numerical groundwater flow model is employed to show the effects on groundwater levels, groundwater storage changes, and interconnected surface water. Furthermore, when water levels are used as proxy, the model can show effects on seawater intrusion and subsidence. If a numerical model is not used, the GSP shall identify and describe an equally effective method, tool, or analytical model to accomplish these requirements. This analysis is lacking in the GSP.	Western Management Area	10/25/2021 18:54 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/792">https://portal.santaynezwater.org/service/document/download/792</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-9	Section 4A-2 Tied Fee is not a PMA of its own. It is a means to implement a project or management action. Under Proposition 218 law, there needs to be a basis for the fee, which would typically be a budget for GSP development and implementation costs demonstrating the necessity of the fee.	Western Management Area	10/25/2021 18:54 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/793">https://portal.santaynezwater.org/service/document/download/793</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-29	3b.3-4 Degraded Water Quality $\leq$ Minimum Thresholds There appear to be conflicting statements regarding salt and nutrient concentrations. The text states their concentrations currently exceed the WQOs. To support efforts to improve groundwater quality the MT concentrations are established near current concentrations. If current concentrations exceed the WQOs, how does establishing the criteria at current concentrations improve water quality? Similarly, the text states that the average MT concentrations are below the WQOs. It is not clear how current concentrations can be both greater than and less than WQOs.	Western Management Area	10/25/2021 18:54 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/794">https://portal.santaynezwater.org/service/document/download/794</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-33	3B.4 Measurable Objectives The GSP fails to define interim milestones (IM) as required by 23 C.C.R. 15354.30(a) which states that the GSA shall establish measurable objectives, including interim milestones in increments of five years, to achieve the sustainability goal for the basin within 20 years of Plan implementation and to continue to sustainably manage the groundwater basin over the planning and implementation horizon. IMs are not optional, and they are required for each RMS and its associated SMC.	Western Management Area	10/25/2021 18:54 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/795">https://portal.santaynezwater.org/service/document/download/795</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-29	3b.3-4 Degraded Water Quality $\leq$ Minimum Thresholds There appear to be conflicting statements regarding salt and nutrient concentrations. The text states their concentrations currently exceed the WQOs. To support efforts to improve groundwater quality the MT concentrations are established near current concentrations. If current concentrations exceed the WQOs, how does establishing the criteria at current concentrations improve water quality? Similarly, the text states that the average MT concentrations are below the WQOs. It is not clear how current concentrations can be both greater than and less than WQOs.	Western Management Area	10/25/2021 18:54 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/796">https://portal.santaynezwater.org/service/document/download/796</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-11	Section 4a-2-1-1 The GSP states, The WMA GSA will coordinate with the existing agencies and programs, and develop additional voluntary, rebate-based, or mandatory conservation efforts for domestic, municipal, and agricultural beneficial uses within the WMA. Mandatory conservation efforts are essentially an allocation plan, which is proposed for Group 3. Group 1 conservation efforts should only be voluntary and rebate based.	Western Management Area	10/25/2021 18:54 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/797">https://portal.santaynezwater.org/service/document/download/797</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable	Page 3b-30	3b.3-4-1 Nitrate Minimum Threshold There is confusion in concentration units for the Water Quality Objectives in Table 3b.2-2, the MT reported in Table 3b.3-2, and the MT reported in the text. Use one consistent set of units.	Western Management Area	10/25/2021 18:54 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/799">https://portal.santaynezwater.org/service/document/download/799</a>

Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-1	Section 4A-1-1. The GSP evaluates PMAs based on their estimated contribution to groundwater storage (the water budget). However, SGMA defines groundwater sustainability as the absence of URS. 23 C.C.R. § 354.22. Hence, the avoidance of URS as defined by MTs and the sustainability goals defined by the MOs (e.g., water levels) are central to sustainable groundwater management and critical to the success of the GSP. The GSP fails to connect the assumed/estimated additions to the water budget to water level changes relative to the MTs/MOs. This is most effectively accomplished utilizing the numerical groundwater model, and indeed is one of the key reasons for developing the tool. Instead, the GSP assumes a one-to-one (or direct) response between the estimated/assumed volume of water added (or saved) and storage increase. The assumed one-to-one response has not been established in the GSP using the model or an equally effective method, tool, or analytical model. Moreover, the assumption is questionable owing to head-dependent boundaries (e.g., the Santa Ynez River and Pacific Ocean) and the spatial distribution of recharge and pumping stresses.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/798">https://portal.santaynezwater.org/service/document/download/798</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable	Page 3b-30	3b.3-4-1 Nitrate Minimum Threshold There is confusion in concentration units for the Water Quality Objectives in Table 3b.2-2, the MT reported in Table 3b.3-2, and the MT reported in the text. Use one consistent set of units.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/800">https://portal.santaynezwater.org/service/document/download/800</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-9	Section 4A-2-1. Tiered Fees is not a PMA of its own. It is a means to implement a project or management action. Under Proposition 218 law, there needs to be a basis for the fee, which would typically be a budget for GSP development and implementation costs demonstrating the necessity of the fee.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/803">https://portal.santaynezwater.org/service/document/download/803</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-11	Section 4a-2-1. The GSP states, "A Water Conservation Strategic Plan, or similar document, will be developed that considers WMA GSA stakeholder concerns, integrates with existing conservation programs, and meets the health and safety water requirements for communities that rely on groundwater within the WMA. The Strategic Plan should also consider granting credit for past conservation actions, such as the extensive conservation program and actions of Lompoc and its citizens/businesses."	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/802">https://portal.santaynezwater.org/service/document/download/802</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-31	3b.3-6 Depletion of Interconnected Surface Water "Minimum Thresholds" This section lacks a discussion of the relationships between recharge, pumping, and surface water depletions. Per 23 C.C.R. § 354.28(c)(6) the MT for depletions of interconnected surface water shall be the rate or volume of surface water depletions, and supported by (A) the location, quantity, and timing of depletions of interconnected surface water; and (B) A description of the groundwater and surface water model used to quantify surface water depletion (if a numerical groundwater and surface water model is not used to quantify surface water depletion, the Plan shall identify and describe an equally effective method, tool, or analytical model to accomplish these requirements). This information is available from the numerical model developed for the WMA and needs to be extracted, analyzed and discussed in the GSP.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/801">https://portal.santaynezwater.org/service/document/download/801</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-31	3b.3-6 Depletion of Interconnected Surface Water "Minimum Thresholds" This section lacks a discussion of the relationships between recharge, pumping, and surface water depletions. Per 23 C.C.R. § 354.28(c)(6) the MT for depletions of interconnected surface water shall be the rate or volume of surface water depletions, and supported by (A) the location, quantity, and timing of depletions of interconnected surface water; and (B) A description of the groundwater and surface water model used to quantify surface water depletion (if a numerical groundwater and surface water model is not used to quantify surface water depletion, the Plan shall identify and describe an equally effective method, tool, or analytical model to accomplish these requirements). This information is available from the numerical model developed for the WMA and needs to be extracted, analyzed and discussed in the GSP.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/805">https://portal.santaynezwater.org/service/document/download/805</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-31	3b.3-6 Depletion of Interconnected Surface Water "Minimum Thresholds" The GSP may establish a representative MT based on groundwater elevations, as is advocated in Section 3b.3-6, but the GSP must demonstrate with adequate evidence that groundwater elevation is a reasonable proxy. This information is available from the numerical model and needs to be extracted and evaluated against measured water level conditions in the RMS for interconnected surface water.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/804">https://portal.santaynezwater.org/service/document/download/804</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-12	Section 4a-2-1. The GSP states "in conjunction with County staff, the WMA GSA can explore whether industrial water demands can be met by alternative non-potable supplies (e.g., recycled water and/or brackish water). Is this considered part of a Group 1 recycled water project? If not, this seems out of place in Group 1, and should perhaps be part of a supplemental supply program in Group 4."	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/806">https://portal.santaynezwater.org/service/document/download/806</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-11	Section 4a-2-1. The GSP states, "The WMA GSA will coordinate with the existing agencies and programs, and develop additional voluntary, rebate-based, or mandatory conservation efforts for domestic, municipal, and agricultural beneficial uses within the WMA. Mandatory conservation efforts are essentially an allocation plan, which is proposed for Group 3. Group 1 conservation efforts should only be voluntary and rebate based."	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/807">https://portal.santaynezwater.org/service/document/download/807</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-33	3B.4 Measurable Objectives The Measurable Objective (MO) is the sustainability goal for the basin and represented by a quantitative value at each RMS. The sustainability goal is reached when the SMC is met at all the RMS. The MO values are allowed to vary between RMS and within a margin of operational flexibility, but the overall trends should be toward the MO. This is a key aspect of demonstrating the efficacy of proposed PMAs. Typically, the numerical groundwater flow model is employed to show the effects on groundwater levels, groundwater storage changes, and interconnected surface water. Furthermore, when water levels are used as proxy, the model can show effects on seawater intrusion and subsidence. If a numerical model is not used, the GSP shall identify and describe an equally effective method, tool, or analytical model to accomplish these requirements. This analysis is lacking in the GSP.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/808">https://portal.santaynezwater.org/service/document/download/808</a>



Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-31	3b.3-6 Depletion of Interconnected Surface Water "Minimum Thresholds" The GSP may establish a representative MT based on groundwater elevations, as is advocated in Section 3b.3-6, but the GSP must demonstrate with adequate evidence that groundwater elevation is a reasonable proxy. This information is available from the numerical model and needs to be extracted and evaluated against measured water level conditions in the RMS for interconnected surface water.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/809">https://portal.santaynezwater.org/service/document/download/809</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-13	Section 4a.2-1-2 States that conservation measures will reduce demand from baseline conditions to approximately 10% to 20% of current groundwater production. Is this with mandatory conservation? See comment above regarding moving mandatory conservation to Group 3. If mandatory conservation is moved to Group 3, this savings number may change. Also, it looks like the 10-20% reduction assumes implementation of tiered fees, but see the comment above concerning tiered fees, which are not management actions of their own, but rather a means to implement management actions.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/811">https://portal.santaynezwater.org/service/document/download/811</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-11	Section 4a.2-1-1 The GSP states, "A Water Conservation Strategic Plan, or similar document, will be developed that considers WMA GSA stakeholder concerns, integrates with existing conservation programs, and meets the health and safety water requirements for communities that rely on groundwater within the WMA." The Strategic Plan should also consider granting credit for past conservation actions, such as the extensive conservation program and actions of Lompoc and its citizens/businesses.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/810">https://portal.santaynezwater.org/service/document/download/810</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-33	3B.4 Measurable Objectives The GSP fails to define interim milestones (IM) as required by 23 C.C.R. § 354.30(a) which states that the GSA shall establish measurable objectives, including interim milestones in increments of five years, to achieve the sustainability goal for the basin within 20 years of Plan implementation and to continue to sustainably manage the groundwater basin over the planning and implementation horizon. IMs are not optional, and they are required for each RMS and its associated SMC.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/812">https://portal.santaynezwater.org/service/document/download/812</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-33	3B.4 Measurable Objectives The Measurable Objective (MO) is the sustainability goal for the basin and represented by a quantitative value at each RMS. The sustainability goal is reached when the SMC is met at all the RMS. The MO values are allowed to vary between RMS and within a margin of operational flexibility, but the overall trends should be toward the MO. This is a key aspect of demonstrating the efficacy of proposed PMAs. Typically, the numerical groundwater flow model is employed to show the effects on groundwater levels, groundwater storage changes, and interconnected surface water. Furthermore, when water levels are used as proxy, the model can show effects on seawater intrusion and subsidence. If a numerical model is not used, the GSP shall identify and describe an equally effective method, tool, or analytical model to accomplish these requirements. This analysis is lacking in the GSP.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/813">https://portal.santaynezwater.org/service/document/download/813</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-12	Section 4a.2-1-1 The GSP states "in conjunction with County staff, the WMA GSA can explore whether industrial water demands can be met by alternative non-potable supplies (e.g., recycled water and/or brackish water)." Is this considered part of a Group 1 recycled water project? If not, this seems out of place in Group 1, and should perhaps be part of a supplemental supply program in Group 4.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/814">https://portal.santaynezwater.org/service/document/download/814</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-11	Section 4a.2-1-1 The GSP states, "The WMA GSA will coordinate with the existing agencies and programs, and develop additional voluntary, rebate-based, or mandatory conservation efforts for domestic, municipal, and agricultural beneficial uses within the WMA." Mandatory conservation efforts are essentially an allocation plan, which is proposed for Group 3. Group 1 conservation efforts should only be voluntary and rebate based.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/832">https://portal.santaynezwater.org/service/document/download/832</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-17	4a.2-2-1 Again, the GSA cannot simply establish tiered fees to try to promote conservation. Under Proposition 218 law, all fees, including tiered fees need to be justified by costs and proportional benefits associated with groundwater management actions. Tiered fees need to be designed to reflect the costs necessary to ensure adequate groundwater is available to serve the demands associated with each tier.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/833">https://portal.santaynezwater.org/service/document/download/833</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-19	4a.2-2-8 As noted previously, Water Code section 10725.4 concerns investigations. The specific fee authority is in Water Code sections 10730 and 10730.2.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/831">https://portal.santaynezwater.org/service/document/download/831</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-12	Section 4a.2-1-1 The GSP states "in conjunction with County staff, the WMA GSA can explore whether industrial water demands can be met by alternative non-potable supplies (e.g., recycled water and/or brackish water)." Is this considered part of a Group 1 recycled water project? If not, this seems out of place in Group 1, and should perhaps be part of a supplemental supply program in Group 4.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/834">https://portal.santaynezwater.org/service/document/download/834</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-23	4a.2-3-5 The reduction in wastewater flow associated with this recycled water project would require approval by the State Water Board. See Water Code section 1211.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/837">https://portal.santaynezwater.org/service/document/download/837</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-11	Section 4a.2-1-1 The GSP states, "A Water Conservation Strategic Plan, or similar document, will be developed that considers WMA GSA stakeholder concerns, integrates with existing conservation programs, and meets the health and safety water requirements for communities that rely on groundwater within the WMA." The Strategic Plan should also consider granting credit for past conservation actions, such as the extensive conservation program and actions of Lompoc and its citizens/businesses.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/836">https://portal.santaynezwater.org/service/document/download/836</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-19	4a.2-2-7 The GSP states "Prior to implementing tiered groundwater extraction fees, the WMA GSA will determine an acceptable fee structure based in part on an analysis of historical and current water production volumes." What about costs? What costs are the GSA incurring to justify the fees?	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/835">https://portal.santaynezwater.org/service/document/download/835</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-19	4a.2-2-8 As noted previously, Water Code section 10725.4 concerns investigations. The specific fee authority is in Water Code sections 10730 and 10730.2.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/838">https://portal.santaynezwater.org/service/document/download/838</a>

Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-13	Section 4a.2-1-2 States that conservation measures will reduce demand from baseline conditions to approximately 10% to 20% of current groundwater production. Is this with mandatory conservation? See comment above regarding moving mandatory conservation to Group 3. If mandatory conservation is moved to Group 3, this savings number may change. Also, it looks like the 10-20% reduction assumes implementation of tiered fees, but see the comment above concerning tiered fees, which are not management actions of their own, but rather a means to implement management actions.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/839">https://portal.santaynezwater.org/service/document/download/839</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-12	Section 4a.2-1-1 The GSP states in conjunction with County staff, the WMA GSA can explore whether industrial water demands can be met by alternative non-potable supplies (e.g., recycled water and/or brackish water). Is this considered part of a Group 1 recycled water project? If not, this seems out of place in Group 1, and should perhaps be part of a supplemental supply program in Group 4.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/840">https://portal.santaynezwater.org/service/document/download/840</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-31	4a.3-1-1 Explain the criteria that SYRWCD uses to assess a request for a Below Narrows Account release.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/841">https://portal.santaynezwater.org/service/document/download/841</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-13	Section 4a.2-1-2 What is the basis for the estimated potential yield from water conservation activities?	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/842">https://portal.santaynezwater.org/service/document/download/842</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-23	4a.2-3-5 The reduction in wastewater flow associated with this recycled water project would require approval by the State Water Board. See Water Code section 1211.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/845">https://portal.santaynezwater.org/service/document/download/845</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-13	Section 4a.2-1-2 States that conservation measures will reduce demand from baseline conditions to approximately 10% to 20% of current groundwater production. Is this with mandatory conservation? See comment above regarding moving mandatory conservation to Group 3. If mandatory conservation is moved to Group 3, this savings number may change. Also, it looks like the 10-20% reduction assumes implementation of tiered fees, but see the comment above concerning tiered fees, which are not management actions of their own, but rather a means to implement management actions.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/843">https://portal.santaynezwater.org/service/document/download/843</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-34	4a.3-1-1 The GSP states that, These Annual Pumping Allocations could be used for the purpose of assigning pumping fees. Augmentation Fees should be some explanation as to how these Augmentation Fees are different than the Tiered Fees described above.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/844">https://portal.santaynezwater.org/service/document/download/844</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-14	4a.2-1-3 The GSP states that conservation efforts are a necessary tool to achieve the WMA's sustainability goal. The estimated average annual deficit, however, is 1,000-2,000 AFY. The potential yield from the conservation measures, metering, and fees is 2,000-4,000 AFY. Thus, it is not clear that developing and expanding conservation efforts are necessary to reach sustainability. The GSP should state that the actions are recommended to maintain sustainability under future projected conditions. See comments above about Lompoc's significant existing conservation efforts.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/847">https://portal.santaynezwater.org/service/document/download/847</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-13	Section 4a.2-1-2 What is the basis for the estimated potential yield from water conservation activities?	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/846">https://portal.santaynezwater.org/service/document/download/846</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-31	4a.3-1-1 Explain the criteria that SYRWCD uses to assess a request for a Below Narrows Account release.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/848">https://portal.santaynezwater.org/service/document/download/848</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-36	4a.3-3-3 The GSP states, the WMA GSA will work with groundwater users in the WMA to determine an equitable process for assigning allocations. The beneficial uses of groundwater will subsequently be evaluated based on water rights priorities. Accordingly, all groundwater users and uses will be equitably considered and prioritized, as required by SGMA. These sentences do not make it clear whether the GSA will attempt to follow a water right priority-based approach or some other equitable approach. To avoid concern or confusion, suggest stating that the allocation criteria will be developed at a future date.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/849">https://portal.santaynezwater.org/service/document/download/849</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-15	4a.2-1-8 By relying on Water Code section 10726.4, it implies that this management action is focused on mandatory conservation, i.e., an allocation plan. See the comment above about mandatory conservation. It seems like Group 1 should be voluntary and rebate based, and allocations should remain in Group 3. Also, Water Code section 10725.4 should not be cited for a GSA's fee-imposition authority because it concerns investigations. The specific fee authority is in Water Code sections 10730 and 10730.2, though it does not appear that conservation measures will depend on fee-imposition authority.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/850">https://portal.santaynezwater.org/service/document/download/850</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-34	4a.3-1-1 The GSP states that, These Annual Pumping Allocations could be used for the purpose of assigning pumping fees. Augmentation Fees should be some explanation as to how these Augmentation Fees are different than the Tiered Fees described above.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/852">https://portal.santaynezwater.org/service/document/download/852</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-14	4a.2-1-3 The GSP states that conservation efforts are a necessary tool to achieve the WMA's sustainability goal. The estimated average annual deficit, however, is 1,000-2,000 AFY. The potential yield from the conservation measures, metering, and fees is 2,000-4,000 AFY. Thus, it is not clear that developing and expanding conservation efforts are necessary to reach sustainability. The GSP should state that the actions are recommended to maintain sustainability under future projected conditions. See comments above about Lompoc's significant existing conservation efforts.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/851">https://portal.santaynezwater.org/service/document/download/851</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	Thank you for your consideration of these comments, and Lompoc looks forward to continued cooperation on developing/finalizing the GSP and moving forward through its implementation.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/854">https://portal.santaynezwater.org/service/document/download/854</a>

Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-17	4a.2-2-1-8 Again, the GSA cannot simply establish tiered fees to try to promote conservation. Under Proposition 218 law, all fees, including tiered fees need to be justified by costs and proportional benefits associated with groundwater management actions. Tiered fees need to be designed to reflect the costs necessary to ensure adequate groundwater is available to serve the demands associated with each tier.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/853">https://portal.santaynezwater.org/service/document/download/853</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-15	4a.2-1-8 By relying on Water Code section 10726.4, it implies that this management action is focused on mandatory conservation, i.e., an allocation plan. See the comment above about mandatory conservation. It seems like Group 1 should be voluntary and rebate based, and allocations should remain in Group 3. Also, Water Code section 10725.4 should not be cited for a GSA's fee-imposition authority because it concerns investigations. The specific fee authority is in Water Code sections 10730 and 10730.2, though it does not appear that conservation measures will depend on fee-imposition authority.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/855">https://portal.santaynezwater.org/service/document/download/855</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-36	4a.3-3-3 The GSP states, the WMA GSA will work with groundwater users in the WMA to determine an equitable process for assigning allocations. The beneficial uses of groundwater will subsequently be evaluated based on water rights priorities. Accordingly, all groundwater users and uses will be equitably considered and prioritized, as required by SGMA. These sentences do not make it clear whether the GSA will attempt to follow a water right priority-based approach or some other equitable approach. To avoid concern or confusion, suggest stating that the allocation criteria will be developed at a future date.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/857">https://portal.santaynezwater.org/service/document/download/857</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-19	4a.2-2-7 The GSP states Prior to implementing tiered groundwater extraction fees, the WMA GSA will determine an acceptable fee structure based in part on an analysis of historical and current water production volumes. What about costs? What costs are the GSA incurring to justify the fees?	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/856">https://portal.santaynezwater.org/service/document/download/856</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-1	Section 4A-1-1 The GSP evaluates PMAs based on their estimated contribution to groundwater storage (the water budget). However, SGMA defines groundwater sustainability as the absence of URS. 23 C.C.R. 354.22. Hence, the avoidance of URS as defined by MTs and the sustainability goals defined by the MOs (e.g., water levels) are central to sustainable groundwater management and critical to the success of the GSP. The GSP fails to connect the assumed/estimated additions to the water budget to water level changes relative to the MTs/MOs. This is most effectively accomplished utilizing the numerical groundwater model, and indeed is one of the key reasons for developing the tool. Instead, the GSP assumes a one-to-one (or direct) response between the estimated/assumed volume of water added (or saved) and storage increase. The assumed one-to-one response has not been established in the GSP using the model or an equally effective method, tool, or analytical model. Moreover, the assumption is questionable owing to head-dependent boundaries (e.g., the Santa Ynez River and Pacific Ocean) and the spatial distribution of recharge and pumping stresses.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/817">https://portal.santaynezwater.org/service/document/download/817</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-13	Section 4a.2-1-2 States that conservation measures will reduce demand from baseline conditions to approximately 10% to 20% of current groundwater production. Is this with mandatory conservation? See comment above regarding moving mandatory conservation to Group 3. If mandatory conservation is moved to Group 3, this savings number may change. Also, it looks like the 10-20% reduction assumes implementation of tiered fees, but see the comment above concerning tiered fees, which are not management actions of their own, but rather a means to implement management actions.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/816">https://portal.santaynezwater.org/service/document/download/816</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-33	3B.4 Measurable Objectives The GSP fails to define interim milestones (IM) as required by 23 C.C.R. 354.30(a) which states that the GSA shall establish measurable objectives, including interim milestones in increments of five years, to achieve the sustainability goal for the basin within 20 years of Plan implementation and to continue to sustainably manage the groundwater basin over the planning and implementation horizon. IMs are not optional, and they are required for each RMS and its associated SMC.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/818">https://portal.santaynezwater.org/service/document/download/818</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-14	4a.2-1-3 The GSP states that conservation efforts are a necessary tool to achieve the WMA's sustainability goal. The estimated average annual deficit, however, is 1,000-2,000 AFY. The potential yield from the conservation measures, metering, and fees is 2,000-4,000 AFY. Thus, it is not clear that developing and expanding conservation efforts are necessary to reach sustainability. The GSP should state that the actions are recommended to maintain sustainability under future projected conditions. See comments above about Lompoc's significant existing conservation efforts.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/819">https://portal.santaynezwater.org/service/document/download/819</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-9	Section 4A-2-2 Tiered Fee is not a PMA of its own. It is a means to implement a project or management action. Under Proposition 218 law, there needs to be a basis for the fee, which would typically be a budget for GSP development and implementation costs demonstrating the necessity of the fee.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/820">https://portal.santaynezwater.org/service/document/download/820</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-13	Section 4a.2-1-2 What is the basis for the estimated potential yield from water conservation activities?	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/823">https://portal.santaynezwater.org/service/document/download/823</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-15	4a.2-1-8 By relying on Water Code section 10726.4, it implies that this management action is focused on mandatory conservation, i.e., an allocation plan. See the comment above about mandatory conservation. It seems like Group 1 should be voluntary and rebate based, and allocations should remain in Group 3. Also, Water Code section 10725.4 should not be cited for a GSA's fee-imposition authority because it concerns investigations. The specific fee authority is in Water Code sections 10730 and 10730.2, though it does not appear that conservation measures will depend on fee-imposition authority.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/822">https://portal.santaynezwater.org/service/document/download/822</a>

Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-1	Section 4A-1-1. The GSP evaluates PMAs based on their estimated contribution to groundwater storage (the water budget). However, SGMA defines groundwater sustainability as the absence of URS. 23 C.C.R. 354.22. Hence, the avoidance of URS as defined by MTs and the sustainability goals defined by the MOs (e.g., water levels) are central to sustainable groundwater management and critical to the success of the GSP. The GSP fails to connect the assumed/estimated additions to the water budget to water level changes relative to the MTs/MOs. This is most effectively accomplished utilizing the numerical groundwater model, and indeed is one of the key reasons for developing the tool. Instead, the GSP assumes a one-to-one (or direct) response between the estimated/assumed volume of water added (or saved) and storage increase. The assumed one-to-one response has not been established in the GSP using the model or an equally effective method, tool, or analytical model. Moreover, the assumption is questionable owing to head-dependent boundaries (e.g., the Santa Ynez River and Pacific Ocean) and the spatial distribution of recharge and pumping stresses.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/821">https://portal.santaynezwater.org/service/document/download/821</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-17	4a.2-2-1. Again, the GSA cannot simply establish tiered fees to try to promote conservation. Under Proposition 218 law, all fees, including tiered fees need to be justified by costs and proportional benefits associated with groundwater management actions. Tiered fees need to be designed to reflect the costs necessary to ensure adequate groundwater is available to serve the demands associated with each tier.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/825">https://portal.santaynezwater.org/service/document/download/825</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-11	Section 4a-2-1-1. The GSP states, The WMA GSA will coordinate with the existing agencies and programs, and develop additional voluntary, rebate-based, or mandatory conservation efforts for domestic, municipal, and agricultural beneficial uses within the WMA. Mandatory conservation efforts are essentially an allocation plan, which is proposed for Group 3. Group 1 conservation efforts should only be voluntary and rebate based.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/826">https://portal.santaynezwater.org/service/document/download/826</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-9	Section 4A-2-1. Tiered Fee is not a PMA of its own. It is a means to implement a project or management action. Under Proposition 218 law, there needs to be a basis for the fee, which would typically be a budget for GSP development and implementation costs demonstrating the necessity of the fee.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/827">https://portal.santaynezwater.org/service/document/download/827</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-14	4a.2-1-3. The GSP states that conservation efforts are a necessary tool to achieve the WMA's sustainability goal. The estimated average annual deficit, however, is 1,000-2,000 AFY. The potential yield from the conservation measures, metering, and fees is 2,000-4,000 AFY. Thus, it is not clear that developing and expanding conservation efforts are necessary to reach sustainability. The GSP should state that the actions are recommended to maintain sustainability under future projected conditions. See comments above about Lompoc's significant existing conservation efforts.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/824">https://portal.santaynezwater.org/service/document/download/824</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-19	4a.2-1-7. The GSP states Prior to implementing tiered groundwater extraction fees, the WMA GSA will determine an acceptable fee structure based in part on an analysis of historical and current water production volumes. What about costs? What costs are the GSA incurring to justify the fees?	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/828">https://portal.santaynezwater.org/service/document/download/828</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-15	4a.2-1-8. By relying on Water Code section 10726.4, it implies that this management action is focused on mandatory conservation, i.e., an allocation plan. See the comment above about mandatory conservation. It seems like Group 1 should be voluntary and rebate based, and allocations should remain in Group 3. Also, Water Code section 10725.4 should not be cited for a GSA's fee-imposition authority because it concerns investigations. The specific fee authority is in Water Code sections 10730 and 10730.2, though it does not appear that conservation measures will depend on fee-imposition authority.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/830">https://portal.santaynezwater.org/service/document/download/830</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-11	Section 4a-2-1-1. The GSP states, A Water Conservation Strategic Plan, or similar document, will be developed that considers WMA GSA stakeholder concerns, integrates with existing conservation programs, and meets the health and safety water requirements for communities that rely on groundwater within the WMA. The Strategic Plan should also consider granting credit for past conservation actions, such as the extensive conservation program and actions of Lompoc and its citizens/businesses.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/829">https://portal.santaynezwater.org/service/document/download/829</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-17	4a.2-2-1. Again, the GSA cannot simply establish tiered fees to try to promote conservation. Under Proposition 218 law, all fees, including tiered fees need to be justified by costs and proportional benefits associated with groundwater management actions. Tiered fees need to be designed to reflect the costs necessary to ensure adequate groundwater is available to serve the demands associated with each tier.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/858">https://portal.santaynezwater.org/service/document/download/858</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	Thank you for your consideration of these comments, and Lompoc looks forward to continued cooperation on developing/finalizing the GSP and moving forward through its implementation.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/859">https://portal.santaynezwater.org/service/document/download/859</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-19	4a.2-2-8. As noted previously, Water Code section 10725.4 concerns investigations. The specific fee authority is in Water Code sections 10730 and 10730.2.	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/860">https://portal.santaynezwater.org/service/document/download/860</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-19	4a.2-2-7. The GSP states Prior to implementing tiered groundwater extraction fees, the WMA GSA will determine an acceptable fee structure based in part on an analysis of historical and current water production volumes. What about costs? What costs are the GSA incurring to justify the fees?	Western Management Area	10/25/2021 18:54	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/861">https://portal.santaynezwater.org/service/document/download/861</a>

Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	Dear Western Management Area GSA: These comments are submitted on behalf of the City of Lompoc (Lompoc) regarding the draft Santa Ynez River Valley Groundwater Basin Western Management Area Groundwater Sustainability Plan (GSP). Lompoc appreciates the efforts of the Western Management Area Groundwater Sustainability Agency (GSA) and its staff and consultants in preparing the draft GSP. That said, Lompoc believes there is still significant work to be done in order to comply with the mandates of SGMA and adopt a GSP that clearly identifies if current groundwater practices in the Western Management Area (WMA) are sustainable and, if not, specifically what needs to be done to become sustainable by 2042. This letter will begin with some general comments about the draft GSP and then present more specific comments. Lompoc respectfully requests that the GSA representatives, staff, and consultants consider and respond to these comments. Lompoc has been an active participant in the GSA activities, including support from Lompoc's hydrologic consultants EKI Environmental & Water (EKI), and will continue its active engagement as the GSP is adopted and implemented in years to come. General Comments 1. As stated above, the GSP needs a clear statement on whether current groundwater extractions from the WMA are sustainable or not. This will clarify whether GSA actions are needed to maintain sustainability, or whether the actions are needed to become sustainable. The entire GSP should be consistent with this characterization.	Western Management Area	10/25/2021 18:53 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/678">https://portal.santaynezwater.org/service/document/download/678</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	2. The numerical groundwater model was developed to support GSP development. It was completed prior to May 2021, yet there are multiple statements in the GSP referring to reliance on the model to refine analyses in the future. For example, sustainable yield estimates reportedly will be refined using the forthcoming numerical model. Plans are described where various water budget components will be refined using groundwater model results. The SGMA regulations require reliance on a numerical model to quantify depletions from surface water, but this information is not provided in the draft GSP. The only mention of model results is in Table 2c.1-2 Water Budget Data Sources, which indicates the model was used to estimate subsurface outflow. The analyses that benefit from the numerical model need to be included and clearly identified in the GSP.	Western Management Area	10/25/2021 18:53 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/679">https://portal.santaynezwater.org/service/document/download/679</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	3. The GSP provides no explanation of how the groundwater storage benefits from the Project and Management Actions (PMA) were quantified, which precludes third-party assessment of their certainty and reliability.	Western Management Area	10/25/2021 18:53 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/680">https://portal.santaynezwater.org/service/document/download/680</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-29	3b.3-4 Degraded Water Quality Minimum Thresholds There appear to be conflicting statements regarding salt and nutrient concentrations. The text states their concentrations currently exceed the WQOs. To support efforts to improve groundwater quality the MT concentrations are established near current concentrations. If current concentrations exceed the WQOs, how does establishing the criteria at current concentrations improve water quality? Similarly, the text states that the average MT concentrations are below the WQOs. It is not clear how current concentrations can be both greater than and less than WQOs.	Western Management Area	10/25/2021 18:53 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/694">https://portal.santaynezwater.org/service/document/download/694</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	Dear Western Management Area GSA: These comments are submitted on behalf of the City of Lompoc (Lompoc) regarding the draft Santa Ynez River Valley Groundwater Basin Western Management Area Groundwater Sustainability Plan (GSP). Lompoc appreciates the efforts of the Western Management Area Groundwater Sustainability Agency (GSA) and its staff and consultants in preparing the draft GSP. That said, Lompoc believes there is still significant work to be done in order to comply with the mandates of SGMA and adopt a GSP that clearly identifies if current groundwater practices in the Western Management Area (WMA) are sustainable and, if not, specifically what needs to be done to become sustainable by 2042. This letter will begin with some general comments about the draft GSP and then present more specific comments. Lompoc respectfully requests that the GSA representatives, staff, and consultants consider and respond to these comments. Lompoc has been an active participant in the GSA activities, including support from Lompoc's hydrologic consultants EKI Environmental & Water (EKI), and will continue its active engagement as the GSP is adopted and implemented in years to come. General Comments 1. As stated above, the GSP needs a clear statement on whether current groundwater extractions from the WMA are sustainable or not. This will clarify whether GSA actions are needed to maintain sustainability, or whether the actions are needed to become sustainable. The entire GSP should be consistent with this characterization.	Western Management Area	10/25/2021 18:53 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/695">https://portal.santaynezwater.org/service/document/download/695</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable	Page 3b-30	3b.3-4-1 Nitrate Minimum Threshold There is confusion in concentration units for the Water Quality Objectives in Table 3b.2-2, the MT reported in Table 3b.3-2, and the MT reported in the text. Use one consistent set of units.	Western Management Area	10/25/2021 18:53 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/696">https://portal.santaynezwater.org/service/document/download/696</a>

Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	Dear Western Management Area GSA: These comments are submitted on behalf of the City of Lompoc (Lompoc) regarding the draft Santa Ynez River Valley Groundwater Basin Western Management Area Groundwater Sustainability Plan (GSP). Lompoc appreciates the efforts of the Western Management Area Groundwater Sustainability Agency (GSA) and its staff and consultants in preparing the draft GSP. That said, Lompoc believes there is still significant work to be done in order to comply with the mandates of SGMA and adopt a GSP that clearly identifies if current groundwater practices in the Western Management Area (WMA) are sustainable and, if not, specifically what needs to be done to become sustainable by 2042. This letter will begin with some general comments about the draft GSP and then present more specific comments. Lompoc respectfully requests that the GSA representatives, staff, and consultants consider and respond to these comments. Lompoc has been an active participant in the GSA activities, including support from Lompoc's hydrologic consultants EKI Environmental & Water (EKI), and will continue its active engagement as the GSP is adopted and implemented in years to come. General Comments: As stated above, the GSP needs a clear statement on whether current groundwater extractions from the WMA are sustainable or not. This will clarify whether GSA actions are needed to maintain sustainability, or whether the actions are needed to become sustainable. The entire GSP should be consistent with this characterization.	Western Management Area	10/25/2021 18:53 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/697">https://portal.santaynezwater.org/service/document/download/697</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	2.The numerical groundwater model was developed to support GSP development. It was completed prior to May 2021, yet there are multiple statements in the GSP referring to reliance on the model to refine analyses in the future. For example, sustainable yield estimates reportedly will be refined using the forthcoming numerical model. Plans are described where various water budget components will be refined using groundwater model results. The SGMA regulations require reliance on a numerical model to quantify depletions from surface water, but this information is not provided in the draft GSP. The only mention of model results is in Table 2c.1-2 Water Budget Data Sources, which indicates the model was used to estimate subsurface outflow. The analyses that benefit from the numerical model need to be included and clearly identified in the GSP.	Western Management Area	10/25/2021 18:53 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/699">https://portal.santaynezwater.org/service/document/download/699</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-31	3b.3-6 Depletion of Interconnected Surface Water Minimum Thresholds This section lacks a discussion of the relationships between recharge, pumping, and surface water depletions. Per 23 C.C.R. § 354.28(c)(6) the MT for depletions of interconnected surface water shall be the rate or volume of surface water depletions, and supported by (A) the location, quantity, and timing of depletions of interconnected surface water; and (B) A description of the groundwater and surface water model used to quantify surface water depletion (if a numerical groundwater and surface water model is not used to quantify surface water depletion, the Plan shall identify and describe an equally effective method, tool, or analytical model to accomplish these requirements). This information is available from the numerical model developed for the WMA and needs to be extracted, analyzed and discussed in the GSP.	Western Management Area	10/25/2021 18:53 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/698">https://portal.santaynezwater.org/service/document/download/698</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	2.The numerical groundwater model was developed to support GSP development. It was completed prior to May 2021, yet there are multiple statements in the GSP referring to reliance on the model to refine analyses in the future. For example, sustainable yield estimates reportedly will be refined using the forthcoming numerical model. Plans are described where various water budget components will be refined using groundwater model results. The SGMA regulations require reliance on a numerical model to quantify depletions from surface water, but this information is not provided in the draft GSP. The only mention of model results is in Table 2c.1-2 Water Budget Data Sources, which indicates the model was used to estimate subsurface outflow. The analyses that benefit from the numerical model need to be included and clearly identified in the GSP.	Western Management Area	10/25/2021 18:53 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/700">https://portal.santaynezwater.org/service/document/download/700</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-31	3b.3-6 Depletion of Interconnected Surface Water Minimum Thresholds The GSP may establish a representative MT based on groundwater elevations, as is advocated in Section 3b.3-6, but the GSP must demonstrate with adequate evidence that groundwater elevation is a reasonable proxy. This information is available from the numerical model and needs to be extracted and evaluated against measured water level conditions in the RMS for interconnected surface water.	Western Management Area	10/25/2021 18:53 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/701">https://portal.santaynezwater.org/service/document/download/701</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	3.The GSP provides no explanation of how the groundwater storage benefits from the Project and Management Actions (PMA) were quantified, which precludes third-party assessment of their certainty and reliability.	Western Management Area	10/25/2021 18:53 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/702">https://portal.santaynezwater.org/service/document/download/702</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	3.The GSP provides no explanation of how the groundwater storage benefits from the Project and Management Actions (PMA) were quantified, which precludes third-party assessment of their certainty and reliability.	Western Management Area	10/25/2021 18:53 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/704">https://portal.santaynezwater.org/service/document/download/704</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-33	3B.4 Measurable Objectives The Measurable Objective (MO) is the sustainability goal for the basin and represented by a quantitative value at each RMS. The sustainability goal is reached when the SMC is met at all the RMS. The MO values are allowed to vary between RMS and within a margin of operational flexibility, but the overall trends should be toward the MO. This is a key aspect of demonstrating the efficacy of proposed PMAs. Typically, the numerical groundwater flow model is employed to show the effects on groundwater levels, groundwater storage changes, and interconnected surface water. Furthermore, when water levels are used as proxy, the model can show effects on seawater intrusion and subsidence. If a numerical model is not used, the GSP shall identify and describe an equally effective method, tool, or analytical model to accomplish these requirements. This analysis is lacking in the GSP.	Western Management Area	10/25/2021 18:53 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/705">https://portal.santaynezwater.org/service/document/download/705</a>

Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	4.The GSP identifies increased water conservation as a potential PMA, and cites data regarding the current per capita water use of Lompoc, Mission Hills CSD, Vandenberg AFB, and Vandenberg Village CSD. This water use data demonstrates that Lompoc (and its citizens) have proactively taken the steps necessary to achieve significant water conservation. The GSP should reflect this fact and acknowledge that any conservation-based efforts to address WMA groundwater conditions must be enforced in an equitable manner, recognizing the past and present efforts of those jurisdictions that are already contributing to a sustainable WMA basin through water conservation programs.	Western Management Area	10/25/2021 18:53 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/703">https://portal.santaynezwater.org/service/document/download/703</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	4.The GSP identifies increased water conservation as a potential PMA, and cites data regarding the current per capita water use of Lompoc, Mission Hills CSD, Vandenberg AFB, and Vandenberg Village CSD. This water use data demonstrates that Lompoc (and its citizens) have proactively taken the steps necessary to achieve significant water conservation. The GSP should reflect this fact and acknowledge that any conservation-based efforts to address WMA groundwater conditions must be enforced in an equitable manner, recognizing the past and present efforts of those jurisdictions that are already contributing to a sustainable WMA basin through water conservation programs.	Western Management Area	10/25/2021 18:53 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/706">https://portal.santaynezwater.org/service/document/download/706</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-33	3B.4 Measurable ObjectivesThe GSP fails to define interim milestones (IM) as required by 23 C.C.R. 354.30(a) which states that the GSA shall establish measurable objectives, including interim milestones in increments of five years, to achieve the sustainability goal for the basin within 20 years of Plan implementation and to continue to sustainably manage the groundwater basin over the planning and implementation horizon. IMs are not optional, and they are required for each RMS and its associated SMC.	Western Management Area	10/25/2021 18:53 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/707">https://portal.santaynezwater.org/service/document/download/707</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	4.The GSP identifies increased water conservation as a potential PMA, and cites data regarding the current per capita water use of Lompoc, Mission Hills CSD, Vandenberg AFB, and Vandenberg Village CSD. This water use data demonstrates that Lompoc (and its citizens) have proactively taken the steps necessary to achieve significant water conservation. The GSP should reflect this fact and acknowledge that any conservation-based efforts to address WMA groundwater conditions must be enforced in an equitable manner, recognizing the past and present efforts of those jurisdictions that are already contributing to a sustainable WMA basin through water conservation programs.	Western Management Area	10/25/2021 18:53 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/681">https://portal.santaynezwater.org/service/document/download/681</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	5.There may be opportunities for the GSA members to implement projects and management actions to benefit the basin. The GSP should acknowledge and encourage its members to undertake such projects/actions, and the GSA should incentivize members with a system of rules that provide groundwater credits. For example, members with recycled water might be able to use or transfer that water to be used in lieu of groundwater. Or, members may engage in groundwater recharge and recovery projects that are best incentivized with a system of credits.	Western Management Area	10/25/2021 18:53 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/682">https://portal.santaynezwater.org/service/document/download/682</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	6.The GSP references a contractual water supply from the State Water Project (SWP) as a potential PMA to address conditions in the basin. Lompoc's citizens have twice been presented with the option of pursuing a SWP water contract and twice rejected the funding mechanism. The GSP should recognize this reality and remove SWP supplies as a potential PMA.	Western Management Area	10/25/2021 18:53 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/683">https://portal.santaynezwater.org/service/document/download/683</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	7.The GSP contains questionable implementation schedules. For example, the GSP requires two years to survey a single well (see 5a.1-1 Surveying Representative Wells) and plans to phase meter installation over multiple years yet complete that task by the end of 2023 (less than 2 years from the GSP submittal date).	Western Management Area	10/25/2021 18:53 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/684">https://portal.santaynezwater.org/service/document/download/684</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-6	8. Specific Comments3b.2-1 Chronic Lowering of Groundwater LevelsThe extracted water level data for Representative Monitoring Sites (RMS) located in the City of Lompoc from the Data Management System (DMS). The MT values were then calculated and found to be 3 feet greater than the values reported in Table 3b.3-1. This discrepancy needs to be reconciled.	Western Management Area	10/25/2021 18:53 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/685">https://portal.santaynezwater.org/service/document/download/685</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-7	8. Specific Comments3b.2-1 Chronic Lowering of Groundwater LevelsThe number of wells with exposed well screens, expressed as a percentage, is utilized as a quantitative indicator for significant and unreasonable effects. However, the Minimum Threshold (MT) for the Upper and Lower aquifers was based primarily on historical water levels. A substantial amount of work is reported calculating the differences between the percentage of exposed well screens under 2020 water levels and proposed MTs, but there is no meaningful difference in the results. The MT for the Upper Aquifer was ultimately defined as 10-feet below the Spring 2020 levels, and in the Lower Aquifer the MT was defined as 20-feet below Spring 2020 levels. A more direct argument would develop the MTs from the historical water levels and then utilize the small differences in exposed well screen percentages to confirm the MTs protect against significant and unreasonable effects.	Western Management Area	10/25/2021 18:53 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/686">https://portal.santaynezwater.org/service/document/download/686</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-8	B. Specific Comments3b.2-1 Chronic Lowering of Groundwater LevelsUndesirable Results (URs) are defined by water levels below the MT in 50% of the RMS. However, the text is not clear whether this definition applies to each principal aquifer or both aquifers and all the RMS combined. The criteria should apply to each principal aquifer as follows: 50% of the RMS in the Upper Aquifer and 50% of the RMS in the Lower Aquifer.	Western Management Area	10/25/2021 18:53 WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/687">https://portal.santaynezwater.org/service/document/download/687</a>

Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-8	B. Specific Comments3b.2-1 Chronic Lowering of Groundwater LevelsThe Triggers appear to be arbitrarily selected and will likely be ineffective. For example, the Trigger for the Upper Aquifer RMS is 5 feet below the Spring 2020 water level. During extended dry periods, the observed water level decline in Lompoc 2 was 4 to almost 6 ft/yr. Hence, during a period of declining water levels the MT (10 feet below 2020 water level) would be reached in 1 to 2 years after reaching the Trigger. Any mitigation must therefore be effective within one year of implementation. Other than requesting a water rights release, which is dependent on the Below Narrows Account, what other specific projects and management actions would be effective in this short time frame should a water rights release not occur? This fallback plan must be made clear as part of GSP implementation, and its effectiveness verified using the numerical groundwater model. Without this plan, the definition of URs and action levels for the Trigger Points must be revised to be more protective of the City's water supply. For example, the percentage of RMS exceeding the MT/Trigger Point can be reduced to something less than 50%. Alternatively, the RMS that represent conditions near and within the City can be weighted higher than the RMS west of the City, ensuring that actions to protect the City water supply are initiated promptly. The numerical groundwater model can be employed to confirm that these revised definitions and action levels provide adequate time for the groundwater system to respond to the specific projects and management actions that form the requested fallback plan.	Western Management Area	10/25/2021 18:53	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/688">https://portal.santaynezwater.org/service/document/download/688</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-9	3b.2-2 Cumulative Change in Groundwater Storage Section 2b.2-1 reports 15,000 AF cumulative decline in storage during 1982-2018, whereas Table 2c.2-6 reports 36,734 AF cumulative decline in storage during the same period. The two results represent different areas, yet only one value is needed for the GSP and should be reported (the one for the entire WMA). Reporting more than one value confuses the issue and will confuse DWR.	Western Management Area	10/25/2021 18:53	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/689">https://portal.santaynezwater.org/service/document/download/689</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-10	3b.2-2 Cumulative Change in Groundwater StorageThe regulations define the MT for groundwater storage as a volume: The minimum threshold for reduction of groundwater storage shall be a total volume of groundwater that can be withdrawn from the basin without causing conditions that may lead to undesirable results. C.C.R. 354.28 (c)(2). The GSP seeks to employ water levels as proxy to storage volumes, however it fails to demonstrate a correlation between the water level changes at the RMS and the corresponding calculated groundwater storage changes in the WMA. Alternatively, the GSP could show that when water levels at the RMS decline to the MTs, the resulting change in groundwater storage is not significant and unreasonable (in other words, the Sustainable Management Criteria [SMCs] for Chronic Lowering of Groundwater Levels protect against significant and unreasonable changes in groundwater storage).	Western Management Area	10/25/2021 18:53	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/690">https://portal.santaynezwater.org/service/document/download/690</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-10	3b.2-2 Cumulative Change in Groundwater StorageNote that 356.2(b)(5)(a) of the regulations require that the Annual Report include a change in groundwater storage maps for each principal aquifer. In the WMA, there are two principal aquifers monitored by different RMS and managed by different SMCs.	Western Management Area	10/25/2021 18:53	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/691">https://portal.santaynezwater.org/service/document/download/691</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-29	3b.3-4 Degraded Water Quality Minimum ThresholdsThis section needs to be rewritten. It includes conflicting statements and confuses units.	Western Management Area	10/25/2021 18:53	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/692">https://portal.santaynezwater.org/service/document/download/692</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-29	3b.3-4 Degraded Water Quality Minimum ThresholdsThe GSA is not required to address URs that occurred before and have not been corrected by January 1, 2015 (10727.2(b)(4)). The approach toward water quality thresholds should be relative to 2015 conditions. Accordingly, the MT should be set at the Water Quality Objectives determined by the CCWQCP, and the Measurable Objectives (MO) should be set at some fraction (e.g., 80%) of the MT. As a result, the sustainability goal for the GSP is to maintain groundwater quality acceptable to the prescribed beneficial uses, and URs occur when GSP implementation causes the water quality to exceed Water Quality Objectives.	Western Management Area	10/25/2021 18:53	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/693">https://portal.santaynezwater.org/service/document/download/693</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	6.The GSP references a contractual water supply from the State Water Project (SWP) as a potential PMA to address conditions in the basin. Lompoc citizens have twice been presented with the option of pursuing a SWP water contract and twice rejected the funding mechanism. The GSP should recognize this reality and remove SWP supplies as a potential PMA.	Western Management Area	10/25/2021 18:53	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/713">https://portal.santaynezwater.org/service/document/download/713</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-11	Section 4a-2-1-1The GSP states, The WMA GSA will coordinate with the existing agencies and programs, and develop additional voluntary, rebate-based, or mandatory conservation efforts for domestic, municipal, and agricultural beneficial uses within the WMA.Mandatory conservation efforts are essentially an allocation plan, which is proposed for Group 3. Group 1 conservation efforts should only be voluntary and rebate based.	Western Management Area	10/25/2021 18:53	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/714">https://portal.santaynezwater.org/service/document/download/714</a>



Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	Dear Western Management Area GSA: These comments are submitted on behalf of the City of Lompoc (Lompoc) regarding the draft Santa Ynez River Valley Groundwater Basin Western Management Area Groundwater Sustainability Plan (GSP). Lompoc appreciates the efforts of the Western Management Area Groundwater Sustainability Agency (GSA) and its staff and consultants in preparing the draft GSP. That said, Lompoc believes there is still significant work to be done in order to comply with the mandates of SGMA and adopt a GSP that clearly identifies if current groundwater practices in the Western Management Area (WMA) are sustainable and, if not, specifically what needs to be done to become sustainable by 2042. This letter will begin with some general comments about the draft GSP and then present more specific comments. Lompoc respectfully requests that the GSA representatives, staff, and consultants consider and respond to these comments. Lompoc has been an active participant in the GSA activities, including support from Lompoc's hydrologic consultants EKI Environmental & Water (EKI), and will continue its active engagement as the GSP is adopted and implemented in years to come. General Comments 1. As stated above, the GSP needs a clear statement on whether current groundwater extractions from the WMA are sustainable or not. This will clarify whether GSA actions are needed to maintain sustainability, or whether the actions are needed to become sustainable. The entire GSP should be consistent with this characterization.	Western Management Area	10/25/2021 18:53	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/715">https://portal.santaynezwater.org/service/document/download/715</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	7.The GSP contains questionable implementation schedules. For example, the GSP requires two years to survey a single well (see 5a.1-1 Surveying Representative Wells) and plans to phase meter installation over multiple years yet complete that task by the end of 2023 (less than 2 years from the GSP submittal date).	Western Management Area	10/25/2021 18:53	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/716">https://portal.santaynezwater.org/service/document/download/716</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	7.The GSP contains questionable implementation schedules. For example, the GSP requires two years to survey a single well (see 5a.1-1 Surveying Representative Wells) and plans to phase meter installation over multiple years yet complete that task by the end of 2023 (less than 2 years from the GSP submittal date).	Western Management Area	10/25/2021 18:53	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/717">https://portal.santaynezwater.org/service/document/download/717</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	Dear Western Management Area GSA: These comments are submitted on behalf of the City of Lompoc (Lompoc) regarding the draft Santa Ynez River Valley Groundwater Basin Western Management Area Groundwater Sustainability Plan (GSP). Lompoc appreciates the efforts of the Western Management Area Groundwater Sustainability Agency (GSA) and its staff and consultants in preparing the draft GSP. That said, Lompoc believes there is still significant work to be done in order to comply with the mandates of SGMA and adopt a GSP that clearly identifies if current groundwater practices in the Western Management Area (WMA) are sustainable and, if not, specifically what needs to be done to become sustainable by 2042. This letter will begin with some general comments about the draft GSP and then present more specific comments. Lompoc respectfully requests that the GSA representatives, staff, and consultants consider and respond to these comments. Lompoc has been an active participant in the GSA activities, including support from Lompoc's hydrologic consultants EKI Environmental & Water (EKI), and will continue its active engagement as the GSP is adopted and implemented in years to come. General Comments 1. As stated above, the GSP needs a clear statement on whether current groundwater extractions from the WMA are sustainable or not. This will clarify whether GSA actions are needed to maintain sustainability, or whether the actions are needed to become sustainable. The entire GSP should be consistent with this characterization.	Western Management Area	10/25/2021 18:53	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/718">https://portal.santaynezwater.org/service/document/download/718</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-11	Section 4a-2-1-1 The GSP states, "A Water Conservation Strategic Plan, or similar document, will be developed that considers WMA GSA stakeholder concerns, integrates with existing conservation programs, and meets the health and safety water requirements for communities that rely on groundwater within the WMA." The Strategic Plan should also consider granting credit for past conservation actions, such as the extensive conservation program and actions of Lompoc and its citizens/businesses.	Western Management Area	10/25/2021 18:53	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/719">https://portal.santaynezwater.org/service/document/download/719</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	2.The numerical groundwater model was developed to support GSP development. It was completed prior to May 2021, yet there are multiple statements in the GSP referring to reliance on the model to refine analyses in the future. For example, sustainable yield estimates reportedly will be refined using the forthcoming numerical model. Plans are described where various water budget components will be refined using groundwater model results. The SGMA regulations require reliance on a numerical model to quantify depletions from surface water, but this information is not provided in the draft GSP. The only mention of model results is in Table 2c.1-2 Water Budget Data Sources, which indicates the model was used to estimate subsurface outflow. The analyses that benefit from the numerical model need to be included and clearly identified in the GSP.	Western Management Area	10/25/2021 18:53	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/720">https://portal.santaynezwater.org/service/document/download/720</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-6	B.Specific Comments 3b.2-1 Chronic Lowering of Groundwater Levels EKI extracted the water level data for Representative Monitoring Sites (RMS) located in the City of Lompoc from the Data Management System (DMS). The MT values were then calculated and found to be 3 feet greater than the values reported in Table 3b.3-1. This discrepancy needs to be reconciled.	Western Management Area	10/25/2021 18:53	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/721">https://portal.santaynezwater.org/service/document/download/721</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	2.The numerical groundwater model was developed to support GSP development. It was completed prior to May 2021, yet there are multiple statements in the GSP referring to reliance on the model to refine analyses in the future. For example, sustainable yield estimates reportedly will be refined using the forthcoming numerical model. Plans are described where various water budget components will be refined using groundwater model results. The SGMA regulations require reliance on a numerical model to quantify depletions from surface water, but this information is not provided in the draft GSP. The only mention of model results is in Table 2c.1-2 Water Budget Data Sources, which indicates the model was used to estimate subsurface outflow. The analyses that benefit from the numerical model need to be included and clearly identified in the GSP.	Western Management Area	10/25/2021 18:53	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/722">https://portal.santaynezwater.org/service/document/download/722</a>

Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 3: Section 3b: Sustainable Management Criteria	Page 3b-6	8. Specific Comments 3b.2-1 Chronic Lowering of Groundwater Levels: CEKI extracted the water level data for Representative Monitoring Sites (RMS) located in the City of Lompoc from the Data Management System (DMS). The MT values were then calculated and found to be 3 feet greater than the values reported in Table 3b.3-1. This discrepancy needs to be reconciled.	Western Management Area	10/25/2021 18:53	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/723">https://portal.santaynezwater.org/service/document/download/723</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	5. There may be opportunities for the GSA members to implement projects and management actions to benefit the basin. The GSP should acknowledge and encourage its members to undertake such projects/actions, and the GSA should incentivize members with a system of rules that provide groundwater credits. For example, members with recycled water might be able to use or transfer that water to be used in lieu of groundwater. Or, members may engage in groundwater recharge and recovery projects that are best incentivized with a system of credits.	Western Management Area	10/25/2021 18:53	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/708">https://portal.santaynezwater.org/service/document/download/708</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	5. There may be opportunities for the GSA members to implement projects and management actions to benefit the basin. The GSP should acknowledge and encourage its members to undertake such projects/actions, and the GSA should incentivize members with a system of rules that provide groundwater credits. For example, members with recycled water might be able to use or transfer that water to be used in lieu of groundwater. Or, members may engage in groundwater recharge and recovery projects that are best incentivized with a system of credits.	Western Management Area	10/25/2021 18:53	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/709">https://portal.santaynezwater.org/service/document/download/709</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-1	Section 4A-1: The GSP evaluates PMAs based on their estimated contribution to groundwater storage (the water budget). However, SGMA defines groundwater sustainability as the absence of URs. 23 C.C.R. 354.22. Hence, the avoidance of URs as defined by MTs and the sustainability goals defined by the MOs (e.g., water levels) are central to sustainable groundwater management and critical to the success of the GSP. The GSP fails to connect the assumed/estimated additions to the water budget to water level changes relative to the MTs/MOs. This is most effectively accomplished utilizing the numerical groundwater model, and indeed is one of the key reasons for developing the tool. Instead, the GSP assumes a one-to-one (or direct) response between the estimated/assumed volume of water added (or saved) and storage increase. The assumed one-to-one response has not been established in the GSP using the model or an equally effective method, tool, or analytical model. Moreover, the assumption is questionable owing to head-dependent boundaries (e.g., the Santa Ynez River and Pacific Ocean) and the spatial distribution of recharge and pumping stresses.	Western Management Area	10/25/2021 18:53	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/710">https://portal.santaynezwater.org/service/document/download/710</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	Page 4a-9	Section 4A-2: Tiered Fee is not a PMA of its own. It is a means to implement a project or management action. Under Proposition 218 law, there needs to be a basis for the fee, which would typically be a budget for GSP development and implementation costs demonstrating the necessity of the fee.	Western Management Area	10/25/2021 18:53	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/711">https://portal.santaynezwater.org/service/document/download/711</a>
Kristin Worthley	WMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	6. The GSP references a contractual water supply from the State Water Project (SWP) as a potential PMA to address conditions in the basin. Lompoc's citizens have twice been presented with the option of pursuing a SWP water contract and twice rejected the funding mechanism. The GSP should recognize this reality and remove SWP supplies as a potential PMA.	Western Management Area	10/25/2021 18:53	WMA public comments.pdf	<a href="https://portal.santaynezwater.org/service/document/download/712">https://portal.santaynezwater.org/service/document/download/712</a>
Sharyne Merritt		N/A	Questions raised by neighboring farmers: Have the Farm Bureau and vintner's association been engaged so meters and fee requirements don't come as a surprise? Is it possible for additional directors to be added to the GSA Board? such as local water agencies, an environmental director, or an agricultural director? Will implementation of the GSP affect new wells (as in Cuyama) and/or the Growth of Buellton (as Urban Growth Boundary) runs out?	null	10/25/2021 11:39		
Melissa Rohde	WMA GSP Public Draft (Plan), September 2021	N/A	Hello, I am writing on behalf of Audubon California, Clean Water Action, Clean Water Fund, Local Government Commission, The Nature Conservancy, and Union of Concerned Scientists with the attached comments on the draft Groundwater Sustainability Plan for this basin. We know that SGMA plan development and implementation is a major undertaking, and we want every basin to be successful. We would be happy to meet with you to discuss our evaluation as you finalize your Plan for submittal to DWR. Feel free to contact us at ngos.sgma@gmail.com for more information or to schedule a conversation. Sincerely, Melissa Rohde Groundwater Scientist The Nature Conservancy	Western Management Area	10/25/2021 10:41	Public Comment Letter_DraftGSP_SantaYnezRiverValley-Western.pdf	<a href="https://portal.santaynezwater.org/service/document/download/674">https://portal.santaynezwater.org/service/document/download/674</a>
Melissa Rohde	WMA GSP Public Draft (Plan), September 2021	N/A	Hello, I am writing on behalf of Audubon California, Clean Water Action, Clean Water Fund, Local Government Commission, The Nature Conservancy, and Union of Concerned Scientists with the attached comments on the draft Groundwater Sustainability Plan for this basin. We know that SGMA plan development and implementation is a major undertaking, and we want every basin to be successful. We would be happy to meet with you to discuss our evaluation as you finalize your Plan for submittal to DWR. Feel free to contact us at ngos.sgma@gmail.com for more information or to schedule a conversation. Sincerely, Melissa Rohde Groundwater Scientist The Nature Conservancy	Western Management Area	10/25/2021 10:40	Public Comment Letter_DraftGSP_SantaYnezRiverValley-Western.pdf	<a href="https://portal.santaynezwater.org/service/document/download/673">https://portal.santaynezwater.org/service/document/download/673</a>
Ngodoo Atume	CMA GSP Public Draft (Plan), September 2021	N/A	Hello, I am writing on behalf of Audubon California, Clean Water Action, Clean Water Fund, Local Government Commission, The Nature Conservancy, and Union of Concerned Scientists with the attached comments on the draft Groundwater Sustainability Plan for this basin. We know that SGMA plan development and implementation is a major undertaking, and we want every basin to be successful. We would be happy to meet with you to discuss our evaluation as you finalize your Plan for submittal to DWR. Feel free to contact us at ngos.sgma@gmail.com for more information or to schedule a conversation. Sincerely, Ngodoo Atume Water Policy Analyst Clean Water Action/Clean Water Fund	Central Management Area	10/25/2021 10:37	Public Comment Letter_DraftGSP_SantaYnezRiverValley-Central.pdf	<a href="https://portal.santaynezwater.org/service/document/download/671">https://portal.santaynezwater.org/service/document/download/671</a>

Ngodoo Atume	CMA GSP Public Draft (Plan), September 2021	N/A	Hello, I am writing on behalf of Audubon California, Clean Water Action, Clean Water Fund, Local Government Commission, The Nature Conservancy, and Union of Concerned Scientists with the attached comments on the draft Groundwater Sustainability Plan for this basin. We know that SGMA plan development and implementation is a major undertaking, and we want every basin to be successful. We would be happy to meet with you to discuss our evaluation as you finalize your Plan for submittal to DWR. Feel free to contact us at ngos.sgma@gmail.com for more information or to schedule a conversation. Sincerely, Ngodoo Atume Water Policy Analyst Clean Water Action/Clean Water Fund	Central Management Area	10/25/2021 10:37	Public Comment Letter_DraftGSP_SantaYnezRiverValley-Central.pdf	<a href="https://portal.santaynezwater.org/service/document/download/672">https://portal.santaynezwater.org/service/document/download/672</a>
Joseph Hughes	EMA GSP Public Draft, Sept. 8, 2021	N/A	Please see attached.	Eastern Management Area	10/22/2021 14:50	10.22.21 EMA GSP Comment Letter(4468110.1).pdf	<a href="https://portal.santaynezwater.org/service/document/download/666">https://portal.santaynezwater.org/service/document/download/666</a>
Pablo Ortiz-Partida	EMA GSP Public Draft, Sept. 8, 2021	N/A	Hello, I am writing on behalf of Audubon California, Clean Water Action, Clean Water Fund, Local Government Commission, The Nature Conservancy, and Union of Concerned Scientists with the attached comments on the draft Groundwater Sustainability Plan for this basin. We know that SGMA plan development and implementation is a major undertaking, and we want every basin to be successful. We would be happy to meet with you to discuss our evaluation as you finalize your Plan for submittal to DWR. Feel free to contact us at ngos.sgma@gmail.com for more information or to schedule a conversation. Sincerely, J. Pablo Ortiz-Partida, Ph.D. Western States Climate and Water Scientist Union of Concerned Scientists	Eastern Management Area	10/22/2021 13:00	Public Comment Letter_DraftGSP_SantaYnezRiverValley-Eastern.pdf	<a href="https://portal.santaynezwater.org/service/document/download/664">https://portal.santaynezwater.org/service/document/download/664</a>
Pablo Ortiz-Partida	EMA GSP Public Draft, Sept. 8, 2021	N/A	Hello, I am writing on behalf of Audubon California, Clean Water Action, Clean Water Fund, Local Government Commission, The Nature Conservancy, and Union of Concerned Scientists with the attached comments on the draft Groundwater Sustainability Plan for this basin. We know that SGMA plan development and implementation is a major undertaking, and we want every basin to be successful. We would be happy to meet with you to discuss our evaluation as you finalize your Plan for submittal to DWR. Feel free to contact us at ngos.sgma@gmail.com for more information or to schedule a conversation. Sincerely, J. Pablo Ortiz-Partida, Ph.D. Western States Climate and Water Scientist Union of Concerned Scientists	Eastern Management Area	10/22/2021 13:00	Public Comment Letter_DraftGSP_SantaYnezRiverValley-Eastern.pdf	<a href="https://portal.santaynezwater.org/service/document/download/665">https://portal.santaynezwater.org/service/document/download/665</a>
Steve Slack (CDFW)	EMA GSP Public Draft, Sept. 8, 2021 - Section 3.1: Hydrogeologic Conceptual Model	29-Mar	Comment #1: Section 3.1.4.1 Principal Aquifers (Santa Ynez River Alluvium) Issue: The Draft GSP does not provide enough information to conclude that surface waters do not affect groundwater levels. Page 3-29 of the Draft GSP states, "Water present within the Santa Ynez River Alluvium is considered surface water by the SWRCB, and not managed by the GSAs. Therefore, the Santa Ynez River Alluvium is not classified in this GSP as a principal aquifer. The main criterion for defining the water-bearing geologic formations in the EMA as principal aquifers is based on the SGMA definition of a principal aquifer: "aquifers or aquifer systems that store, transmit, and yield significant or economic quantities of groundwater to wells, springs, or surface water systems." Principal aquifers must exhibit both sufficient permeability and storage potential for the movement and storage of groundwater such that wells can reliably produce groundwater in sufficient quantities on a long-term basis. The EMA-Hydrologic Conceptual Model (HCM) states during downstream water right releases, water infiltrates and recharges the alluvium as "Recharge to the Santa Ynez River Alluvium occurs through percolation of precipitation as well as from upstream Lake Cachuma releases and discharge from the Santa Ynez Uplands Tributaries" (EMA-HCM Memo, Pg. 65). The HCM Memo acknowledges that the younger alluvium in the upper aquifer is being recharged from water right releases. However, the EMA GSA has not provided enough information to properly identify and analyze the interconnectivity between the three zones of the upper aquifer and the relationship with the lower aquifer. The alluvium at the mouth of the Santa Ynez Upland Tributaries is an example in the Basin that has groundwater-surface water interactions based on groundwater recharge during downstream water right releases. CDFW believes this interaction also occurs during the natural flows of various seasons throughout the year. CDFW agrees that the Upper Aquifer is recharged from the surface water, but it is unclear how Upper Aquifer groundwater pumping should be regulated without direct input from the State Water Resources Control Board (SWRCB). The EMA-HCM Memo also states that "The extent and quantity of any groundwater discharge from the groundwater basin into the Tributary Alluvium has not been confirmed or quantified. Conceptually, it is believed that this discharge occurs primarily as surface water flow leaving the tributaries" (EMA-HCM Memo, Pg. 67). The EMA-HCM Memo further states that "Water discharges from the EMA as underflow from the Santa Ynez River Alluvium every year" (Stetson, 2004 among others) (EMA-HCM Memo, Pg. 67). This is another example of an interconnected surface water that WMA-GSA describes in their WMA-HCM Memo but did not identify and analyze in the WMA-GC Memo. Recommendation #1(a): CDFW recommends the EMA-GSA provide justification, based on specific provisions of SGMA, for the conclusion that the Upper Aquifer should not be classified as a principal aquifer or managed by a GSP under SGMA. Alternatively, the WMA-GSA can provide direct input from SWRCB on the classification of the Upper Aquifer. CDFW believes the EMA-GSA must sustainably manage groundwater resources in the Upper Aquifer, in part	Eastern Management Area	10/21/2021 15:40	Santa Ynez EMA Draft GSP Comment Letter.pdf	<a href="https://portal.santaynezwater.org/service/document/download/655">https://portal.santaynezwater.org/service/document/download/655</a>

Steve Slack (CDFW)	EMA GSP Public Draft, Sept. 8, 2021 - Section 3.2: Groundwater Conditions	Mar-84	<p>Comment #2: Section 3.2.5 Interconnected Groundwater and Surface Water for Tributaries to the Santa Ynez River Issue: The Draft GSP still does not provide enough information to conclude how much recharge is occurring within SYR tributaries. As indicated on page 3-84, a significant source of recharge to the Paso Robles Formation occurs within the shallow alluvial sand and gravel beds of tributaries where they are in direct contact with the Paso Robles Formation. Percolating groundwater moves readily through the tributary alluvium in the Santa Ynez Uplands (LaFreniere and French,1968). In these areas, the tributaries are losing streams, contributing to the groundwater in the underlying Paso Robles Formation (and Older Alluvium). The Draft GSP identifies two locations in the EMA where groundwater from a principal aquifer is interconnected with surface water. Table ES-1 Summary of Sustainable Management Criteria on page ES-16 indicates the confluence of Alamo Pintado Creek and Zanja de Cota Creek as the two areas connecting surface water and the SYR. Under SGMA, a GSP is required to avoid unreasonable adverse impacts on beneficial uses of interconnected surface waters, defined as surface water that is hydraulically connected at any point by a continuous saturated zone to the underlying aquifer, and the overlying surface water is not completely depleted. (Water Code 10721(x)(6) and 10727.2(b); 23 CCR 351(o).) To the extent that the tributaries are hydraulically connected and not completely depleted at any time of the year, they qualify as interconnected surface waters and warrant appropriate consideration in the GSP, including the goal to avoid depletions causing significant and unreasonable adverse impacts on beneficial uses. The interconnected surface water narrative also lacks specific estimations of the quantity and timing of streamflow depletions as required by California Code of Regulations, Title 23, 354.16(f). CDFW is very concerned about the health of the steelhead population. Managing the groundwater within the Santa Ynez River Valley is particularly critical to the survival and recovery of the threatened South-Central California Steelhead Designation Population Segment (DPS), a federal Endangered Species Act (FESA) listed species (NMFS 2013). Drought conditions and low flow rates have led CDFW to participate in rescue operations as recently as 2020. The SYR contains important steelhead spawning and rearing tributaries. Threats to steelhead, such as excessively high-water temperatures due to reduced surface flows or groundwater pumping in the spring, summer, and early fall, reduce available juvenile rearing habitat. Low flows in the fall and winter can delay adult passage to critical spawning areas. Groundwater-dependent habitats, including interconnected surface waters, are particularly susceptible to changes in the depth of the groundwater. Lowered water tables that drop beneath the root zones can cut off phreatophyte vegetation from water resources, stressing or ultimately converting vegetated terrestrial habitat. Induced infiltration attributable to groundwater pumping can reverse hydraulic gradients and may cause streams to stop flowing. The frequency and duration of exposure to lowered groundwater tables and low-flow or no-flow conditions caused by groundwater pumping, as well as habitat and</p>	Eastern Management Area	10/21/2021 15:40 Santa Ynez EMA Draft GSP Comment Letter.pdf	<a href="https://portal.santaynezwater.org/service/document/download/656">https://portal.santaynezwater.org/service/document/download/656</a>
Steve Slack (CDFW)	EMA GSP Public Draft, Sept. 8, 2021 - Section 3.2: Groundwater Conditions	3-158	<p>Comment #3: Section 3.3.5.1.2 Projected Water Budget (Cannabis Cultivation)- Cannabis High Priority Watershed Issue: CDFW is concerned that cannabis groundwater use is not being fully accounted for when evaluating this SGMA area. Ignoring the growth potential of this industry, could result in a lack of groundwater management accountability. Page 3-158 of the Draft GSP states that "While not included as a crop category in the recent crop surveys, cannabis production is projected to enter the Santa Ynez Valley and the EMA in the coming years. The County of Santa Barbara has placed an upper limit on the maximum number of acres county-wide allowed to be planted with cannabis. The assumption for the EMA is that cannabis production will reach a limit for the Santa Ynez Valley over the next several years and will increase beyond the current limit." CDFW has identified, in region, the Santa Ynez River Valley as a high priority watershed. Most projects distributed throughout this SGMA area are clustered within the San Miguelito Creek-Santa Ynez River, Nojoqui Creek, Santa Rosa Creek-Santa Ynez River, Salsipuedes Creek, Santa Rita Valley and Canada De La Vina-Santa Ynez River HUC 12 watersheds. This includes San Miguelito Creek, Salsipuedes Creek, and Santa Ynez River (critical steelhead streams) as well as Nojoqui Creek and Santa Rosa River, and the SYR tributaries (Dagit et. al 2020). The projects range from cultivation of 1-50 acres within the approximate 52 notifications the Department has received with the main source of water coming from groundwater wells. CDFW expects this type of trend to continue in the future. Groundwater and interconnected surface water are critical resources that do not recognize artificial boundaries. Since the implementation of legal cannabis cultivation, CDFW has received multiple applications within the Santa Ynez River Valley, especially in the HUC 12 watersheds listed above. Some of the cannabis grows can range from 1-50 acres, with multiple licenses on a property (resulting in several acres of cultivation) that are dependent on depths within the alluvium. Surface flows (and surface diversions) are regulated in large degree from dam releases, which emphasizes the large roll groundwater wells have in cannabis cultivation. Santa Ynez has sensitive, natural communities consisting of Oak woodlands, grasslands, sage scrub, chaparral, and riparian woodland habitats along the Santa Ynez River and SYR tributaries. According to the California Natural Diversity Database (CNDDB), the Santa Ynez River Valley provides habitat that supports several sensitive species (some listed as endangered or threatened) throughout their life cycles, including southwestern willow flycatcher (<i>Empidonax traillii extimus</i>), least Bell's vireo (<i>Vireo bellii pusillus</i>), red-legged frog (<i>Rana draytonii</i>), and seaside bird beak (<i>Cordylanthus rigidus ssp. littoralis</i>) (CDFW, 2019). Habitats that support these species also consist of phreatophytes and other vegetation communities that are dependent on shallow aquifers that support surface water in each of these systems. Phreatophytic vegetation is a critical contributor to nesting and foraging habitat, forage for a wide range of species and can be affected by sensitive depth to groundwater threshold impacts (Naumburg et.al. 2005) and (Froend et. al. 2010). This sensitivity to groundwater level thresholds means that localized</p>	Eastern Management Area	10/21/2021 15:40 Santa Ynez EMA Draft GSP Comment Letter.pdf	<a href="https://portal.santaynezwater.org/service/document/download/657">https://portal.santaynezwater.org/service/document/download/657</a>

Steve Slack (CDFW)	EMA GSP Public Draft, Sept. 8, 2021 - Section 3.2: Groundwater Conditions	3-158	<p>Comment #4: Section 3.3.5.1.2 Projected Water Budget (Cannabis Cultivation)- Cannabis Impacts          Issue #4.1: Without the designation of the Santa Ynez River Valley as a Cannabis High Priority Watershed, evaluation of cannabis crop water usage may be overlooked throughout the Santa Ynez River Valley Groundwater Basin, especially within the Santa Ynez Alluvium, an area that, as stated on page 3-29, will not be managed under SGMA by the EMA-GSA. Page 3-158 of the Draft GSP states:</p> <p>The projected agricultural acreages and water use are projected to increase only modestly over the next 20 and 50 years. This increase, based principally on conversion to field crops and a more modest increase in vineyard acreage, are together similar in scale to the estimated projected increase in cannabis acreage. The projected rate of expansion of acreage is equal to 36 acres added per year.</p> <p>Cannabis cultivation is a water intensive crop that can have a significant impact to environmental beneficial users of groundwater. Cannabis groundwater wells provide water for the irrigation of water-intensive cannabis cultivation (assuming six gallons of water per day per plant) (Bauer S. 2015). Just within the Santa Ynez Alluvium, CDFW has received approximately 26 cannabis projects. These projects range from cultivation of 3.5 - 50.0 acres with water supplied from groundwater wells. Many of the wells for the cannabis notifications within Santa Ynez Valley are shallow wells located within or immediately adjacent to tributary streams and the SYR. CDFW is concerned that without management of the Santa Ynez Alluvium under SGMA by the EMA-GSA, significant and unreasonable surface water depletions may occur, compromising groundwater dependent ecosystems within and along the streams. Recommendation #4.1(a): CDFW recommends a more careful review of the existing information on cannabis cultivation within the Santa Ynez alluvium and recommends the information be considered when evaluating groundwater management. As indicated on page 3-84, a significant source of recharge to the Paso Robles Formation occurs within the shallow alluvial sand and gravel beds of tributaries where they are in direct contact with the Paso Robles Formation. Percolating groundwater moves readily through the tributary alluvium in the Santa Ynez Uplands (LaFreniere and French,1968). In these areas, the tributaries are losing streams, contributing to the groundwater in the underlying Paso Robles Formation (and Older Alluvium). The majority of cannabis cultivation rely on groundwater for cannabis crops irrigation, and the likely interconnected nature of the Santa Ynez River suggests that such uses (individually or cumulatively) should be considered when evaluating cannabis impacts in the Santa Ynez alluvium. Recommendation #4.1(b): CDFW recommends the Santa Ynez River Valley be classified as a Cannabis High Priority Watershed. Issue #4.2: The majority reliance on groundwater for cannabis crops irrigation, and the likely interconnected nature of the Santa Ynez River suggests that such uses (individually or cumulatively) should be considered when evaluating cannabis impacts in the Santa Ynez alluvium. As indicated on page 3-84, a significant source of recharge to the Paso Robles Formation occurs within the shallow alluvial sand and gravel beds of tributaries where</p>	Eastern Management Area	10/21/2021 15:40 Santa Ynez EMA Draft GSP Comment Letter.pdf	<a href="https://portal.santaynezwater.org/service/document/download/658">https://portal.santaynezwater.org/service/document/download/658</a>																																	
Steve Slack (CDFW)	EMA GSP Public Draft, Sept. 8, 2021 - Section 3.2: Groundwater Conditions	Mar-95	<p>Comment #5: Section 3.2.6.1.3 Categorization of Potential GDEs          Issue: The Draft GSP still does not provide enough information to conclude that potential GDEs should be excluded from the GSP. Page 3-95 of the Draft GSP states that the potential GDEs identified in the section above are further categorized based on their proximity to, and association with, the regional principal aquifers in the EMA (refer to Figure 3-39) as follows:</p> <p>Category A refers to potential GDEs that are associated with a principal aquifer in the EMA and are potentially affected by groundwater management activities. Category B refers to potential GDEs that are unlikely to be affected by pumping and groundwater management activities within the EMA. The focus of this GSP is to preserve the existing Category A GDEs where identified, regardless of composition, or condition.</p> <p>Page 3-95 of the Draft GSP also states that in total, there are 1,546 acres of Category B potential GDEs in the EMA as shown on Figure 3-39 and in Table 3-13. All of the orange areas identified on Figure 3-39 are Category B areas for the following reasons:</p> <p>The potential GDEs in the upper portions of Zaca Creek and upper Alamo Pintado Creek are categorized as Category B due to apparent hydrogeologic separation between the perched tributary alluvium, which supports the potential GDEs, and the deeper principal aquifer groundwater elevations that support significant agricultural irrigation in the area.</p> <p>The potential GDEs located in upper Santa Agueda Creek and Happy Canyon are categorized as Category B due to limited groundwater production occurring within the area and the apparent hydrogeologic separation between the perched tributary alluvium aquifers and the deeper principal aquifer groundwater elevations.</p> <p>The potential GDEs located in the eastern portion of the EMA in Cachuma and Santa Cruz Creeks are categorized as Category B due to the absence of significant groundwater production in the area and an assumed hydrogeologic separation between the perched tributary alluvium aquifers and the deeper principal aquifer groundwater elevations.</p> <p>Page 3-97 of the Draft GSP uses Table 3-13 to show the number of acres of potential GDEs in both category A and B:</p> <p>Table 3-13. Categorized Potential GDEs in the EMA (Excluding Santa Ynez River Area)</p> <table border="1"> <thead> <tr> <th>Potential GDE Category</th> <th>Natural Communities Vegetation Classification</th> <th>Acres</th> </tr> </thead> <tbody> <tr> <td>Category A</td> <td>Coast Live Oak</td> <td>91</td> </tr> <tr> <td>Category A</td> <td>Riparian Mixed Hardwood</td> <td>93</td> </tr> <tr> <td>Category B</td> <td>Subtotal</td> <td>184</td> </tr> <tr> <td>Category B</td> <td>Coast Live Oak</td> <td>1,159</td> </tr> <tr> <td>Category B</td> <td>Valley Oak</td> <td>279</td> </tr> <tr> <td>Category B</td> <td>Riparian Mixed Hardwood</td> <td>99</td> </tr> <tr> <td>Category B</td> <td>Riversidean Alluvial Scrub</td> <td>5</td> </tr> <tr> <td>Category B</td> <td>Willow (Shrub)</td> <td>4</td> </tr> <tr> <td>Category B</td> <td>Subtotal</td> <td>1,546</td> </tr> <tr> <td>Total</td> <td></td> <td>1,731</td> </tr> </tbody> </table> <p>The potential GDEs were assessed into two categories based on their relationship to the aquifer, but it is unclear if they were categorized any further. It is also unclear and unknown if there are any GDEs in the Draft GSP that will be protected and monitored into the future. Recommendation #5(a): CDFW recommends the WMA-GSA evaluate potential effects on each GDE unit based on at least four criteria, such as: 1) groundwater dependence; 2) ecological value (high, moderate, low); 3) ecological condition (good, fair, poor) using Normalized Difference Vegetation Index/ Normalized Difference Moisture Index data; and,</p>	Potential GDE Category	Natural Communities Vegetation Classification	Acres	Category A	Coast Live Oak	91	Category A	Riparian Mixed Hardwood	93	Category B	Subtotal	184	Category B	Coast Live Oak	1,159	Category B	Valley Oak	279	Category B	Riparian Mixed Hardwood	99	Category B	Riversidean Alluvial Scrub	5	Category B	Willow (Shrub)	4	Category B	Subtotal	1,546	Total		1,731	Eastern Management Area	10/21/2021 15:40 Santa Ynez EMA Draft GSP Comment Letter.pdf	<a href="https://portal.santaynezwater.org/service/document/download/659">https://portal.santaynezwater.org/service/document/download/659</a>
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Steve Slack (CDFW)	EMA GSP Public Draft, Sept. 8, 2021 - Section 6: Projects and Management Actions	1	GENERAL COMMENTS AND RECOMMENDATIONS Comment #6: Sensitive Species and Habitats Issue: Many sensitive species and habitats in the Santa Ynez EMA comprise of GDEs, the natural communities that rely on groundwater to sustain all or a portion of their water needs. Some of the special-status species in the Santa Ynez River watershed that rely on surface water supported and supplemented by groundwater include the federally endangered Southern California steelhead; southwestern pond turtle (Actinemys pallida), a CDFW species of special concern (SSC) and U.S. Forest Service sensitive species; California red-legged frog (Rana draytonii), a CDFW SSC and ESA-listed species; western spadefoot toad (Spea hammondi), a CDFW SSC and Bureau of Land Management sensitive species; and California tiger salamander (Ambystoma californiense), an ESA-listed and California Endangered Species Act (CESA)-listed species. Some of the special-status species in the SYR watershed that rely on surface water supported and supplemented by groundwater include the federally endangered Southern California steelhead; southwestern pond turtle (Actinemys pallida), a CDFW species of special concern (SSC) and U.S. Forest Service sensitive species; California red-legged frog (Rana draytonii), a CDFW SSC and ESA-listed species; western spadefoot toad (Spea hammondi), a CDFW SSC and Bureau of Land Management sensitive species; and California tiger salamander (Ambystoma californiense), an ESA-listed and California Endangered Species Act (CESA)-listed species. Southwestern pond turtle was designated as a California SSC in 1994. Western pond turtle's preferred habitat is permanent ponds, lakes, streams, or permanent pools along intermittent streams associated with standing and slow-moving water. A potentially important limiting factor for western pond turtle is the relationship between water level and flow in off-channel water bodies, which can both be affected by groundwater pumping. California red-legged frog is rarely encountered far from perennial water. Tadpoles require water for at least three or four months while completing their aquatic development. Adults eat both aquatic and terrestrial invertebrates, and the tadpoles graze along rocky stream bottoms. Groundwater pumping that impairs streamflow could have negative impacts on California red-legged frog populations. Western spadefoot toad migrates to seasonal vernal pools to reproduce. They will use small puddles of water, such as small pools to breed. California tiger salamander is also restricted to vernal pools and seasonal ponds for reproduction. If groundwater depletion results in reduced streamflow due to interconnected surface waters, the nesting and foraging success of flycatcher, least Bell's vireo, and other bird species may be diminished due to the reduced nesting habitat and food availability. The unsustainable use of groundwater can impact the shallow aquifers and interconnected surface waters on which these species and GDEs depend. This may lead to adverse impacts on fish and wildlife and the habitat they need to survive. Determining the effects that groundwater levels have on surface water flows in the EMA would provide an understanding of how the groundwater levels may be associated with the health and abundance of riparian vegetation. Poorly managed groundwater pumping, and surface	Eastern Management Area	10/21/2021 15:40	Santa Ynez EMA Draft GSP Comment Letter.pdf	<a href="https://portal.santaynezwater.org/service/document/download/660">https://portal.santaynezwater.org/service/document/download/660</a>
Steve Slack (CDFW)	EMA GSP Public Draft, Sept. 8, 2021 - Section 6: Projects and Management Actions	1	Comment #7: Draft GSP vs. Final GSP Issue: The GSA may need to revise the GSP before it is finalized and adopted. Recommendation #7: CDFW recommends the EMA-GSA provide a red-lined version of the final GSP to understand the changes made between the Draft GSP and final GSP. Alternatively, CDFW recommends the GSA provide a summary of changes made and comments addressed by the GSA in preparation of a final GSP. CONCLUSION CDFW has significant concerns about ISWs for the SYR, and its tributaries, and surface water and the SYR alluvium, interconnected surface water for tributaries to the SYR, cannabis cultivation into the future and CDFW urges the EMA-GSA to plan for and engage in responsible groundwater management that minimizes or avoids these impacts to the maximum extent feasible as required under applicable provisions of SGMA and the Public Trust Doctrine.	Eastern Management Area	10/21/2021 15:40	Santa Ynez EMA Draft GSP Comment Letter.pdf	<a href="https://portal.santaynezwater.org/service/document/download/661">https://portal.santaynezwater.org/service/document/download/661</a>
Nancy Emerson	EMA GSP Public Draft, Sept. 8, 2021 - Section 1: Introduction to Plan Contents	1-Jan	WE Watch Comments Eastern Management Area GSA Plan Nancy Emerson, President and Nick DiCroce, Chairperson, Water Issues Group The almost 1,000 page Plan (which includes the Executive Summary, and seven sections with appendices, tables, and figures) is a thorough, detailed examination of the Central Management Area GSA Plan, which ties into the potential statewide plan to achieve groundwater sustainability. The Plan has been carefully constructed and appears to be detailed enough to be able to be utilized for the implementation of local and statewide groundwater sustainability. WE Watch recommends that, even though the State has allowed 20 years to achieve necessary sustainability after development of an approved Groundwater Sustainability Plan, our local implementation period be no more than 10 years, and preferably 5 years. The Eastern Management Area is 1,800 AF short of being rated as sustainable. That status could change rapidly if drought years persist, temperatures rise, population growth increases, and open space converts to housing or the type of agriculture that overuses water. Groundwater is the primary source of water in the Santa Ynez Valley because the amount of State Water is so unreliable from year to year and the amount of water available from the Santa Ynez River is so small, especially in times of drought. How climate change will affect the Valley is uncertain and we need to be prepared to deal with a worst-case scenario both short-term (5-10 years) and long-term (20 years and beyond). In a 2018 landmark report on California water solutions, the Environmental Water Caucus' first Strategic Goal indicates that groundwater management needs to be overhauled. A new sustainable groundwater management approach that allows 20 years for implementation is unreasonable, and it would never have been contemplated in this report and put off for such a long period. <a href="http://www.ewccalifornia.org/reports/CWSN3rdEdition.pdf">http://www.ewccalifornia.org/reports/CWSN3rdEdition.pdf</a> [1]	Eastern Management Area	10/20/2021 11:50		
Nancy Emerson	EMA GSP Public Draft, Sept. 8, 2021 - Section 1: Introduction to Plan Contents	1-Jan	Section 1. Introduction to Plan Contents. The following section will need to be modified for the revised implementation period. This includes Sections 1.1, 1.3 (pg. 1-1)	Eastern Management Area	10/20/2021 11:50		
Nancy Emerson	EMA GSP Public Draft, Sept. 8, 2021 - Section 2: Administrative Information	19-Feb	The following section will need to be modified for the revised implementation period. Section 2. Administrative Information. Section 2.2.2.5. (pg. 2-19)	Eastern Management Area	10/20/2021 11:50		
Nancy Emerson	EMA GSP Public Draft, Sept. 8, 2021 - Section 3: Basin Setting	1-Mar	The following section will need to be modified for the revised implementation period. Section 3. Basin Setting. Section 3.1 (pg.3-1)	Eastern Management Area	10/20/2021 11:50		
Nancy Emerson	EMA GSP Public Draft, Sept. 8, 2021 - Section 4: Monitoring Networks	10-Apr	Section 4.3.2 Assessment & Improvement of Monitoring Network. The plan needs to say gaps are so spatially large that the groundwater level monitoring network is inadequate and insufficient. This will assist the justification for the Plan's action items related to adding monitoring wells. (pg. 4-10)	Eastern Management Area	10/20/2021 11:50		

Nancy Emerson	EMA GSP Public Draft, Sept. 8, 2021 - Section 5: Sustainable Management Criteria	1-May	The following section will need to be modified for the revised implementation period. Section 5. Sustainable Management Criteria. The change to a 5-Year (or a 6 to 10-Year Plan) will affect at least the following: Section 5.2, Table 5-2, Figure 5-3, and Section 5.3.2, 5.5.4, 5.6.4, 5.9.3, 5.10.4, and 5.10.4. (pg. 5-1)	Eastern Management Area	10/20/2021 11:50
Nancy Emerson	EMA GSP Public Draft, Sept. 8, 2021 - Section 6: Projects and Management Actions	1-Jun	The following section will need to be modified for the revised implementation period. Section 6. Projects and Management Actions. The change to a 5-year (or to a 6 to 10-Year Plan) will affect these portions of Section 6: Section 6-1, Group Two Management Actions, Section 6-7, 6-9. (pg. 6-1)	Eastern Management Area	10/20/2021 11:50
Nancy Emerson	EMA GSP Public Draft, Sept. 8, 2021 - Section 7: Groundwater Sustainability Plan Implementation	1-Jul	Section 7. Plan Implementation Changes will need to be made to the 5-Year GSP Evaluation and Update to consider the 5-Year Plan as the final implementation date, at least for the Group 1 Action Items. If necessary, the implementation date beyond the 5-Year limit can be adjusted by one-year increments, but in no case should the implementation date go beyond a 10 year period from the start of implementation. The time period beyond the 5-Year period will depend on the overall groundwater condition of agencies in a particular area. (pg.7-1)	Eastern Management Area	10/20/2021 11:50
Nancy Emerson	EMA GSP Public Draft, Sept. 8, 2021 - Section 7: Groundwater Sustainability Plan Implementation	7-4 and 7-5	Section 7.4 & 7.5. Annual Reporting and 5-Year GSP Updates. In addition to communication with the State, ongoing communication with groundwater users and the entire community is needed if the Plan is to be implemented successfully and the public reassured about the long-term sustainability of the groundwater on which our lives in the Valley depend. This means not only the GSA, but individual agencies being asked to help by keeping their users informed about the plan and its implementation. (pgs. 7-4 & 7-5)	Eastern Management Area	10/20/2021 11:50
Nancy Emerson	EMA GSP Public Draft, Sept. 8, 2021 - Section 7: Groundwater Sustainability Plan	7-7 and 7-8	Section 7.6. & 7.7. Plan Budget and Funding. WE Watch urges that the action priority be to get a governance structure in place and funded with commitments to implement the plan. (pgs. 7-7 & 7-8).	Eastern Management Area	10/20/2021 11:50
Nancy Emerson	CMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1-Jan	WE Watch Comments "Central Management Area GSA Plan Nancy Emerson, President & Nick DiCroce, Water Issues Group, ChairpersonThe almost 1,000 page Plan (which includes the Executive Summary, and seven sections with appendices, tables, and figures) is a thorough, detailed examination of the Central Management Area GSA Plan, which ties into the potential statewide plan to achieve groundwater sustainability. The Plan has been carefully constructed and appears to be detailed enough to be able to be utilized for the implementation of local and statewide groundwater sustainability. WE Watch recommends that, even though the State has allowed 20 years to achieve necessary sustainability after development of an approved Groundwater Sustainability Plan, our local implementation period be no more than 10 years, and preferably 5 years. This will be easier for the Central Management Area since its current groundwater situation is evaluated as sustainable. That status could change rapidly if drought years persist, temperatures rise, population growth increases, and open space converts to housing or the type of agriculture which overuses water. Groundwater is the primary source of water in the Santa Ynez Valley because the amount of State Water is so unreliable from year to year and the amount of water available from the Santa Ynez River is so small, especially in times of drought. How climate change will affect the Valley is uncertain and we need to be prepared to deal with a worst-case scenario both short-term (5-10 years) and long-term (20 years and beyond). In a 2018 landmark report on California water solutions, Environmental Water Caucus' first Strategic Goal indicates that groundwater management needs to be overhauled. A new sustainable groundwater management approach that allows 20 years for implementation is unreasonable, and it would never have been contemplated in this report and put off for such a long period. http://www.ewcalifornia.org/reports/CWSN3rdEdition.pdf[1]	Central Management Area	10/20/2021 11:33
Nancy Emerson	CMA GSP Public Draft (Plan), September 2021 - Chapter 5: Plan Implementation	5a-1	Section 5a.2 Monitoring Network Data Gaps. The plan needs to say gaps are so spatially large that the groundwater level monitoring network is inadequate and insufficient. This will assist the justification for the Plan's action items related to adding monitoring wells. (pg. 5a-1)	Central Management Area	10/20/2021 11:33
Nancy Emerson	CMA GSP Public Draft (Plan), September 2021 - Chapter 5: Plan Implementation	51-13	Section 5A. Plan Implementation. 5a.5. Reporting & Plan Updates. Changes will need to be made to the 5-Year Plan Assessment to consider the 5-Year Plan as the final implementation date, at least for the Group 1 Action Items. If necessary, the implementation date beyond the 5-Year limit can be adjusted by one-year increments, but in no case should the implementation date go beyond a 10-year period from the start of implementation. The time period beyond the 5-Year period will depend on the overall groundwater condition of agencies in a particular area. (pg. 5a-13)	Central Management Area	10/20/2021 11:33
Nancy Emerson	CMA GSP Public Draft (Plan), September 2021 - Chapter 5: Plan Implementation	5a-13	Section 5a.5-1 and 5a.5-2. Reporting and Plan Updates. In addition to communication with the State, ongoing communication with groundwater users and the entire community is needed if the Plan is to be implemented successfully and the public reassured about the long-term sustainability of the groundwater on which our lives in the Valley depend. This means not only the GSA, but individual agencies being asked to help by keeping their users informed about the plan and its implementation. (pgs. 5a-13)	Central Management Area	10/20/2021 11:33
Nancy Emerson	CMA GSP Public Draft (Plan), September 2021 - Chapter 5: Plan Implementation	5c-1	Section 5C. Plan Funding. WE Watch urges that the action priority be to get a governance structure in place and funded and commitments to implement the plan. (pg.5c-1)	Central Management Area	10/20/2021 11:33
Nancy Emerson		N/A	This is a General Comment regarding the specific comments to be entered by WE Watch. There may be a problem in linking the two as the form only allows either General or Specific Comments, not both at the same time. WE Watch is a Santa Ynez Valley environmental/land use organization with members in both the Central and the Eastern Management Areas. We have provided separate comments for each Area's plans and will insert them in each plan with page notation. This will be done today. Thank you. Nancy Emerson	null	10/20/2021 11:23
tim Gorham	EMA GSP Public Draft, Sept. 8, 2021 - Section 6: Projects and Management Actions	N/A	Why is the County continuing to issue private water well drilling permits in the middle of a long term drought and will the GSP restrict new water well drilling as part of the CMA if necessary?	Eastern Management Area	10/19/2021 11:57

tim Gorham	EMA GSP Public Draft, Sept. 8, 2021 - Section 3.2: Groundwater Conditions	N/A	The Hydrologic Conceptual Model states that the Paso Robles Fm "extends from the surface to approximately 3500 ft below the ground surface with an average thickness of 1500 ft" in the eastern uplands area according to several well logs the Paso Robles Fm has water bearing sands only in the upper 600 ft (approx. 50% ss and gravels). The top 150 ft is now depleted and below 600 ft the Paso is mostly mud. The economic limit to drilling is approximately 1000ft and below that any water bearing sands will be non potable. The reader must understand the aquifer limitations of the Paso Robles Fm and clearly potable water bearing sands are not present to 3000ft.	Eastern Management Area	10/19/2021 11:57	
tim Gorham	EMA GSP Public Draft, Sept. 8, 2021 - Section 5: Sustainable Management Criteria	N/A	In recent CAG meetings the Agriculture members keep repeating that "they see no ground water levels falling in their wells". How is that consistent with the many hydrographs in the GSA that show steeply falling water levels thru 2018 and when data is included from the more recent drought years 2018- 2021 even steeper declines in SWL?	Eastern Management Area	10/19/2021 11:57	
tim Gorham	EMA GSP Public Draft, Sept. 8, 2021 - Section 3.3: Water Budget	N/A	The global warming climate model included in the GSP indicates a slight increase in annual rain fall thru 2045. How is that consistent with the last 9 years of significantly lower than normal rain fall?	Eastern Management Area	10/19/2021 11:57	
tim Gorham	EMA GSP Public Draft, Sept. 8, 2021 - Section 5: Sustainable Management Criteria	ES-4	The GSP states: "while no significant and unreasonable effect has been observed in the EMA as a result of lowering ground water levels to date" this is inconsistent with water well data in the EMA uplands where we have had to replace wells due to sanding and falling SWL, several shallow private wells in the area have gone dry (they have had to hook up to our system). That statement leaves the reader with the feeling that "all is well"!	Eastern Management Area	10/19/2021 11:57	
tim Gorham	EMA GSP Public Draft, Sept. 8, 2021 - Section 3.3: Water Budget	N/A	IN Oct of 2014 the County of Santa Barbara published "County of SB Groundwater Status Report" stating in Table 1 that the Santa Ynez Upland Basin had 900,000 acft of "usable water in storage" with an overdraft of 2,020/yr giving our area of the SYB over 82 years of water supply even with on recharge! That information was passed on to our water users for many years until recently when we are faced with severely falling SWL requiring the drilling of new wells and discussions of water rationing.	Eastern Management Area	10/19/2021 11:57	
tim Gorham	EMA GSP Public Draft, Sept. 8, 2021 - Section 3.3: Water Budget	N/A	The Water Budget indicates a negative outflow of 1830 AFY which is a relatively small number. When you look at the drought years of 2012-2018 the budget indicates a 6500 AFY negative budget. When you add in the recent drought data thru 2021 water year things look even worse.	Eastern Management Area	10/19/2021 11:57	
Judi Stauffer		N/A	1. It seems to me that at least two to three (2-3) more directors need to be added to the agency's decision-making board. I suggest someone representing a local water agency (e.g. Bobcat Springs Mutual Water Company), representation from the agriculture sector, and someone representing the conservation community. 2. As I understand the documents, the aquifer in central portion of the SYV River Valley Groundwater Basin is presently considered "in balance." What threshold of change will trigger a signal that the aquifer is moving "out of balance" so measures can be taken (e.g. reduce usage to increase water storage)? 3. Since riparian areas in the SYV River Valley Groundwater Basin are considered surface water dependent, until groundwater and alluvium interconnectedness is established it seems premature to monitor surface water. 4. Since the City of Buellton continues to grow, add hotel and other tourism services, and flirts with expanding its sphere of influence (and eventually its city limits) and SB County continues to approve more cannabis grows, will water availability and storage capacity trigger enforceable constraints on both the City and County in this regard?	null	10/18/2021 16:14	
Leonard Fleckenstein	CMA GSP Public Draft (Plan), September 2021 - Chapter 2: Section 2a: Hydrogeologic Conceptual Model	1	Page 2a-15 and the 3 cross section figures: Figure A-A' shows the alluvium (Qal) being on top of the Aquifer (Paso QTP and Careaga Tca), but the text says the Aquifer is separated from the SYR and subterranean alluvial deposits except west of the Buellton Bend. -In contrast, page 2a-41 seems to say the opposite; it has a good description basically saying that the entire River upstream of the Lompoc Narrows is underlain by bedrock except for section from the EMA/CMA boundary to the Buellton Bend. This section includes Paso Robles and Careaga Sandstone beneath the Santa Ynez River alluvial deposits. Page 2a-19, top paragraph. Typo with freestanding "P. 2a-25; SY River and Tributaries: 1st, paragraph, Final sentence should be edited because the tunnels take water not only to cities (SB and Goleta) but also to Montecito, which is not a city. Jameson Reservoir and Doulton tunnel are owned and operated by the Montecito Water District. P. 2a-26; paragraph 2; Wouldn't the tributary that has the eastern most confluence with the SY River be Nojoqui Creek rather than Zaca Creek? I think of Nojoqui Creek as being east of Hwy101 and Zaca Creek as being west of Hwy 101. P. 2a-34: para 1; final sentence; change "with no permit issued for 13 parcels" to "with no permits yet issued as of August 2021 for 13 parcels. P. 2a-41 mentions additional geophysical AEM data (in paragraph 2) and the AEM geophysics study (in paragraph 3) but the text should be clear on the status of the data and the study, or say that the study is a recommended action (if that is the case)."	Central Management Area	10/10/2021 14:58	Len F comments on draft GSP for CMA.docx <a href="https://portal.santaynezwater.org/service/document/download/642">https://portal.santaynezwater.org/service/document/download/642</a>
Leonard Fleckenstein	CMA GSP Public Draft (Plan), September 2021 - Chapter 2: Section 2b: Groundwater Conditions	1	Page 2b-7: Seasonal High text: What are the units of measure for the hydrographs, e.g., # of feet to reach groundwater level? Or the elevation level above sea level? The units should be indicated in the text and on the maps (Figures 2b.1-1 and 1-2). Page 2b-8 re Evaluation of Seasonal High and Low: When the text says "groundwater elevations measured in Fall 2019 are lower than those measured in Spring 2020" believe that means the recorded number is higher, i.e., the depth to groundwater is a larger number in the fall than in the spring. Perhaps this point should be made clear, because it can be confusing for a general public reader who may be thinking of depth to water rather than elevation - or vice versa. Figure 2b.6-3: The drawn line boundary of the Buellton Aquifer (near Buellton Bend) is very helpful in this Figure. It should be similarly shown on some other maps, especially Figures 2a.2-1, and/or -2, -3, and -4.	Central Management Area	10/10/2021 14:58	Len F comments on draft GSP for CMA.docx <a href="https://portal.santaynezwater.org/service/document/download/643">https://portal.santaynezwater.org/service/document/download/643</a>



Leonard Fleckenstein	CMA GSP Public Draft (Plan), September 2021 - Chapter 2: Section 2c: Water Budget	1	<p>Fig 2c.1-1 shows (and is titled as) the HCM for the Western MA, not the CMA; and it even includes the Lompoc Reclamation Plant. This graphic should be replaced by the HCM graphic in the PowerPoint slides which shows a wastewater plant but doesn't label it as the Lompoc Plant. Alternatively, since one HCM is being used for both the WMA and the CMA, this figure could be re-titled and the drawing re-labeled so the Lompoc RWRP becomes simply Wastewater Recharge since wastewater recharge happens in Buellton too. Page 2c-21. Says Santa Rita Upland (CMA) and Buellton Upland (WMA) should those CMA &amp; WMA designations be switched? Figure 2c.2-1: For inflows, are any river alluvium inflows actually visible on this chart? I can't see any. -Is this chart incorrectly showing Imported SWP water prior to 1997?-why is the Imported SWP shown as a consistent dark line? Shouldn't there be great variability over time?-is the Net Percolation color actually visible on the chart? I see only SV River and alluvium colors. Page 2c-42: While Figures 2c.3-1A&amp;B are excellent in giving annual averages, there should be another figure to show the data from page 2c-42, i.e., the net decline of 10,880 AF over the total years of the current water budget period of 2011-2018.</p>	Central Management Area	10/10/2021 14:58 Len F comments on draft GSP for CMA.docx	<a href="https://portal.santaynezwater.org/service/document/download/644">https://portal.santaynezwater.org/service/document/download/644</a>
Leonard Fleckenstein	CMA GSP Public Draft (Plan), September 2021 - Executive Summary	8-Jan	<p>Page ES-1: Paragraph 1 says Basin means the entire S-Y-R-V-G-Basin, and then says current Basin conditions are sustainable. How is it sustainable if in the CMA we need to avoid continual loss of 200 AF (or more) per year? Page ES-1: Perhaps change Physical and political complexities to Physical, political, and water management complexities. Page ES-2, bottom paragraph, line 4: Change Upland which are Upland which is Upland. Page ES-3, paragraph 2, line 4: After imported water primarily after Project, insert the word only. Page ES-7, paragraph 2 says surface water inflows were 32,040 AF/year; and the outflows were also 32,040. Is that correct? Page ES-8, paragraph 2; should indicate the number of wells being monitored in the CMA by USGS, SBCWA, and the City, i.e., 3 separate numbers.</p>	Central Management Area	10/10/2021 14:58 Len F comments on draft GSP for CMA.docx	<a href="https://portal.santaynezwater.org/service/document/download/640">https://portal.santaynezwater.org/service/document/download/640</a>
Leonard Fleckenstein	CMA GSP Public Draft (Plan), September 2021 - Chapter 1: Introduction and Plan Area	1	<p>Page 1c-5: The heading is incorrectly numbered. Should be a heading. Not a heading. In 1d.1-5 Public comments. Page 1d-7. A new paragraph should be added at the end of this section to say that although the Buellton Upland and the Alluvium are distinct subareas of the CMA, the Buellton aquifer underlies the Buellton Upland and underlies part of the Alluvium subarea east of the Buellton Bend. Section 1d.4-2: This section on Management Plans should be put into the Appendices. 1d.5.: Regulatory Programs; should be in the Appendices; 1d.6: Band Use Considerations; in the Appendices.</p>	Central Management Area	10/10/2021 14:58 Len F comments on draft GSP for CMA.docx	<a href="https://portal.santaynezwater.org/service/document/download/641">https://portal.santaynezwater.org/service/document/download/641</a>
Leonard Fleckenstein	CMA GSP Public Draft (Plan), September 2021 - Chapter 3: Monitoring Networks/Sustainable Management Criteria	1	<p>Page 3a-14: The 2nd bullet point regarding CCWA deliveries is irrelevant to this issue. Although the SWP data is appropriately part of the water budget, the amount of SWP water delivered in the CMA (i.e., to the City of Buellton) doesn't help to estimate current surface water conditions within the CMA. If you have data to show a relationship between SWP deliveries and surface water conditions, then please present it here. However, I doubt that any such relationship exists, partly because poor surface water conditions due to drought often mean low SWP deliveries due to drought in Northern CA. Page 3b-3; final paragraph says: Water levels and GW in storage in the SVR Alluvium fluctuate in response to water rights and environmental regulations. No! Better to say: Alluvium storage fluctuates in response to: precipitation, river flow (including releases from Cachuma), water diversions from the river, pumping from the alluvium, surface evaporation, and phreatophyte ET. Then you could add that water rights and environmental regulations influence water releases, diversions, and pumping. -Also, the sentence is using the term groundwater in storage for the alluvium! Page 3b-3, final paragraph: Insert data between groundwater elevation and is needed.</p>	Central Management Area	10/10/2021 14:58 Len F comments on draft GSP for CMA.docx	<a href="https://portal.santaynezwater.org/service/document/download/645">https://portal.santaynezwater.org/service/document/download/645</a>
Leonard Fleckenstein	CMA GSP Public Draft (Plan), September 2021 - Chapter 4: Projects and Management Actions	1	<p>Table 4a.1-2: For Supplemental Imported Water contend that the estimated benefit would be Low, not Low to Medium. The text later in the chapter actually identifies why, i.e.: cost of SWP water would be very high; SWP water is often unavailable when it is most needed during drought years; banking the water somewhere else would add to the cost; etc. Also, I believe Buellton residents won't want to substitute aquifer water with more expensive SWP water. Retaining this action item in the Plan is fine, but the benefit/cost would be low. Table 4a.2-1: Change spelling of Tired to Tiered. Page 4a-35: Since Group 4 actions seem to be out-of-the-box thinking, how about adding a regional seawater desalination plant to the list? A desal plant on Vandenberg SFB could pump water in a new pipeline along CCWA's pipeline route. Page 5a-1, table: The Group 1 PMAs should be included in this table, either individually or as a line item, e.g., Group 1 PMAs with a Task to start implementing them in WY2023. Page 5a-3: Final paragraph quotes a cost for 2 new monitoring wells. Why not quote a cost for only 1 well, which at least would be more affordable? -- even if 2 wells are sought. Also, this kind of project might be ideal for a future grant from the State or the Feds. This project should be included in the County's IRWM Plan.</p>	Central Management Area	10/10/2021 14:58 Len F comments on draft GSP for CMA.docx	<a href="https://portal.santaynezwater.org/service/document/download/646">https://portal.santaynezwater.org/service/document/download/646</a>

Gay Infanti	EMA GSP Public Draft, Sept. 8, 2021 - Section 3.3: Water Budget	3-146	Are the DWR guidelines for incorporating climate change into the GSPs reasonable given the current climate situation? Do you expect DWR to update this guidance to take into consideration the long-term drought? Current water budget is significantly worse than historic-based (1982-2018) water budget (only 41% of historical average). If this trend continues or gets worse, the sustainable yield will be much lower than currently budgeted. Therefore, it's critical to verify all of the estimated inflow/outflow volumes used in developing the water budgets asap so we can adjust as needed before we experience undesirable results. Also, the water budgets depend on imported water that probably won't be available for several years and perhaps never again. If either the SWP or Cachuma project deliveries are cut below those estimates, municipalities will be forced to use more G/W or purchased water, which is becoming very scarce and very expensive.	Eastern Management Area	10/8/2021 15:19
Gay Infanti	EMA GSP Public Draft, Sept. 8, 2021 - Section 3.3: Water Budget	3-164	Please explain how CCWA and DWR can say that DWR has the delivery capacity of a minimum of 58% allocation of SWP water that may be available to the EMA in their planning guidance? If that were true, Solvang wouldn't already be in a Stage 2 Drought Emergency with 20% mandatory reductions in water usage, as well as trying to purchase water on the open market to provide to residents next year when 0% allocations are expected.	Eastern Management Area	10/8/2021 15:19
Gay Infanti	EMA GSP Public Draft, Sept. 8, 2021 - Section 5: Sustainable Management Criteria	13-May	Section 5.5.1, last paragraph: "There have been no reports from stakeholders in the EMA that wells needed to be deepened." I think this situation needs to be verified. I know of one individual whose well had to be drilled deeper due to reduced production, and have heard in our discussions that one mutual water company had one or more wells going dry. What is the process for reporting these and where is it documented? I think the EMA needs to know if the lack of reports actually means that no wells have either been deepened or gone dry.	Eastern Management Area	10/8/2021 15:19
Gay Infanti	EMA GSP Public Draft, Sept. 8, 2021 - Section 6: Projects and Management Actions	Jun-48	Section 6-7 discusses the possibility of developing a Base Pumping Allocation to stabilize the volume of G/W pumping in the EMA. Since there is an annual pumping deficit already, since G/W levels have not recovered since the last wet period, and since an ongoing drought is forecast, I think this MA is a necessity and should be given priority along with verification of pumping volumes via well metering/reporting.	Eastern Management Area	10/8/2021 15:19
Gay Infanti	EMA GSP Public Draft, Sept. 8, 2021 - Section 6: Projects and Management Actions	17-Jun	This section discusses financing options for G/W pumping fees that include parcel fees and parcel tax. How would this work for Solvang, which has municipal wells providing water to all residential and commercial users? Unlike parcels with their own well(s), the parcel owners in Solvang have no direct control over G/W pumping and only indirectly via the city's conservation programs and drought emergency ordinances. In addition these municipal parcels are substantially smaller than AG parcels, so using a parcel fee or tax that is applied to all parcels in the EMA, regardless of whether they contain G/W wells, regardless of parcel size or amount of water used by each, would be unfair. Obviously there is not enough detail in this document to understand if either of these approaches is contemplated, but I hope not. G/W pumping fees should be levied per G/W well, not parcel, and should also include consideration of pumped volume.	Eastern Management Area	10/8/2021 15:19
Gay Infanti	EMA GSP Public Draft, Sept. 8, 2021 - Section 6: Projects and Management Actions	Jun-60	The first sentence of the last paragraph on this page, which concerns partnering with SB County's Precipitation Enhancement Program, is garbled - it seems to be missing some words.	Eastern Management Area	10/8/2021 15:19
Gay Infanti	EMA GSP Public Draft, Sept. 8, 2021 - Executive Summary	N/A	This is a general comment. Overall, the Draft EMA GSP is comprehensive and well written. I think GSI has done an exceptional job. See below for specific comments and questions on the draft document.	Eastern Management Area	10/8/2021 15:19
Gay Infanti	EMA GSP Public Draft, Sept. 8, 2021 - Executive Summary	8-Feb	Figure 2-2 shows the Chumash Reservation on the east side of Hwy 154 - I believe this is the Camp 4 property that was recently annexed. The rest of the reservation is not identified specifically on the map in this figure, although there is an area outlined in dark blue shown where Sanja de Cota creek meets the SY river.	Eastern Management Area	10/8/2021 15:19
Gay Infanti	EMA GSP Public Draft, Sept. 8, 2021 - Section 2: Administrative Information	Feb-35	Section 2.2.3.32, Solvang's comprehensive update of its General Plan is currently underway so the Conservation and Open Space element discussed in this section will change. Solvang's new census information was also recently received indicating that Solvang's population has increased to ~6,000.	Eastern Management Area	10/8/2021 15:19
Gay Infanti	EMA GSP Public Draft, Sept. 8, 2021 - Executive Summary	3-114	Table 3-17, Water Budget Sources, qualitative data ratings indicating the level of confidence in the estimate are shown for each listed component - a high rating being the best. However, most of the discussion following this Table address the level of uncertainty for each individual element - low being the best. This is confusing. I think this section would be easier to read and understand if, for the sake of consistency, one or the other qualitative rating is used in both Table 3-17 and the discussion sections following it, i.e., either level of confidence or level of certainty to qualitatively rate the data source.	Eastern Management Area	10/8/2021 15:19
Mark Capelli	EMA GSP Public Draft, Sept. 8, 2021	N/A	NMFS comment letter regarding Santa Ynez River Valley Groundwater Sustainability Plan - Eastern Management Area.	Eastern Management Area	9/23/2021 14:05 23SEP2021_Santa Ynez SGMA Comment Letter_MC.pdf <a href="https://portal.santaynezwater.org/service/document/download/635">https://portal.santaynezwater.org/service/document/download/635</a>
Joseph Hughes	WMA GSP Public Draft (Plan), September 2021	N/A	Attached letter received by email on 9/21/21.	Western Management Area	9/22/2021 13:36 Santa Ynez Water Group 09.21.21 legal counsel.pdf <a href="https://portal.santaynezwater.org/service/document/download/634">https://portal.santaynezwater.org/service/document/download/634</a>
Joseph Hughes	EMA GSP Public Draft, Sept. 8, 2021	N/A	Attached letter received by email on 9/21/21.	Eastern Management Area	9/22/2021 13:35 Santa Ynez Water Group 09.21.21 legal counsel.pdf <a href="https://portal.santaynezwater.org/service/document/download/633">https://portal.santaynezwater.org/service/document/download/633</a>
Joseph Hughes	CMA GSP Public Draft (Plan), September 2021	N/A	Attached letter received by email on 9/21/21.	Central Management Area	9/22/2021 13:15 Santa Ynez Water Group 09.21.21 legal counsel.pdf <a href="https://portal.santaynezwater.org/service/document/download/632">https://portal.santaynezwater.org/service/document/download/632</a>
Gay Infanti	Draft EMA Sec 4: Monitoring Networks (2021-08-02) - 4.3 Groundwater Level	4	Pages 1-4 in this section are followed by page 2, in other words, the pages in the document are numbered 1,2,3,4,2,3,4.....	Eastern Management Area	8/25/2021 13:30

Gay Infanti	Draft EMA Sec 4: Monitoring Networks (2021-08-02) - 4.1 Introduction	1	Second paragraph, second sentence says "During the 20-year GSP implementation period it MAY be necessary to expand the monitoring networks..." I think this should be changed to it WILL BE or PROBABLY WILL BE necessary to expand the monitoring networks. There are many data gaps noted throughout the document that will require additional data, monitoring wells, access to private wells, etc. that will change the monitoring networks.	Eastern Management Area	8/25/2021 13:30	
Gay Infanti	Draft EMA Sec 4: Monitoring Networks (2021-08-02) - 4.3 Groundwater Level	2	There are wells for which access agreements were denied by the well owners. Since these wells are not in the monitoring network, will these well owners be required to measure and report their groundwater pumping under the EMA GSP? When will the "informal access agreements" be formalized?	Eastern Management Area	8/25/2021 13:30	
Gay Infanti	Draft EMA Sec 4: Monitoring Networks (2021-08-02) - 4.3 Groundwater Level	4-Mar	There are quite a few wells included in the monitoring network that lack required data, e.g., well depth and screen levels. When and how will these gaps be filled? Now can these wells be reliably used to measure groundwater levels and groundwater storage until this is done?	Eastern Management Area	8/25/2021 13:30	
Gay Infanti	Draft EMA Sec 4: Monitoring Networks (2021-08-02) - 4.3 Groundwater Level	9-Aug	In 4.3.2, Assessment and Improvement of Monitoring Network, there are two areas within the PR formation in the NW portion of the uplands and the central portion of the basin. This draft notes that effort will be made during GSP implementation to contact well owners in these areas, but there are no specific goals or timelines defined for accomplishing this effort in order to reduce the uncertainties in groundwater elevation or storage trends that currently exist within the monitoring network.	Eastern Management Area	8/25/2021 13:30	
Gay Infanti	Draft EMA Sec 4: Monitoring Networks (2021-08-02) - 4.5 Degraded Water Quality	17	This document mentions only one open/active case of potential groundwater contamination (Jim's Service Station, but there is also the Zaca oil and gas field for which COGG data are unavailable. What is being done to obtain these data to determine if the oil and gas field is contaminating the groundwater in the EMA?	Eastern Management Area	8/25/2021 13:30	
Gay Infanti	Draft EMA Sec 4: Monitoring Networks (2021-08-02) - 4.5 Degraded Water Quality	17	Would it be within the purview of the GSP to tighten up the standards for agricultural runoff of pesticides and fertilizers that pose a risk to public health? Their concentrations in the groundwater must be worsening as time goes on, especially given the lack of rainfall in the basin.	Eastern Management Area	8/25/2021 13:30	
Russell Chamberlin		N/A	Comments received on EMA draft PMA section.	null	8/9/2021 12:53	EMA-draft PMA Comments GSA management-Chamberlin 2021-08.docx <a href="https://portal.santaynezwater.org/service/document/download/594">https://portal.santaynezwater.org/service/document/download/594</a>
Daniel Pelikan	Draft WMA SMC 2021-07-01 - 3.3: Minimum Thresholds	24	Are the values in Table 3-4 correct? It appears that "Lompoc Plan" and "Lompoc Upland" may be transposed.	Western Management Area	7/20/2021 14:33	
Steve Jordan	Draft WMA SMC 2021-07-01 - 3.4: Measurable Objectives	N/A	7N/35W is a very shallow well near the western edge of the Lompoc Plain. It is 23 feet deep. It was drilled to isolate the surface aquifer. I do not think it should be used for water quality determinations.	Western Management Area	7/20/2021 13:28	
Mark Kram	Draft CMA SMC 2021-07-01 - 3.6: Monitoring Network	N/A	I'd like to briefly describe two solution sets my colleagues and I have developed that you may find to be of interest, as these could greatly enhance your ability to monitor, respond, and therefore sustainably manage the local and regional water resources. Water Sustainability Solution: Through our UCSB partnership (Dr. Hugo Loaiciga and Ryan Solgi), Abbaroo and Groundswell developed an automated web based platform to prevent basin overdraft, stream depletion and seawater intrusion by integrating real-time sensors (level and meters) with classic hydraulic and game theory algorithms. Mr. Solgi is also currently developing machine learning algorithms to accurately predict levels based on observed trends. This platform is aimed at answering the critical questions: How much can each well sustainably extract? When will unsustainable conditions occur? What would happen if we reduced pumping at locations X, Y and Z? Should the well permit be approved given the proposed operating conditions? Groundwater Basin Storage Tracking (GBST): Through our partnership with Virginia Tech (Dr. Mark Widdowson and Dr. Eduardo Mendez), we are deploying our GBST automated web based platform with a modern Internet of Things architecture. This allows us to instantly determine changes in groundwater storage (both spatially as well as volumetrically) between any two selected time steps. It can also rapidly display past and current water level conditions relative to an established critical threshold so that decision-makers can see when/where problem areas arise. The platform has recently been integrated with the entire USGS water level monitoring network, which dramatically streamlines the decision process. This system also allows planners to establish water supply objectives and to rapidly determine whether basins are on track to meet these goals. For instance, for the State of Virginia, we are using GBST to evaluate managed aquifer recharge efforts. I would greatly appreciate an opportunity to present to you and other stakeholders working towards sustainable outcomes. We believe that by convincing key players to adopt these technologies, we can collectively meet DWR and stakeholder objectives while reducing the potential for legal actions, which will take years to litigate, waste countless hours and resources, and would achieve very little towards achieving sustainability in the near term. Given the current drought and DWR's objectives, the timing could not be more ideal for considering new ideas, as the status quo is not resulting in optimal outcomes. The bottom line is that one cannot manage what is not measured, rapidly processed, and displayed in an intuitive way to a wide range of stakeholders. Your attention to this matter is greatly appreciated. Kindest Regards, Mark Kram, Ph.D., CGWP/Groundswell Technologies, Inc. 7127 Hollister Ave., Suite 25A-108Goleta, CA 93117 USA 805-899-8142 (office) 805-844-6854 (cell) mark.kram@groundswelltech.com www.groundswelltech.com *Recipient of the National Ground Water Association Technology Award	Central Management Area	7/17/2021 11:08	

Mark Kram	Draft WMA SMC 2021-07-01 - 3.6: Monitoring Network	N/A	I'd like to briefly describe two solution sets my colleagues and I have developed that you may find to be of interest, as these could greatly enhance your ability to monitor, respond, and therefore sustainably manage the local and regional water resources. Water Sustainability Solution: Through our UCSB partnership (Dr. Hugo Loaiciga and Ryan Solgi), Abbaroo and Groundswell developed an automated web based platform to prevent basin overdraft, stream depletion and seawater intrusion by integrating real-time sensors (level and meters) with classic hydraulic and game theory algorithms. Mr. Solgi is also currently developing machine learning algorithms to accurately predict levels based on observed trends. This platform is aimed at answering the critical questions: How much can each well sustainably extract? What would happen if we reduced pumping at locations X, Y and Z? Should the well permit be approved given the proposed operating conditions? Groundwater Basin Storage Tracking (GBST): Though our partnership with Virginia Tech (Dr. Mark Widdowson and Dr. Eduardo Mendez), we are deploying our GBST automated web based platform with a modern Internet of Things architecture. This allows us to instantly determine changes in groundwater storage (both spatially as well as volumetrically) between any two selected time steps. It can also rapidly display past and current water level conditions relative to an established critical threshold so that decision-makers can see when/where problem areas arise. The platform has recently been integrated with the entire USGS water level monitoring network, which dramatically streamlines the decision process. This system also allows planners to establish water supply objectives and to rapidly determine whether basins are on track to meet these goals. For instance, for the State of Virginia, we are using GBST to evaluate managed aquifer recharge efforts. I would greatly appreciate an opportunity to present to you and other stakeholders working towards sustainable outcomes. We believe that by convincing key players to adopt these technologies, we can collectively meet DWR and stakeholder objectives while reducing the potential for legal actions, which will take years to litigate, waste countless hours and resources, and would achieve very little towards achieving sustainability in the near term. Given the current drought and DWR's objectives, the timing could not be more ideal for considering new ideas, as the status quo is not resulting in optimal outcomes. The bottom line is that one cannot manage what is not measured, rapidly processed, and displayed in an intuitive way to a wide range of stakeholders. Your attention to this matter is greatly appreciated. Kindest Regards, Mark Kram, Ph.D., CGWP* Groundswell Technologies, Inc. 7127 Hollister Ave., Suite 25A-108 Goleta, CA 93117 USA 805-899-8142 (office) 805-844-6854 (cell) mark.kram@groundswelltech.com www.groundswelltech.com *Recipient of the National Ground Water Association Technology Award	Western Management Area	7/17/2021 11:04		
Mark Capelli		N/A	NMFS Comment Central Management Area - Santa Ynez River Sustainability	null	7/16/2021 13:35	16JUL2021_NMFS Comment Central Management Area - Santa Ynez River Sustainability.pdf	<a href="https://portal.santaynezwater.org/service/document/download/558">https://portal.santaynezwater.org/service/document/download/558</a>
Mark Capelli		N/A	NMFS Comment Western Management Area - Santa Ynez River Letter	null	7/15/2021 8:39	15JUL2021_NMFS Comment Western Management Area - Santa Ynez River Sustainability Criteria.pdf	<a href="https://portal.santaynezwater.org/service/document/download/557">https://portal.santaynezwater.org/service/document/download/557</a>
Mark Capelli	Draft EMA Sustainable Management Criteria (June 18, 2021)	N/A	RE: Santa Ynez River Valley Groundwater Basin Eastern Management Area Plan Section 5	Eastern Management Area	7/7/2021 21:05	7JUL2021_Final NMFS Comment Eastern Management Area - Santa Ynez Letter_MC.pdf	<a href="https://portal.santaynezwater.org/service/document/download/553">https://portal.santaynezwater.org/service/document/download/553</a>
Mark Capelli	Draft EMA Sustainable Management Criteria (June 18, 2021) - 5.6 Reduction of	N/A	RE: Santa Ynez River Valley Groundwater Basin Plan Section 5	Eastern Management Area	7/7/2021 13:42	7JUL2021_Final NMFS Comment Eastern Management Area - Santa Ynez River Letter_MC.pdf	<a href="https://portal.santaynezwater.org/service/document/download/552">https://portal.santaynezwater.org/service/document/download/552</a>
Doug Circle	Draft EMA Sustainable Management Criteria (June 18, 2021) - 5.1 Definitions	N/A	Dear Directors and Staff: As you know the Santa Ynez Water Group (SYWG) was formed to engage on behalf of landowners with the GSAs concerning development of the Santa Ynez River Valley GSPs. SYWG includes, vineyards, vegetables, and other interests and currently represents 54 landowners and 7,853 acres in Santa Ynez River Valley Basin. SYWG has been consistent in its comments that the sustainable management criteria (SMC) and projects and management actions (PMA) should be developed in a manner that ensures meaningful engagement with the agricultural landowners in the Basin to ensure the most equitable and cost-effective PMAs can be developed. We are disappointed that the EMA has chosen to keep the agricultural landowners at arm's length in this process and work very closely with the City of Solvang and ID-1 on the development of SMC that are favorable for them. The unreasonable short comment period on the SMC memo - two weeks with a holiday - is the latest evidence the EMA does not intend to seriously consider the impacts on land values and agribusiness in the planning process. The unreasonably short SMC memo comment period was inadequate for meaningful stakeholder review and comment and to prepare for the corresponding Citizens Advisory Group meeting. We reserve the right to comment later in the process.	Eastern Management Area	7/6/2021 13:44	Draft EMA Sustainable Management Criteria_SYWG comment .pdf	<a href="https://portal.santaynezwater.org/service/document/download/551">https://portal.santaynezwater.org/service/document/download/551</a>
Gay Infanti	Draft EMA Sustainable Management Criteria (June 18, 2021) - 5.9 Land Subsidence	46	Re 5.9.1, pg. 46, 3rd bullet: The use of the conjunction "and" seems to mean that both results, i.e., unreasonable subsidence and damage to infrastructure and land uses much occur together to meet the minimum threshold. While there are presently no data to indicate whether the basin's geologic materials are susceptible to subsidence, or whether ground water storage capacity would result from subsidence, it seems like unusual subsidence alone should be considered a significant and unreasonable result until we learn definitively whether we are losing groundwater storage permanently due to subsidence. Damage to infrastructure, etc., should not be allowed to occur before management actions are undertaken, if unusual subsidence is occurring, we need to employ management actions as soon as possible in order to protect our infrastructure and surface land uses.	Eastern Management Area	6/30/2021 16:02		
Gay Infanti	Draft EMA Sustainable Management Criteria (June 18, 2021) - 5.9 Land Subsidence	48	Re 5.9.2, subsidence minimum threshold: What is the rationale for selective 3 consecutive years in the subsidence minimum threshold?	Eastern Management Area	6/30/2021 16:02		
Gay Infanti	Draft EMA Sustainable Management Criteria (June 18, 2021) - 5.9 Land Subsidence	49	Re Table 5-3, footnote 1: This footnote also seems to require that, in addition to land subsidence, at a rate of 0.8' per year, it must also cause damage to groundwater, land uses, infrastructure, and property interests before significant and unreasonable results are considered to have occurred. Is this correct? If not, a clarification would be helpful.	Eastern Management Area	6/30/2021 16:02		

Gay Infanti	Draft EMA Sustainable Management Criteria (June 18, 2021) - 5.10 Depletion of Interconnected Surface Water	54	With regard to the middle paragraph referencing Section 3.2: The uplands contain a variety of oak woodlands (Valley, Blue and Live oaks) reliant on groundwater. Young valley and blue oaks have tap roots that extend well below the 30' depth, but after several years, the tap roots are replaced by shallower root systems within the 30' depth. In Sedgwick Reserve, young trees are not replacing mature trees in these upland areas so that, over time, these woodlands could disappear. This makes a case for young oaks to be considered in GCES in areas where groundwater drops below 30'.	Eastern Management Area	6/30/2021 16:02
Gay Infanti	Draft EMA Sustainable Management Criteria (June 18, 2021) - 5.10 Depletion of Interconnected Surface Water	62	Re 5.10.3: If the minimum threshold (Table 5-5) is 15' below respective stream bed, please explain why the measurable objectives (Table 5-6) is 5' below the stream bed. Page 61 says this objective was selected because it is well within the root zone of vegetation commonly associated with GDEs. Doesn't the GSP establish objectives or goals we plan to meet? If so, why is the minimum threshold set to much lower than the measurable objective? This doesn't make sense. We won't meet our measurable objective if we don't take management action until the much lower minimum threshold is reached. Is the 5' objective actually intended to be an interim milestone?	Eastern Management Area	6/30/2021 16:02
Gay Infanti	Draft EMA Sustainable Management Criteria (June 18, 2021) - 5.11 References and	64	I suggest consulting UCSB, the Sedgwick Reserve, and the CDFW concerning GDEs present in this basin that not have been addressed in this GSP. If that is done, there will likely be changes required to the GSP, as well as additional references to be added to this section.	Eastern Management Area	6/30/2021 16:02
Gay Infanti	Draft EMA Sustainable Management Criteria (June 18, 2021) - 5.5 Chronic Lowering of Groundwater Levels	18	Section 5.5.1, page 18, second bullet: Have you investigated the number of wells in the EMA that have already required deeper drilling? I spoke to a gentleman recently who had to drill 60 feet deeper due to his well's inability to produce its historical water production. I don't know the age of the well but I do know his family has owned the land for ~110 years. SGMA, enacted in 2015, may not apply here, since it is forward looking, but this does indicate the basin's G/W level has already declined in the past to an unreasonable level for some domestic wells.	Eastern Management Area	6/25/2021 18:02
Gay Infanti	Draft EMA Sustainable Management Criteria (June 18, 2021) - 5.5 Chronic Lowering of	23	5.5.2.3, page 23, paragraph 1: Seems like there should be some interim quality thresholds for salts in Careaga Sands wells to ensure timely actions are taken to avoid the point where the water quality degrades to the point that the water it produces is undrinkable.	Eastern Management Area	6/25/2021 18:02
Gay Infanti	Draft EMA Sustainable Management Criteria (June 18, 2021) - 5.5 Chronic Lowering of Groundwater Levels	23	5.5.2.3, page 23, next to last bullet concerning depletion of surface water: There are a number of GDEs that I don't believe were specifically addressed in the HGM, e.g., the mixed oak woodlands consisting of blue oaks and gray pines, as well as the Valley oaks in the upper PR at Sedgwick Reserve. I realize this isn't the best place to bring those up, but I think that we may be overlooking these and possibly other GDEs in our planning. I don't think it's sufficient to address only the GDEs associated with the intersection of surface and groundwater at the distal end of these two creeks. A field study in the EMD may be necessary to address other GDEs but there surely is plenty of information about the flora and fauna in the area already collected and documented.	Eastern Management Area	6/25/2021 18:02
Gay Infanti	Draft EMA Sustainable Management Criteria (June 18, 2021) - 5.5 Chronic Lowering of Groundwater Levels	27	Re 5.5.4, measurable objectives, page 27 bottom paragraph: I'm concerned there are no interim milestones identified. The current drought is projected to be much worse than the last on which this decision was made. This decision doesn't really take worsening climate change into consideration either. Hotter, dryer conditions will likely require additional pumping for agricultural purposes. I think interim milestones would require the EMA to review and understand where we are at more frequent intervals to make sure that no significant and unreasonable effects are looming within the first 5 years so that management actions can be taken sooner, rather than later, should they be necessary.	Eastern Management Area	6/25/2021 18:02
Gay Infanti	Draft EMA Sustainable Management Criteria (June 18, 2021) - 5.6 Reduction of Groundwater in Storage	29	Re 5.6.1, page 29, top of page: what is the rationale for including "after 2 consecutive years of average and above-average precipitation" (should this be or instead of and?) be required if the threshold has already been met? If it's required that two more years pass before management actions are taken, the situation could get much worse. Shouldn't management action be required when the minimum levels in the monitoring wells occur? This doesn't make sense to me given climate change and the current drought situation. This comment applies to earlier sections of this document as well.	Eastern Management Area	6/25/2021 18:02
Gay Infanti	Draft EMA Sustainable Management Criteria (June 18, 2021) - 5.6 Reduction of Groundwater in Storage	35	Re 5.6.4, Interim Milestones, page 35, I don't understand why no interim milestones have been identified. If indeed selected projects and management actions will be undertaken, then interim milestones used to measure progress on these projects/actions should be identified and tracked.	Eastern Management Area	6/25/2021 18:02
Gay Infanti	Draft EMA Sustainable Management Criteria (June 18, 2021) - 5.8 Degraded Groundwater Quality	35	How will the water quality be monitored? What is the plan to ensure water quality is not degraded? With regard to the footnote, Solvang has recently undertaken considerable expense to enable treatment/removal of nitrates from its potable water/wastewater likely caused by agricultural runoff and/or septic systems. Agriculture may be able to tolerate higher levels of sales and nutrients but humans and the environment (GDEs) cannot.	Eastern Management Area	6/25/2021 18:02
Gay Infanti	Draft EMA Sustainable Management Criteria (June 18, 2021) - 5.8 Degraded	37	Re 5.8.2.1, last paragraph: can dissolved benzene and MTBE reach river wells and is this being monitored? Can these contaminants affect the GDEs at the distal end of Alamo Pintado creek?	Eastern Management Area	6/25/2021 18:02
Gay Infanti	Draft EMA Sustainable Management Criteria (June 18, 2021) - 5.3 Process for	13	Re 5.3.3.1, second bullet: it seems like Solvang Municipal Water should be included in the list since Solvang did provide input to groundwater levels from its monitored wells, especially since Solvang is a EMA GSA member.	Eastern Management Area	6/25/2021 18:02
Gay Infanti	Draft EMA Sustainable Management Criteria (June 18, 2021) - 5.1 Definitions	9	To clarify my previously-submitted comment on page 9, paragraph (1): I characterized the EMA as "over-drafted" in my previous comment because the water budget section acknowledges that the projected annual EMA sub basin recharge is less than the projected annual water usage, indicating an annual deficit in groundwater. Also, the G/W levels in the EMA sub basin have not yet recovered from the previous drought, and we're experiencing another state-wide, more significant and potentially longer-term drought. Thus, the MSCs should recognize that immediate action is necessary to sustain the basin. Waiting for 50% of the wells in the basin to reach the MSC will likely be too late for the basin to recover. More frequent interim milestones are recommended to ensure management actions are timely.	Eastern Management Area	6/25/2021 13:34

Gay Infanti	Draft EMA Sustainable Management Criteria (June 18, 2021) - 5.1 Definitions	9	Paragraph (1), page 9: Undesirable result (1) says that chronic lowering of groundwater levels are not considered as over-drafted during a period of drought if extractions and recharge are managed as necessary to ensure that reductions in G/W levels or storage during a period of drought are offset by increased in G/W levels or storage during other periods. That's fine as long as there is ongoing recharge but, if not, we can no longer expect wet years to recharge our basin. Historically wet years are occurring with less frequency and we are starting this GSP in an over-drafted state. This has bearing on how the MSCs for this basin are defined, as well as the interim milestones. Setting the interim milestones every 5 years is too infrequent to allow timely management action that will more quickly recharge the the basin before it is too far over-drafted to achieve sustainability in this age of climate change-caused drought.	Eastern Management Area	6/25/2021 12:47
Mark Capelli	WMA Water Budget (Draft 4-10-21) - Figures	N/A	NMGSP Water Budget Comment Letter	Western Management Area	4/28/2021 17:18 28APR2021_NMGSP Water Budget Comment Letter_MC.pdf <a href="https://portal.santaynezwater.org/service/document/download/498">https://portal.santaynezwater.org/service/document/download/498</a>
Mark Capelli	EMA Water Budget - DRAFT - 3.3 Water Budget	Jan-67	Comments are up-loaded as a PFD letter.	Eastern Management Area	4/28/2021 17:15 28APR2021_NMGSP Water Budget Comment Letter_MC.pdf <a href="https://portal.santaynezwater.org/service/document/download/497">https://portal.santaynezwater.org/service/document/download/497</a>
Mark Capelli		N/A	This was received from NOAA. They were not able to upload using the GCP.	null	4/28/2021 17:12 28APR2021_NMGSP Water Budget Comment Letter_MC.pdf <a href="https://portal.santaynezwater.org/service/document/download/496">https://portal.santaynezwater.org/service/document/download/496</a>
William Buelow Bryan Bondy	WMA Water Budget (Draft) 4-10-21 - Introduction	N/A N/A	test SYWG-WMA-HCM-Comment No. 1. Santa Ynez Water Group (SYWG) would like to thank the WMA GSA for the opportunity to submit comments on the Draft Western Management Area Groundwater Budget document. SYWG comments were prepared with the assistance of a State of California Professional Geologist and Certified Hydrogeologist. SYWG's comments are intended to help improve the HCM, help ensure consistency with GSP Emergency Regulations, and avoid unnecessary GSP implementation costs. Please do not hesitate to contact our hydrogeologist, Bryan Bondy, if you need any clarifications or would like to discuss any of our comments.	null Western Management Area	4/28/2021 17:11 test.pdf <a href="https://portal.santaynezwater.org/service/document/download/495">https://portal.santaynezwater.org/service/document/download/495</a> 4/25/2021 16:37
Bryan Bondy	WMA Water Budget (Draft) 4-10-21 - Introduction	N/A	SYWG-WMA-HCM-Comment No. 2. There is significant uncertainty in the water budget, both historically and projected into the future that is not characterized quantitatively. Quantitative uncertainty estimates should be provided and clearly communicated to the stakeholders and GSA Board for consideration when developing sustainable management criteria and projects/management actions for the GSP. The GSP should lay out a path to reducing uncertainty in the rate of storage depletion over time, commensurate with the costs of projects/management actions necessary to address the storage depletion.	Western Management Area	4/25/2021 16:37
Bryan Bondy	WMA Water Budget (Draft) 4-10-21 - Introduction	N/A	SYWG-WMA-HCM-Comment No. 3. Page 2 - Bullet "Evaluating undesirable results (negative impacts)" - The term "negative impacts" is inconsistent with the Water Code definition of undesirable results, which incorporates "significant and unreasonable" concept. Not all negative impacts may necessarily be concluded to be significant and unreasonable. "(negative impacts" should be deleted or replaced with "(significant and unreasonable effects related to one or more sustainability indicators)."	Western Management Area	4/25/2021 16:37
Bryan Bondy	WMA Water Budget (Draft) 4-10-21 - 1. Water Budget Elements	N/A	SYWG-WMA-HCM-Comment No. 4. Page 7 first paragraph, second to last sentence - "other management agencies" - please clarify what agencies are being referred to here. Is the reference to the other groundwater management agencies (CMA and EMA)?	Western Management Area	4/25/2021 16:37
Bryan Bondy	WMA Water Budget (Draft) 4-10-21 - 1. Water Budget Elements	N/A	SYWG-WMA-HCM-Comment No. 5. Table 1-2 states that BCM recharge was "calibrated" to basin precipitation data. Page 13 of the text describes this as an adjustment, which is the correct term for the changes made to the BCM recharge data. Consider revising in the table. Calibration is a completely different process.	Western Management Area	4/25/2021 16:37
Bryan Bondy	WMA Water Budget (Draft) 4-10-21 - 1. Water Budget Elements	N/A	SYWG-WMA-HCM-Comment No. 6. Table 1-2 does not include water system distribution losses. Inflows from this term are expected to be small, but should be addressed.	Western Management Area	4/25/2021 16:37
Bryan Bondy	WMA Water Budget (Draft) 4-10-21 - 1. Water Budget Elements	N/A	SYWG-WMA-HCM-Comment No. 7. Table 1-2 does not include evaporation from water in SY River when flowing. Outflows from this term are expected to be small, but should be addressed.	Western Management Area	4/25/2021 16:37
Bryan Bondy	WMA Water Budget (Draft) 4-10-21 - 1. Water Budget Elements	N/A	SYWG-WMA-HCM-Comment No. 8. Table 1-2 must include imported water outflows to distribution in order to balance the surface water budget. Because of this omission, the fraction of imported water that becomes landscape return flow and wastewater percolation to the SY River alluvium is being double-counted in the surface water budget.	Western Management Area	4/25/2021 16:37
Bryan Bondy	WMA Water Budget (Draft) 4-10-21 - 1. Water Budget Elements	N/A	SYWG-WMA-HCM-Comment No. 9. More information is needed to understand the calculations described in the last two sentences on page 13.	Western Management Area	4/25/2021 16:37
Bryan Bondy	WMA Water Budget (Draft) 4-10-21 - 1. Water Budget Elements	N/A	SYWG-WMA-HCM-Comment No. 10. The mathematical procedures described in the first paragraph at the top of page 14 are unclear to the reader. More information is requested.	Western Management Area	4/25/2021 16:37
Bryan Bondy	WMA Water Budget (Draft) 4-10-21 - 1. Water Budget Elements	N/A	SYWG-WMA-HCM-Comment No. 11. Page 15 - irrigation efficiency for vineyard - it is unclear why the efficiency in WMA is assumed to be 95% versus 90% assumed for the EMA.	Western Management Area	4/25/2021 16:37
Bryan Bondy	WMA Water Budget (Draft) 4-10-21 - 1. Water Budget Elements	N/A	SYWG-WMA-HCM-Comment No. 12. Page 15 - it is unclear why only 15% of applied water for landscape irrigation is assumed to become return flow in light of the preceding statement that landscape irrigation efficiency is assumed to be 70%. More explanation is requested because the draft document referenced does not appear to be publicly available.	Western Management Area	4/25/2021 16:37
Bryan Bondy	WMA Water Budget (Draft) 4-10-21 - 1. Water Budget Elements	N/A	SYWG-WMA-HCM-Comment No. 13. A figure should be provided to show the combined NCCAG and NWI data sets so the reader can see the areas of vegetation used in the calculation of riparian ET in the upland areas.	Western Management Area	4/25/2021 16:37

Bryan Bondy	WMA Water Budget (Draft) 4-10-21 - 1. Water Budget Elements	N/A	SYWG-WMA-HCM-Comment No. 14. Riparian ET - This section describes the estimation of natural vegetation uptake of water. It is noted that some of the water transpired by this vegetation is already accounted for in the BCM ET term. It is further noted that riparian vegetation along tributaries and the SY River are likely relying on surface water to meet at least part of their water demands. In either case, the outflows for this water budget term are being overestimated. This should be revisited.	Western Management Area	4/25/2021 16:37
Bryan Bondy	WMA Water Budget (Draft) 4-10-21 - 2. Historical Water Budget	N/A	SYWG-WMA-HCM-Comment No. 15. Table 2-9. It is unclear why the Lompoc Plain perennial yield values differ from those shown in Table 2-8. The text on page 29 describes certain factors that may justify a higher value, but stops short of providing a quantitative explanation for the 2,000 AFY higher upper end reported in Table 2-9. Please clarify.	Western Management Area	4/25/2021 16:37
Bryan Bondy	WMA Water Budget (Draft) 4-10-21 - 4. Projected Water Budget	N/A	SYWG-WMA-HCM-Comment No. 16. Pages 37-38 - Projected Hydrology - The reviewer was unable to determine what 50-year period of historical hydrology was used to develop the project water budget. Page 37 states "The monthly change factors...were applied to the historical hydrology for the WMA." Was the historical period hydrology used? If so, the reviewer notes that this period is only 37 years whereas a 50-yr period is required. At a minimum, more information needs to be included to make clear what historical years were used to develop 50-year hydrology for the projected water budget.	Western Management Area	4/25/2021 16:37
Bryan Bondy	WMA Water Budget (Draft) 4-10-21 - 4. Projected Water Budget	N/A	SYWG-WMA-HCM-Comment No. 17. Page 41 states "...the current estimate of perennial yield of 26,300 to 28,000 AFY..." Why the range reported on page 41 different from that presented in Table 2-9 (26,300-29,000 AFY).	Western Management Area	4/25/2021 16:37
Bryan Bondy	WMA Water Budget (Draft) 4-10-21 - 4. Projected Water Budget	N/A	SYWG-WMA-HCM-Comment No. 18. Pages 41-42 and Table 4-2 - 2042 and 2072 water budgets are presented and compared with the baseline 2018 demands. It is unclear what the 2042 and 2072 water budgets represent. Are they single year water budgets? Alternatively, do they represent average conditions over some period projected in the future? The projected water budget information presented does not meet the GSP Emergency Regulations requirement for annual quantification of the water budget for the 50-yr projection period (GSP Emergency Regulations § 354.18). An annual water budget table and bar chart like that provided for the historical water budget should be provided for the projected water budget.	Western Management Area	4/25/2021 16:37
Bryan Bondy	CMA Water Budget-DRAFT 4/11/2021 - Introduction	N/A	SYWG-CMA-HCM-Comment No. 1. Santa Ynez Water Group (SYWG) thanks the CMA GSA for the opportunity to submit comments on the Draft Central Management Area Groundwater Budget document. SYWG comments were prepared with the assistance of a State of California Professional Geologist and Certified Hydrogeologist. SYWG's comments are intended to help improve the HCM, help ensure consistency with GSP Emergency Regulations, and avoid unnecessary GSP implementation costs. Please do not hesitate to contact our hydrogeologist, Bryan Bondy, if you need any clarifications or would like to discuss any of our comments.	Central Management Area	4/25/2021 16:31
Bryan Bondy	CMA Water Budget-DRAFT 4/11/2021 - Introduction	N/A	SYWG-CMA-HCM-Comment No. 2. There is significant uncertainty in the water budget, both historically and projected into the future that is not characterized quantitatively. Quantitative uncertainty estimates should be provided and clearly communicated to the stakeholders and GSA Board for consideration when developing sustainable management criteria and projects/management actions for the GSP. The GSP should lay out a path to reducing uncertainty in the rate of storage depletion over time, commensurate with the costs of projects/management actions necessary to address the storage depletion.	Central Management Area	4/25/2021 16:31
Bryan Bondy	CMA Water Budget-DRAFT 4/11/2021 - Introduction	2	SYWG-CMA-HCM-Comment No. 3. Page 2 - Bullet "Evaluating undesirable impacts" - consider replacing "impacts" with "results" for consistency with SGMA.	Central Management Area	4/25/2021 16:31
Bryan Bondy	CMA Water Budget-DRAFT 4/11/2021 - 1. Water Budget Elements	7	SYWG-CMA-HCM-Comment No. 4. Page 7 first paragraph, second to last sentence - "other management agencies" - please clarify what agencies are being referred to here. Is the reference to the other groundwater management agencies (WMA and EMA)?	Central Management Area	4/25/2021 16:31
Bryan Bondy	CMA Water Budget-DRAFT 4/11/2021 - 1. Water Budget Elements	N/A	SYWG-CMA-HCM-Comment No. 5. Table 1-2 states that BCM recharge was "calibrated" to basin precipitation data. Page 13 of the text describes this as an adjustment, which is the correct term for the changes made to the BCM recharge data. Consider revising in the table. Calibration is a completely different process.	Central Management Area	4/25/2021 16:31
Bryan Bondy	CMA Water Budget-DRAFT 4/11/2021 - 1. Water Budget Elements	N/A	SYWG-CMA-HCM-Comment No. 6. Table 1-2 does not include water system distribution losses. Inflows from this term are expected to be small, but should be addressed.	Central Management Area	4/25/2021 16:31
Bryan Bondy	CMA Water Budget-DRAFT 4/11/2021 - 1. Water Budget Elements	N/A	SYWG-CMA-HCM-Comment No. 7. Table 1-2 does not include evaporation from water in SY River when flowing. Outflows from this term are expected to be small, but should be addressed.	Central Management Area	4/25/2021 16:31
Bryan Bondy	CMA Water Budget-DRAFT 4/11/2021 - 1. Water Budget Elements	N/A	SYWG-CMA-HCM-Comment No. 8. Table 1-2 must include imported water outflows to distribution in order to balance the surface water budget. Because of this omission, the fraction of imported water that becomes landscape return flow and wastewater percolation to the SY River alluvium is being double-counted in the surface water budget.	Central Management Area	4/25/2021 16:31
Bryan Bondy	CMA Water Budget-DRAFT 4/11/2021 - 1. Water Budget Elements	N/A	SYWG-CMA-HCM-Comment No. 9. More information is needed to understand the calculations described in the last two sentences on page 13.	Central Management Area	4/25/2021 16:31
Bryan Bondy	CMA Water Budget-DRAFT 4/11/2021 - 1. Water Budget Elements	N/A	SYWG-CMA-HCM-Comment No. 10. The mathematical procedures described in the first paragraph at the top of page 14 are unclear to the reader. More information is requested.	Central Management Area	4/25/2021 16:31
Bryan Bondy	CMA Water Budget-DRAFT 4/11/2021 - 1. Water Budget Elements	N/A	SYWG-CMA-HCM-Comment No. 11. Page 15 - irrigation efficiency for vineyard - it is unclear why the efficiency in CMA is assumed to be 95% versus 90% assumed for the EMA.	Central Management Area	4/25/2021 16:31
Bryan Bondy	CMA Water Budget-DRAFT 4/11/2021 - 1. Water Budget Elements	N/A	SYWG-CMA-HCM-Comment No. 12. Page 15 - it is unclear why only 15% of applied water for landscape irrigation is assumed to become return flow in light of the preceding statement that landscape irrigation efficiency is assumed to be 70%. More explanation is requested because the draft document referenced does not appear to be publicly available.	Central Management Area	4/25/2021 16:31

Bryan Bondy	CMA Water Budget-DRAFT 4/11/2021 - 1. Water Budget Elements	N/A	SYWG-CMA-HCM-Comment No. 13. Page 15 - second paragraph - assumption of 10% agricultural return flows from SY River water applied in the Buellton Uplands is inconsistent with the irrigation efficiencies stated in the prior paragraph. Please explain the reason for the difference.	Central Management Area	4/25/2021 16:31
Bryan Bondy	CMA Water Budget-DRAFT 4/11/2021 - 1. Water Budget Elements	N/A	SYWG-CMA-HCM-Comment No. 14. Page 17, first paragraph, last sentence. Discussion of rural domestic and small public water systems seems out-of-place in a section that addresses agricultural pumping.	Central Management Area	4/25/2021 16:31
Bryan Bondy	CMA Water Budget-DRAFT 4/11/2021 - 1. Water Budget Elements	N/A	SYWG-CMA-HCM-Comment No. 15. A figure should be provided to show the combined NCCAG and NWI data sets so the reader can see the areas of vegetation used in the calculation of riparian ET in the upland areas.	Central Management Area	4/25/2021 16:31
Bryan Bondy	CMA Water Budget-DRAFT 4/11/2021 - 1. Water Budget Elements	N/A	SYWG-CMA-HCM-Comment No. 16. Riparian ET in upland areas- This section describes the estimation of natural vegetation uptake of water along the upland tributaries. It is noted that some of the water transpired by this vegetation is already accounted for in the BCM ET term. It is further noted that riparian vegetation along tributaries are likely relying on surface water to meet some of their water demands. In either case, the outflows for this water budget term are being overestimated. This should be revisited.	Central Management Area	4/25/2021 16:31
Bryan Bondy	CMA Water Budget-DRAFT 4/11/2021 - 2. Historical Water Budget	N/A	SYWG-CMA-HCM-Comment No. 17. The subflow value in Table 2-4 differs from the value provided on page 14 (85 vs. 90).	Central Management Area	4/25/2021 16:31
Bryan Bondy	CMA Water Budget-DRAFT 4/11/2021 - 4. Projected Water Budget	N/A	SYWG-CMA-HCM-Comment No. 18. Pages 36-37 - Projected Hydrology - The reviewer was unable to determine what 50-year period of historical hydrology was used to develop the project water budget. Page 36 "The monthly change factors...were applied to the historical hydrology for the CMA." Was the historical period hydrology used? If so, the reviewer notes that this period is only 37 years whereas a 50-yr period is required. At a minimum, more information needs to be included to make clear what historical years were used to develop 50-year hydrology for the projected water budget.	Central Management Area	4/25/2021 16:31
Bryan Bondy	CMA Water Budget-DRAFT 4/11/2021 - 4. Projected Water Budget	N/A	SYWG-CMA-HCM-Comment No. 19. Page 38, third paragraph discusses estimation of future agricultural water demands. The text states no change in acreage or crop type is assumed and that the only change will be due to increased crop water demand related to climate change. The irrigation demands are projected to increase by 3.8% and 8.3% for the 2042 and 2072 estimates, applied to a baseline irrigation quantity of 2,415 AFY. However, the calculated further irrigation demands for 2042 and 2072 are 17.6% and 21.7% greater than the baseline value, not 3.8% and 8.3%. Something is wrong with the text or the math because a 3.8% increase to 2,415 AFY should be 2,507 AFY (compared with 2,840 AFY) and an 8.3% increase to 2,415 AFY should be 2,615 AFY (compared with 2,940 AFY). This issue affects the remainder of the projected groundwater balance..	Central Management Area	4/25/2021 16:31
Bryan Bondy	CMA Water Budget-DRAFT 4/11/2021 - 4. Projected Water Budget	N/A	SYWG-CMA-HCM-Comment No. 20. Page 40, second paragraph, last sentence states that the perennial yield for the projected period is 2,800 AFY. Applying the same methodology to calculate the historical period perennial yield (page 29 - Average Annual Pumping + Average Annual Change in Storage) to the values in Table 4-2, the perennial yield for 2042 and 2072 should be $3,531 + (-420) = 3,111$ and $3,653 AFY + (-600) = 3,053 AFY$ respectively. It is unclear why the same perennial yield estimation methodology for the historical period was not used for the projected period. This is not defensible and should be corrected.	Central Management Area	4/25/2021 16:31
Bryan Bondy	CMA Water Budget-DRAFT 4/11/2021 - 4. Projected Water Budget	N/A	SYWG-CMA-HCM-Comment No. 21. Pages 40-41 and Table 4-2. 2042 and 2072 water budgets are presented and compared with the baseline 2018 demands. It is unclear what the 2042 and 2072 water budgets represent. Are they single year water budgets? Alternatively, do they represent average conditions over some period projected in the future? The projected water budget information presented does not meet the GSP Emergency Regulations requirement for annual quantification of the water budget for the 50-yr projection period (GSP Emergency Regulations § 354.18). An annual water budget table and bar chart like that provided for the historical water budget should be provided for the projected water budget.	Central Management Area	4/25/2021 16:31
Bryan Bondy	CMA Water Budget-DRAFT 4/11/2021 - 4. Projected Water Budget	N/A	SYWG-CMA-HCM-Comment No. 22. Page 40 summary of projected water budget and Table 4-2 discuss and show projected deficits of 420 and 600 AFY for 2042 and 2072. After correcting for the projected agricultural demand estimates, these values decrease to 87 and 275 AFY, respectively. This correction needs to be made and communicated to the stakeholders and decision makers prior to SMC discussions.	Central Management Area	4/25/2021 16:31
Bryan Bondy	EMA Water Budget - DRAFT - 3.3.1 Overview of Water Budget Development	N/A	SYWG-EMA-HCM-Comment No. 4. The document makes numerous references to figures in Section 2 that are not provided with the document or otherwise publicly available. The absence of these figures limits the public's ability to review the document.	Eastern Management Area	4/25/2021 16:23
Bryan Bondy	EMA Water Budget - DRAFT - 3.3.1 Overview of Water Budget Development	8	SYWG-EMA-HCM-Comment No. 5. Page 8 states "The sustainable yield of a groundwater basin is the volume of groundwater that can be extracted from a basin on a long-term basis without creating chronic and continued lowering of groundwater levels and a significant and unreasonable reduction of groundwater in storage." This definition of sustainable yield is not entirely consistent with the Water Code Section 10721 definition, which is provided in the subsequent paragraph.	Eastern Management Area	4/25/2021 16:23
Bryan Bondy	EMA Water Budget - DRAFT - 3.3.1 Overview of Water Budget Development	8	SYWG-EMA-HCM-Comment No. 6. Page 8 states that "sustainable yield is not a fixed constant value" and goes on to say that the sustainable yield will be "likely modified with future updated of the GSP" (presumably every 5 years). The suggestion that sustainable yield can change as frequently as every five years is inconsistent with the definition of sustainable yield provided in the Water Code, which says sustainable yield is to be "calculated over a base period representative of long-term conditions in the basin." The memo should provide more information concerning why it is believed that this GSP should take a short-term view of the sustainable yield that is clearly in conflict with the regulatory definition of the term.	Eastern Management Area	4/25/2021 16:23
Bryan Bondy	EMA Water Budget - DRAFT - 3.3.1 Overview of Water Budget Development	12	SYWG-EMA-HCM-Comment No. 7. Page 12 - Groundwater Inflows. Water distribution system leakage should be considered a source of recharge.	Eastern Management Area	4/25/2021 16:23



Bryan Bondy	EMA Water Budget - DRAFT - 3.3.1 Overview of Water Budget Development	13	SYWG-EMA-HCM-Comment No. 8. Page 13 states "The historical water budget period was set to define a specific period over which elements of recharge and discharge to the basin may be compared to the long-term average." It is unclear what long-term average values the historical water budget is being compared against. Please clarify.	Eastern Management Area	4/25/2021 16:23
Bryan Bondy	EMA Water Budget - DRAFT - 3.3.1 Overview of Water Budget Development	15	SYWG-EMA-HCM-Comment No. 9. The cumulative departure graphs discussed on page 15 should be included in the water budget document. The graphs do not appear to be publicly available during the water budget public review period.	Eastern Management Area	4/25/2021 16:23
Bryan Bondy	EMA Water Budget - DRAFT - 3.3.2 Water Budget Data Sources	16	SYWG-EMA-HCM-Comment No. 10. Page 16 states: "While the data associated with the EMA is generally excellent, any large uncertainty in the data could limit the GSA's ability to effectively develop...". The statement here that the data used for water budget development is "generally excellent" is inconsistent with Table 3-2, which indicates that vast majority (15/18) of the data sources have a medium or lower Qualitative Data Rating, including more than half (10/18) with a "low" or "medium/low" rating. Moreover, none of the groundwater budget data sources have a "High" rating. More explanation is needed to clarify justify the conclusion that the data are "generally excellent".	Eastern Management Area	4/25/2021 16:23
Bryan Bondy	EMA Water Budget - DRAFT - 3.3.2 Water Budget Data Sources	N/A	SYWG-EMA-HCM-Comment No. 13. Table 3-2 states that the BCM is calibrated to gage data. Page 18 describes adjustments made to the data based on gage data, however adjustments are not calibration. It is unclear whether the BCM model was actually calibrated to measured data for the EMA. The BCM model is a statewide model and has only been calibrated to surface water flow and only in selected basins. The memo does not describe whether Basin is one of those basins. If it is, more information should be provided concerning the quality of the calibration and clarify that the calibration only applies to streamflow (i.e., recharge is uncalibrated). If it is not, the document should not say the BCM model is calibrated.	Eastern Management Area	4/25/2021 16:23
Bryan Bondy	EMA Water Budget - DRAFT - 3.3.2 Water Budget Data Sources	N/A	SYWG-EMA-HCM-Comment No. 14. Table 3-2 states that the BCM is calibrated to SYRB meteorological station data. Page 18 describes adjustments made to the data based on meteorological data. Such adjustments are not calibration, they are adjustments only. The table should say the BCM data were adjusted using meteorological data, not calibrated.	Eastern Management Area	4/25/2021 16:23
Bryan Bondy	EMA Water Budget - DRAFT - 3.3.2 Water Budget Data Sources	N/A	SYWG-EMA-HCM-Comment No. 15. Table 3-2 The Qualitative Data Rating for tributary deep percolation is "Medium," yet page 19 says the flow from tributary creeks (the source of the percolation) has a high uncertainty. These two statements appear to be in conflict.	Eastern Management Area	4/25/2021 16:23
Bryan Bondy	EMA Water Budget - DRAFT - 3.3.2 Water Budget Data Sources	18	SYWG-EMA-HCM-Comment No. 16. Page 18 states that "...were determined using the adjusted and calibrated BCM recharge and runoff data sets." It seems clear that the BCM data were adjusted per the discussion in the preceding paragraph. However, it is not clear whether or how the BCM data were calibrated. More information is needed for the reader to understand what calibration, if any, was performed and what methods were used.	Eastern Management Area	4/25/2021 16:23
Bryan Bondy	EMA Water Budget - DRAFT - 3.3.2 Water Budget Data Sources	18	SYWG-EMA-HCM-Comment No. 17. Footnote 3 states: "The adjusted BCM runoff data were calibrated to match stream gage data (where available) by routing excess or deficit volumes to/from recharge." It is unclear why streamflow adjustments are exclusively taken from / added to the BCM recharge component as opposed to the BCM ET term or both terms. What is the justification for reducing only the recharge term? Same comment on Page 20 text.	Eastern Management Area	4/25/2021 16:23
Bryan Bondy	EMA Water Budget - DRAFT - 3.3.2 Water Budget Data Sources	19	SYWG-EMA-HCM-Comment No. 18. Page 19 states that "The Santa Ynez River and underflow is accurately gauged and highly regulated. Therefore, the level of uncertainty of these data is low." The text is not clear here regarding how the underflow (subsurface flow) is gaged. This also appears to conflict with Section 3.3.2.3.2, which says underflow was estimated using Darcy's Law and numerical models.	Eastern Management Area	4/25/2021 16:23
Bryan Bondy	EMA Water Budget - DRAFT - 3.3.2 Water Budget Data Sources	N/A	SYWG-EMA-HCM-Comment No. 19. Section 3.3.2.2.4 - Irrigation Return Flows: This section mentions urban landscape irrigation efficiency, but lacks discussion of calculations of return flows from residential/commercial landscape irrigation. Was this recharge source ignored in the water budget?	Eastern Management Area	4/25/2021 16:23
Bryan Bondy	EMA Water Budget - DRAFT - 3.3.2 Water Budget Data Sources	N/A	SYWG-EMA-HCM-Comment No. 20. Page 25 says the SYRWCD pamphlet water duties were used in the white area, but page 32 describes spatial-temporal interpolation of crop water requirements. Therefore, it is unclear which data were used to estimate white area crop water demands.	Eastern Management Area	4/25/2021 16:23
Bryan Bondy	EMA Water Budget - DRAFT - 3.3.2 Water Budget Data Sources	N/A	SYWG-EMA-HCM-Comment No. 21. Section 3.3.2.4.5 - Phreatophyte ET - This section describes the estimation of natural vegetation update of water along the upland tributaries. It is noted that some of the water transpired native vegetation is accounted for in the BCM ET term. It is also noted that this vegetation is likely relying on surface water to meet some its water needs. Bottom line - it appears that the impact of natural vegetation ET on the groundwater budget is overestimated. This should be revisited.	Eastern Management Area	4/25/2021 16:23
Bryan Bondy	EMA Water Budget - DRAFT - 3.3.2 Water Budget Data Sources	N/A	SYWG-EMA-HCM-Comment No. 22. A figure should be provided to show the "LandFire EVT" data. The reviewer is particularly interested in the what it shows in the Uplands, as it is related to the prior comment.	Eastern Management Area	4/25/2021 16:23
Bryan Bondy	EMA Water Budget - DRAFT - 3.3.3 Historical Water Budget (1982-2018)	N/A	SYWG-EMA-HCM-Comment No. 23. Surface Water Budget - Imported water is included as an inflow term, but is not fully accounted for in the outflows. It appears based on text elsewhere in the document that imported water is sent to distribution, which is ultimately consumptively used and provides inputs to the groundwater budget. Imported water sent to distribution must be accounted for in order to properly close the surface water budget.	Eastern Management Area	4/25/2021 16:23

Bryan Bondy	EMA Water Budget - DRAFT - 3.3.3 Historical Water Budget (1982-2018)	N/A	SYWG-EMA-HCM-Comment No. 24. Comparison of Figure 3-49 with the "Representative" hydrographs provided in the HCM document, suggests that the water balance is not following groundwater level trends. Based on the "Representative " hydrographs for the Paso Robles Formation, the cumulative storage change should peak sooner (earlier in the 2000s) and should do so at a higher value that is significantly greater than the starting value of zero (groundwater levels were notably higher in the early 2000s as compared to the 1982). The groundwater level trends also suggest that the declining storage in the 1980s is overestimated. The historical water budget should be revisited and "calibrated" to the "Representative" hydrographs to provide a more accurate historical water budget.	Eastern Management Area	4/25/2021 16:23
Bryan Bondy	EMA Water Budget - DRAFT - 3.3.3 Historical Water Budget (1982-2018)	N/A	SYWG-EMA-HCM-Comment No. 25. The wet-dry year coloring scheme shown on Figure 3-49 differs notably from the scheme used in the HCM figures.	Eastern Management Area	4/25/2021 16:23
Bryan Bondy	EMA Water Budget - DRAFT - 3.3.3 Historical Water Budget (1982-2018)	N/A	SYWG-EMA-HCM-Comment No. 26. Section 3.3.3.7 - The SGMA requirement for a quantitative evaluation of the availability of historical surface water supplies is not met by content provided in this section.	Eastern Management Area	4/25/2021 16:23
Bryan Bondy	EMA Water Budget - DRAFT - 3.3.5 Projected Water Budget	N/A	SYWG-EMA-HCM-Comment No. 27. Section 3.3.5.1.1 - Projected Hydrology - The reviewer was unable to determine what 50-year period of historical hydrology was used to develop the project water budget. Page 57 discusses the time periods of various data sets, but does not state what historical period is used to develop the projected water budgets. This paragraph says, "The precipitation and ET change projections are computed relative to a baseline period of 1981 to 2010." Is that the period that was used? If so, the reviewer notes that this period is only 30 years whereas a 50-yr period is required. The historical period needs to be stated explicitly for the reader.	Eastern Management Area	4/25/2021 16:23
Bryan Bondy	EMA Water Budget - DRAFT - 3.3.5 Projected Water Budget	N/A	SYWG-EMA-HCM-Comment No. 28. Table 3-19 water duty factors - SYWG growers believe the water duty for vineyards is too high. A value closer to 1 - 1.2 AFY/acre, inclusive of irrigation and frost protection, is believed to be more reasonable.	Eastern Management Area	4/25/2021 16:23
Bryan Bondy	EMA Water Budget - DRAFT - 3.3.5 Projected Water Budget	N/A	SYWG-EMA-HCM-Comment No. 29. Projected expansion of agriculture: SYWG landowners have been farming in Santa Barbara County for many decades and grow diverse products including strawberries, raspberries, and vegetable and wine grapes. We respectfully disagree with the large projected expansion of agricultural acreage and water use developed for the projected water budget. Recent California labor wage increases have caused many crops to no longer be economically viable. For this reason any change in agricultural water use will likely be to decrease higher labor and water use crops in favor of lower labor and lower water use crops. GSP implementation costs and potential groundwater use limitations will further influence growers of higher water duty crops to transition to lower water duty crops. By way of example, one SYWG landowner had a organic raspberry grower as a tenant on 85 acres. Recent labor increases caused the tenant to buy out of the lease and move operations to Mexico. Raspberries in hoop houses use 3.5 ac feet of water. The 85 acres site was re-planted into wine grapes that use considerably less water for irrigation. We expect this trend to continue as markets adjust to increasing labor and regulatory costs. As crops leave our area based upon negative economic results there will be no incentive to convert new pasture land into irrigated land. For example, we do not believe that the "a large increase expected" in cannabis stated in memo will be on previously unirrigated acres. Rather we believe it will replace acres previously used to grow other crops. More work and discussion is needed on the future water demand projections to adequately support groundwater management decisions.	Eastern Management Area	4/25/2021 16:23
Bryan Bondy	EMA Water Budget - DRAFT - 3.3.5 Projected Water Budget	61	SYWG-EMA-HCM-Comment No. 30. Page 61 - second paragraph - Based the remainder of the paragraph, the first sentence should say "decrease", not "increase."	Eastern Management Area	4/25/2021 16:23
Bryan Bondy	EMA Water Budget - DRAFT - 3.3.5 Projected Water Budget	N/A	SYWG-EMA-HCM-Comment No. 31. Page 62 states that "...ID No. 1 and the unincorporated areas of the EMA including Los Olivos, Ballard, the Chumash Reservation, and other areas are not expected to increase in population through 2042 and 2072." However, the subsequent paragraph and Table 3-22 projects increased municipal and domestic pumping in all areas. This discrepancy should be resolved.	Eastern Management Area	4/25/2021 16:23
Bryan Bondy	EMA Water Budget - DRAFT - 3.3.2 Water Budget Data Sources	16	SYWG-EMA-HCM-Comment No. 11. Page 16 states "While the data associated with the EMA is generally excellent, any large uncertainty in the data could limit the GSA's ability to effectively!" This sentence implies that there could be large uncertainties in the data, yet the potential "large uncertainties" are not clearly identified in the document. Is the author aware of "large uncertainties" in the data? If so, those uncertainties should be clearly described. If not, it is unclear what the author is trying to communicate and the discussion should be revised.	Eastern Management Area	4/25/2021 16:23
Bryan Bondy	EMA Water Budget - DRAFT - 3.3.2 Water Budget Data Sources	N/A	SYWG-EMA-HCM-Comment No. 12. Table 3-2 appears to be missing data sources for calculation of residential/commercial landscape irrigation return flows and water distribution system losses.	Eastern Management Area	4/25/2021 16:23
Bryan Bondy	EMA Water Budget - DRAFT - 3.3.1 Overview of Water Budget Development	N/A	SYWG-EMA-HCM-Comment No. 1. Santa Ynez Water Group (SYWG) thanks the EMA GSA for the opportunity to submit comments on the Draft Eastern Management Area Groundwater Budget document. SYWG comments were prepared with the assistance of a State of California Professional Geologist and Certified Hydrogeologist. SYWG's comments are intended to help improve the HCM, help ensure consistency with GSP Emergency Regulations, and avoid unnecessary GSP implementation costs. Please do not hesitate to contact our hydrogeologist, Bryan Bondy, if you need any clarifications or would like to discuss any of our comments.	Eastern Management Area	4/25/2021 16:23

Bryan Bondy	EMA Water Budget - DRAFT - 3.3.1 Overview of Water Budget Development	N/A	SYWG-EMA-HCM-Comment No. 2. There is significant uncertainty in the water budget, both historically and projected into the future that is not characterized quantitatively. Quantitative uncertainty estimates should be provided and clearly communicated to the stakeholders and GSA Board for consideration when developing sustainable management criteria and any projects/management actions for the GSP. The GSP should lay out a path to reducing uncertainty in the rate of storage depletion, commensurate with the costs of projects/management actions necessary to address the storage depletion.	Eastern Management Area	4/25/2021 16:23	
Bryan Bondy	EMA Water Budget - DRAFT - 3.3.1 Overview of Water Budget Development	N/A	SYWG-EMA-HCM-Comment No. 3. The document states in numerous places that the numerical model was used during preparation of the water budget. It is noted that information concerning the groundwater model was not made available for consideration during the water budget public review period.	Eastern Management Area	4/25/2021 16:23	
Bryan Bondy	EMA Water Budget - DRAFT - 3.3.5 Projected Water Budget	N/A	SYWG-EMA-HCM-Comment No. 32. Table 3-32. 2042 and 2072 water budgets are presented and compared with the historical and current water budget. It is unclear what the 2042 and 2072 water budgets represent. Are they single year water budgets? Alternatively, do they represent average conditions over some period projected in the future? The projected water budget information presented does not meet the GSP Emergency Regulations requirement for annual quantification of the water budget for the 50-yr projection period (GSP Emergency Regulations 354.18). An annual water budget table and bar chart like that provided for the historical water budget should be provided for the projected water budget.	Eastern Management Area	4/25/2021 16:23	
Bryan Bondy	EMA Water Budget - DRAFT - 3.3.5 Projected Water Budget	N/A	SYWG-EMA-HCM-Comment No. 33. It is unclear why the projected 2042 agricultural pumping values in Tables 3-21 differ from the values in Tables 3-23 and 3-24 even though both are described as agricultural pumping with climate change (values in Tables 3-23 and 3-24 are higher than Table 3-21). The 2072 projected agricultural pumping values is different in all three tables, with the numbers in Tables 3-23 and 3-24 both being higher than value in Table 3-21. It does not appear that higher numbers included in Tables 3-23 and 3-24, which also appear to be the values used in the projected water balance, are justified. The projected agricultural pumping rates should be revisited, discrepancies resolved, and the water budget calculations updated (after also addressing other comments that impact projected agricultural pumping).	Eastern Management Area	4/25/2021 16:23	
Amber Thompson	CMA Water Budget-DRAFT 4/11/2021	N/A	Water Budget TM document does NOT have a "Table of Contents" or list like the GCTM has ("This Memorandum is organized as follows. Section 1. Groundwater Elevation. This section evaluates..."). The EMA Water Budget has a Table of Contents. OK?	Central Management Area	4/13/2021 15:22	
Steven Slack		N/A	Dear Mr. Buelow, The California Department of Fish and Wildlife has completed review of Santa Ynez River Valley Groundwater Basin Draft Groundwater Conditions Technical Memorandum for the Central Management Area. Please find CDFW's comment letter attached. Thank you for the opportunity to provide comments. If you have any questions or concerns regarding CDFW's comments, please feel free to contact myself at your convenience. Thank you,	null	3/19/2021 17:28	Santa Ynez GSA Comment Letter for GCTM CMA.pdf <a href="https://portal.santaynezwater.org/service/document/download/455">https://portal.santaynezwater.org/service/document/download/455</a>
Steven Slack		N/A	ADDITIONAL COMMENTS Sensitive Species and Habitats: Many sensitive species and habitats in the Santa Ynez CMA comprise of GDEs, the natural communities that rely on groundwater to sustain all or a portion of their water needs. Some of the special-status species in the Santa Ynez River watershed that rely on surface water supported and supplemented by groundwater include the federally endangered Southern California steelhead; western pond turtle (Emys marmorata), a CDFW species of special concern (SSC) and U.S. Forest Service sensitive species; California red-legged frog (Rana draytonii), a CDFW SSC and ESA-listed species; western spadefoot toad (Spea hammondi), a CDFW SSC and Bureau of Land Management sensitive species; and California tiger salamander (Ambystoma californiense), an ESA-listed and California Endangered Species Act (CESA)-listed species. The Santa Ynez River contains important Southern California steelhead spawning and rearing tributaries in Southern California. Threats to Southern California steelhead, such as excessively high-water temperatures in the spring, summer, and early fall, reduce available juvenile rearing habitat. Low flows in the fall and winter can delay adult passage to critical spawning areas. Western pond turtle was designated as a California SSC in 1994. Western pond turtle's preferred habitat is permanent ponds, lakes, streams, or permanent pools along intermittent streams associated with standing and slow-moving water. A potentially important limiting factor for western pond turtle is the relationship between water level and flow in off-channel water bodies, which can both be affected by groundwater pumping. California red-legged frog is rarely encountered far from perennial water. Tadpoles require water for at least three or four months while completing their aquatic development. Adults eat both aquatic and terrestrial invertebrates, and the tadpoles graze along rocky stream bottoms. Groundwater pumping that impairs streamflow could have negative impacts on California red-legged frog populations. Western spadefoot toad migrates to seasonal vernal pools to reproduce. They will use small puddles of water, such as small pools to breed. California tiger salamander is also restricted to vernal pools and seasonal ponds for reproduction. If groundwater depletion results in reduced streamflow due to interconnected surface waters, the nesting and foraging success of flycatcher, least Bell's vireo, and other bird species may be diminished due to the reduced nesting habitat and food availability. The unsustainable use of groundwater can impact the shallow aquifers and interconnected surface waters on which these species and GDEs depend. This may lead to adverse impacts on fish and wildlife and the habitat they need to survive. Determining the effects that groundwater levels have on surface water flows in the CMA would provide an understanding of how the groundwater levels may be associated with the health and abundance of riparian vegetation. Poorly managed groundwater pumping, and surface water flows have the potential to reduce the abundance and quality of riparian vegetation, reducing the amount of shade provided by the vegetation, and ultimately leading to increased water temperatures in the CMA. CDFW highly recommends the SYR-GSA map out locations where there are interconnected surface	null	3/19/2021 16:06	

Steven Slack	CMA Groundwater Conditions TM - TEXT - 6. Interconnected Surface Water & GW Dependent Ecosystems	31	<p>Comment #1: Groundwater Dependent Ecosystems: Fish and Wildlife Species Water Needs Issue: Page 31 of the CMA-GC Memo states, "Additional potential GDEs have been mapped by the California Department of Water Resources, the California Department of Fish and Wildlife, and The Nature Conservancy along the tributaries of the CMA (HCM Figure 5-2), including the ephemeral tributaries in the Buellton Upland north of the Santa Ynez River, including Dry Creek, Santa Rosa Creek, Canada de Palos Blancos, and Canada de Laguna Creek, and Zaca Creek." Figure 5-2 of the Draft Central Management Area Hydrogeologic Conceptual Model: Technical Memorandum (CMA-HCM Memo) only outlines the Natural Communities Commonly Associated with Groundwater (NCCAG) wetlands and vegetation with possible connections to groundwater. It is unclear whether CMA-HCM Memo Figure 5-2 incorporates species-specific data on plants, fish, and wildlife. Concern: Pursuant to SGMA, the GSP to be developed by GSYR-GSA must identify and consider impacts to all GDEs in the basin, including flowing waters and refugia pools relied upon by Southern California Coast Steelhead (<i>Oncorhynchus mykiss</i> (O. mykiss) or Southern California steelhead), an endangered species under the Federal Endangered Species Act (ESA). The GSP must also avoid depletions of interconnected surface waters that have significant and unreasonable adverse impacts on beneficial uses of the surface water. Specific, surface water flows needed to support Southern California steelhead life stages at different times of year are as follows: 1) from October through June for river-estuary-Ocean connectivity needed for passage; 2) from January through May for adult migration, spawning and incubation; 3) from January through June for juvenile migration; and 4) year-round for expression of juvenile life history. Notably, migration and connectivity flows are needed for the entire length of the Santa Ynez River from Bradbury Dam to the Pacific Ocean for Southern California steelhead to complete their life cycle. Reductions in flows during the July to September period within the CMA downstream of Alisal Bridge would have adverse effects on Southern California steelhead through elevated water temperatures and reductions in dissolved oxygen levels necessary to sustain Southern California steelhead. CDFW is concerned that groundwater overdraft will lead to losing streams, temperature increases, diminishing refugia pools, and a lack of connectivity flows needed for Southern California steelhead migration. CDFW is also concerned that groundwater pumping in the face of climate change and human disturbance will lead to dryer stream reaches incapable of supporting suitable riparian habitat for sensitive species that occupy GDEs, such as least Bell's vireo (<i>Vireo bellii pusillus</i>) and southwestern willow flycatcher (<i>Empidonax traillii extimus</i>). These federally and State-listed species need dense willow thickets and understory vegetation for both nesting and breeding purposes. Recommendation #1(a): To ensure meaningful consideration of GDEs as required under SGMA, CDFW recommends the SYR-GSA provide a biological assessment identifying species known to occur within the GDEs presented in Figure 5-2, including Southern California steelhead, least Bell's vireo, and southwestern willow flycatcher. Given the</p>	Central Management Area	3/19/2021 16:04
Steven Slack	CMA Groundwater Conditions TM - TEXT - 6. Interconnected Surface Water & GW Dependent Ecosystems	31	<p>Comment #2: Saturated Zone Connectivity to The Principal Aquifer Issue: Page 31 of the CMA-GC Memo states, "These potential GDEs will be screened to determine if a continuous saturated zone exists between groundwater levels of the principal aquifers using the groundwater model being developed for the CMA as part of GSP implementation." Concern: CDFW understands that there will be unknown factors regarding GSP implementation but hopes that additional wells, piezometers, temperature probes, and expanded groundwater monitoring systems can be installed to improve information availability over time. Notwithstanding existing data gaps, SGMA requires SYR-GSA to avoid significant and unreasonable adverse impacts to beneficial uses of interconnected surface waters. Recommendation #2(a): Information shortages should trigger conservative groundwater management decisions that err on the side of caution when assessing potential impacts to fish and wildlife and their habitats.</p>	Central Management Area	3/19/2021 16:04
Steven Slack	CMA Groundwater Conditions TM - TEXT - 6. Interconnected Surface Water & GW Dependent Ecosystems	30	<p>Comment #3: Hydraulically Connected vs. Seasonally Dry Issue: Page 30 of the CMA-GC Memo states, "All tributaries within the CMA (Figure 6-1) are ephemeral. As shown on Figure 6-2, Zaca Creek, the largest CMA tributary, has no measurable flow during half of the period of record. Most flow occurs in wet and above normal years between February to March, with no flow between June to November. This indicates these tributaries are completely depleted during part of the year and do not meet the SGMA definition for interconnected surface water." Concern: CDFW is very concerned about the health of the Southern California steelhead population in the Santa Ynez River. Drought conditions and low flow rates have led CDFW to participate in rescue operations as recently as 2020. The Santa Ynez River contains important Southern California steelhead spawning and rearing tributaries. Threats to Southern California Steelhead, such as excessively high-water temperatures due to reduced surface flows or groundwater pumping in the spring, summer, and early fall, reduce available juvenile rearing habitat. Low flows in the fall and winter can delay adult passage to critical spawning areas. Groundwater-dependent habitats, including interconnected surface waters, are particularly susceptible to changes in the depth of the groundwater. Lowered water tables that drop beneath the root zones can cut off phreatophyte vegetation from water resources, stressing or ultimately converting vegetated terrestrial habitat. Induced infiltration attributable to groundwater pumping can reverse hydraulic gradients and may cause streams to stop flowing. The frequency and duration of exposure to lowered groundwater tables and low-flow or no-flow conditions caused by groundwater pumping, as well as habitat and species resilience, will dictate vulnerability to changes in groundwater elevation. For example, some species rely on perennial instream flow, and any interruption to flow can risk species survival. CDFW believes SYR-GSA has not provided adequate support and justification for its conclusion that the tributaries within the CMA do not meet SGMA's definition of interconnected surface waters simply because they do not receive measurable flow at all times of year. Under SGMA, a GSP is required to avoid unreasonable adverse impacts on beneficial uses of interconnected surface waters, defined as "surface water that is hydraulically connected at any point by a continuous saturated zone to the underlying aquifer, and the overlying surface water is not completely depleted." (Water Code § 10721(x)(6) and 10727.2(b); 23 CCR § 351(o).) The SYR-GSA has not provided adequate support for its conclusion that lack of measurable flow within the tributaries means the tributaries are completely depleted under this definition. Even assuming the tributaries are completely depleted during part of the year, there is no requirement within SGMA or its implementing regulations that surface waters have measurable surface flows at all times of the year to qualify as an interconnected surface water. To the extent that the tributaries are hydraulically connected and not completely depleted at any time of the year, they qualify as interconnected surface waters and warrant appropriate consideration in the GSP, including the goal to avoid</p>	Central Management Area	3/19/2021 16:04

Steven Slack	CMA Groundwater Conditions TM - TEXT - 6. Interconnected Surface Water & GW Dependent Ecosystems	28	Comment #4: Resources in the Upper Aquifer: Issue: Page 28 of the CMA-GC Memo states, "Divisions from the Upper Aquifer of the Santa Ynez River Alluvium are subject to SWRCB which considers it the same as surface water. As described in the HCM, the Upper Aquifer is recharged from the surface water of the river." Concern: The CMA-HCM Memo states that during downstream water right releases, water infiltrates and recharges the alluvium in Zone A (CMA-HCM Memo, Pg. 23). This is another example of a location that has interconnected surface waters based on groundwater recharge during downstream water right releases. CDFW believes this occurs during natural flows at various seasons throughout the year. CDFW agrees that the Upper Aquifer is recharged from the surface water of the river but is unclear on the basis for the conclusion that the diversions from the Upper Aquifer should be regulated in the same manner as surface water. The CMA-HCM Memo also states that groundwater in the CMA discharges to the Santa Ynez River when the groundwater elevation is higher than the stream channel thalweg. Groundwater discharge to the river will occur during wet winter and spring months. However, during the summer and dry winter months, the streamflow loses water to the groundwater aquifers of the Santa Ynez alluvium subarea (CMA-HCM Memo, p. 27). This is another example of an interconnected surface water that SYR-GSA describes in their CMA-HCM Memo but failed to identify and analyze in the CMA-GC Memo. Recommendation #4(a): CDFW suggests providing justification, based on specific provisions of SGMA, for the conclusion that the Upper Aquifer should not be classified as a principal aquifer or managed by a GSP under SGMA. CDFW believes the GSA must sustainably manage groundwater resources in the Upper Aquifer, in part because it supports GDEs. Furthermore, portions of the Upper Aquifer are interconnected with surface water and is currently identified as a principal aquifer under Department of Water Resources Bulletin 118 (DWR 2020). The communities within the CMA heavily rely on surface and subsurface diversions from the Upper Aquifer. According to the CMA-GC Memo, Lower Aquifer groundwater pumping may not be currently occurring in the deeper aquifer (or it is unknown). Use of this Lower Aquifer water may become more appealing and economically viable in future years as Upper Aquifer pumping restrictions are placed to meet SGMA sustainable yield and criteria, and to meet Santa Ynez River instream flow needs. Thus, analyzing the Upper Aquifer as interconnected with surface water is consistent with the sustainability goals of SGMA. Furthermore, identifying and appropriately considering GDEs in the CMA that rely on the Upper Aquifer should be completed irrespective of the amount of pumping in both aquifers so that future impacts on GDEs due to new production can be avoided. CDFW urges the SYR-GSA to identify and consider all GDEs within the CMA per Code of Regulations, Title 23, § 354.16(g). Recommendation #4(b): CDFW strongly urges the SYR-GSA to map, identify, and analyze depletions of interconnected surface waters and areas with the potential for depletion of interconnected surface waters per Code of Regulations, Title 23, § 354.16(f).	Central Management Area	3/19/2021 16:04
Steven Slack	CMA Groundwater Conditions TM - TEXT - 6. Interconnected Surface Water & GW Dependent Ecosystems	27	Comment #5: Interconnected Surface Water for the Santa Ynez River: Issue: The CMA-GC memo states on page 27, "The Santa Ynez River Alluvium lays unconformably on or besides either non-water bearing sediments of the consolidated Monterey Shale and Sisuquoc Formations or the low permeability Careaga Formation. Because the underflow of the Santa Ynez River is considered part of the surface water flowing in a known and definite channel, there is no interconnected surface water in the CMA. The Santa Ynez surface water and underflows are regulated by the SWRCB for the reach of the Santa Ynez River in the CMA and will not be administered under SGMA." Concern: Page 13 of the CMA-HCM Memo identifies two principal aquifers for the management area. The Upper Aquifer is described as consisting of the river gravels and younger alluvium along the Santa Ynez River, and the Lower Aquifer is defined as consisting of the Paso Robles and Careaga Formations of the Buellton Upland. As per SGMA regulations, a principal aquifer refers to an aquifer or system of aquifers that stores, transmits, and yields significant or economic quantities of groundwater to wells or surface water (23 CCR § 351(aa)). The CMA Hydrogeologic Conceptual Model (CMA-HCM) identifies the river gravels and younger alluvium along the Santa Ynez River as being part of Upper Principal Aquifer system within the CMA. The CMA-HCM Memo further indicates on page 17 that the Santa Ynez River is in direct contact with major bodies of water-bearing deposits near Buellton and Lompoc subarea where it crosses the two ends of the Santa Rita syncline. The CMA-HCM Memo additionally states on page 17 that many of the wells within the Santa Ynez River Alluvium subarea are shallow, and a precise understanding of the Lower Aquifer underneath the Santa Ynez River is a data gap in the HCM. CDFW acknowledges that there are locations within the CMA where the Santa Ynez River is situated within consolidated non-water bearing formations. However, as indicated above, there are portions where the Santa Ynez River have the potential to be in communication with the water-bearing formations of the principal aquifers, and as such additional characterization is required to fill these data gaps. The CMA-GC memo provides groundwater contour elevation maps (Figures 1-1 and 1-2) that indicate the direction of groundwater flow for spring 2020 and fall 2019 events for both the Upper Aquifer and the Lower Aquifer. Interpretation of the data set provided indicates a direction/gradient of groundwater flow from the Buellton Uplands towards the Santa Ynez River, which more than likely provides recharge to the Santa Ynez River via the aquifers. Page 21 of the CMA-HCM Memo states, "Areas with high recharge are dominant in the Buellton Uplands west of Highway 101 to Santa Rosa Creek on the Southern slopes of the Purisima Hills and along the Santa Ynez River. These areas correspond to Careaga Formation in the Buellton Uplands and to the river gravels along the Santa Ynez River." The provided information substantiates the idea that the Santa Ynez River is not completely within a known and definite channel and that there are portions of the river that are interconnected with groundwater within the CMA. As a final discussion, analysis of hydrographs included in the CMA-GC Memo's appendix provides additional data	Central Management Area	3/19/2021 16:04
Sean Diggins		N/A	The Groundwater Conditions and Hydrogeologic Conceptual Model Tech Memos both discuss the water bearing geologic units within the CMA. They identify the Orcutt Sand, Paso Robles Formation, and Careaga Formation as the only groundwater bearing units in the CMA. The cross-sections from the Hydrogeologic Conceptual Model do not show any of those bodies on the south side of the Santa Ynez River. It appears that the current CMA boundary may include land that does not actually have any access to groundwater, primarily properties on the south side of the Santa Ynez River. Should the boundary be adjusted based on the new understanding of groundwater locations?	Central Management Area	3/18/2021 12:57
Mark Capelli	CMA Groundwater Conditions TM - TEXT	N/A	Draft Central Area Groundwater Conditions, February 2021	Central Management Area	3/15/2021 15:36 15MAR2021_NMFS Comment Central Management Area - St. Ynez River_MC.pdf <a href="https://portal.santaynezwater.org/service/document/download/454">https://portal.santaynezwater.org/service/document/download/454</a>
Leonard Fleckenstein	CMA Groundwater Conditions TM - TEXT - 3. Water Quality	17	Table 3-3 should indicate (in a new column or footnote) where the 1 well with salinity "above WQO" is located, e.g., serving City of Buellton or serving a ranch, etc. The same information should be provided for the Chloride table on page 18; for the sulfate table on page 20 and the nitrate table on page 21, i.e., # of wells serving Ag, serving City, etc.	Central Management Area	3/12/2021 15:43
Leonard Fleckenstein	CMA Groundwater Conditions TM - TEXT - 6. Interconnected Surface Water & GW	27	In section 6.1, please say why the "gaged flows into the CMA entirely ceased during 13 of the past 20 years".	Central Management Area	3/12/2021 15:43

Leonard Fleckenstein	CMA Groundwater Conditions TM - TEXT - 2. Groundwater Storage	10	In top paragraph, can you say more about how the volume is estimated?	Central Management Area	3/12/2021 15:32
Leonard Fleckenstein	CMA Groundwater Conditions TM - TEXT - 2. Groundwater Storage	10	Clearly state whether figure 2-1 depicts total combined volume for both upper and lower aquifers. Can separate volumes be estimated for each aquifer?	Central Management Area	3/12/2021 15:32
Leonard Fleckenstein	CMA Groundwater Conditions TM - TEXT - 2. Groundwater Storage	10	The text should note that the line in Fig 2-1 rises and falls consistently with wet vs dry years from 1982 to 2014, and the text should note the increase in storage since 2014 even though dry conditions have persisted throughout that time period.	Central Management Area	3/12/2021 15:32
Leonard Fleckenstein	CMA Groundwater Conditions TM - TEXT - 2. Groundwater Storage	11	Since the green chart (on top of the graph of water storage) clearly shows water usage declining since 2015, the text should suggest possible reasons that would account for this reduction in usage from the upper aquifer.	Central Management Area	3/12/2021 15:32
Leonard Fleckenstein	CMA Groundwater Conditions TM - TEXT - 1. Groundwater Elevation	5	In table 1-1, the # of wells tested per time period should be shown, e.g., x wells for Buellton's monthly reporting.	Central Management Area	3/12/2021 15:24
Leonard Fleckenstein	CMA Groundwater Conditions TM - TEXT - 1. Groundwater Elevation	6	Where it says there are fewer wells monitored in the upland area, it should state the actual # of wells.	Central Management Area	3/12/2021 15:24
Leonard Fleckenstein	CMA Groundwater Conditions TM - TEXT - 1. Groundwater Elevation	8	Add a phrase or sentence to explain the meaning of "perched groundwater conditions", or use alternative wording.	Central Management Area	3/12/2021 15:24
Leonard Fleckenstein	CMA Groundwater Conditions TM - TEXT - 1. Groundwater Elevation	9	Top paragraph says long term trends are relatively flat. However, 1990s data hovers around 250 ft, 1980s data hovers lower, 1990s fairly flat, but 2010s even lower. It seems more accurate to say "slightly declining" trend over long-term.	Central Management Area	3/12/2021 15:24
Leonard Fleckenstein	CMA Groundwater Conditions TM - TEXT - 1. Groundwater Elevation	9	In middle paragraph re figures 1-5 C&D, since it says 1 well has recovered to 1982 level, then it should say the 2nd well has not recovered to 1982 level.	Central Management Area	3/12/2021 15:24
Leonard Fleckenstein	CMA Groundwater Conditions TM - TEXT - 1. Groundwater Elevation	9	In the middle paragraph, can the text explain or suggest possible reasons why there is such high variability in water levels in these deep wells, especially during recent drier periods? E.g., is there any data regarding the number of Ag wells drawing from this deeper aquifer, or the amount of pumpage?	Central Management Area	3/12/2021 15:24
Steven Slack		N/A	General Comments Many sensitive species and habitats in the Santa Ynez Western Management Area comprise groundwater dependent ecosystems (GDEs), the natural communities that rely on groundwater to sustain all or a portion of their water needs. Some of the special status species in the Santa Ynez River watershed that rely on surface water supported and supplemented by groundwater include: southern California steelhead ( <i>Oncorhynchus mykiss</i> ), a federally endangered species under the Endangered Species Act; western pond turtle ( <i>Emys marmorata</i> ), a CDFW species of special concern and USFS sensitive species; California red-legged frog ( <i>Rana draytonii</i> ), a CDFW species of special concern and federally threatened species; western spadefoot toad ( <i>Speotriton hammondi</i> ), a CDFW species of special concern and BLM sensitive species; and California tiger salamander ( <i>Ambystoma californiense</i> ), a federally threatened species under the Endangered Species Act. In addition to these species, other aquatic and riparian-dependent species such as the Federally Endangered, and CDFW Threatened least Bell's vireo ( <i>Vireo bellii pusillus</i> ), has been documented as occurring along the Santa Ynez River. The Santa Ynez River contains important steelhead spawning and rearing tributaries in Southern California. Threats to southern California steelhead, such as excessively high-water temperatures in the spring, summer, and early fall, reduce available juvenile rearing habitat. Low flows in the fall and winter can delay adult passage to critical spawning areas. The western pond turtle was designated as a California species of special concern (SSC) in 1994. The western pond turtle's preferred habitat is permanent ponds, lakes, streams or permanent pools along intermittent streams, associated with standing and slow-moving water. A potentially important limiting factor for the Western pond turtle is the relationship between water level and flow in off-channel water bodies, which can both be affected by groundwater pumping. California red-legged frog is rarely encountered far from permanent water. Tadpoles require water for at least three or four months while completing their aquatic development. Adults eat both aquatic and terrestrial invertebrates, and the tadpoles graze along rocky stream bottoms. Groundwater pumping that impairs streamflow could have negative impacts on California red-legged frog populations. The western spadefoot toad migrates to seasonal vernal pools to reproduce. They will use small puddles of water, such as small pools to breed. The California tiger salamander is also restricted to vernal pools and seasonal ponds for reproduction. If groundwater depletion results in reduced streamflow due to interconnected surface waters, the nesting and foraging success of flycatcher, vireo, and other bird species may be diminished due to the reduced nesting habitat and food availability. The unsustainable use of groundwater can impact the shallow aquifers and interconnected surface waters on which GDEs depend. This may lead to adverse impacts on fish and wildlife and the habitat upon which they need to survive. Determining the effects that groundwater levels have on surface water flows in the Western Management Area would provide an understanding of how the groundwater levels may be associated with the health and abundance of riparian vegetation.	null	3/9/2021 17:25

Steven Slack	WMA Groundwater Conditions TM-TEXT - Section 6 Interconnected Surface Water and GDEs	38	Comment #1WMA Groundwater Conditions TM "Text Document; Page # 38Issue: Page 38 of the Memorandum states, "Additional potential GDEs have been mapped by the California Department of Water Resources, the California Department of Fish and Wildlife, and The Nature Conservancy along the tributaries of the WMA (HCM Figure 5-2), including the following: HCM Figure 5-2 referenced here only outlines the Natural Communities Commonly Associated with Groundwater (NCCAG) wetlands and vegetation with possible connections to groundwater. It is unclear whether the data on this HCM Figure 5-2 includes species-specific plants, fish, and wildlife. Recommendation 1: The California Department of Fish and Wildlife (CDFW) recommends the GSA provide a biological assessment identifying species known to occur within the GDEs presented in Figure 5-2. Recommendation 2: CDFW recommends the GSA identify possible impacts to fish and wildlife beneficial uses, users of groundwater, and ISW caused by depletions of ground water management. Further the evaluation should consider species water needs for all life history stages when defining undesirable results and setting minimum thresholds required by SGMA. For example, CDFW recommends the evaluation describe flow conditions necessary to ensure hydrologic connectivity and opportunities for movement between the habitats needed by each stage of the southern California steelhead (Onchoryncus mykiss) life cycle, including tributary access. Fish and wildlife species have different water needs and understanding the timing of water availability with respect to species needs across all life history phases will allow groundwater planners to better account for groundwater management impacts to fish and wildlife beneficial uses and users of groundwater and ISW.	Western Management Area	3/9/2021 17:21
Steven Slack	WMA Groundwater Conditions TM-TEXT - Section 6 Interconnected Surface Water and GDEs	38	Comment #2WMA Groundwater Conditions TM "Text Document; Page # 38Issue: Page 38 of the Memorandum states, "There is no available data that establish whether these potential GDEs in the WMA tributaries are connected through a continuous saturated zone to any principal aquifer, upper or lower. Their relationship to underlying groundwater is therefore poorly understood and represents a data gap to address as part of the GSP implementation. Recommendation: The California Department of Fish and Wildlife (CDFW) understands that there will be data gaps regarding the GSP implementation but hopes that additional wells, piezometers, temperature probes and expanded groundwater monitoring systems can be installed to improve information availability over time. Even with existing data gaps, the Santa Ynez GSA must avoid significant and unreasonable adverse impacts to beneficial uses of groundwater and ISW. Information shortages should trigger conservative groundwater management decisions that err on the side of caution when it comes to protecting fish and wildlife and their habitats.	Western Management Area	3/9/2021 17:21
Steven Slack	WMA Groundwater Conditions TM-TEXT - Section 6 Interconnected Surface Water and GDEs	33	Comment #3WMA Groundwater Conditions TM "Text Document; Page # 33Issue: Page 33 of the Memorandum states, "The portion of the Santa Ynez River between the Lompoc Narrows and the Pacific Ocean is identified as seasonally interconnected surface water because at times surface water in this reach is hydrologically connected to the underlying water table in the principal aquifer. The reach is considered seasonally interconnected because the Santa Ynez River is dry for significant periods of time during the year, and as a result is not hydraulically connected to the underlying water table. CDFW would like more information provided as to whether this reach is hydraulically connected or not. Concern 1: California Department of Fish and Wildlife (CDFW) is very concerned about the health of the Federally Listed southern California steelhead (Oncorhynchus mykiss) population in the Santa Ynez River where they have participated in rescue operations as recently as 2020. The Santa Ynez River contains important steelhead spawning and rearing tributaries. Threats to Southern California steelhead, such as excessively high-water temperatures in the spring, summer, and early fall, reduce available juvenile rearing habitat. Low flows in the fall and winter can delay adult passage to critical spawning areas. This area between the Lompoc Narrows and the Pacific Ocean identified as seasonally interconnected surface water is crucial to steelhead survival. Concern 2: Groundwater-dependent habitats, including ISW, are particularly susceptible to changes in the depth of the groundwater. Lowered water tables that drop beneath the root zones can cut off phreatophyte vegetation from water resources, stressing or ultimately converting vegetated terrestrial habitat. Induced infiltration attributable to groundwater pumping can reverse hydraulic gradients and may cause streams to stop flowing. The frequency and duration of exposure to lowered groundwater tables and low-flow or no-flow conditions caused by groundwater pumping, as well as habitat and species resilience, will dictate vulnerability to changes in groundwater elevation. For example, some species rely on perennial instream flow, and any interruption to flow can risk species survival. Recommendation: CDFW recommends a more detailed evaluation of what is happening beneath the ground to cause this section of river to become completely dry during parts of the year. The cause for the groundwater elevation fluctuations should be investigated further. Impacts caused by changes in groundwater elevation should be considered in the evaluation of groundwater management effects on GDEs and ISW.	Western Management Area	3/9/2021 17:21
Mark Capelli	CMA Groundwater Conditions TM - FIGURES	N/A	Enclosed with this letter are NOAA'S National Marine Fisheries Service's (NMFS) comments on the Draft Western Management Area Groundwater Conditions in the lower Santa Ynez River Valley (Draft Conditions)	Central Management Area	3/9/2021 15:40 09MAR2021_NMFS Comment Western Management Area Santa Ynez River_MC.pdf <a href="https://portal.santaynezwater.org/service/document/download/445">https://portal.santaynezwater.org/service/document/download/445</a>
Bryan Bondy	WMA Groundwater Conditions TM-TEXT - Section 1 Groundwater Elevations	1	SYWG-WMA-GCTM-Comment No. 5. Figure 1-2. The northern portion of the Upper Aquifer 50 ft contour lacks data control and should be deleted or dashed. Similar comment for the Lower Aquifer 60 ft contour.	Western Management Area	2/27/2021 13:06
Bryan Bondy	WMA Groundwater Conditions TM-TEXT - Section 1 Groundwater Elevations	10	SYWG-WMA-GCTM-Comment No. 6. The term data gap is used to describe the limited number of wells to assess the hydraulic connectivity of the Lower Aquifer present in the northeastern Lompoc Terrace and the Lompoc Plain. Unless the author has concluded that the degree of connectivity must be better understood to sustainably manage the basin, the term "data gap", as defined in SGMA, should not be used here.	Western Management Area	2/27/2021 13:06
Bryan Bondy	WMA Groundwater Conditions TM-TEXT - Section 3 Water Quality	1	SYWG-WMA-GCTM-Comment No. 7. Figures 3-1 through 3-8. It is unclear why groundwater quality data are shown outside (south) of the basin boundary.	Western Management Area	2/27/2021 13:06

Bryan Bondy	WMA Groundwater Conditions TM-TEXT - Section 4 Seawater Intrusion	1	SYWG-WMA-GCTM-Comment No. 8. Please show the location of the wells used in Figures 4-5 and 4-6 on a map.	Western Management Area	2/27/2021 13:06
Bryan Bondy	WMA Groundwater Conditions TM-TEXT - Section 5 Land Subsidence	32	SYWG-WMA-GCTM-Comment No. 9. Section 5.3. The InSAR section should note that the reported accuracy of the method is +/- 0.05 foot (+/- 0.62 inches), which is greater than the results for much of the area underlain by a principal aquifer in the WMA.	Western Management Area	2/27/2021 13:06
Bryan Bondy	WMA Groundwater Conditions TM-TEXT - Section 6 Interconnected Surface Water and GDEs	37	SYWG-WMA-GCTM-Comment No. 10. Section 6.2 discusses springs in the upland area and states that "There are no available data that relate spring flow, the source of water to these springs, groundwater levels, and groundwater use. The relationship between these springs and underlying groundwater is therefore poorly understood and represent a data gap to address as part of GSP implementation." GSP Emergency Regulations 8351(l) define the term "data gap" as "a lack of information that significantly affects the understanding of the basin setting or evaluation of the efficacy of Plan implementation, and could limit the ability to assess whether a basin is being sustainably managed." It is premature to conclude that sustainable management will require knowledge of the spring discharge rates to sustainably manage the basin. It is agreed that a preliminary review of the springs is warranted to determine: (1) are the springs fed by a principal aquifer; (2) are the spring flows a material part of the water budget; and (3) are there beneficial users that depend on the springs. Unless items 1-3 are affirmatively established, the spring flow rates would not likely need to be precisely known or monitored in order to sustainably manage the basin. A quick visual inspection of the springs could shed light on these questions. It is requested that section 6.2 be reframed consistent with this comment.	Western Management Area	2/27/2021 13:06
Bryan Bondy	WMA Groundwater Conditions TM-TEXT - Section 5 Land Subsidence	1	SYWG-WMA-GCTM-Comment No. 12. Appendix B should note that the InSAR method accuracy is +/- 0.05 foot (+/- 0.62 inches), which is greater than 95% of the data for the basin, as depicted on Chart 1.	Western Management Area	2/27/2021 13:06
Bryan Bondy	WMA Groundwater Conditions TM-TEXT - Section 5 Land Subsidence	1	SYWG-WMA-GCTM-Comment No. 13. Appendix B recommends baseline and periodic land surveys to monitor for land subsidence. A surveying proposal from Stantec Consulting is also included in Appendix B. Based on the information presented in Appendix B, the HCM, and the GCTM, surveying and the associated costs are not justified at this time. Due to the very low land subsidence risk, the GSP should instead rely on ongoing InSAR surveys and groundwater level data to monitor for and evaluate the potential limited inelastic land subsidence associated with groundwater withdrawal.	Western Management Area	2/27/2021 13:06
Bryan Bondy	WMA Groundwater Conditions TM-TEXT - Section 6 Interconnected Surface Water and GDEs	38	SYWG-WMA-GCTM-Comment No. 11. Section 6.3 states that "There are no available data that establish whether these potential GDEs in the WMA tributaries are connected through a continuous saturated zone to any principal aquifer, upper or lower. Their relationship to underlying groundwater is therefore poorly understood and represent a data gap to address as part of GSP implementation." It is unclear what is meant by "connected through a continuous saturated zone to any principal aquifer." By definition, a saturated zone located above a principal aquifer (perched aquifer?) will not be managed because it is not a principal aquifer, so this should not be a consideration, let alone a "data gap", as defined by SGMA. Potential GDEs that draw water from a saturated zone located above a principal aquifer (perched aquifer?) should be screened out. It is suggested that this discussion and analysis be simplified. Either a potential GDE draws water from a principal aquifer or not. In the former case the potential GDE should be retained for further consideration during SMC development. In the latter case the potential GDE should be screened out before developing SMCs (because it is not an environmental beneficial use of water from a principal aquifer). The reviewer disagrees with the conclusion that this is a data gap. The depth to water in the Upper and Lower Aquifer can be estimated using the contours presented in Figures 1-1 and 1-2 and then can be used to screen out potential GDEs based on reasonable rooting depth assumptions. In any areas of confined conditions, the depth to the top of the aquifer can be compared to the rooting depth. This screening should be completed now, prior to developing sustainable management criteria, not during GSP implementation; otherwise, the SMCs could incorrectly consider environmental water uses that are not actually drawing from a principal aquifer. Such a situation could lead to unnecessary management actions and/or projects at a potentially significant expense that would be borne by the regulated water users.	Western Management Area	2/27/2021 13:06
Bryan Bondy	WMA Groundwater Conditions TM-TEXT - Introduction List of Acronyms and Appendices List	1	SYWG-WMA-GCTM-Comment No. 1. Santa Ynez Water Group (SYWG) thanks the WMA GSA for the opportunity to submit comments on the Draft Groundwater Conditions Technical Memorandum (GCTM). SYWG's comments have been prepared by a State of California Professional Geologist and Certified Hydrogeologist. SYWG's comments are intended to help improve the GCTM, help ensure consistency with GSP Emergency Regulations, and avoid unnecessary GSP implementation costs. Please do not hesitate to contact our hydrogeologist, Bryan Bondy, if you need any clarifications or would like to discuss any of our comments.	Western Management Area	2/27/2021 13:06
Bryan Bondy	WMA Groundwater Conditions TM-TEXT - Section 1 Groundwater Elevations	6	SYWG-WMA-GCTM-Comment No. 2. Page 6 states that "Two subareas, the Burton Mesa and south Lompoc Terrace, are uplifted marine terraces and not included in the WMA groundwater elevation contour maps because of existing data gaps (they are not part of current monitoring programs), and because they are considered mostly disconnected from the principal aquifers cited above. Groundwater in these two subareas is typically perched, and therefore not representative or correlative to the principal groundwater aquifers above." The lack of data in these areas of perched groundwater will materially limit the GSA's ability to sustainably manage the basin; therefore, the lack of data should not be described as a "data gap", as the term is used in SGMA.	Western Management Area	2/27/2021 13:06
Bryan Bondy	WMA Groundwater Conditions TM-TEXT - Section 1 Groundwater Elevations	1	SYWG-WMA-GCTM-Comment No. 3. Please post the data used to develop the contours on Figures 1-1 and 1-2.	Western Management Area	2/27/2021 13:06
Bryan Bondy	WMA Groundwater Conditions TM-TEXT - Section 1 Groundwater Elevations	1	SYWG-WMA-GCTM-Comment No. 4. Figure 1-1. The northern portion of the Upper Aquifer 50 ft contour lacks data control and should be deleted or dashed. Similar comment for the Lower Aquifer 60 and 70 ft contours.	Western Management Area	2/27/2021 13:06



Bryan Bondy	CMA Groundwater Conditions TM - TEXT - 5. Land Subsidence	N/A	SYWG-CMA-GCTM-Comment No. 10. Appendix B should note that the InSAR method accuracy is +/- 0.05 foot (+/- 0.62 inches), which is greater than 95% of the data for the basin, as depicted on Chart 1.	Central Management Area	2/27/2021 12:27
Bryan Bondy	CMA Groundwater Conditions TM - TEXT - 5. Land Subsidence	N/A	SYWG-CMA-GCTM-Comment No. 11. Appendix B recommends baseline and periodic land surveys to monitor for land subsidence. A surveying proposal from Stantec Consulting is also included in Appendix B. Based on the information presented in Appendix B, the HCM, and the GCTM, surveying and the associated costs are not justified at this time. Due to the very low land subsidence risk, the GSP should instead rely on ongoing InSAR surveys and groundwater level data to monitor for and evaluate the potential limited inelastic land subsidence associated with groundwater withdrawal.	Central Management Area	2/27/2021 12:27
Bryan Bondy	CMA Groundwater Conditions TM - TEXT - 1. Groundwater Elevation	N/A	SYWG-CMA-GCTM-Comment No. 2. Please post the data used to develop the contours on Figures 1-1 and 1-2.	Central Management Area	2/27/2021 12:26
Bryan Bondy	CMA Groundwater Conditions TM - TEXT - 1. Groundwater Elevation	N/A	SYWG-CMA-GCTM-Comment No. 3. Figure 1-1 and 1-2 Upper Aquifer groundwater elevation contours are depicted in areas where the Upper Aquifer is not present, based on the geologic map provided in the HCM. Upper Aquifer groundwater elevation contours should not be depicted in areas where the aquifer does not exist.	Central Management Area	2/27/2021 12:26
Bryan Bondy	CMA Groundwater Conditions TM - TEXT - 1. Groundwater Elevation	N/A	SYWG-CMA-GCTM-Comment No. 4. Figure 1-1: The 400 and 350 ft contours in the western portion of the map are identified as Upper Aquifer (dark green), but the data point upon which these contours appear to be based is identified as Lower Aquifer (light green). The text indicates the well in question is an Upper Aquifer well, in contrast with the figure. Assuming the well is correctly identified as a Lower Aquifer well on the figure, then all of the Upper Aquifer contours between the Santa Ynez River and this well and the 400 ft contour lack data control and should be deleted or, at a minimum should be dashed/queried to indicate they are inferred.	Central Management Area	2/27/2021 12:26
Bryan Bondy	CMA Groundwater Conditions TM - TEXT - 1. Groundwater Elevation	5	SYWG-CMA-GCTM-Comment No. 1. Santa Ynez Water Group (SYWG) thanks the CMA GSA for the opportunity to submit comments on the Draft Groundwater Conditions Technical Memorandum (GCTM). SYWG's comments have been prepared by a State of California Professional Geologist and Certified Hydrogeologist. SYWG's comments are intended to help improve the GCTM, help ensure consistency with GSP Emergency Regulations, and avoid unnecessary GSP implementation costs. Please do not hesitate to contact our hydrogeologist, Bryan Bondy, if you need any clarifications or would like to discuss any of our comments.	Central Management Area	2/27/2021 12:23
Bryan Bondy	CMA Groundwater Conditions TM - TEXT - 1. Groundwater Elevation	8	SYWG-CMA-GCTM-Comment No. 5. Section 1.3.1, last paragraph. Please clarify which wells the author is referring to.	Central Management Area	2/27/2021 12:23
Bryan Bondy	CMA Groundwater Conditions TM - TEXT - 1. Groundwater Elevation	11	SYWG-CMA-GCTM-Comment No. 6. Section 2.3, the statement "Groundwater use increased in the period 2008 through 2015" is misleading. Groundwater use during this period, on average, was fairly stable. 2015 usage spiked for a single year, but that does not constitute a trend for the entire eight year period.	Central Management Area	2/27/2021 12:23
Bryan Bondy	CMA Groundwater Conditions TM - TEXT - 1. Groundwater Elevation	17	SYWG-CMA-GCTM-Comment No. 7. Section 3.4.1, third paragraph, second to last sentence. Should chloride be TDS instead?	Central Management Area	2/27/2021 12:23
Bryan Bondy	CMA Groundwater Conditions TM - TEXT - 1. Groundwater Elevation	25	SYWG-CMA-GCTM-Comment No. 8. Section 5.3. The InSAR section should note that the reported accuracy of the method is +/- 0.05 foot (+/- 0.62 inches), which is greater than the results for most of the CMA.	Central Management Area	2/27/2021 12:23
Bryan Bondy	CMA Groundwater Conditions TM - TEXT - 2. Groundwater Storage	31	SYWG-CMA-GCTM-Comment No. 9. Section 6.4, last paragraph discusses potential GDEs in the upland area. The text states that "these potential GDEs will be screened to determine if a continuous saturated zone exists between groundwater levels of the principal aquifers using the groundwater model being developed for the CMA as part of GSP implementation." The screening should take now, prior to developing sustainable management criteria, not during GSP implementation.	Central Management Area	2/27/2021 12:23
Amber Thompson	WMA Groundwater Conditions TM-TEXT - Section 1 Groundwater Elevations	N/A	test	Western Management Area	2/25/2021 19:01

Paeter Garcia	N/A	These comments pertain to the Eastern Management Area DRAFT Section 3 - Basin Setting: HCM & Groundwater Conditions null document. The Draft HCM should be revised throughout to refer to water in the Santa Ynez River alluvium as underflow and part of the surface water system in the EMA. Currently the Draft HCM interchanges between the terms groundwater and underflow throughout when referencing SYR alluvium. SGMA defines groundwater as water beneath the surface of the earth within the zone of saturation below the water table in which the soil is completely saturated with water, but does not include water that flows in known and definite channels. (Water Code, section 10721(g).) The Draft HCM and its analyses should not characterize or otherwise treat water in and produced from the Santa Ynez River alluvium as groundwater. Importantly, this distinction is recognized by the Draft HCM by its acknowledgment that SGMA and the GSA do not regulate underflow of the Santa Ynez River. (See, e.g., Sections 3.1.1.4; 3.1.3.1.) However, the document should be revised throughout to ensure that the term groundwater is not used to define or describe the Santa Ynez River alluvium, i.e., underflow of the Santa Ynez River. Because the Santa Ynez River alluvium in the EMA is not groundwater as defined by SGMA, the statement in Section 3.1.1.3.1 that the EMA is recharged in part by downstream water rights releases from Lake Cachuma, as ordered by SYRWCD, is not accurate and should be revised or deleted. Based on the comments above and below, the Santa Ynez River and the Santa Ynez River alluvium are a surface water system that should be identified and analyzed in relation to groundwater in accordance with SGMA Regulation Section 354.18. Revise References to the Santa Ynez River Alluvium as a Principal Aquifer. The Draft HCM should be revised throughout to ensure that the Santa Ynez River alluvium is not identified or defined as a principal aquifer in the EMA. (See, e.g., Section 3.1.3.1.) While footnote 1 to Table 3-3 properly recognizes that production from the Santa Ynez River alluvium is managed as surface water by the SWRCB and is not subject to management by the GSAs under SGMA, further revisions are needed. SGMA Regulation Section 351(a) defines principal aquifers as aquifers or aquifer systems that store, transmit, and yield significant or economic quantities of groundwater to wells, springs, or surface water systems. (See also, DWR Hydrogeological Conceptual Model BMP, p. 19.) Similar to comments above, the Santa Ynez River alluvium is part and parcel of the surface water system which does not meet SGMA's definition of groundwater. A principal aquifer is not subject to the establishment of sustainable management criteria or regulation under SGMA. The Draft HCM states, for example, that the main criterion for defining the water-bearing geologic formations in the EMA as principal aquifers is that they exhibit both sufficient permeability and storage potential for the movement and storage of groundwater.	2/22/2021 10:55		
Amber Thompson		12 test	2/22/2021 10:45		
Amber Thompson	CMA Groundwater Conditions TM - TEXT - 1. Groundwater Elevation	4 test	2/19/2021 11:10	Central Management Area	
Douglas Pike		N/A	2/19/2021 10:43		2-12-2021 LOS OLIVOS CSD TO GSA.pdf <a href="https://portal.santaynezwater.org/service/document/download/441">https://portal.santaynezwater.org/service/document/download/441</a>
Amber Thompson	CMA Groundwater Conditions TM - TEXT - 1. Groundwater Elevation	6	2/19/2021 9:23	Central Management Area	
Sam Cohen		N/A	2/17/2021 13:45		Comments #2 of Sam Cohen 02-17-21 Wastewater Recycling.docx <a href="https://portal.santaynezwater.org/service/document/download/434">https://portal.santaynezwater.org/service/document/download/434</a>
Sam Cohen		N/A	2/17/2021 12:41		Comments of Sam Cohen 02-17-21.docx <a href="https://portal.santaynezwater.org/service/document/download/433">https://portal.santaynezwater.org/service/document/download/433</a>

Tim Gorham		63	!The discussion of the different water bearing reservoirs includes the "Tertiary Alluvium" which minimizes it's contribution to potential water storage and confines the water bearing sands and gravels to only current N-5 river beds. I believe based on newly drilled wells in the area that the Tertiary Alluvium is much thicker in valley floors and more widespread and should hold more water storage than in the model. Lack of sufficient data in the EMA. It appears that there are many more water wells in the basin that have not been incorporated into the hydrological model. How are we going to get access to that data to improve the accuracy of the model?	null	2/17/2021 10:01
John Harris	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.1.3 Principal Aquifers and Aquitards	N/A	Based on All American Drilling Inc. (AAD) water well drilling experience in the basin, AAD does not believe it appears necessary or practical to designate the Tributary Alluvium as a principal aquifer for specific management in the groundwater sustainability plan. Almost all the groundwater production from the Santa Ynez Uplands is produced from Paso Robles and Careaga Formation wells. AAD does not anticipate any new Tributary Alluvium wells will be drilled in the future for multiple reasons including the fact that the aquifer is unreliable for production and County of Santa Barbara regulations require a 50-foot seal, which effectively prohibits construction of wells in this aquifer. AAD is only aware of a small number of legacy Tributary Alluvium wells, which are actively being replaced by newer and more reliable Paso Robles Formation replacement wells.	Eastern Management Area	2/15/2021 14:35
Steven Slack	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.2.6 Groundwater Dependent Ecosystems	121	The California Department of Fish and Wildlife (CDFW) South Coast Region 5 is providing comments on the Santa Ynez Hydrologic Conceptual Model (HCM) for the Eastern Management Area (EMA) prepared pursuant to the Sustainable Groundwater Management Act (SGMA). As trustee agency for the State's fish and wildlife resources, the Department has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and the habitat necessary for biologically sustainable populations of such species (Fish & Game Code §§ 711.7 and 1802). Issue #1: The information given in the HCM for the EMA regarding Section 3.2.6 on potential groundwater dependent ecosystems (GDEs) seems fairly robust. CDFW has concerns regarding how groundwater extractions will affect the vegetation communities as well as the duration of surface flows that are needed to support the rearing habitat for all aquatic species. We recommend that best scientific data on depth to groundwater be included in the analysis of interconnected surface waters before any data is excluded. Other data should include (but not be limited to): USGS mapped springs/seep and comparing recent groundwater level contours to vegetation root zones. In addition, relying solely on soils information is not recommended. For example, the presence of sandy, dry, and friable soils, does not mean that existing plant species do not rely on groundwater for some portion of their life cycle. Capillary fringe associated with root networks from native plants could be accessing groundwater from deeper depths. The following link is from the Groundwater Resource Hub sponsored by The Nature Conservancy. This maximum-rooting depth database provides information that can help assess whether groundwater dependent plants are accessing groundwater. Actual rooting depths will depend on the plant species and site-specific conditions, such as soil type and availability of other water sources. Site-specific knowledge of depths to groundwater combined with rooting depths will help provide an understanding of the potential groundwater levels needed to sustain GDEs. <a href="https://groundwaterresourcehub.org/public/uploads/pdfs/Plant_Rooting_Depth_Database_20180419.xlsx">https://groundwaterresourcehub.org/public/uploads/pdfs/Plant_Rooting_Depth_Database_20180419.xlsx</a> In addition, restoration projects that provide direct benefits to sensitive riparian resources, such as slowing river velocities during high flow events which benefits the Santa Ynez Eastern Management Area by allowing for increased surface water infiltration into the subsurface aquifer, should be identified as GDEs and mapped in the GSP. Beneficial use in the form of future riparian enhancement projects should be included in the GSP.	Eastern Management Area	2/12/2021 15:38
Steven Slack	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.2.6 Groundwater Dependent Ecosystems	121	Issue #2: Has the GSA identified the GDEs of open water/aquatic habitat for aquatic resources such as Federal Endangered Species Act (FESA) listed southern California steelhead ( <i>Oncorhynchus mykiss</i> ), the FESA-listed California red-legged frog ( <i>Rana draytonii</i> ), the California species of special concern (SSC) western pond turtle ( <i>Emys marmorata</i> ), the SSC two striped garter snake ( <i>Thamnophis hammondi</i> ), the FESA-listed and California endangered least Bell's vireo ( <i>Vireo bellii pusillus</i> ) and the FESA-listed and California endangered southwestern willow flycatcher ( <i>Empidonax traillii extimus</i> ) habitat? CDFW believe these areas are located where the groundwater discharges into the Santa Ynez River to support special-status species and their habitat. Managing the groundwater within the Santa Ynez River is important to the recovery of southern California steelhead. The development and implementation of a groundwater monitoring program (to guide the management of groundwater extractions) is crucial to ensure surface flows provide essential support for all southern California steelhead life history stages, including adult and juvenile spawning, incubation, and rearing habitats. CDFW has concerns regarding how groundwater extractions will affect the duration of surface flows that are needed to support the rearing habitat for and prevent the stranding of all aquatic species, including steelhead. CDFW has an interest in the sustainable management of groundwater, as many sensitive ecosystems and species depend on groundwater and interconnected surface waters. CDFW values SGMA groundwater planning that carefully considers and protects groundwater dependent ecosystems and fish and wildlife beneficial uses and users of groundwater and interconnected surface waters.	Eastern Management Area	2/12/2021 15:38
Steven Slack	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.2.1 Groundwater Elevations	76	Issue #3: The tech memo identifies perched aquifer conditions. These perched water resources can provide essential habitat and sustenance for various wildlife species including plants, aquatic animals and migratory refuge for avian species. To enhance the effectiveness and utility of the GSP, CDFW requests the following information be included: a) Identify each perched aquifer, if they: 1) are being used by domestic shallow wells; 2) support GDEs; and, 3) have interactions with surface water. b) Document the characteristics of each perched aquifer, including thickness, porosity, hydraulic conductivity, and vertical gradients to more recent alluvium aquifers.	Eastern Management Area	2/12/2021 15:38

Steven Slack	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.2.6 Groundwater Dependent Ecosystems	121	Development and implementation of GSPs under SGMA represents a new era of California groundwater management. SGMA and its implementing regulations afford ecosystems and species specific statutory and regulatory consideration, including the following as pertinent to Groundwater Sustainability Plans: Groundwater Sustainability Plans must identify and consider impacts to groundwater dependent ecosystems [23 CCR, § 354.16(g) and Water Code, § 10727.4(l)]; Groundwater Sustainability Agencies must consider all beneficial uses and users of groundwater, including environmental users of groundwater [Water Code, § 10723.2 (e)]; and Groundwater Sustainability Plans must identify and consider potential effects on all beneficial uses and users of groundwater [23 CCR, § 354.10(a), 354.26(b)(3), 354.28(b)(4), 354.34(b)(2), and 354.34(f)(3)]; Groundwater Sustainability Plans must establish sustainable management criteria that avoid undesirable results within 20 years of the applicable statutory deadline, including depletions of interconnected surface waters that have significant and unreasonable adverse impacts on beneficial uses of the surface waters [23 CCR, § 354.22 et seq. and Water Code, § 10721(k)(6) and 10727.2(b)] and describe monitoring networks that can identify adverse impacts to beneficial uses of interconnected surface waters [23 CCR, § 354.34(c)(6)(D)]; and, Groundwater Sustainability Plans must account for groundwater extraction for all Water Use Sectors including managed wetlands, managed recharge, and native vegetation [23 CCR, § 351(a) and 354.18(b)(3)]. Furthermore, the Public Trust Doctrine imposes a related but distinct obligation to consider how groundwater management affects public trust resources, including navigable surface waters and fisheries. Groundwater hydrologically connected to navigable surface waters or surface waters supporting fisheries, and surface waters tributary to navigable surface waters or surface waters supporting fisheries, are also subject to the Public Trust Doctrine to the extent that groundwater extractions or diversions affect or may affect public trust uses (Environmental Law Foundation v. State Water Resources Control Board (2018), 26 Cal. App. 5th 844; National Audubon Society v. Superior Court (1983), 33 Cal. 3d 419). Accordingly, groundwater plans should consider potential impacts to and appropriate protections for interconnected surface waters and their tributaries, and interconnected surface waters that support fisheries, including the level of groundwater contribution to those waters. In the context of SGMA statutes and regulations, and Public Trust Doctrine considerations, the CDFW values groundwater planning that carefully considers and protects environmental beneficial uses and users of groundwater including fish and wildlife and their habitats: groundwater dependent ecosystems and interconnected surface waters. The following is information regarding CEQA and its presence regarding GSPs identifying GDEs and Interconnected Surface Waters (ISWs): The Santa Ynez GSP as developed under SGMA is exempt from the California Environmental Quality Act (CEQA). However, project and management actions needed to achieve basin sustainability, such as artificial recharge from storm water capture, are subject to CEQA.	Eastern Management Area	2/12/2021 15:38
Steven Slack	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.2.5 Interconnected Surface Water Systems	121	Issue #4: Has the GSP incorporated the impact on the aquifer from the limited Bradbury Dam releases? Identifying these in the GSP will add to the development of a robust baseline. This is to ensure that sensitive resources that rely on surface water (natural or from the discharge points are included in the water budget and the groundwater sustainability plan.	Eastern Management Area	2/12/2021 15:38
Steven Slack	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.1.4 Data Gaps and Uncertainty	71	CDFW appreciates the opportunity to review this technical memorandum and looks forward to its contribution to the forthcoming GSP. Please note, once a draft GSP is provided for public review, CDFW can deem the GSP insufficient in its consideration of environmental beneficial uses and users of groundwater, including fish and wildlife and their habitats within GDEs and interconnected surface waters. CDFW can recommend that the Department of Water Resources (DWR) determine the GSP incomplete and require the GSA to address shortcomings before approving the plan for the following reasons: 1. The assumptions, criteria, findings, and objectives, including the sustainability goal, undesirable results, minimum thresholds, measurable objectives, and interim milestones are not reasonable and/or not supported by the best available information and best available science [23 CCR, § 355.4(b)(1)]. 2. The GSP does not identify reasonable measures and schedules to eliminate data gaps [23 CCR, § 355.4(b)(2)]. To improve identification of GDEs, including interconnected surface waters, in the GSP, the CDFW recommends the GSA consider: a. The installation of shallow groundwater monitoring wells near potential GDEs and interconnected surface waters, potentially pairing multiple-completion wells with additional streamflow gauges. This will facilitate an improved understanding of surface water-groundwater interconnectivity. b. Re-evaluating sustainable management criteria based on an improved understanding of GDEs and interconnected surface waters. In addition, the re-evaluation shall be based on undesirable results for environmental beneficial users of groundwater and interconnected surface waters. CDFW hopes that additional data can be acquired to help eliminate the data gaps involving faults, perched groundwater, spring discharge and general groundwater movement.	Eastern Management Area	2/12/2021 15:38

Steven Slack	CMA Hydrogeologic Conceptual Model (HCM) - 5.0 Uses and Users of GW in CMA	26	<p>CDFW RESPONSE: The California Department of Fish and Wildlife (CDFW) South Coast Region 5 is providing comments on the Santa Ynez Hydrologic Conceptual Model (HCM) for the Central Management Area (CMA) prepared pursuant to the Sustainable Groundwater Management Act (SGMA). As trustee agency for the State's fish and wildlife resources, the Department has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and the habitat necessary for biologically sustainable populations of such species (Fish &amp; Game Code § 711.7 and 1802). Issue #1: The information given in the HCM for the CMA regarding Section 5.4 on potential groundwater dependent ecosystems (GDEs) seems very limited and it is unknown how the Santa Ynez GSP will expand upon the very limited information that the HCM is providing. The model is only as strong as the data used to build it. CDFW has concerns regarding how groundwater extractions will affect these vegetation communities as well as the duration of surface flows that are needed to support the rearing habitat for all aquatic species. We recommend that best scientific data on depth to groundwater be included in the analysis of interconnected surface waters before any data is excluded. Other data should include (but not be limited to): USGS mapped springs/seep and comparing recent groundwater level contours to vegetation root zones. In addition, relying solely on soils information is not recommended. For example, the presence of sandy, dry, and friable soils, does not mean that existing plant species do not rely on groundwater for some portion of their life cycle. Capillary fringe associated with root networks from native plants could be accessing groundwater from deeper depths. The following link is from the Groundwater Resource Hub sponsored by The Nature Conservancy. This maximum-rooting depth database provides information that can help assess whether groundwater dependent plants are accessing groundwater. Actual rooting depths will depend on the plant species and site-specific conditions, such as soil type and availability of other water sources. Site-specific knowledge of depths to groundwater combined with rooting depths will help provide an understanding of the potential groundwater levels needed to sustain GDEs. <a href="https://groundwaterresourcehub.org/public/uploads/pdfs/Plant_Rooting_Depth_Database_20180419.xlsx">https://groundwaterresourcehub.org/public/uploads/pdfs/Plant_Rooting_Depth_Database_20180419.xlsx</a> In addition, restoration projects that provide direct benefits to sensitive riparian resources, such as slowing river velocities during high flow events which benefits the Santa Ynez Central Management Area by allowing for increased surface water infiltration into the subsurface aquifer, should be identified as GDEs and mapped in the GSP. Beneficial use in the form of future riparian enhancement projects should be included in the GSP.</p>	Central Management Area	2/12/2021 12:57
Steven Slack	CMA Hydrogeologic Conceptual Model (HCM) - 5.0 Uses and Users of GW in CMA	26	<p>Issue #2: Has the GSA identified the GDEs of open water/aquatic habitat for aquatic resources such as Federal Endangered Species Act (FESA) listed southern California steelhead (<i>Oncorhynchus mykiss</i>), the FESA-listed California red-legged frog (<i>Rana draytonii</i>), the FESA-listed and California endangered and fully protected unarmored three spine stickleback (<i>Gasterosteus aculeatus williamsoni</i>), the California species of special concern (SSC) western pond turtle (<i>Emys marmorata</i>), the SSC two striped garter snake (<i>Thamnophis hammondi</i>), the FESA-listed and California endangered least Bell's vireo (<i>Vireo bellii pusillus</i>) and the FESA-listed and California endangered southwestern willow flycatcher (<i>Empidonax traillii extimus</i>) habitat? CDFW believe these areas are located where the groundwater discharges into the Santa Ynez River to support special-status species and their habitat. Managing the groundwater within the Santa Ynez River is important to the recovery of southern California steelhead. The development and implementation of a groundwater monitoring program (to guide the management of groundwater extractions) is crucial to ensure surface flows provide essential support for all southern California steelhead life history stages, including adult and juvenile spawning, incubation, and rearing habitats. CDFW has concerns regarding how groundwater extractions will affect the duration of surface flows that are needed to support the rearing habitat for and prevent the stranding of all aquatic species, including steelhead. CDFW has an interest in the sustainable management of groundwater, as many sensitive ecosystems and species depend on groundwater and interconnected surface waters. The Department values SGMA groundwater planning that carefully considers and protects groundwater dependent ecosystems and fish and wildlife beneficial uses and users of groundwater and interconnected surface waters.</p>	Central Management Area	2/12/2021 12:57
Steven Slack	CMA Hydrogeologic Conceptual Model (HCM) - 6.0 Data Gaps and Uncertainty	28	<p>CDFW appreciates the opportunity to review this technical memorandum and looks forward to its contribution to the forthcoming GSP. Please note, once a draft GSP is provided for public review, the Department can deem the GSP insufficient in its consideration of environmental beneficial uses and users of groundwater, including fish and wildlife and their habitats within GDEs and interconnected surface waters. CDFW can recommend that the Department of Water Resources (DWR) determine the GSP incomplete and require the GSA to address shortcomings before approving the plan for the following reasons: 1. The assumptions, criteria, findings, and objectives, including the sustainability goal, undesirable results, minimum thresholds, measurable objectives, and interim milestones are not reasonable and/or not supported by the best available information and best available science [23 CCR § 355.4(b)(1)]. 2. The GSP does not identify reasonable measures and schedules to eliminate data gaps [23 CCR § 355.4(b)(2)]. To improve identification of GDEs, including interconnected surface waters, in the GSP, the Department recommends the GSA consider: a. The installation of shallow groundwater monitoring wells near potential GDEs and interconnected surface waters, potentially pairing multiple-completion wells with additional streamflow gauges. This will facilitate an improved understanding of surface water-groundwater interconnectivity. b. Re-evaluating sustainable management criteria based on an improved understanding of GDEs and interconnected surface waters. In addition, the re-evaluation shall be based on undesirable results for environmental beneficial users of groundwater and interconnected surface waters. CDFW hopes that additional data can be acquired to help eliminate the data gaps involving faults, perched groundwater, spring discharge and general groundwater movement.</p>	Central Management Area	2/12/2021 12:57

Steven Slack	CMA Hydrogeologic Conceptual Model (HCM) - 6.0 Data Gaps and Uncertainty	28	<p>CDFW response: Issue #3: CDFW agrees that the influence of faults on groundwater movement is a data gap. CDFW looks forward to reviewing the GSAs plans on how to address data gaps associated with potential groundwater flux at faults, including undesirable results to GDEs in adjacent groundwater basins, and how these data gaps may be addressed through additional monitoring proposals such as through the installation of monitoring wells at various locations. Because of the unknown flux across faults, groundwater extractions may impact recharge in adjacent subbasins. Recharge impacts include groundwater declines that can cause severe impacts to fish and wildlife resources. Issue #4: The tech memo should provide more information on groundwater extraction well depths throughout the basin including how it compares with the depth of the subbasin's geologic formation. Wells that extend outside the vertical limits of the basin should be included within the SGMA regulations. Well depth should be included in the determination of the basin bottom to capture such occurrences. Issue #5: The tech memo identifies perched aquifer conditions. These perched water resources can provide essential habitat and sustenance for various wildlife species including plants, aquatic animals and migratory refuge for avian species. To enhance the effectiveness and utility of the GSP, CDFW requests the following information be included: a) identify each perched aquifer, if they: 1) are being used by domestic shallow wells; 2) support GDEs; and, 3) have interactions with surface water. b) Document the characteristics of each perched aquifer, including thickness, porosity, hydraulic conductivity, and vertical gradients to more recent alluvium aquifers.</p>	Central Management Area	2/12/2021 12:57
Steven Slack	CMA Hydrogeologic Conceptual Model (HCM) - 5.0 Uses and Users of GW in CMA	26	<p>Development and implementation of GSPs under SGMA represents a new era of California groundwater management. SGMA and its implementing regulations afford ecosystems and species specific statutory and regulatory consideration, including the following as pertinent to Groundwater Sustainability Plans: Groundwater Sustainability Plans must identify and consider impacts to groundwater dependent ecosystems [23 CCR § 354.16(g) and Water Code § 10727.4(l)]; Groundwater Sustainability Agencies must consider all beneficial uses and users of groundwater, including environmental users of groundwater [Water Code § 10723.2 (e)]; and Groundwater Sustainability Plans must identify and consider potential effects on all beneficial uses and users of groundwater [23 CCR § 354.10(a), 354.26(b)(3), 354.28(b)(4), 354.34(b)(2), and 354.34(f)(3)]. Groundwater Sustainability Plans must establish sustainable management criteria that avoid undesirable results within 20 years of the applicable statutory deadline, including depletions of interconnected surface waters that have significant and unreasonable adverse impacts on beneficial uses of the surface waters [23 CCR § 354.22 et seq. and Water Code § 10721(k)(6) and 10727.2(b)] and describe monitoring networks that can identify adverse impacts to beneficial uses of interconnected surface waters [23 CCR § 354.34(c)(6)(D)]; and Groundwater Sustainability Plans must account for groundwater extraction for all Water Use Sectors including managed wetlands, managed recharge, and native vegetation [23 CCR § 351(a) and 354.18(b)(3)]. Furthermore, the Public Trust Doctrine imposes a related but distinct obligation to consider how groundwater management affects public trust resources, including navigable surface waters and fisheries. Groundwater hydrologically connected to navigable surface waters or surface waters supporting fisheries, and surface waters tributary to navigable surface waters or surface waters supporting fisheries, are also subject to the Public Trust Doctrine to the extent that groundwater extractions or diversions affect or may affect public trust uses (Environmental Law Foundation v. State Water Resources Control Board (2018), 26 Cal. App. 5th 844; National Audubon Society v. Superior Court (1983), 33 Cal. 3d 419). Accordingly, groundwater plans should consider potential impacts to and appropriate protections for interconnected surface waters and their tributaries, and interconnected surface waters that support fisheries, including the level of groundwater contribution to those waters. In the context of SGMA statutes and regulations, and Public Trust Doctrine considerations, CDFW values groundwater planning that carefully considers and protects environmental beneficial uses and users of groundwater including fish and wildlife and their habitats: groundwater dependent ecosystems and interconnected surface waters. The following is information regarding CEQA and its presence regarding GSPs identifying GDEs and Interconnected Surface Waters (ISWs): The Santa Ynez GSP as developed under SGMA is exempt from the California Environmental Quality Act (CEQA). However, project and management actions needed to achieve basin sustainability, such as artificial recharge from storm water capture, are subject to CEQA review.</p>	Central Management Area	2/12/2021 12:57
Steven Slack	WMA Hydrogeologic Conceptual Model (HCM) - 5 USES AND USERS OF GROUNDWATER IN THE WESTERN MANAGEMENT AREA	33	<p>CDFW RESPONSE: The California Department of Fish and Wildlife (CDFW) South Coast Region 5 is providing comments on the Santa Ynez Hydrologic Conceptual Model (HCM) for the Western Management Area (WMA) prepared pursuant to the Sustainable Groundwater Management Act (SGMA). As trustee agency for the State's fish and wildlife resources, the Department has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and the habitat necessary for biologically sustainable populations of such species (Fish &amp; Game Code § 711.7 and 1802). Issue #1: The information given in the HCM for the WMA regarding Section 5.4 on potential groundwater dependent ecosystems (GDEs) seems very limited and it is unknown how the Santa Ynez GSP will expand upon the very limited information that the HCM is providing. The model is only as strong as the data that goes into it. CDFW has concerns regarding how groundwater extractions will affect these vegetation communities as well as the duration of surface flows that are needed to support the rearing habitat for all aquatic species. We recommend that best scientific data on depth to groundwater be included in the analysis of interconnected surface waters before any data is excluded. Other data should include (but not be limited to): USGS mapped springs/seep and comparing recent groundwater level contours to vegetation root zones. In addition, relying solely on soils information is not recommended. For example, the presence of sandy, dry, and friable soils, does not mean that existing plant species do not rely on groundwater for some portion of their life cycle. Capillary fringe associated with root networks from native plants could be accessing groundwater from deeper depths. The following link is from the Groundwater Resource Hub sponsored by The Nature Conservancy. This maximum-rooting depth database provides information that can help assess whether groundwater dependent plants are accessing groundwater. Actual rooting depths will depend on the plant species and site-specific conditions, such as soil type and availability of other water sources. Site-specific knowledge of depths to groundwater combined with rooting depths will help provide an understanding of the potential groundwater levels needed to sustain GDEs. <a href="https://groundwaterresourcehub.org/public/uploads/pdfs/Plant_Rooting_Depth_Database_20180419.xlsx">https://groundwaterresourcehub.org/public/uploads/pdfs/Plant_Rooting_Depth_Database_20180419.xlsx</a> In addition, restoration projects that provide direct benefits to sensitive riparian resources, such as slowing river velocities during high flow events which benefits the Santa Ynez Western Management Area by allowing for increased surface water infiltration into the subsurface aquifer, should be identified as GDEs and mapped in the GSP. Beneficial use in the form of future riparian enhancement projects should be included in the GSP.</p>	Western Management Area	2/12/2021 11:57

Steven Slack	WMA Hydrogeologic Conceptual Model (HCM) - 5 USES AND USERS OF GROUNDWATER IN THE WESTERN MANAGEMENT AREA	33	Issue #2: Has the GSA identified the GDEs of open water/aquatic habitat for aquatic resources such as Federal Endangered Species Act (FESA) listed southern California steelhead ( <i>Oncorhynchus mykiss</i> ), the FESA-listed California red-legged frog ( <i>Rana draytonii</i> ), the FESA-listed and California endangered and fully protected unarmored three spine stickleback ( <i>Gasterosteus aculeatus williamsonii</i> ), the California species of special concern (SSC) western pond turtle ( <i>Emys marmorata</i> ), the SSC two striped garter snake ( <i>Thamnophis hammondi</i> ), the FESA-listed and California endangered least Bell's vireo ( <i>Vireo bellii pusillus</i> ) and the FESA-listed and California endangered southwestern willow flycatcher ( <i>Empidonax traillii extimus</i> ) habitat? CDFW believe these areas are located where the groundwater discharges into the Santa Ynez River to support special-status species and their habitat. Managing the groundwater within the Santa Ynez River is important to the recovery of southern California steelhead. The development and implementation of a groundwater monitoring program (to guide the management of groundwater extractions) is crucial to ensure surface flows provide essential support for all southern California steelhead life history stages, including adult and juvenile spawning, incubation, and rearing habitats. CDFW has concerns regarding how groundwater extractions will affect the duration of surface flows that are needed to support the rearing habitat for and prevent the stranding of all aquatic species, including steelhead. The Department has an interest in the sustainable management of groundwater, as many sensitive ecosystems and species depend on groundwater and interconnected surface waters. The Department values SGMA groundwater planning that carefully considers and protects groundwater dependent ecosystems and fish and wildlife beneficial uses and users of groundwater and interconnected surface waters.	Western Management Area	2/12/2021 11:57
Steven Slack	WMA Hydrogeologic Conceptual Model (HCM) - 6 DATA GAPS AND UNCERTAINTY	33	Issue #3: Has the GSA incorporated how the aquifer is replenished from discharge or percolation of treated wastewater from the various wastewater treatment plants along the Santa Ynez River? Has the GSP incorporated the impact on the aquifer from the limited Bradbury Dam releases? Identifying these in the GSP will add to the development of a robust baseline. This is to ensure that sensitive resources that rely on surface water (natural or from the discharge points are included in the water budget and the groundwater sustainability plan.	Western Management Area	2/12/2021 11:57
Steven Slack	WMA Hydrogeologic Conceptual Model (HCM) - 5 USES AND USERS OF GROUNDWATER IN THE WESTERN MANAGEMENT AREA	33	The Department appreciates the opportunity to review this technical memorandum and looks forward to its contribution to the forthcoming GSP. Please note, once a draft GSP is provided for public review, the Department can deem the GSP insufficient in its consideration of environmental beneficial uses and users of groundwater, including fish and wildlife and their habitats within GDEs and interconnected surface waters. The Department can recommend that the Department of Water Resources (DWR) determine the GSP incomplete and require the GSA to address shortcomings before approving the plan for the following reasons:1.The assumptions, criteria, findings, and objectives, including the sustainability goal, undesirable results, minimum thresholds, measurable objectives, and interim milestones are not reasonable and/or not supported by the best available information and best available science [23 CCR 355.4(b)(1)].2.The GSP does not identify reasonable measures and schedules to eliminate data gaps [23 CCR 355.4(b)(2)].To improve identification of GDEs, including interconnected surface waters, in the GSP, the Department recommends the GSA consider:1.The installation of shallow groundwater monitoring wells near potential GDEs and interconnected surface waters, potentially pairing multiple-completion wells with additional streamflow gauges. This will facilitate an improved understanding of surface water-groundwater interconnectivity.2.Re-evaluating sustainable management criteria based on an improved understanding of GDEs and interconnected surface waters. In addition, the re-evaluation shall be based on undesirable results for environmental beneficial users of groundwater and interconnected surface waters.The Department hopes that additional data can be acquired to help eliminate the data gaps involving faults, perched groundwater, spring discharge and general groundwater movement.	Western Management Area	2/12/2021 11:57
Steven Slack	WMA Hydrogeologic Conceptual Model (HCM) - 6 DATA GAPS AND UNCERTAINTY	34	CDFW response:Issue #4: CDFW agrees that the influence of faults on groundwater movement is a data gap. CDFW looks forward to reviewing the GSAs plans on how to address data gaps associated with potential groundwater flux at faults, including undesirable results to GDEs in adjacent groundwater basins, and how these data gaps may be addressed through additional monitoring proposals such as through the installation of monitoring wells at various locations. Because of the unknown flux across faults, groundwater extractions may impact recharge in adjacent subbasins. Recharge impacts include groundwater declines that can cause severe impacts to fish and wildlife resources.Issue #5: The tech memo should provide more information on groundwater extraction well depths throughout the basin including how it compares with the depth of the subbasin's geologic formation. Wells that extend outside the vertical limits of the basin should be included within the SGMA regulations. Well depth should be included in the determination of the basin bottom to capture such occurrences.Issue #6: The tech memo identifies perched aquifer conditions. These perched water resources can provide essential habitat and sustenance for various wildlife species including plants, aquatic animals and migratory refuge for avian species. To enhance the effectiveness and utility of the GSP, the Department requests the following information be included: a)Identify each perched aquifer, if they: 1) are being used by domestic shallow wells; 2) support GDEs; and, 3) have interactions with surface water.b)Document the characteristics of each perched aquifer, including thickness, porosity, hydraulic conductivity, and vertical gradients to more recent alluvium aquifers.	Western Management Area	2/12/2021 11:57

Steven Slack	WMA Hydrogeologic Conceptual Model (HCM) - 5 USES AND USERS OF GROUNDWATER IN THE WESTERN MANAGEMENT AREA	33	Development and implementation of GSPs under SGMA represents a new era of California groundwater management. SGMA and its implementing regulations afford ecosystems and species specific statutory and regulatory consideration, including the following as pertinent to Groundwater Sustainability Plans: Groundwater Sustainability Plans must identify and consider impacts to groundwater dependent ecosystems [23 CCR 10727.4(g) and Water Code 10727.4(i)]; Groundwater Sustainability Agencies must consider all beneficial uses and users of groundwater, including environmental users of groundwater [Water Code 10723.2 (e)]; and Groundwater Sustainability Plans must identify and consider potential effects on all beneficial uses and users of groundwater [23 CCR 10727.2(b)(3), 354.28(b)(4), 354.34(b)(2), and 354.34(f)(3)]; Groundwater Sustainability Plans must establish sustainable management criteria that avoid undesirable results within 20 years of the applicable statutory deadline, including depletions of interconnected surface waters that have significant and unreasonable adverse impacts on beneficial uses of the surface waters [23 CCR 10727.22 et seq. and Water Code 10721(x)(6) and 10727.2(b)] and describe monitoring networks that can identify adverse impacts to beneficial uses of interconnected surface waters [23 CCR 10727.22(c)(6)(D)]; and Groundwater Sustainability Plans must account for groundwater extraction for all Water Use Sectors including managed wetlands, managed recharge, and native vegetation [23 CCR 10727.2(a) and 354.18(b)(3)]. Furthermore, the Public Trust Doctrine imposes a related but distinct obligation to consider how groundwater management affects public trust resources, including navigable surface waters and fisheries. Groundwater hydrologically connected to navigable surface waters or surface waters supporting fisheries, and surface waters tributary to navigable surface waters or surface waters supporting fisheries, are also subject to the Public Trust Doctrine to the extent that groundwater extractions or diversions affect or may affect public trust uses (Environmental Law Foundation v. State Water Resources Control Board (2018), 26 Cal. App. 5th 844; National Audubon Society v. Superior Court (1983), 33 Cal. 3d 419). Accordingly, groundwater plans should consider potential impacts to and appropriate protections for interconnected surface waters and their tributaries, and interconnected surface waters that support fisheries, including the level of groundwater contribution to those waters. In the context of SGMA statutes and regulations, and Public Trust Doctrine considerations, CDFW values groundwater planning that carefully considers and protects environmental beneficial uses and users of groundwater including fish and wildlife and their habitats: groundwater dependent ecosystems and interconnected surface waters. The following is information regarding CEQA and its presence regarding GSPs identifying GDEs and Interconnected Surface Waters (ISWs): The Santa Ynez GSP as developed under SGMA is exempt from the California Environmental Quality Act (CEQA). However, project and management actions needed to achieve basin sustainability, such as artificial recharge from storm water capture, are subject to CEQA.	Western Management Area	2/12/2021 11:57
Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.1.1 Regional Hydrology	23-24	SYWG-EMA-HCM-Comment No. 5. Section 3.1.1.1, titled "Topography and Watershed Boundary" reads more like an overview of the EMA and its subareas than a description of topography and watershed. The section includes a fair amount of discussion about features unrelated to topography and watershed and omits discussion of some relevant features (i.e. topographic features relevant to recharge and groundwater flow, subwatersheds/drainages, etc.). Consider revising this section to focus more on the section title subject matter (it seems like the discussion of EMA and its subareas belongs somewhere else in the GSP?).	Eastern Management Area	2/1/2021 20:44
Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.1.1 Regional Hydrology	23-24	SYWG-EMA-HCM-Comment No. 6. Given the title of Section 3.1.1.1, it would be appropriate to include or reference a figure that depicts the watershed boundary.	Eastern Management Area	2/1/2021 20:44
Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.1.1 Regional Hydrology	25	SYWG-EMA-HCM-Comment No. 7. Figure 3-1 - Please identify the solid blue, dashed blue, and yellow/orange lines in the map legend. It is not entirely clear what the boundary of Zone C is based on the map symbology (Zone C is mentioned in Section 3.1.1.1). The CMA subareas depicted on this figure are inconsistent with the CMA HCM figures.	Eastern Management Area	2/1/2021 20:44
Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.1.1 Regional Hydrology	29-30	SYWG-EMA-HCM-Comment No. 8. Table 3-1 indicates the SYR gage near Solvang is active, but the text on page 29 says it was terminated in 2013.	Eastern Management Area	2/1/2021 20:44
Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.1.1 Regional Hydrology	21	SYWG-EMA-HCM-Comment No. 9. Figure 2-11 - Please label the station numbers on the figure so the reader can easily identify specific gauges.	Eastern Management Area	2/1/2021 20:44
Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.1.1 Regional Hydrology	31	SYWG-EMA-HCM-Comment No. 10. Page 31 - the statement "Water is primarily imported to the EMA through the Central Coast Water Authority (CCWA) pipeline" (emphasis added) implies that there is another means of importing water into the EMA, but none is discussed in this section. Please clarify what the other means of importing water into the EMA are.	Eastern Management Area	2/1/2021 20:44
Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.1.1 Regional Hydrology	31	SYWG-EMA-HCM-Comment No. 11. Page 31 discusses SYRWCD ID No. 1, but its boundaries are not depicted on a figure referenced in this section. Please depict the boundaries of SYRWCD ID No. 1 on Figure 2-11 or reference another figure that does.	Eastern Management Area	2/1/2021 20:44
Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.1.2 Regional Geology	36	SYWG-EMA-HCM-Comment No. 12. Figure 3-4. The strike/dip information, anticline/syncline symbols and labels, and formation labels on the geologic map figure are not legible and it is difficult to distinguish between formation colors in areas with narrow exposures. Please change the map size so the labels are readable and narrow exposures can be resolved or please annotate the map so these features can be read.	Eastern Management Area	2/1/2021 20:44
Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.1.2 Regional Geology	38	SYWG-EMA-HCM-Comment No. 13. Figure 3-5 - please label C, B', and G'	Eastern Management Area	2/1/2021 20:44
Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.1.2 Regional Geology	43	SYWG-EMA-HCM-Comment No. 14. Figure 3-8 (Cross Section C). The section shows an approximate 3/4-mile wide exposure Careaga Sand near Ballard Canyon, but the geologic map does not appear to show an exposure along this portion of the section line.	Eastern Management Area	2/1/2021 20:44
Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.1.2 Regional Geology	45	SYWG-EMA-HCM-Comment No. 15. Figure 3-10 (Cross Section E). The section appears to be flipped relative to the section letters and direction listed above the section. For example, the SYR should be on the south side of the section toward E', not the north toward E.	Eastern Management Area	2/1/2021 20:44
Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.1.2 Regional Geology	46	SYWG-EMA-HCM-Comment No. 16. Figure 3-11 (Cross Section F). The section appears to be flipped relative to the section letters and direction listed above the section. For example, Alamo Pintado Creek should be on the north side of the section toward F, not the southwest side toward F'.	Eastern Management Area	2/1/2021 20:44
Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.1.2 Regional Geology	47	SYWG-EMA-HCM-Comment No. 17. Figure 3-12 (Cross Section G). The section appears to be flipped relative to the section letters and direction listed above the section. For example, SYR should be on the southwest side of the section toward G', not the northeast side toward G.	Eastern Management Area	2/1/2021 20:44



Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.1.2 Regional Geology	48	SYWG-EMA-HCM-Comment No. 18. Figure 3-13 (Cross Section H). The section appears to be flipped relative to the section letters and direction listed above the section. For example, SYR should be on the southwest side of the section toward H', not the northeast side toward H.	Eastern Management Area	2/1/2021 20:44
Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.1.2 Regional Geology	49	SYWG-EMA-HCM-Comment No. 19. Figure 3-14 (Cross Section I). The section appears to be flipped relative to the section letters and direction listed above the section. For example, SYR should be on the southwest side of the section toward I', not the northeast side toward I. SYR is incorrectly labeled Santa Agueda Creek.	Eastern Management Area	2/1/2021 20:44
Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.1.2 Regional Geology	41-49	SYWG-EMA-HCM-Comment No. 20. Figures 3-6 through 3-14. The cross-sections should indicate (label) the location of faults and include a note to explain that any offsets are not depicted.	Eastern Management Area	2/1/2021 20:44
Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.1.2 Regional Geology	50	SYWG-EMA-HCM-Comment No. 21. Figure 3-15. The bullseyes in the contours along the north part of the EMA do not appear to be geologically plausible. Consider smoothing out the bullseyes to provide a more realistic geological interpretation of the regional geologic structure.	Eastern Management Area	2/1/2021 20:44
Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.1.2 Regional Geology	37	SYWG-EMA-HCM-Comment No. 22. Page 37 states that "Geologic cross sections are provided as Figure 3-6 through Figure 3-15." Please note that Figure 3-15 is not a cross section.	Eastern Management Area	2/1/2021 20:44
Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.1.3 Principal Aquifers and Aquitards	51	SYWG-EMA-HCM-Comment No. 23. Section 3.1.3.1 designates the Tributary Alluvium a principal aquifer. This designation conflicts directly with information presented elsewhere in the HCM and other available information. The text states that "The main criterion for defining the water-bearing geologic formations in the EMA as principal aquifers is that they exhibit both sufficient permeability and storage potential for the movement and storage of groundwater such that wells can reliably produce groundwater in sufficient quantities on a long-term basis" (emphasis added). However, information provided on page 63 of the HCM demonstrates that the "main criterion for defining" the principal aquifers is not met. Page 63 states "Tributary Alluvium aquifer is usually not considered a reliable aquifer on its own because of its shallow depth and its tendency to become dewatered during drought periods (Hoffman et al., 1996)" (emphasis added). Page 70 states that "The quantity of wells that rely solely upon this aquifer is limited because this aquifer is usually not considered a reliable aquifer on its own" (emphasis added). These statements in the HCM clearly indicate that wells cannot "reliably produce groundwater in sufficient quantities on a long-term basis" from the Tributary Alluvium and the pumping from the aquifer is limited. Discussions with a local driller and EMA landowners provides further evidence that wells penetrating the Tributary Alluvium are not reliable. It is also noted that County of Santa Barbara regulations (Section 34A-12(a)(1)) effectively prohibit new wells from tapping the Tributary Alluvium because of the 50-foot sealing requirement is deeper than the reported 35-foot average thickness of the Tributary Alluvium (HCM Table 3-4). Thus, it appears that only a relatively small number of legacy wells may tap the Tributary Alluvium and it is unclear how many of these wells remain active. It is also noted that tributary alluvium in the CMA and WMA upland areas is not being considered a principal aquifer. Based on the foregoing, it does not appear that the Tributary Alluvium should be designated a principal aquifer. SYWG respectfully requests the GSA carefully consider whether the proposed principal aquifer designation makes sense. This is important because designating any unit as a principal aquifer means that it will be actively managed under the GSP, including establishment of sustainable management criteria, monitoring, etc., which will result in significant costs to the groundwater users of the basin (it is assumed that the GSA will establish groundwater extraction or other fees in the future). Thus, we ask that you please carefully consider what the practical outcome of actively managing the Tributary Alluvium would be? Given that the Tributary Alluvium goes dry naturally (HCM p. 63) and is not a principal water source for overlying landowners, any there potential undesirable results that could occur that need to be managed for? An alternative (recommended) path forward would be to not designate the Tributary Alluvium as a principal aquifer in the initial GSP and then re-evaluate the need to actively manage the Tributary Alluvium during each 5-year GSP update based on monitoring data.	Eastern Management Area	2/1/2021 20:44
Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.1.3 Principal Aquifers and Aquitards	52	SYWG-EMA-HCM-Comment No. 25. The basin bottom is shown in Figure 3-15, not 3-16.	Eastern Management Area	2/1/2021 20:44
Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.1.3 Principal Aquifers and Aquitards	55	SYWG-EMA-HCM-Comment No. 26. Page 55 states that "Groundwater in portions of the Santa Ynez Uplands may contribute some quantity of recharge to the Tributary Alluvium, which subsequently contributes to recharge to the Santa Ynez River Alluvium and the rest of the Basin downstream of the EMA. This is not well defined and so is a data gap and is described further in the data gaps section" (emphasis added). However, page 64 states that "The total volume of groundwater that discharges as subsurface outflow from the higher-elevation Santa Ynez Uplands into the lower-lying Santa Ynez River along the southern border is relatively small (USGS, 1968)..." (emphasis added). USGS (1968) goes on to explain that most of the natural discharge of ground water from the upland occurs as discharge to the creeks (principally Zanja de Cota Creek) near the bedrock high. GSP Emergency Regulations 351(l) define the term "data gap" as "a lack of information that significantly affects the understanding of the basin setting or evaluation of the efficacy of Plan implementation, and could limit the ability to assess whether a basin is being sustainably managed." Use of the term "data gap" implies that the "quite small" flows described by the USGS (this is the actual language used in USGS 1968) need to be more precisely understood in order to sustainably manage the basin. If prior investigators have determined that the groundwater flow from the uplands to the SYR area is quite small, then, why is it necessary to characterize it as a data gap? The HCM does not provide a sufficient explanation to justify why more precise understanding of small flows is necessary to sustainably manage the basin. Absent justification, the term data gap should not be used because the implication is that additional data collection efforts will need to be undertaken, which represent a potentially significant future cost to the groundwater uses (it is assumed that the GSA will establish groundwater extraction or other fees in the future). SYWG respectfully requests the GSA carefully consider whether a more precise understanding of these flows is necessary to sustainably manage the basin. An alternative (recommended) path forward would be to strike the data gap language for the initial GSP and re-evaluate the need for more precise understanding of the flows during each 5-year GSP update based on monitoring data. Also, based on the USGS study, it seems the focus of any quantification efforts should be on surface water outflows fed by rising groundwater, not the groundwater underflow.	Eastern Management Area	2/1/2021 20:44

Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.1.3 Principal Aquifers and Aquitards	51	SYWG-EMA-HCM-Comment No. 24. Section 3.1.3 designates the Paso Robles Formation and Careaga Sand as separate principal aquifers. It is noted that the WMA and CMA HCMs combine these units into a "Lower Aquifer" that is designated a principal aquifer for management purposes. SYWG respectfully requests the GSA carefully consider whether it is necessary to separately manage the Paso Robles Formation and Careaga Sand to achieve sustainable management of the EMA. This is important because designating these units separately will increase the complexity of the management plan and increase monitoring and reporting efforts, both of which will result in increased cost, which SYWG assumes will be charged to the groundwater users via a future extraction or other fee. An alternative (recommended) path forward would be lump the Paso Robles Formation and the Careaga Sand into a "Lower Aquifer" (as has been done in the WMA and CMA) for the initial GSP and then re-evaluate the need to separate the units during each 5-year GSP update based on monitoring data.	Eastern Management Area	2/1/2021 20:44
Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.1.3 Principal Aquifers and Aquitards	61	SYWG-EMA-HCM-Comment No. 27. Page 61 states that "The [Paso Robles Formation] hydraulic conductivity ranges between approximately 400 feet and 200,000 feet per day, which reflects the heterogeneity of the aquifer hydraulic properties of these materials in the EMA." The reported range is inconsistent with Table 3-4 and is implausible given the described texture of the formation.	Eastern Management Area	2/1/2021 20:44
Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.1.3 Principal Aquifers and Aquitards	62	SYWG-EMA-HCM-Comment No. 28. Page 62 states that "the Careaga Sand is approximately 800 feet thick below the Paso Robles Formation." The cross sections indicate that the formation is both thinner and thicker than 800 feet. Is 800 feet the average? Consider clarifying what 800 feet represents and consider describing where it is thinner and thicker.	Eastern Management Area	2/1/2021 20:44
Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.1.3 Principal Aquifers and Aquitards	64	SYWG-EMA-HCM-Comment No. 29. Section 3.1.3.4, page 64 (and at least one other portion of the HCM) conclude that the faults, (including Baseline Fault and associated Los Alamos Fault) do not exhibit vertical offset of adjacent materials and are not believed to be barriers to groundwater flow. The conclusion that there are no vertical offsets conflicts directly with prior USGS studies of the faults in the EMA and adjacent Los Alamos Basin, which document vertical offsets Quaternary sediments caused by thrust faulting (please see USGS Open-File Report No. 81-271. <a href="https://pubs.er.usgs.gov/publication/ofr81271">https://pubs.er.usgs.gov/publication/ofr81271</a> ).	Eastern Management Area	2/1/2021 20:44
Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.1.3 Principal Aquifers and Aquitards	65	SYWG-EMA-HCM-Comment No. 30. Page 65 and Figure 3-17 present recharge areas. However, the data supporting the discussion and mapping are limited to agricultural lands. It is unclear why only agricultural lands are considered in the mapping and discussion of recharge areas. The mapping and discussion should address the entire EMA, not just agricultural lands.	Eastern Management Area	2/1/2021 20:44
Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.1.3 Principal Aquifers and Aquitards	67	SYWG-EMA-HCM-Comment No. 31. Page 67 states that "The single mapped spring within the EMA occurs within the Paso Robles Formation and likely indicates occasional artesian groundwater conditions within steeply dipping strata of gravel and sand, which are exposed high within confined or partially confined areas by less permeable beds of silt and clay." The conclusion of artesian conditions as an explanation for the spring appears to conflict directly with information presented elsewhere in the HCM. The approximate land surface at the spring location is 1,100 to 1,200 feet. The Spring 2018 groundwater elevation in this area is 900 feet (Figure 3-18). Hydrographs for Paso Robles Formation wells presented in this HCM show maximum groundwater level fluctuations of approximately 125 feet. Artesian conditions at the spring location would require groundwater levels to rise at least 200 feet above Spring 2018 levels, which is greater than the historical groundwater level fluctuations in the Paso Robles Formation. Therefore, it seems unlikely that artesian conditions have existed at the spring location. A more plausible source of spring flow may be perched groundwater, perhaps trapped in the landslides visible on Google Earth near the spring location.	Eastern Management Area	2/1/2021 20:44
Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.1.3 Principal Aquifers and Aquitards	67	SYWG-EMA-HCM-Comment No. 32. Page 67 states that "The extent and quantity of any groundwater discharge from the groundwater basin into the Tributary Alluvium has not been confirmed or quantified." The reviewer disagrees with this conclusion. USGS (1968) concluded that much of the groundwater flow exiting the uplands occurs as surface water flow, particularly in Zanja de Cota Creek. USGS (1968) estimated groundwater discharge to surface water in the tributaries, which is inclusive of both lateral groundwater flow in the Tributary Alluvium and any upward flow from deeper formations. The period of record reported by USGS was 1946 - 1964, which an average of approximately 2,800 acre-feet per year for all tributaries. The USGS (1968) estimates should be reported in this section of the HCM.	Eastern Management Area	2/1/2021 20:44
Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.1.3 Principal Aquifers and Aquitards	69-71	SYWG-EMA-HCM-Comment No. 33. Section 3.1.3.7 describes beneficial uses by mutual water companies, districts, etc. It would be helpful to depict the location of these entities on a map for the reader. It would also be helpful to include a map showing the location of active wells in the EMA symbolized by beneficial use type.	Eastern Management Area	2/1/2021 20:44
Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.1.4 Data Gaps and Uncertainty	68	SYWG-EMA-HCM-Comment No. 34. Figure 3-19. Well 05A01 is symbolized as a Tributary Alluvium but does not appear to be located in an area underlain by a mapped tributary. The classification of this wells seems incorrect. This well also appears on Figure 3-23. Please check the classification of this well.	Eastern Management Area	2/1/2021 20:44
Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.1.4 Data Gaps and	71	SYWG-EMA-HCM-Comment No. 35. Section 3.1.4.1 seems more appropriate placed in Section 5 as it discusses the adequacy of the groundwater level monitoring network.	Eastern Management Area	2/1/2021 20:44

Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.1 Hydrogeologic Conceptual Model	22	SYWG-EMA-HCM-Comment No. 1. Santa Ynez Water Group (SYWG) would like to thank the EMA GSA for the opportunity to submit comments on the Draft Eastern Management Area Hydrogeologic Conceptual Model (HCM). SYWG's comments have been prepared by a State of California Professional Geologist and Certified Hydrogeologist. SYWG's comments are intended to help improve the HCM, help ensure consistency with GSP Emergency Regulations, and avoid unnecessary GSP implementation costs. Please do not hesitate to contact our hydrogeologist, Bryan Bondy, if you need any clarifications or would like to discuss any of our comments.	Eastern Management Area	2/1/2021 20:44
Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.1.1 Regional Hydrology	23	SYWG-EMA-HCM-Comment No. 2. Page 23 states that "The entire Basin is about 50 miles long and varies in width from about 4 to 7 miles, as presented on Figure 3-1." Figure 3-1 does not depict the entire basin; rather, it only shows the EMA. This paragraph goes on to describe the three management areas. A figure should be provided (or referenced from another GSP section) that depicts the entire basin and management areas.	Eastern Management Area	2/1/2021 20:44
Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.1.1 Regional Hydrology	23	SYWG-EMA-HCM-Comment No. 3. Page 23, third bullet refers to SYRWCD "Zone E". A figure should be provided (or referenced from another GSP section) that depicts the location of "Zone E."	Eastern Management Area	2/1/2021 20:44
Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.1.1 Regional Hydrology	23	SYWG-EMA-HCM-Comment No. 4. Figure 2-2 is referenced, but not provided	Eastern Management Area	2/1/2021 20:44
Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.2.1 Groundwater Elevations	79	SYWG-EMA-HCM-Comment No. 41. Figure 3-21. The groundwater contours are continuous across the area of extremely thin Careaga Sand where it outcrops southwest of Los Olivos. The cross sections provided in the HCM suggest that the Careaga Sand in this area is "perched" on Monterey Formation and may not be hydraulic connected to the Careaga Sand that underlies the Paso Robles Formation to the north, east, and south. Based on the foregoing, it may not be appropriate to contour Careaga Sand groundwater levels in this area. At a minimum, the contours should be dashed in this area.	Eastern Management Area	2/1/2021 20:44
Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.2.3 Groundwater Quality Distribution and Trends	93	SYWG-EMA-HCM-Comment No. 42. Page 93 states that "Projects and management actions implemented as part of this GSP are not anticipated to directly cause concentrations of any of these constituents in groundwater to increase." Pages 97 and 101 include similar language. It is unclear why the draft HCM presumes that that projects and/or management actions will be necessary to sustainably manage the EMA. This conclusion is premature given that Sustainable Management Criteria have not yet been established and future conditions have not yet been evaluated.	Eastern Management Area	2/1/2021 20:44
Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.2.3 Groundwater Quality	111	SYWG-EMA-HCM-Comment No. 43. Page 111 - San Francisco Regional Water Quality Control Board. This should be the Central Coast Regional Water Quality Control Board.	Eastern Management Area	2/1/2021 20:44
Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.2.4 Land Subsidence	113-114	SYWG-EMA-HCM-Comment No. 44. The land subsidence discussion on Page 113-114 should be presented as potential land surface elevation changes, not subsidence. The HCM has not presented sufficient information to demonstrate that the land surface elevation changes, if real, shown on Figure 3-37 are the exclusive result of elastic or inelastic compression of the groundwater basin sediments. In fact, the hydrographs presented in the HCM suggest that groundwater levels in the Paso Robles Formation were mostly higher than historical low elevations during 2015-2019, meaning that inelastic subsidence during this period was not physically possible in most areas of the EMA. This section should be revised to include discussion of tectonic activity as a possible contributor to land surface elevation changes. In fact the much of the teal colored area on Figure 3-37 that indicates the small reported downward land surface changes are remarkably coincident the synclinal structures indicated on the HCM cross sections and Figure 3-37, which suggests that land surface change could be related to downwarping along the synclines. Similarly, the dark blue areas are generally coincident with anticlinal structures. (*the reported land surface elevation changes are less than the stated accuracy of the InSAR method, as described on page 113 of the HCM)	Eastern Management Area	2/1/2021 20:44
Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.2.4 Land Subsidence	114	SYWG-EMA-HCM-Comment No. 46. The discussion on page 114 should be deleted because it does not pertain to the EMA.	Eastern Management Area	2/1/2021 20:44
Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.2.5 Interconnected Surface	118	SYWG-EMA-HCM-Comment No. 48. Page 118 states that "Streamflow measurements at distal ends of the major tributaries discharging to the Santa Ynez River is a data gap." Please see Comment No. 37.	Eastern Management Area	2/1/2021 20:44
Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.2.4 Land Subsidence	113	SYWG-EMA-HCM-Comment No. 45. The HCM concludes on page 113 that the UNAVCO CGPS station in the EMA has recorded 4mm per year of subsidence and a total of 20mm of subsidence since 2015. The reviewer disagrees with this conclusion. First, the hydrographs presented in the HCM suggest that groundwater levels in the Paso Robles Formation were mostly higher than historical low elevations during 2015-2019, meaning that inelastic subsidence during this period was not physically possible in most areas of the EMA. Second, and more importantly, most of the change indicated in the CGPS data occurred as an abrupt shift in early 2017. Subsidence does not occur abruptly. Inspection of data for this CGPS station reveals that the abrupt vertical shift was coincident with an abrupt ~25 mm shift to the north, which also cannot be explained by subsidence ( <a href="http://geodesy.unr.edu/NGLStationPages/stations/SYNG.sta">http://geodesy.unr.edu/NGLStationPages/stations/SYNG.sta</a> ). Based on the foregoing, the change in elevation indicated by the CGPS station in the basin between 2015 - 2019 should not be attributed to subsidence. The discussion on page 113 should be revised accordingly.	Eastern Management Area	2/1/2021 20:44

Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.2.5 Interconnected Surface Water Systems	118	SYWG-EMA-HCM-Comment No. 47. Page 118 states that "Where the valleys are narrow and the cross-sectional area of alluvial fill is decreased, groundwater may be forced to the surface and at times become intermittent or perennial flow in the stream channels. Such narrowing occurs where stream channels have cut through the consolidated rocks that form the south boundary of the Santa Ynez Uplands area. This causes perennial flow in Alamo Pintado, Santa Agueda, Zanja de Cota, Zaca, and Santa Cruz Creeks (Figure 3-38)." Two comments. First, the narrowing in the bedrock areas does not appear to be the cause for perennial flow in Santa Cruz Creek, as the entire reach is indicated as perennial on Figure 3-38, suggesting the creek is fed by spring upstream of the EMA. Second, the text conflicts with Figure 3-38 because Alamo Pintado, Santa Agueda, and Zaca Creeks are not depicted as perennial in their lower reaches (in contrast with Zanja de Cota Creek). The text should be revised.	Eastern Management Area	2/1/2021 20:44
Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.2.6 Groundwater Dependent Ecosystems	121-122	SYWG-EMA-HCM-Comment No. 49. Section 3.2.6 and Figure 3-40. GSP Emergency Regulations 4.16(g) require identification of groundwater dependent ecosystems, not potential groundwater dependent ecosystems (pGDEs). The pGDEs discussed in Section 3.2.6 and identified on Figure 3-40 must be further evaluated to determine, based on available data, whether they are indeed dependent on groundwater from the regional water table. It is understood that there are limited data concerning groundwater levels in the Tributary Alluvium, but many of pGDEs elsewhere can easily be screened out at this time. For example, vegetation along perennial reaches of the creeks in the upper part of the EMA can be screened out because they are clearly dependent on surface water flows (i.e. upper reaches of Zaca, Santa Agueda, Cachuma, and Santa Cruz Creeks). Most if not all of the pGDEs located in the upland area between the creeks can be screened out because the water table in the Paso Robles Formation is much deeper than the rooting depth of the plants. In other areas, it may be possible using aerial photos (Google Earth) to inspect and screen out pGDEs that appear to be sustained by irrigation, runoff from irrigation or residential activities, or septic system discharges. Screening using available data and aerial photos should be performed to remove pGDEs, where appropriate, prior to proceeding with development of sustainable management criteria.	Eastern Management Area	2/1/2021 20:44
Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.1.4 Data Gaps and Uncertainty	71-72	SYWG-EMA-HCM-Comment No. 36. Section 3.1.4.2 recommends "The addition of groundwater monitoring located on either side of the fault would clarify the relationship of water levels across the fault and, by extension, its potential role in controlling groundwater flow. Selection of wells for this purpose should be considered when expanding the groundwater monitoring network." SYWG supports studying the effects of the Baseline fault on groundwater flow in the upland area. However, SYWG is concerned about the expense of adding additional monitoring locations to accomplish this goal without first evaluating whether the existing monitoring network could be used for this purpose. SYWG notes that the existing groundwater level monitoring network (Figure 3-19) already includes several sets of wells that straddle the fault. SYWG believes that more frequent monitoring (with transducers) in the existing wells straddling the fault may be sufficient to assess potential barrier effects of the fault and may be more effective than adding additional wells with infrequent level measurements (differences in the transient responses can be used to evaluate barrier effects). This is recommended as a first step, as opposed to proceeding directly to adding more wells to the monitoring network, especially if it means drilling dedicated monitoring wells for this purpose at significant cost to the groundwater users (it is assumed that the GSA will establish groundwater extraction or other fees in the future). The need for additional monitoring locations can be re-evaluated during each 5-year GSP update based on monitoring data.	Eastern Management Area	2/1/2021 20:44
Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.1.4 Data Gaps and Uncertainty	72	SYWG-EMA-HCM-Comment No. 37. Section 3.1.4.5 states that the volumetric contribution of tributary streamflow to both groundwater recharge and surface water inflow out of the Santa Ynez Uplands area into the Santa Ynez River is not well measured (and is, hence a data gap). The HCM recommends installation or reinstallation of streamflow gauges on all of the major tributaries near their confluence with the Santa Ynez River and periodic flow measurements at two locations along Alamo Pintado, and Santa Agueda Creeks. SYWG recognizes the importance of stream flows for the water balance of EMA. However, SYWG does not agree that gauging of every tributary is necessary to sustainably manage the Basin. SYWG notes that there are active gauges on Santa Ynez Creek and Alamo Pintado Creek. The data from these gauges can be used together with other historical gauging records to estimate ungauged storm flows for the other tributaries, as has been done in the past (see HCM page 118). SYWG believes that this approach would be a cost-effective alternative to installing and maintaining gauges on every single tributary, which would result in a significant cost to the groundwater users (it is assumed that the GSA will establish groundwater extraction or other fees in the future). In terms of dry weather inflows to the SYR area, USGS (1968) concluded that much of the groundwater flow exiting the uplands occurs as surface water flow, particularly in Zanja de Cota Creek. Therefore, it may also be appropriate to measure surface water flows in Zanja de Cota Creek during non-storm flow periods. These actions are recommended as a first step in the initial GSP, as opposed to the costly proposal of proceeding directly to constructing stream gauges on all tributaries. The need for additional gauging can be re-evaluated during each 5-year GSP update based on monitoring data.	Eastern Management Area	2/1/2021 20:44
Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.2.1 Groundwater Elevations	76	SYWG-EMA-HCM-Comment No. 38. Page 76 states that "A slight pumping trough is evident in the western portion of the Santa Ynez Uplands near Los Olivos.". This is assumed to be referring to the closed 550-foot elevation contour on Figure 3-20. The closed contour is not supported by data on Figure 3-20 (no wells depicted in this area). As such, the basis for the closed contour and discussion of a pumping trough is unclear. Please clarify.	Eastern Management Area	2/1/2021 20:44
Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.2.1 Groundwater Elevations	77,79,81,83	SYWG-EMA-HCM-Comment No. 39. Figures 3-20 through 3-23. Please show the measured groundwater level data on the map for comparison with the contours.	Eastern Management Area	2/1/2021 20:44

Bryan Bondy	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.2.1 Groundwater Elevations	79	SYWG-EMA-HCM-Comment No. 40. Figure 3-21. The groundwater contours and flow direction arrow in northwestern EMA indicate groundwater flow directly toward The La Pruisima Hills (bedrock). This seems unlikely.	Eastern Management Area	2/1/2021 20:44
Bryan Bondy	CMA Hydrogeologic Conceptual Model (HCM) - 3.0 Principal Aquifers and Aquitards	17	SYWG-CMA-HCM-Comment No. 34. Section 3.2.2. Page 17 states that "The lack of well and water level information over time has led to a data gap about details and changes in groundwater movement of the Lower Aquifer in the Buellton Upland." GSP Emergency Regulations 351(l) define the term "data gap" as "a lack of information that significantly affects the understanding of the basin setting or evaluation of the efficacy of Plan implementation, and could limit the ability to assess whether a basin is being sustainably managed." However, the HCM does not provide a sufficient explanation to justify why the lack of information concerning the "details an changes in groundwater movement" constitutes a data gap, as defined by the GSP Emergency Regulations. Please justify why knowledge of the "details and changes in groundwater movement" must be known in order to sustainably manage the basin as opposed to a more fundamental understanding of the general directions and magnitudes of groundwater flow. Absent justification, the term data gap should not be used to describe the lack of data to demonstrate the "details" of the groundwater flow system.	Central Management Area	1/31/2021 18:36
Bryan Bondy	CMA Hydrogeologic Conceptual Model (HCM) - 3.0 Principal Aquifers and Aquitards	17-18	SYWG-CMA-HCM-Comment No. 35. Section 3.2.2. Pages 17-18 state that "A full understanding of the different lenses of more permeable materials is a data gap in the hydrogeological conceptual model for the CMA." GSP Emergency Regulations 351(l) define the term "data gap" as "a lack of information that significantly affects the understanding of the basin setting or evaluation of the efficacy of Plan implementation, and could limit the ability to assess whether a basin is being sustainably managed." The HCM does not provide a sufficient explanation to justify why a "full understanding" of the heterogeneity of the Lower Aquifer is necessary to sustainably manage the CMA. Absent such a justification, the term data gap should not be used here.	Central Management Area	1/31/2021 18:36
Bryan Bondy	CMA Hydrogeologic Conceptual Model (HCM) - 4.0 Hydrologic Characteristics	21	SYWG-CMA-HCM-Comment No. 36. Section 4.2.2. Page 21 states that "Potential groundwater banking projects will be described in further detail when projects and management actions are developed for the CMA." It is unclear why the HCM presumes that that projects and/or management actions will be necessary to sustainably manage the CMA. This conclusion is premature given that Sustainable Management Criteria have not yet been established and future conditions have not yet been evaluated. Even if projects and/or management actions are necessary, it is premature to conclude that groundwater banking would be a project that would be included in the GSP.	Central Management Area	1/31/2021 18:36
Bryan Bondy	CMA Hydrogeologic Conceptual Model (HCM) - 4.0 Hydrologic Characteristics	23	SYWG-CMA-HCM-Comment No. 37. Section 4.3.2. Page 23 states that "There are three main tributaries in the CMA that flow into the Santa Ynez River in the CMA. These include from east to west: Zaca Creek, Nojoqui Creek, and Santa Rosa Creek." Per Figure 4-5, it appears that the confluence of Nojoqui Creek with the Santa Ynez River is further east than Zaca Creek confluence.	Central Management Area	1/31/2021 18:36
Bryan Bondy	CMA Hydrogeologic Conceptual Model (HCM) - 4.0 Hydrologic Characteristics	23	SYWG-CMA-HCM-Comment No. 38. Section 4.3.2.1. The final paragraph on Page 23 begins with "The CMA aquifer is". There is more than one aquifer in the CMA. Consider revising.	Central Management Area	1/31/2021 18:36
Bryan Bondy	CMA Hydrogeologic Conceptual Model (HCM) - 4.0 Hydrologic Characteristics	24	SYWG-CMA-HCM-Comment No. 39. Regarding Section 4.3.4, Treated Wastewater Sources, it would be helpful to include a representative statistic for recent annual discharge volumes in a new column in Table 1.	Central Management Area	1/31/2021 18:36
Bryan Bondy	CMA Hydrogeologic Conceptual Model (HCM) - 5.0 Uses and Users of GW in CMA	26-27	SYWG-CMA-HCM-Comment No. 40. Section 5.4. Groundwater dependent ecosystems are addressed under the Groundwater Conditions requirements for GSPs (GSP Emergency Regulations 354.16(g)), not the HCM requirements 354.14. It is suggested that potential groundwater dependent ecosystems discussion be moved to the forthcoming Groundwater Conditions memo to be consistent with the structure of the GSP regulations.	Central Management Area	1/31/2021 18:36
Bryan Bondy	CMA Hydrogeologic Conceptual Model (HCM) - 1.0 CMA Boundaries and Subareas	5	SYWG-CMA-HCM-Comment No. 5. Section 1.2 - The eastern boundary is not addressed in the discussion of boundaries.	Central Management Area	1/31/2021 18:36
Bryan Bondy	CMA Hydrogeologic Conceptual Model (HCM) - 1.0 CMA Boundaries and Subareas	5	SYWG-CMA-HCM-Comment No. 6. Section 1.2. Discussion of the western boundary of the CMA corresponding to the watershed boundary of the Santa Ynez River at the point of the Santa Rosa Dam site near Santa Rosa Park, appears to conflict with Figure 4-5, which does not depict the CMA western boundary corresponding with a watershed boundary at this location along the Santa Ynez River.	Central Management Area	1/31/2021 18:36
Bryan Bondy	CMA Hydrogeologic Conceptual Model (HCM) - 1.0 CMA Boundaries and Subareas	5	SYWG-CMA-HCM-Comment No. 7. Section 1.2. The southern boundary of the CMA is described as "the valley bottom along the south side of the Santa Ynez River." Consider also noting that this is the contact between alluvium and bedrock formations.	Central Management Area	1/31/2021 18:36
Bryan Bondy	CMA Hydrogeologic Conceptual Model (HCM) - 2.0 CMA and Adjacent Geology	10	SYWG-CMA-HCM-Comment No. 13. Section 2.2.1. The following statement "Just north of the Buellton Bend, the syncline extends southeast underneath the Santa Ynez River alluvium" is inconsistent with the geologic map (Figure 2-2), which does not depict the syncline east of the Buellton Bend. Section A-A' suggests that the syncline does continue east of the Buellton Bend; therefore, it suggested that the inferred syncline line be extended further east on the geologic map.	Central Management Area	1/31/2021 18:36
Bryan Bondy	CMA Hydrogeologic Conceptual Model (HCM) - 2.0 CMA and Adjacent Geology	11-Oct	SYWG-CMA-HCM-Comment No. 14. Section 2.2.2. This section should be updated with more information about the potential impact of the Santa Ynez River Fault on groundwater flow in the Paso Robles Formation and Careaga Sandstone. Please see <a href="https://www.scec.org/publication/9493">https://www.scec.org/publication/9493</a> for discussion of evidence of late Pleistocene movement of this fault, which is post-deposition of Paso Robles Formation and Careaga Sandstone. Potential offsets of these formations could have barrier effects on groundwater flow. This potential should be noted.	Central Management Area	1/31/2021 18:36
Bryan Bondy	CMA Hydrogeologic Conceptual Model (HCM) - 3.0 Principal Aquifers and Aquitards	12	SYWG-CMA-HCM-Comment No. 17. Section 3.1. Discussion of crystalline rocks is not applicable, and potentially misleading to the lay reader, because no such units are identified on the geologic map or cross sections nor are they discussed in Section 2.1.	Central Management Area	1/31/2021 18:36

Bryan Bondy	CMA Hydrogeologic Conceptual Model (HCM) - 3.0 Principal Aquifers and Aquitards	12	SYWG-CMA-HCM-Comment No. 18. Section 3.1 (or other section) should describe discrepancies between the current basin boundary and the extent of water-bearing units depicted in the geologic map (Figure 2-2) and note that a future basin boundary modification will be needed to properly align the basin boundary with the mapped extent of the Careaga Sandstone and alluvium.	Central Management Area	1/31/2021 18:36
Bryan Bondy	CMA Hydrogeologic Conceptual Model (HCM) - 3.0 Principal Aquifers and Aquitards	13	SYWG-CMA-HCM-Comment No. 19. Section 3.1.1 deals with the definable bottom of the basin, but includes substantial discussion of the lateral basin boundary. The lateral basin boundary discussion is out-of-place here and should be moved elsewhere, perhaps Section 1.2.	Central Management Area	1/31/2021 18:36
Bryan Bondy	CMA Hydrogeologic Conceptual Model (HCM) - 3.0 Principal Aquifers and Aquitards	13-14	SYWG-CMA-HCM-Comment No. 24. Section 3.2. Older Alluvium is omitted from the definition of either the Upper or Lower Aquifer at the bottom of page 13, but is included in the first paragraph under Heading 3.2.1 on page 14, and then is omitted in the discussion under the heading "Upper Aquifer in the Santa Ynez River Alluvium Subarea". Please clarify whether older alluvium is included in the Upper Aquifer or not.	Central Management Area	1/31/2021 18:36
Bryan Bondy	CMA Hydrogeologic Conceptual Model (HCM) - 3.0 Principal Aquifers and Aquitards	13	SYWG-CMA-HCM-Comment No. 25. Section 3.2. The introduction of SYRWCD groundwater zones via reference to Figure 3-3 at this point in the document is confusing and seems out of place. This figure and footnote discussion is better placed in Section 1.3 and text should be added to describe the differences between the SYRWCD zones and the subareas used in the HCM. It is also noted that Figure 3-3 does not depict the geologic features described in the sentence in which it is referenced; the geologic map would be a better figure to reference.	Central Management Area	1/31/2021 18:36
Bryan Bondy	CMA Hydrogeologic Conceptual Model (HCM) - 3.0 Principal Aquifers and Aquitards	14	SYWG-CMA-HCM-Comment No. 27. Section 3.2.1. Page 14 of the HCM states that "Exactly where the Careaga Formation first intrudes in between the Monterey Shale and river alluvial deposits and the depth of Careaga Formation downstream of EMA/CMA boundary is identified as a data gap for this study due to lack of available deep well logs in the river alluvium near the EMA/CMA boundary." GSP Emergency Regulations 8351(l) define the term "data gap" as "a lack of information that significantly affects the understanding of the basin setting or evaluation of the efficacy of Plan implementation, and could limit the ability to assess whether a basin is being sustainably managed." The HCM does not provide a sufficient explanation to justify why the "exact location" of where the Careaga Formation is first present beneath the river alluvium should be characterized as a "data gap" (as defined by the GSP Emergency Regulations) as it does not appear to have a material impact on sustainable management of the CMA. Absent such a justification, the term data gap should not be used here.	Central Management Area	1/31/2021 18:36
Bryan Bondy	CMA Hydrogeologic Conceptual Model (HCM) - 3.0 Principal Aquifers and Aquitards	15	SYWG-CMA-HCM-Comment No. 28. Section 3.2.1. "Perched Groundwater in the Buelton Upland" is discussed within the sections identifying the principal aquifers (i.e. aquifers that will be managed under the GSP). GSP Emergency Regulations 8351(aa) defines "Principal aquifers" as "aquifers or aquifer systems that store, transmit, and yield significant or economic quantities of groundwater to wells, springs, or surface water systems." Perched groundwater rarely meets the criteria in this definition and the HCM does not describe pumping of perched groundwater. Therefore, it does not appear that perched groundwater should be considered a principal aquifer for the purposes of the CMA GSP. At a minimum, justification is needed for including perched groundwater in the principal aquifers for the GSP. The more likely outcome seems to be that discussion of perched groundwater should be deleted from this section and discussed elsewhere, because perched groundwater does not appear to be part of a principal aquifer or a principal aquifer itself and management of perched groundwater appears to be unnecessary and impractical.	Central Management Area	1/31/2021 18:36
Bryan Bondy	CMA Hydrogeologic Conceptual Model (HCM) - 3.0 Principal Aquifers and Aquitards	15	SYWG-CMA-HCM-Comment No. 29. Section 3.2.1. Page 15 of the HCM states that "The extent and connectivity of the different lenses of the perched groundwater system in the CMA is a data gap in the hydrogeologic conceptual model for the CMA." GSP Emergency Regulations 8351(l) define the term "data gap" as "a lack of information that significantly affects the understanding of the basin setting or evaluation of the efficacy of Plan implementation, and could limit the ability to assess whether a basin is being sustainably managed." The HCM does not provide a sufficient explanation to justify why the limited information concerning the extent and connectivity of the perched groundwater in the CMA should be characterized as a "data gap" (as defined by SGMA) as it does not appear to have a material impact on sustainable management of the CMA. Absent such a justification, the term data gap should not be used here. This is particularly true if it is ultimately decided that perched groundwater is not a principal aquifer.	Central Management Area	1/31/2021 18:36
Bryan Bondy	CMA Hydrogeologic Conceptual Model (HCM) - 3.0 Principal Aquifers and Aquitards	16	SYWG-CMA-HCM-Comment No. 30. Section 3.2.2. Page 16 states that "The Lower Aquifer consists of the Paso Robles and Careaga Formations which are found in the axis of the Santa Rita Syncline." This sentence is misleading because the formations are not exclusively found along the axis of the syncline. This sentence should be revised.	Central Management Area	1/31/2021 18:36
Bryan Bondy	CMA Hydrogeologic Conceptual Model (HCM) - 3.0 Principal Aquifers and Aquitards	16	SYWG-CMA-HCM-Comment No. 31. Section 3.2.2. Page 16 states that "The syncline terminates under the Santa Ynez River Alluvium in the eastern part of the CMA.". Cross section A-A' suggests that the syncline extends at least as far east as the cross section line. Please clarify where the syncline terminates and please consider extending the inferred trace of the syncline on the geologic map (Figures 2-1 and 2-2) further east to the inferred location where the fold terminates.	Central Management Area	1/31/2021 18:36
Bryan Bondy	CMA Hydrogeologic Conceptual Model (HCM) - 3.0 Principal Aquifers and Aquitards	17	SYWG-CMA-HCM-Comment No. 32. Section 3.2.2. Page 17 states that "only near Buelton and in the Lompoc subarea, where it crosses the two ends of the Santa Rita syncline that is, for only about 18 miles of its entire course, is the Santa Ynez River in direct contact with the major bodies of water-bearing deposits (Lower Aquifer) in its valley." The conclusion that the Lower Aquifer is in direct contact with the Santa Ynez River is in direct conflict with numerous statements elsewhere in the HCM document and the HCM cross sections, which demonstrate that the Upper Aquifer exists between the river bed and the Lower Aquifer. This should be clarified.	Central Management Area	1/31/2021 18:36

Bryan Bondy	CMA Hydrogeologic Conceptual Model (HCM) - 3.0 Principal Aquifers and Aquitards	17	SYWG-CMA-HCM-Comment No. 33. Section 3.2.2. Page 17 states that "Because the majority of wells in the Santa Ynez River Alluvium subarea are shallow, a precise understanding of the Lower Aquifer underneath the Santa Ynez River is a data gap in the hydrogeological conceptual model for the CMA.". GSP Emergency Regulations 8351(i) define the term "data gap" as "a lack of information that significantly affects the understanding of the basin setting or evaluation of the efficacy of Plan implementation, and could limit the ability to assess whether a basin is being sustainably managed." The HCM does not provide a sufficient explanation to justify why a "precise understanding" of the Lower Aquifer underneath the Santa Ynez River rises is necessary and rises to the level of a data gap, as defined by the GSP Emergency Regulations. Given that there are few wells pumping from the Lower Aquifer in this area, it appears that a "precise understanding of the Lower Aquifer" in this area is not needed for sustainable management of the CMA and the term "data gap" should not used here.	Central Management Area	1/31/2021 18:36
Bryan Bondy	CMA Hydrogeologic Conceptual Model (HCM) - 5.0 Uses and Users of GW in CMA	26-27	SYWG-CMA-HCM-Comment No. 41. Section 5.4. The text in Section 5.4 focusses on the inferred nexus between perched groundwater and pGDEs. It is noted that pGDEs utilizing perched water should not be a consideration for the GSP and should be screened out because perched groundwater does not appear to meet the definition of a principal aquifer under (SGMA GSP Emergency Regulations 8351(aa)) and the HCM does not describe any significant pumping of perched groundwater within CMA.	Central Management Area	1/31/2021 18:36
Bryan Bondy	CMA Hydrogeologic Conceptual Model (HCM) - 5.0 Uses and Users of GW in CMA	26-27	SYWG-CMA-HCM-Comment No. 42. Section 5.4. GSP Emergency Regulations 8354.16(g) require identification of groundwater dependent ecosystems, not potential groundwater dependent ecosystems (pGDEs). The pGDEs discussed in Section 5.4 and identified on Figure 5-2 must be further evaluated to determine, based on available data, whether they are indeed dependent on groundwater from the regional water table in a principal aquifer. For the upland areas, pGDEs should be removed from consideration in areas where the water table in the lower aquifer is deeper than the anticipated root zone on a regular basis and/or where the mapped plant communities appear to be relying as source of water other than groundwater. This should be completed before sustainable management criteria are developed.	Central Management Area	1/31/2021 18:36
Bryan Bondy	CMA Hydrogeologic Conceptual Model (HCM) - 5.0 Uses and Users of GW in CMA	27	SYWG-CMA-HCM-Comment No. 43. Section 5.4. Page 27 states that "Overall, the extent, nature and occurrence of the perched groundwater systems in the CMA is currently a data gap and needs further review to determine whether each perched system is connected to the saturated flow of Principal Aquifers in the CMA (Upper and Lower Aquifers) or is more closely related to the recharge of the Principal Aquifers as part of the interflow of the hydrologic system and water budget for the basin." This sentence is confusing and does not appear to follow hydrogeologic principles. Driscoll (1005) defines "perched groundwater" as "unconfined groundwater separated from an underlying main body of groundwater by an unsaturated zone." Therefore, by definition, perched groundwater areas are not "connected to the saturated flow" of the regional groundwater system. Based on the foregoing, it is unclear what the issue is that the author is attempting to communicate and why it would be necessary to address for sustainable management of the CMA.	Central Management Area	1/31/2021 18:36
Bryan Bondy	CMA Hydrogeologic Conceptual Model (HCM) - 5.0 Uses and Users of GW in CMA	27	SYWG-CMA-HCM-Comment No. 44. Section 5.4. Page 27 states that "Overall, the extent, nature and occurrence of the perched groundwater systems in the CMA is currently a data gap and needs further review to determine whether each perched system is connected to the saturated flow of Principal Aquifers in the CMA (Upper and Lower Aquifers) or is more closely related to the recharge of the Principal Aquifers as part of the interflow of the hydrologic system and water budget for the basin." GSP Emergency Regulations 8351(i) define the term "data gap" as "a lack of information that significantly affects the understanding of the basin setting or evaluation of the efficacy of Plan implementation, and could limit the ability to assess whether a basin is being sustainably managed." The HCM does not provide a sufficient explanation to justify why the "extent, nature, and occurrence of the perched groundwater systems" is required to sustainably manage the CMA. This is particularly true if it is ultimately decided that perched groundwater is not a principal aquifer. Absent such a justification, the term data gap should not used here.	Central Management Area	1/31/2021 18:36
Bryan Bondy	CMA Hydrogeologic Conceptual Model (HCM) - 5.0 Uses and Users of GW in CMA	27	SYWG-CMA-HCM-Comment No. 45. Section 5.4.1. Page 27 states that "Only one active spring and seep has been identified in the CMA on the south side of the Santa Ynez River just east of Nojoqui Creek (Figure 5-2). The quantity of water discharging from this spring near Nojoqui Creek is currently a data gap." Review of the geologic map (Figure 2-1) reveals that the location of the spring in question is coincident with a portion of the basin that is actually underlain by bedrock of the Monterey Formation. Thus, it does not appear that this spring is related to the principal aquifers of the CMA and, hence, is not applicable to the HCM or sustainable management of the CMA. It is recommended that this spring be characterized as a bedrock spring not applicable to the CMA and that the HCM note that a basin boundary modification is needed in this area to properly align the basin boundary with mapped contact between alluvium and the Monterey Formation, which is located north of the current basin boundary.	Central Management Area	1/31/2021 18:36

Bryan Bondy	CMA Hydrogeologic Conceptual Model (HCM) - 5.0 Uses and Users of GW in CMA	27	SYWG-CMA-HCM-Comment No. 46. Section 5.4.1. It is unclear why the content of Section 5.4.1 - Discharge and Springs Areas is included as subsection of Section 5.4 - Potential Groundwater Dependent Ecosystems. While these two topics are potentially related in some cases, it is misleading as structured because discharge and spring areas are not necessarily potential groundwater dependent ecosystems. GSP Emergency regulations separate these aspects with the requirement to identify discharge areas and springs falling under the HCM requirements 5.4.14(d)(4) and identification of groundwater dependent ecosystems falling under the Groundwater Conditions requirements 5.4.16(g). As per a prior comment, it is suggested that potential groundwater dependent ecosystems discussion be moved to the forthcoming Groundwater Conditions memo to be consistent with the structure of the GSP regulations.	Central Management Area	1/31/2021 18:36
Bryan Bondy	CMA Hydrogeologic Conceptual Model (HCM) - 6.0 Data Gaps and Uncertainty	28-29	SYWG-CMA-HCM-Comment No. 47. Section 6 is intended to address data gaps and uncertainty in the hydrogeologic conceptual model. We would like to take this opportunity to remind the GSA that the terms "data gap" and "uncertainty" have specific meanings under SMGA and that items should only be included in this section that are consistent with those definitions. The definitions are as follows. GSP Emergency Regulations 5.4.351(i) define the term "data gap" as "a lack of information that significantly affects the understanding of the basin setting or evaluation of the efficacy of Plan implementation, and could limit the ability to assess whether a basin is being sustainably managed." GSP Emergency Regulations 5.4.351(j) define the term "uncertainty" as "a lack of understanding of the basin setting that significantly affects an Agency's ability to develop sustainable management criteria and appropriate projects and management actions in a Plan, or to evaluate the efficacy of Plan implementation, and therefore may limit the ability to assess whether a basin is being sustainably managed." Essentially, these definitions mean that a data limitation or lack of information must materially impact the ability to sustainably manage the basin in order to be considered a "data gap" or "uncertainty". Most, if not all of the items, included in Section 6 subsections do not describe a lack of information or lack of understanding that will materially impact the ability to sustainably manage the CMA. Therefore, it is requested that the HCM be revised to eliminate those items from Section 6 that do not meet the SGMA definitions of "data gaps" or "uncertainty." Certainly these items could be described elsewhere absent these terms, but any items that are retained in this section should include a clear explanation how the lack of information or understanding will materially impact the ability to sustainably manage the CMA. This is important because the implication is that "data gaps" and "uncertainties" identified in the GSP must be filled in order to sustainably manage the basin, likely at a significant cost to the groundwater users. Santa Ynez Water group supports filling bona fide "data gaps" and "uncertainties" consistent with the GSP Emergency Regulations, but would not support any costly data collection efforts to address items called "data gaps" or "uncertainties" but that do not actually materially impact the ability of the GSA to sustainably manage the CMA.	Central Management Area	1/31/2021 18:36
Bryan Bondy	CMA Hydrogeologic Conceptual Model (HCM) - 6.0 Data Gaps and Uncertainty	28	SYWG-CMA-HCM-Comment No. 48. Concerning Section 6.1, it is agreed that the AEM data will help update the current understanding of faults that may affect groundwater flow. However, it has not been demonstrated that the current understanding is insufficient to sustainably manage the basin. Therefore, it does not appear that there is a "data gap" or "uncertainty" (as defined by SGMA) with respect to faults. Section 6.1 should be deleted. This topic is adequately described in Section 2.2.2.	Central Management Area	1/31/2021 18:36
Bryan Bondy	CMA Hydrogeologic Conceptual Model (HCM) - 6.0 Data Gaps and Uncertainty	28	SYWG-CMA-HCM-Comment No. 49. Concerning Section 6.2, it is agreed that the AEM data will help delineate the geologic structure and hydrostratigraphy beneath the alluvium between the Buellton Bend and the CMA/EMA boundary. However, it has not been demonstrated that the current understanding is insufficient to sustainably manage the basin, particularly given the limited pumping from the Lower Aquifer in this area. Therefore, it does not appear that there is a "data gap" or "uncertainty" (as defined by SGMA) associated with this issue. Section 6.2 should be deleted.	Central Management Area	1/31/2021 18:36
Bryan Bondy	CMA Hydrogeologic Conceptual Model (HCM) - 6.0 Data Gaps and Uncertainty	28	SYWG-CMA-HCM-Comment No. 50. Concerning Section 6.3, it is agreed that the AEM data may help delineate zones of coarser aquifer materials and the contact between the two members of the Careaga Sandstone. However, it has not been demonstrated that the current understanding of these aspects are insufficient to sustainably manage the basin. Therefore, it does not appear that there is a "data gap" or "uncertainty" (as defined by SGMA) associated with this issue. Section 6.3 should be deleted.	Central Management Area	1/31/2021 18:36
Bryan Bondy	CMA Hydrogeologic Conceptual Model (HCM) - 6.0 Data Gaps and Uncertainty	29	SYWG-CMA-HCM-Comment No. 51. Section 6.4 describes concerns with the existing groundwater level monitoring network. While these concerns may be valid (more information on the location of the monitoring wells is needed for the reader to develop an opinion), the potential monitoring network deficiencies is not an HCM issue. This discussion belongs in a forthcoming memo / GSP section that addresses the groundwater level monitoring network as per GSP Emergency Regulations 5.4.354.38, which requires assessment of the monitoring network in the GSP as part of the monitoring network section.	Central Management Area	1/31/2021 18:36
Bryan Bondy	CMA Hydrogeologic Conceptual Model (HCM) - 6.0 Data Gaps and Uncertainty	29	SYWG-CMA-HCM-Comment No. 52. Section 6.5 states that "more study is needed to determine how these perched groundwater zones are connected with the saturated flow in the Lower Aquifer or if they only function as a delayed recharge source for the underlying Lower Aquifer. This sentence is confusing and does not appear to follow hydrogeologic principles. Driscoll (1005) defines "perched groundwater" as "unconfined groundwater separated from an underlying main body of groundwater by an unsaturated zone." Therefore, by definition, perched groundwater areas are not "connected to the saturated flow" of the regional groundwater system. Based on the foregoing, it is unclear what needs to be studied and why it is important to management of the CMA.	Central Management Area	1/31/2021 18:36



Bryan Bondy	CMA Hydrogeologic Conceptual Model (HCM) - 6.0 Data Gaps and Uncertainty	29	SYWG-CMA-HCM-Comment No. 53. Section 6.5 states that more data is needed to evaluate perched groundwater conditions in the Buellton Upland. It is unclear how the current understanding of perched groundwater is insufficient to sustainably manage the basin, particularly given the fact that the perched aquifer should probably not be identified as a principal aquifer. Therefore, it does not appear that there is a "data gap" or "uncertainty" associated with perched groundwater (as defined by SGMA). Section 6.5 should be deleted. This is particularly true if it is ultimately decided that perched groundwater is not a principal aquifer.	Central Management Area	1/31/2021 18:36
Bryan Bondy	CMA Hydrogeologic Conceptual Model (HCM) - 6.0 Data Gaps and Uncertainty	29	SYWG-CMA-HCM-Comment No. 54. Section 6.6. As described in a separate comment, the spring in question is coincident with a portion of the basin that appears to be underlain by bedrock of the Monterey Formation. Thus, it does not appear that this spring is related to the principal aquifers of the CMA and, hence, is not applicable to the HCM or sustainable management of the CMA. Therefore, it does not appear that there is a "data gap" or "uncertainty" (as defined by SGMA). Section 6.6 should be deleted.	Central Management Area	1/31/2021 18:36
Bryan Bondy		N/A	SYWG-CMA-HCM-Comment No. 8. Figure 2-1. It is difficult to differentiate between the gray colors representing younger alluvium and older formations (older than Monterey Formation).	null	1/31/2021 18:18
Bryan Bondy		N/A	SYWG-CMA-HCM-Comment No. 9. Figure 2-1. The Qal label located due south of the confluence of Santa Rosa Creek and Santa Ynez River appears to be misplaced (it is located south of the CMA boundary in a hilly area that appears to be underlain by bedrock formations).	null	1/31/2021 18:18
Bryan Bondy		N/A	SYWG-CMA-HCM-Comment No. 10. Figure 2-1. Please add strike/dip information to the geologic map.	null	1/31/2021 18:18
Bryan Bondy		N/A	SYWG-CMA-HCM-Comment No. 11. Figure 1-4. It is unclear why the Buellton Upland subarea does not extend all of the way south to the bedrock outcrop that is located immediately west of the area labeled as the Buellton Bend on Figure 1-4. The geologic map and cross-section B-B' (Figures 2-1 and 2-3b) do not depict alluvium in this area, rather, these figures show Careaga Sandstone and Sisquoc Formation outcrops. Based on the geologic map, the subarea boundaries should be modified or justification should be added to Section 1.3 for including this area in the Santa Ynez River Alluvium Subarea.	null	1/31/2021 18:18
Bryan Bondy		N/A	SYWG-CMA-HCM-Comment No. 12. Figure 2-3a. The stated vertical exaggeration of 2x does not appear correct based on the elevation and distance labels. It appears that either the vertical exaggeration or one, or both, of the scales are incorrect.	null	1/31/2021 18:18
Bryan Bondy		N/A	SYWG-CMA-HCM-Comment No. 15. Figures 2-3a-c. The cross-sections should depict the location of the Santa Ynez River Fault and include a note to explain that the Pleistocene and older formations may have offsets that are not depicted on the cross-sections.	null	1/31/2021 18:18
Bryan Bondy		N/A	SYWG-CMA-HCM-Comment No. 16. Figures 2-3a-c. Horizontal distance units should be noted.	null	1/31/2021 18:18
Bryan Bondy		N/A	SYWG-CMA-HCM-Comment No. 20. Figure 3-1. Given the 500-ft contour interval, there should be a thick contour labeled with 0 elevation between the -500 ft and +500 ft contours, but it is not shown on the figure. Also, there are only eight 100-ft contours between the -500 ft and +500 ft contours - there should be nine. Perhaps the 0 contour has been omitted.	null	1/31/2021 18:18
Bryan Bondy		N/A	SYWG-CMA-HCM-Comment No. 21. Figure 3-1. The bottom elevation of the basin does not match Cross Section A-A' near the City of Buellton. Cross Section A-A' shows the bottom of the basin to be as deep as approximately 2,500 feet below sea level along the section line; however, Figure 3-1 shows the bottom no deeper than approximately 700 ft below sea level along the section line. This large discrepancy between these two figures should be addressed.	null	1/31/2021 18:18
Bryan Bondy		N/A	SYWG-CMA-HCM-Comment No. 22. Figure 3-1. The bullseyes in the contours do not appear to be geologically plausible, particularly the bullseye in the northwestern portion of the management area. The contours extending northward from the Buellton Bend into the Buellton Upland are inconsistent with the regional structure of the Santa Rita Syncline (e.g. the -500 ft contour trending due north implies that the formations are not dipping on the northern limb of the Santa Rita syncline, which is inconsistent with the sections located east and west of this area that depict a synclinal feature). The bottom of the basement should be re-evaluated, particularly in the areas noted. Interpretive control points should be used in the Leapfrog model where necessary to force the interpolation algorithms to comport with a more realistic geological interpretation of the regional geologic structure.	null	1/31/2021 18:18
Bryan Bondy		N/A	SYWG-CMA-HCM-Comment No. 23. Figure 3-2. Comments on Figure 3-1 will impact the thickness depicted in Figure 3-2.	null	1/31/2021 18:18
Bryan Bondy		N/A	SYWG-CMA-HCM-Comment No. 26. Figure 3.4. The range of vertical scale values are dramatically different than shown on the same cross section in Figure 2-3a; the vertical scale range on one or both figures appear to be incorrect. Consider alternative placement of the "lower aquifer" label to better indicate that the Careaga Sandstone is part of the Lower Aquifer.	null	1/31/2021 18:18
Bryan Bondy		N/A	SYWG-CMA-HCM-Comment No. 1. Santa Ynez Water Group (SYWG) would like to thank the CMA GSA for the opportunity to submit comments on the Draft Central Management Area Hydrogeologic Conceptual Model (HCM). SYWG's comments have been prepared by a State of California Professional Geologist and Certified Hydrogeologist. SYWG's comments are intended to help improve the HCM, help ensure consistency with GSP Emergency Regulations, and avoid unnecessary GSP implementation costs. Please do not hesitate to contact our hydrogeologist, Bryan Bondy, if you need any clarifications or would like to discuss any of our comments.	null	1/31/2021 18:11

Bryan Bondy	N/A	SYWG-CMA-HCM-Comment No. 2. General comment. The term "data gap" is used frequently in the HCM to describe incomplete or limited information concerning a specific HCM element. We would like to take this opportunity to remind the GSA that the term "data gap" has a specific meaning under SMGA and the use of this term in the HCM should be consistent with that meaning. GSP Emergency Regulations 15351(i) define the term "data gap" as "a lack of information that significantly affects the understanding of the basin setting or evaluation of the efficacy of Plan implementation, and could limit the ability to assess whether a basin is being sustainably managed." Essentially, this definition means that a data limitation must materially impact the ability to sustainably manage the basin in order to be considered a "data gap". Most, if not all, uses of the term "data gap" do not describe a lack of information that will materially impact the ability to sustainably manage the CMA. It is requested that the HCM be revised to eliminate the use of the term "data gap" except where it is truly believed that the incomplete or limited information will materially impact the ability to sustainably manage the CMA. Any uses of the term "data gap" should include a clear explanation why the incomplete or limited or information will materially impact the ability to sustainably manage the CMA. This is important because the implication is that "data gaps" identified in the GSP must be filled in order to sustainably manage the basin, likely at a significant cost to the groundwater users. Santa Ynez Water Group supports filling bona fide "data gaps" consistent with the GSP Emergency Regulations definition, but would not support costly data collection efforts to address items called "data gaps" but that do not actually materially impact the ability of the GSA to sustainably manage the CMA.	null	1/31/2021 18:11
Bryan Bondy	N/A	SYWG-CMA-HCM-Comment No. 3. General comment. When using geographic references in the text (or at least when introducing a geographic reference for the first time), please kindly indicate which figure depicts the geographic reference.	null	1/31/2021 18:11
Bryan Bondy	N/A	SYWG-CMA-HCM-Comment No. 4. General comment. The term permeability is incorrectly used in multiple instances throughout the document in conjunction with values reported in units of length/time. Hydraulic conductivity should be used instead of permeability in these instances.	null	1/31/2021 18:11
Bryan Bondy	2-3a-c	SYWG-WMA-HCM-Comment No. 12. Figures 2-3a-c. Horizontal distance units should be noted.	null	1/31/2021 18:01
Bryan Bondy	1-Mar	SYWG-WMA-HCM-Comment No. 16. Figure 3-1. Given the 500-ft contour interval, there should be a thick contour labeled with 0 elevation between the -500 ft and +500 ft contours, but it is not shown on the figure. Also, there are only eight 100-ft contours between the -500 ft and +500 ft contours - there should be nine. Perhaps the 0 contour has been omitted.	null	1/31/2021 18:01
Bryan Bondy	1-Mar	SYWG-WMA-HCM-Comment No. 17. Figure 3-1. The bullseyes in the contours do not appear to be geologically plausible. The bullseyes should be smoothed out provide a more realistic geological interpretation of the regional geologic structure.	null	1/31/2021 18:01
Bryan Bondy	2-Mar	SYWG-WMA-HCM-Comment No. 18. Figure 3-2. Comments on Figure 3-1 will impact the thickness depicted in Figure 3-2.	null	1/31/2021 18:01
Bryan Bondy	1-Feb	SYWG-WMA-HCM-Comment No. 10. Figure 2-1. Please add strike/dip information to the geologic map.	null	1/31/2021 18:01
Bryan Bondy	2-3a-c	SYWG-WMA-HCM-Comment No. 11. Figures 2-3a-c. The cross-sections should depict the location of the Santa Ynez River Fault and include a note to explain that the Pleistocene and older formations may have offsets that are not depicted on the cross-sections.	null	1/31/2021 18:01
Bryan Bondy	WMA Hydrogeologic Conceptual Model (HCM) - 1. WESTERN MANAGEMENT AREA BOUNDARIES AND SUBAREAS	1 SYWG-WMA-HCM-Comment No. 1. Santa Ynez Water Group (SYWG) would like to thank the WMA GSA for the opportunity to submit comments on the Draft Western Management Area Hydrogeologic Conceptual Model (HCM). SYWG's comments have been prepared by a State of California Professional Geologist and Certified Hydrogeologist. SYWG's comments are intended to help improve the HCM, help ensure consistency with GSP Emergency Regulations, and avoid unnecessary GSP implementation costs. Please do not hesitate to contact our hydrogeologist, Bryan Bondy, if you need any clarifications or would like to discuss any of our comments.	Western Management Area	1/31/2021 17:55
Bryan Bondy	WMA Hydrogeologic Conceptual Model (HCM) - 3 PRINCIPAL AQUIFERS AND AQUITARDS	1 SYWG-WMA-HCM-Comment No. 2. General comment. The term permeability is incorrectly used in multiple instances throughout the document in conjunction with values reported in units of length/time. Hydraulic conductivity should be used instead of permeability in these instances.	Western Management Area	1/31/2021 17:55
Bryan Bondy	WMA Hydrogeologic Conceptual Model (HCM) - Introduction Acronyms and Abbreviations Appendix	5 SYWG-WMA-HCM-Comment No. 4. Section 1.2. Discussion of the eastern boundary of the WMA corresponding to the watershed boundary of the Santa Ynez River at the point of the Santa Rosa Dam site near Santa Rosa Park, appears to conflict with Figure 4-5, which does not depict the CMA western boundary corresponding with a watershed boundary at this location along the Santa Ynez River.	Western Management Area	1/31/2021 17:55
Bryan Bondy	WMA Hydrogeologic Conceptual Model (HCM) - 1. WESTERN MANAGEMENT AREA BOUNDARIES AND SUBAREAS	7 SYWG-WMA-HCM-Comment No. 5. Section 1.3.3 (Burton Mesa) states that "During wet years, high rates of precipitation result in temporary runoff during storm events and perched conditions above non-water-bearing consolidated bedrock and/or above clays that separate the perched water from the regional aquifer system (Arcadis 2016)." This underlined portion of this sentence is not true - there is no regional aquifer system present beneath the Burton Mesa.	Western Management Area	1/31/2021 17:55
Bryan Bondy	WMA Hydrogeologic Conceptual Model (HCM) - 1. WESTERN MANAGEMENT AREA BOUNDARIES AND SUBAREAS	7 SYWG-WMA-HCM-Comment No. 6. Section 1.3.3 (Burton Mesa) This section should state there is no principal aquifer identified in the Burton Mesa, there will be no management of this area under the GSP, and a future basin boundary modification may be considered to remove this area from the basin.	Western Management Area	1/31/2021 17:55
Bryan Bondy	WMA Hydrogeologic Conceptual Model (HCM) - 1. WESTERN MANAGEMENT AREA BOUNDARIES AND SUBAREAS	7 SYWG-WMA-HCM-Comment No. 7. Section 1.3.4 (Lompoc Terrace) This section states that "The portion of Careaga Sand present in the Lompoc Terrace is a down-faulted wedge, overlain by younger Orcutt Sand deposits." This description is not consistent with cross-section B-B', which does not depict any faulting or a wedge-shape feature of Careaga Sandstone.	Western Management Area	1/31/2021 17:55

Bryan Bondy	WMA Hydrogeologic Conceptual Model (HCM) - 1. WESTERN MANAGEMENT AREA BOUNDARIES AND SUBAREAS	7	SYWG-WMA-HCM-Comment No. 8. Section 1.3.4 (Lompoc Terrace) and Figure 1-4. It is unclear what the geologic basis is for the boundary between the Lompoc Terrace and Lompoc Plain. The boundary segment located from the Pacific Ocean to approximately 3 miles inland seems arbitrarily straight and cuts across the hills instead. To the east, the boundary appears to follow the edge of the river alluvium at the base of the hills. In either case, cross section B-B' and the outcrops of the Careaga Sandstone within the Lompoc Terrace subarea depicted on the geologic map suggest that the boundary between the Lompoc Terrace and Lompoc Plain may be more appropriately placed along the outcrop and subcrop of the Careaga Sandstone because this aquifer appears to extend from the hills northward beneath the Lompoc Plain. Please describe the technical rationale for the existing boundary between the Lompoc Terrace and Lompoc Plain shown on Figure 1-4 or modify the boundary to include the area with Careaga Sandstone within the Lompoc Plain.	Western Management Area	1/31/2021 17:55
Bryan Bondy	WMA Hydrogeologic Conceptual Model (HCM) - 1. WESTERN MANAGEMENT AREA BOUNDARIES AND SUBAREAS	7	SYWG-WMA-HCM-Comment No. 9. Section 1.3.4 (Lompoc Terrace) This section should state there is no principal aquifer identified in the western and southern portions of the Lompoc Terrace Subarea, there will be no management of those portions of the subarea, and a future basin boundary modification may be considered to remove portions of the subarea from the Basin that are not underlain by a principal aquifer.	Western Management Area	1/31/2021 17:55
Bryan Bondy	WMA Hydrogeologic Conceptual Model (HCM) - 1. WESTERN MANAGEMENT AREA BOUNDARIES AND SUBAREAS	14	SYWG-WMA-HCM-Comment No. 13. Section 3.1 (or other section) should describe discrepancies between the current basin boundary and the extent of water-bearing units depicted in the geologic map (Figure 2-2) and note that a future basin boundary modification may be considered to properly align the basin boundary with the mapped extent of the water-bearing units.	Western Management Area	1/31/2021 17:55
Bryan Bondy	WMA Hydrogeologic Conceptual Model (HCM) - 3 PRINCIPAL AQUIFERS AND	14	SYWG-WMA-HCM-Comment No. 14. Section 3.1. Discussion of crystalline rocks is not applicable, and potentially misleading to the lay reader, because no such units are identified on the geologic map or cross sections nor are they discussed in Section 2.1.	Western Management Area	1/31/2021 17:55
Bryan Bondy	WMA Hydrogeologic Conceptual Model (HCM) - 3 PRINCIPAL AQUIFERS AND AQUITARDS	15	SYWG-WMA-HCM-Comment No. 15. Section 3.1.1 deals with the definable bottom of the basin, but includes substantial discussion of the lateral basin boundary. The lateral basin boundary discussion is out-of-place here and should be moved elsewhere, perhaps Section 1.2.	Western Management Area	1/31/2021 17:55
Bryan Bondy	WMA Hydrogeologic Conceptual Model (HCM) - 3 PRINCIPAL AQUIFERS AND AQUITARDS	18-19	SYWG-WMA-HCM-Comment No. 19. Section 3.2.1 describes groundwater as locally present in "shallow" perched conditions within the Orcutt Sand Deposits on pages 18-19. This discussion occurs within Section 3.2.1 that is identifying the principal aquifers of the basin (i.e. aquifers that will be managed under the GSP). GSP Emergency Regulations 351(a) defines "Principal aquifers" as "aquifers or aquifer systems that store, transmit, and yield significant or economic quantities of groundwater to wells, springs, or surface water systems." It is unclear, what areas of perched groundwater, if any meet the SGMA definition of a principal aquifer. In general, perched groundwater rarely meets the criteria in the SGMA definition. The HCM cites a historical study from 1972 that implies there were some wells at that time that produced groundwater from perched zones. However, the HCM does not describe whether there is current perched groundwater pumping and whether any pumping is significant enough to justify management of the perched groundwater. The HCM should analyze whether the various areas of perched water truly meet the SGMA definition of a principal aquifer and whether management of perched groundwater is warranted. Based on the information provided in the HCM, it does not appear that perched groundwater should be considered a principal aquifer for the purposes of the CMA GSP. This certainly appears to be the case in the Burton Mesa where the HCM states there is no groundwater pumping. At a minimum, justification is needed for including perched groundwater in the principal aquifers for the GSP. The more likely outcome seems to be that discussion of perched groundwater should be removed from this section of the HCM that describes the principal aquifers and described elsewhere, because perched groundwater does not appear to be part of a principal aquifer or a principal aquifer itself and management of perched groundwater appears to be unnecessary and impractical based on the information provided in the HCM.	Western Management Area	1/31/2021 17:55
Bryan Bondy	WMA Hydrogeologic Conceptual Model (HCM) - 3 PRINCIPAL AQUIFERS AND AQUITARDS	19	SYWG-WMA-HCM-Comment No. 20. Section 3.2.1 describes small quantities of groundwater present in younger alluvium less than 30-ft thick in the small drainages of the Lompoc Terrace on page 19. This discussion occurs within Section 3.2.1 that is identifying the principal aquifers of the basin (i.e. aquifers that will be managed under the GSP). GSP Emergency Regulations 351(a) defines "Principal aquifers" as "aquifers or aquifer systems that store, transmit, and yield significant or economic quantities of groundwater to wells, springs, or surface water systems." As the text on page 19 describes, the groundwater present these areas does not meet the SGMA definition of a principal aquifer. Therefore, the discussion of this groundwater should be removed from this section of the HCM that describes the principal aquifers and described elsewhere.	Western Management Area	1/31/2021 17:55
Bryan Bondy	WMA Hydrogeologic Conceptual Model (HCM) - 3 PRINCIPAL AQUIFERS AND	20	SYWG-WMA-HCM-Comment No. 21. Page 20, subsection "Lower Aquifer in the Lompoc Upland Subarea". The text references Figure 2-3a, cross-section B-B'. This section does not transect the Lompoc Upland. The correct reference is cross-section C-C', Figure 2-3b.	Western Management Area	1/31/2021 17:55
Bryan Bondy	WMA Hydrogeologic Conceptual Model (HCM) - 3 PRINCIPAL AQUIFERS AND AQUITARDS	20	SYWG-WMA-HCM-Comment No. 22. Page 20, subsection "Lower Aquifer in the Lompoc Terrace Subarea" states that "The Lompoc Terrace subarea, the hilly area adjacent to the southwest part of the Lompoc Plain subarea, is a down-faulted wedge of Careaga Sand overlain by Orcutt Sand." This description is not consistent with cross section B-B', which does not depict any faulting or a wedge-shape feature of Careaga Sandstone. The following sentence: "The Lower Aquifer is in the buried syncline that becomes broader and widens to the northeast" appears to be much more consistent with cross-section B-B'.	Western Management Area	1/31/2021 17:55

Bryan Bondy	WMA Hydrogeologic Conceptual Model (HCM) - 3 PRINCIPAL AQUIFERS AND AQUITARDS	20-21	SYWG-WMA-HCM-Comment No. 23. Pages 20-21, subsection "Lower Aquifer in the Lompoc Terrace Subarea" states that "The groundwater in the Lower Aquifer of the Lompoc Terrace follows the surface topography and flows either into the Lower Aquifer of the Lompoc Plain to the northeast or into the adjacent coastal drainage outside of the Santa Ynez River watershed (Bear Creek)." It appears unlikely that groundwater in the Lower Aquifer of the Lompoc Terrace flows into Bear Creek because the Lower Aquifer does not appear to extend southward to Bear Creek.	Western Management Area	1/31/2021 17:55
Bryan Bondy	WMA Hydrogeologic Conceptual Model (HCM) - 3 PRINCIPAL AQUIFERS AND AQUITARDS	22-23	SYWG-WMA-HCM-Comment No. 24. Page 22-23, Water Quality, Upper Aquifer. Consider expanding this discussion to include the information presented by Curtis L. during the January 2021 WMA GSA meeting that describes the estuary and salinity in the westernmost portion of the Lompoc Plain.	Western Management Area	1/31/2021 17:55
Bryan Bondy	WMA Hydrogeologic Conceptual Model (HCM) - 3 PRINCIPAL AQUIFERS AND AQUITARDS	25	SYWG-WMA-HCM-Comment No. 25. Section 4.2.2. Page 25 states that "Potential groundwater banking projects will be described in further detail when projects and management actions are developed for the WMA. Potential areas for artificial recharge have been identified along the Santa Ynez River and in the Santa Rita Upland, and are identified as "excellent" shown on Figure 4-3." It is unclear why the HCM presumes that that projects and/or management actions will be necessary to sustainably manage the WMA. This conclusion is premature given that Sustainable Management Criteria have not yet been established and future conditions have not yet been evaluated. Even if projects and/or management actions are necessary, it is premature to conclude that groundwater banking would be a project that would be included in the GSP.	Western Management Area	1/31/2021 17:55
Bryan Bondy	WMA Hydrogeologic Conceptual Model (HCM) - 4 HYDROLOGIC CHARACTERISTICS	26	SYWG-WMA-HCM-Comment No. 26. Section 4.3.1, page 26 states that "As mountain front groundwater recharge, which is the subsurface inflow of groundwater to lowland aquifers from adjacent mountains. This likely occurs in upper elevations of the Santa Rita Upland subarea." It is unclear why mountain front recharge is not also expected in the upper elevations of the Lompoc Upland subarea.	Western Management Area	1/31/2021 17:55
Bryan Bondy	WMA Hydrogeologic Conceptual Model (HCM) - 4 HYDROLOGIC CHARACTERISTICS	29	SYWG-WMA-HCM-Comment No. 27. Regarding Section 4.3.4, Treated Wastewater Sources, it would be helpful to include a representative statistic for recent annual discharge volumes in a new column in Table 1.	Western Management Area	1/31/2021 17:55
Bryan Bondy	WMA Hydrogeologic Conceptual Model (HCM) - 4 HYDROLOGIC CHARACTERISTICS	33	SYWG-WMA-HCM-Comment No. 28. Section 5.4. Groundwater dependent ecosystems are addressed under the Groundwater Conditions requirements for GSPs (GSP Emergency Regulations 354.16(g)), not the HCM requirements 354.14. It is suggested that potential groundwater dependent ecosystems discussion be moved to the forthcoming Groundwater Conditions memo to be consistent with the structure of the GSP regulations.	Western Management Area	1/31/2021 17:55
Bryan Bondy	WMA Hydrogeologic Conceptual Model (HCM) - 5 USES AND USERS OF GROUNDWATER IN THE WESTERN MANAGEMENT AREA	33	SYWG-WMA-HCM-Comment No. 29. Section 5.4. GSP Emergency Regulations 354.16(g) require identification of groundwater dependent ecosystems, not potential groundwater dependent ecosystems (pGDEs). The pGDEs discussed in Section 5.4 and identified on Figure 5-2 must be further evaluated to determine, based on available data, whether they are indeed dependent on groundwater from the regional water table in a principal aquifer. For the upland and terrace areas, pGDEs should be removed from consideration in areas where the water table in the lower aquifer is deeper than the anticipated root zone on a regular basis and/or where the mapped plant communities appear to be relying as source of water other than groundwater. This should be completed before sustainable management criteria are developed.	Western Management Area	1/31/2021 17:55
Bryan Bondy	WMA Hydrogeologic Conceptual Model (HCM) - 5 USES AND USERS OF GROUNDWATER IN THE WESTERN MANAGEMENT AREA	33	SYWG-WMA-HCM-Comment No. 30. Section 5.4.1. It is unclear why the content of Section 5.4.1 - Discharge and Springs Areas is included as subsection of Section 5.4 - Potential Groundwater Dependent Ecosystems. While these two topics are potentially related in some cases, it is misleading as structured because discharge and spring areas are not necessarily potential groundwater dependent ecosystems. GSP Emergency regulations separate these aspects with the requirement to identify discharge areas and springs falling under the HCM requirements 354.14(d)(4) and identification of groundwater dependent ecosystems falling under the Groundwater Conditions requirements 354.16(g). As per a prior comment, it is suggested that potential groundwater dependent ecosystems discussion be moved to the forthcoming Groundwater Conditions memo to be consistent with the structure of the GSP regulations.	Western Management Area	1/31/2021 17:55
Bryan Bondy	WMA Hydrogeologic Conceptual Model (HCM) - 5 USES AND USERS OF GROUNDWATER IN THE WESTERN MANAGEMENT AREA	33	SYWG-WMA-HCM-Comment No. 31. Section 5.4.1. states that "The quantity of water discharging from these six springs located within the WMA is currently a data gap." GSP Emergency Regulations 351(l) define the term "data gap" as "a lack of information that significantly affects the understanding of the basin setting or evaluation of the efficacy of Plan implementation, and could limit the ability to assess whether a basin is being sustainably managed." It is premature to conclude that sustainable management will require us to know the spring discharge rates to sustainably manage the basin. It is agreed that a preliminary review of the springs is warranted to determine: (1) are the springs fed by a principal aquifer; (2) are the spring flows a material part of the water budget; and (3) are there beneficial users that depend on the springs. Unless items 1-3 are affirmatively established, the spring flow rates would not likely need to be precisely known or monitored in order to sustainably manage the basin. A quick visual inspection of the springs could shed light on these questions. It is requested that section 5.4.1 be reframed consistent with this comment.	Western Management Area	1/31/2021 17:55

Bryan Bondy	WMA Hydrogeologic Conceptual Model (HCM) - 5 USES AND USERS OF GROUNDWATER IN THE WESTERN MANAGEMENT AREA	34-35	SYWG-WMA-HCM-Comment No. 32. Section 6 is intended to address data gaps and uncertainty in the hydrogeologic conceptual model. We would like to take this opportunity to remind the GSA that the terms "data gap" and "uncertainty" have specific meanings under SMGA and that items should only be included in this section that are consistent with those definitions. The definitions are as follows. GSP Emergency Regulations 5.351(l) define the term "data gap" as "a lack of information that significantly affects the understanding of the basin setting or evaluation of the efficacy of Plan implementation, and could limit the ability to assess whether a basin is being sustainably managed." GSP Emergency Regulations 5.351(a) define the term "uncertainty" as "a lack of understanding of the basin setting that significantly affects an Agency's ability to develop sustainable management criteria and appropriate projects and management actions in a Plan, or to evaluate the efficacy of Plan implementation, and therefore may limit the ability to assess whether a basin is being sustainably managed." Essentially, these definitions mean that a data limitation or lack of information must materially impact the ability to sustainably manage the basin in order to be considered a "data gap" or "uncertainty". Most, if not all of the items, included in Section 6 subsections do not describe a lack of information or lack of understanding that will materially impact the ability to sustainably manage the WMA. Therefore, it is requested that the HCM be revised to eliminate those items from Section 6 that do not meet the SGMA definitions of "data gaps" or "uncertainty." Certainly these items could be described elsewhere absent these terms, but any items that are retained in this section should include a clear explanation how the lack of information or understanding will materially impact the ability to sustainably manage the WMA. This is important because the implication is that "data gaps" and "uncertainties" identified in the GSP must be filled in order to sustainably manage the basin, likely at a significant cost to the groundwater users. Santa Ynez Water group supports filling bona fide "data gaps" and "uncertainties" consistent with the GSP Emergency Regulations, but will not likely support costly data collection efforts to address items called "data gaps" or "uncertainties" but that do not actually materially impact the ability of the GSA to sustainably manage the WMA.	Western Management Area	1/31/2021 17:55
Bryan Bondy	WMA Hydrogeologic Conceptual Model (HCM) - 6 DATA GAPS AND UNCERTAINTY	34	SYWG-WMA-HCM-Comment No. 33. Concerning Section 6.1, it is agreed that the AEM data will help update the current understanding of faults that may affect groundwater flow. However, it has not been demonstrated that the current understanding is insufficient to sustainably manage the basin. Therefore, it does not appear that there is a "data gap" or "uncertainty" (as defined by SGMA) with respect to faults. Section 6.1 should be deleted. This topic is adequately described in Section 2.2.2.	Western Management Area	1/31/2021 17:55
Bryan Bondy	WMA Hydrogeologic Conceptual Model (HCM) - 6 DATA GAPS AND UNCERTAINTY	34	SYWG-WMA-HCM-Comment No. 34. Section 6.2 lists perched groundwater of the Burton Mesa and Lompoc Terrace subareas as a data gap. It is unclear how the current understanding of perched groundwater is insufficient to sustainably manage the basin, particularly given the fact that the perched aquifer should probably not be identified as a principal aquifer. Therefore, it does not appear that there is a "data gap" or "uncertainty" associated with perched groundwater (as defined by SGMA). Section 6.2 should be deleted. This is particularly true if it is ultimately decided that perched groundwater is not a principal aquifer.	Western Management Area	1/31/2021 17:55
Bryan Bondy	WMA Hydrogeologic Conceptual Model (HCM) - 6 DATA GAPS AND UNCERTAINTY	34	SYWG-WMA-HCM-Comment No. 35. Section 6.3 describes concerns with the existing groundwater level monitoring network for the Santa Rita Upland subarea. While these concerns may be valid (more information on the location of the monitoring wells is needed for the reader to develop an opinion), the potential monitoring network deficiencies is not an HCM issue. This discussion belongs in a forthcoming memo / GSP section that addresses the groundwater level monitoring network as per GSP Emergency Regulations 5.354.38, which requires assessment of the monitoring network in the GSP as part of the monitoring network section.	Western Management Area	1/31/2021 17:55
Bryan Bondy	WMA Hydrogeologic Conceptual Model (HCM) - 6 DATA GAPS AND UNCERTAINTY	34	SYWG-WMA-HCM-Comment No. 36. Section 6.3 states that "Additional data is needed to understand the role of perched aquifers that occur in the Santa Rita Upland." It is unclear how the current understanding of perched groundwater is insufficient to sustainably manage the basin, particularly given the fact that the perched aquifer should probably not be identified as a principal aquifer. Therefore, it does not appear that there is a "data gap" or "uncertainty" associated with perched groundwater (as defined by SGMA). This discussion should be deleted from Section 6.	Western Management Area	1/31/2021 17:55
Bryan Bondy	WMA Hydrogeologic Conceptual Model (HCM) - 6 DATA GAPS AND UNCERTAINTY	35	SYWG-WMA-HCM-Comment No. 37. Section 6.4. states that "The quantity of water discharging from the six springs located within the WMA is currently a data gap. Additional data is needed to understand how discharge from these springs changes over seasons and during wet and dry years." GSP Emergency Regulations 5.351(l) define the term "data gap" as "a lack of information that significantly affects the understanding of the basin setting or evaluation of the efficacy of Plan implementation, and could limit the ability to assess whether a basin is being sustainably managed." It is premature to conclude that sustainable management will require us to know "how discharge from these springs changes over seasons and during wet and dry years." It is agreed that a preliminary review of the springs is warranted to determine: (1) are the springs fed by a principal aquifer; (2) are the spring flows a material part of the water budget; and (3) are there beneficial users that depend on the springs. Unless items 1-3 are affirmatively established, the variability of spring flow rates over time would not need to be determined in order to sustainably manage the basin. A quick visual inspection of the springs could shed light on these questions. It is requested that section 6.4 be reframed consistent with this comment.	Western Management Area	1/31/2021 17:55

Gay Infanti	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.1 Hydrogeologic Conceptual Model	N/A	The tributaries below Bradbury Dam and related tributary alluvium are discussed in several sections of the HCM, hence my "general comment" related to them. It's unclear from these discussions whether these creeks are considered ground water or surface water subject to the SWRCB's jurisdiction. It was previously explained to me that these are indeed considered ground water for purposes of sustainability management, but it would help to clarify this in the HCM. Consider adding a statement to this effect in 3.1.1.3.1, page 29. See also page 65 and page 67, which says there is limited discharge from the uplands via the valleys of Zaca creek, Ballard Canyon and Adobe Canyon. Please clarify if this means these creeks are also considered ground water.	Eastern Management Area	1/21/2021 17:11	
Gay Infanti	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.1.3 Principal Aquifers and	28	Aren't all three upstream reservoirs, Jamieson, Gibraltar and Cachuma, also upstream of the EMA? It isn't clear from the maps that Cachuma is within the EMA, although page 28 implies that it is.	Eastern Management Area	1/21/2021 17:11	
Gay Infanti	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.1.2 Regional Geology	N/A	3.1.2.2 mentions the EMA boundary with the San Antonio Creek Groundwater Basin and says "it is not necessarily a geologic barrier to groundwater flow. What are the implications if it is not? Are there plans to make a definitive determination?"	Eastern Management Area	1/21/2021 17:11	
Gay Infanti	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.1.4 Data Gaps and	N/A	Under Well Completion Data,, the first two sentences seem garbled. I read it several times and don't understand - seems like an edit is needed.	Eastern Management Area	1/21/2021 17:11	
Gay Infanti	SY EMA Hydrogeologic Conceptual Model (Nov. 2020) - 3.2.3 Groundwater Quality Distribution and Trends	N/A	What are the sources of volatile organic compounds , e.g., benzene, toluene, EDC in EMA water? Can these contaminants flow from their sources? Will the GSP address this? Upland drainage appears to account for concentrations of water contaminants in the south west portion of the EMA. This is especially problematic since much of the water pumped from the southwest portion of the EMA is used for drinking water (residential and commercial), not ag. On that subject, there's not much mention of water quality, or harm thereof, as it relates to human or wildlife use in this document. I've read that most of the high priority basin GSPs failed to address this as well.	Eastern Management Area	1/21/2021 17:11	
Amber Thompson Maygan Cline		N/A	TEST of website link (Contact Us page)	null	1/4/2021 14:37	
		N/A	Maria and team, I'd like to see a button on the home page or somewhere else considered 'general' for the public to provide general feedback on the SGMA process in the Basin. There is no easy way to find/see the comment form without digging into a specific management area subsection of the website. Please help! Thanks from the Geosyntec/Dudek stakeholder and engagement team.	null	1/4/2021 9:53	
Citizen Advisory Groups CMA EMA WMA Leonard Fleckenstein	CMA HCM Figures	N/A	See attached for comments received from CAGs on Newsletter #2 plus final Draft Newsletter #2	null	12/10/2020 9:27	Newsletter #2 received comments.pdf <a href="https://portal.santaynezwater.org/service/document/download/370">https://portal.santaynezwater.org/service/document/download/370</a>
Leonard Fleckenstein	CMA HCM Figures	N/A	In Figure 4-5 (Tributary Drainage): The blue lines for water flows in 2 canyons (de Laguna and de los Palos Blancos) never reach the SY River. If those ephemeral streams are actual tributaries, then they should be shown reaching the river. If they never actually do reach the river, is there any purpose in showing them on this tributary map?	Central Management Area	12/6/2020 22:08	
Leonard Fleckenstein	CMA HCM Figures	N/A	This is an additional comment on Figure 3-4 (Aquifer Cross Section A-A'): the Paso Robles Formation should be labeled (QTP) on the cross-section since "QTP" is already shown in the key box.	Central Management Area	12/6/2020 22:06	
Leonard Fleckenstein	CMA HCM Figures	N/A	In Figure 3-4 (Aquifer Cross Section A-A'): There is a dark line showing the base of the upper aquifer. Could there also be a dark line to show the base of the lower aquifer? I presume such a line would be at the bottom of the Careaga Sandstone (Tca). As currently depicted in this figure, it looks (to me) as if the "lower aquifer" is synonymous with the Paso Robles Formation. I realize the Tech Memo explains the extent of the lower aquifer, but it would be helpful if this figure showed the aquifer boundaries.	Central Management Area	12/6/2020 22:03	
Leonard Fleckenstein	CMA HCM Figures	N/A	In Figure 1-2 (HC Model for CMA): Water flow from urban runoff/stormwater should be included since it is part of the water flow in the landscape, and it isn't limited to the WWRf recharge shown in the model. The runoff concept should be included in the figure and in the HCM. The Tech Memo also should mention the role of urban runoff/stormwater as part of the HCM.	Central Management Area	12/6/2020 21:58	
Len Fleckenstein Gay Infanti	EMA Data Management Plan - DRAFT - 2.4 Data Input Process	N/A 10	See attached. Figure 4 - Data Input Process describes the workflow for data input and generally describes the data sources, while 2.4.1 (page 11) Figure 5 - Template Import Process for Local Data describes the steps for data input leading to Data Compilation. Nowhere does it say who the responsible party is for bringing/inputting these data from their sources into the Data Management System. To me, this Chapter is incomplete.	null Eastern Management Area	2/26/2020 15:14 1/21/2020 15:04	Comments on CMA outreach plan.docx <a href="https://portal.santaynezwater.org/service/document/download/245">https://portal.santaynezwater.org/service/document/download/245</a>
Gay Infanti	EMA Data Management Plan - DRAFT - 2. DMS Development	12-Nov	This section says that templates will be used to input the data using rules that restrict format, alphanumeric properties and other filters. The process steps are shown in Figure 5 and Figure 6 shows a template example. However, shouldn't there be more detailed instructions in this document for the users or is this DMP simply intended to be a high-level plan for the DMS? When the Data Management System is completed, will there be a system descriptions with user instructions?	Eastern Management Area	1/21/2020 15:04	
Mary Heyden		N/A	Please see my comments on the Draft Communication and Engagement Plan attached below.	null	1/14/2020 12:06	Mary's Comments on Draft Communications & Engagement Plan.docx <a href="https://portal.santaynezwater.org/service/document/download/235">https://portal.santaynezwater.org/service/document/download/235</a>
Gay Infanti	EMA Data Management Plan - DRAFT - 1.1 SGMA DMS Requirements	2	Section 1.0 (Introduction), 2nd paragraph: Suggest first sentence read as follows: GEI Consultants completed a needs assessment to determine the type of data....Section 1.0, 3rd paragraph: Suggest first sentence should read as follows: The Plan will serve as guidance for the collection, analysis, and management of groundwater.... (add analysis)	Eastern Management Area	12/11/2019 13:49	
Gay Infanti	EMA Data Management Plan - DRAFT - 2.1 DMS Coordination	4	Will a data dictionary including terminology, abbreviations, and data values be added to this document?	Eastern Management Area	12/11/2019 13:49	
Gay Infanti	EMA Data Management Plan - DRAFT - 2.1 DMS Coordination	5	Will the process for sharing unique data sets generated in one or more of the MAs be documented in this Data Management Plan (DMP)? Will the "common protocol" for sharing data be added to this DMP, once it is decided?	Eastern Management Area	12/11/2019 13:49	

Gay Infanti	EMA Data Management Plan - DRAFT - 2.2 Data Needs	6	Section 2.2.1, the paragraph following Figure 2 mentions that the DWR's BMP describes how groundwater elevations may be used as a proxy metric, "provided the GSP demonstrates that there is significant correlation between groundwater levels and other metrics." Please explain what this means and how it is relevant to the EMA. Is this related to the process for measuring impacts of groundwater use on surface water? Also, please define isocoutour.	Eastern Management Area	12/11/2019 13:49	
Gay Infanti	EMA Data Management Plan - DRAFT - 2.2 Data Needs	6	Table 1. Data required to monitor the SGMA sustainability indicators: There are several indicators shown in this table that require definitions, e.g., extensometer, + constituents, InSAR, and stream stages; not all stakeholders are familiar with these terms so I suggest that a glossary be added to this document for all terms not generally understood by non-experts.	Eastern Management Area	12/11/2019 13:49	
Gay Infanti	EMA Data Management Plan - DRAFT - 2.2 Data Needs	7	Section 2.2.1, first paragraph, second sentence: There appears to be a word missing (following available) in this sentence.	Eastern Management Area	12/11/2019 13:49	
Gay Infanti	EMA Data Management Plan - DRAFT - 2.2 Data Needs	7	Section 2.2.2. Data Sources. In Table 2. Data Sources to Populate Santa Ynez Basin DMS, there a numerous data sources included that are not defined, e.g., DWR CASGEM, DWT (Well Logs), DWR CDEC, Geotracker GAMA, etc. As previously suggested, a Glossary to define these data sources should be added to this document. Also please define "Participating Agencies".	Eastern Management Area	12/11/2019 13:49	
Gay Infanti	EMA Data Management Plan - DRAFT - 2.3 Data Structure	9	Table 3. DMS Table Descriptions. Please define the following terms: lithology, diversion site, confinement, and transmissivity, These definitions could be added to the Glossary earlier suggested..	Eastern Management Area	12/11/2019 13:49	
Gay Infanti	EMA Data Management Plan - DRAFT - 2.4 Data Input Process	10 and 11	As earlier suggested, please define CASGEM.	Eastern Management Area	12/11/2019 13:49	
Gay Infanti	EMA Data Management Plan - DRAFT - 2.4 Data Input Process	12	Section 2.4.3, first paragraph, second sentence: Where is Section 5, which this sentence says describes the visualization tool?	Eastern Management Area	12/11/2019 13:49	
Gay Infanti	EMA Data Management Plan - DRAFT - 3. Web Interface	13	Overall, i.e., not only in this Section 3, there are several places in this document indicating that things will be done or will be added to the DMS. That said, is it premature to be asking for public comments on this document at this stage, or should the DMS and this document first be completed? In paragraph 4, second sentence, it says the data viewer will have additional features such as GSA. local agency, and Bulletin 118 basin boundaries to provide context and facilitate EMA interaction with the DMS data. What is Bulletin 118?	Eastern Management Area	12/11/2019 13:49	
Sadie Buelow	EMA Data Management Plan - DRAFT - 3. Web Interface	N/A	This is a test comment from Bill Buelow to evaluate the GCP. Not a comment. No action needed.	Eastern Management Area	12/10/2019 14:38	
WMA CAG		N/A	See attached WMA CAG Memo on the Draft Outreach and Engagement Plan	null	12/9/2019 15:37	WMA CAG Memo on Outreach Plan.pdf <a href="https://portal.santaynezwater.org/service/document/download/234">https://portal.santaynezwater.org/service/document/download/234</a>
CMA CAG		N/A	See attached Memo from the CMA CAG.	null	12/9/2019 15:30	CMA CAG Memo on OEP.pdf <a href="https://portal.santaynezwater.org/service/document/download/233">https://portal.santaynezwater.org/service/document/download/233</a>
Jeanette Lombardo	WMA Data Management Plan - DRAFT	N/A	Please see attachment	Western Management Area	11/29/2019 12:43	Draft CMA_WMA Data Management Plan Comments.docx <a href="https://portal.santaynezwater.org/service/document/download/232">https://portal.santaynezwater.org/service/document/download/232</a>
Jeanette Lombardo	CMA Data Management Plan - DRAFT	N/A	Please see attachments	Central Management Area	11/27/2019 19:42	Draft CMA Data Management Plan Comments.docx <a href="https://portal.santaynezwater.org/service/document/download/231">https://portal.santaynezwater.org/service/document/download/231</a>
Jeanette Lombardo	CMA Public Outreach and Engagement Plan - DRAFT - 1. Background	2	Section 1.1 SGMA Requirments for Stakeholder Engagement.Phase 2. The GSP must include a communication section that includes the following: Identification of opportunities for public engagement and a discussion of how public input and response will be used.The plan is very detailed in the collection of the feedback from stakeholder, but appears to be lacking in how those responses will be replied to and/or used in the development of the plan. This administrative record needs to be clearly understood now-especially in regards to the criteria for the avoidance of undesirable results for the six sustainability indicators.	Central Management Area	11/26/2019 21:38	
Jeanette Lombardo	CMA Public Outreach and Engagement Plan - DRAFT - 3. Central Management Area	5	3.1 Stakeholders and Interested Parties"Stakeholders can also subscribe to the interested parties list at <a href="http://www.santaynezwater.org">www.santaynezwater.org</a> or by emailing <a href="mailto:cma.gsa.syrbg@gmail.com">cma.gsa.syrbg@gmail.com</a> Now that the website is up and running, perhaps this needs to be corrected? Additionally, outreach to large Grower/Shippers and AG organizations needs to occur now. Ag organizations need to include this contact information in correspondence to their membership. CMA Board needs to have updates to be made aware of size and scope of the interested party list-to verify these efforts. A A	Central Management Area	11/26/2019 21:38	
Jeanette Lombardo	CMA Public Outreach and Engagement Plan - DRAFT - 4. Purpose	7	4 Purpose 4.2 Outreach and Engagement Goals 3. "Build and maintain a website where stakeholders can obtain CMA GSA information, ask questions, and provide comments; and"Question: Are the comments on the completed GSP only to be submitted in writing, in electronic format, through the online comment form? Will public comments from the GSA meetings be input by consultants or will recordings be made available? Will the CMA Citizens Advisory Group comments be uploaded to the online version, or just be provided in the agenda packets? This will become more important as we move on down the road.A	Central Management Area	11/26/2019 21:38	
Gay Infanti	EMA Communication and Engagement Plan - DRAFT - 5. Stakeholder Survey	7	Third paragraph: How and when will our survey be distributed? I think we might miss the summer 2019 schedule. If true, then change to fall 2019. Won't we need the EMA GSA's approval of the survey before it can go out? Their next meeting won't be until October.	Eastern Management Area	11/18/2019 15:41	
Gay Infanti	EMA Communication and Engagement Plan - DRAFT - 6. Venues and Methods: Opportunities for Engagement	8	Second Section (Focused Engagement), Tribal Governments: I'm not clear on how the tribal government will participate. This paragraph says it will participate in the planning, financing and management of the SGMA activities. Chairman Kahn's letter points out that the Reservation is not subject to SGMA, but does receive potable water from ID#1. Will their participation therefore be limited to potable water or will they participate in planning, financing and managing sustainability as required by the GSP for their other uses as well? If not, how can our GSP be successful if there is a significant amount of water not subject to its requirements?	Eastern Management Area	11/18/2019 15:41	

Gay Infanti	EMA Communication and Engagement Plan - DRAFT - 6. Venues and Methods: Opportunities for Engagement	9	Figure 4: I can clearly see the cities of Lompoc and Buellton on this map, but cannot locate Solvang within a dashed border as indicated in the map legend.Organizational Groups: GSA leadership may plan to attend or host meetings with organizational group. I think this should say will, rather than may. I believe outreach to all stakeholder groups is necessary to ensure GSP success. Can the CAG be used for this purpose? GSA Committee Meetings, second sentence: This is the first place where 'technical consultants' are mentioned. Who are they and what is their role in GSP preparation?	Eastern Management Area	11/18/2019 15:41
Gay Infanti	EMA Communication and Engagement Plan - DRAFT - 6. Venues and Methods: Opportunities for Engagement	10	Public Notices and Hearings: I assume the GSP will go through several iterations before it is ready for approval. That being true, I think public hearings would be appropriate for each iteration in order to ensure all stakeholder comments are heard by the GSA Committee. If this is the intention of the second bullet, then clarification should be made here.	Eastern Management Area	11/18/2019 15:41
Gay Infanti	EMA Communication and Engagement Plan - DRAFT - 7. Evaluation and Assessment	12	Table 3: Is there a schedule for the activities listed in this Table? Will the Stakeholder Survey results be posted on the GCP? If so, will the results be analyzed and summarized in a report that will be easily understandable by all Stakeholders?	Eastern Management Area	11/18/2019 15:41
Gay Infanti	EMA Communication and Engagement Plan - DRAFT - 1. Introduction to the Santa Ynez River Valley Basin EMA	1	Paragraph 2, third sentence: The stated purpose of this plan is to "facilitate effective communication and engagement with the multiple and varied stakeholders in the EMA". But what is the purpose of this engagement? If, as I assume, it is to gather and use stakeholder input to the GSP development, then I think that should be stated here.	Eastern Management Area	11/18/2019 15:41
Gay Infanti	EMA Communication and Engagement Plan - DRAFT - 1. Introduction to the Santa Ynez	1	Figure 1: Nowhere in this figure does it show identification of stakeholder issues or development of solutions to those issues - a missing step in the process. It seems like that step should precede definition of messages and talking points in this figure.	Eastern Management Area	11/18/2019 15:41
Gay Infanti	EMA Communication and Engagement Plan - DRAFT - 1. Introduction to the Santa Ynez	2	Paragraph 2: Why is the Basin divided into three Management Areas for purposes of SGMA implementation? It would be helpful to explain here.	Eastern Management Area	11/18/2019 15:41
Gay Infanti	EMA Communication and Engagement Plan - DRAFT - 1. Introduction to the Santa Ynez	3	Paragraph 1: Will there also be a basin-wide coordination plan, and if so, who is responsible for it? Will it be separate or incorporated into each of the 3 sub-basin plans?	Eastern Management Area	11/18/2019 15:41
Gay Infanti	EMA Communication and Engagement Plan - DRAFT - 2. Goals and Desired Outcomes	4	First paragraph, third bullet, second sentence: replace the word 'should' with 'will'. First paragraph, third bullet, third sentence: what other methods are available to make engagement easy for stakeholders?	Eastern Management Area	11/18/2019 15:41
Gay Infanti	EMA Communication and Engagement Plan - DRAFT - 3. GSP Participants and Decision-	5	Second Paragraph (GSA Leadership), second sentence: Where is Table 2? Last sentence: How will coordination take place between the EMA, CMA and WMA and how will that voting occur? Will it be one vote per management area?	Eastern Management Area	11/18/2019 15:41
Gay Infanti	EMA Communication and Engagement Plan - DRAFT - 4. Stakeholder Identification	6	Second paragraph (Stakeholder Group Identification): Instead of private users, consider using domestic well owners. Instead of Industrial Users, use Industrial and Commercial Users. Add Disadvantaged Communities (DAC) and Municipal Water Agencies. Also, what about federal stakeholders, e.g., Bureau of Reclamation and US Fish and Wildlife? Should there also be a point of contact for each, or will this be included in the GCP? Groundwater Communication Portal: Will individuals sign up for special interest groups for the purpose of facilitating targeted communications to specific stakeholder sub-groups, as needed?	Eastern Management Area	11/18/2019 15:41
Gay Infanti	EMA Communication and Engagement Plan - DRAFT - 5. Stakeholder Survey	7	First paragraph: I would like to suggest the following additional questions: How reliant are you on the groundwater basin? What is the source of your drinking water? What is the source of your agricultural water? What do you see as the governance challenges for groundwater management? What are your preferred solutions to achieve groundwater sustainability? (see the results of the state-wide survey from UC Davis Report entitled "Implementing SGMA Results from a Stakeholder Survey") I think it would be useful to know the answers to these questions from our stakeholders in order to better understand the barriers/challenges we face to achieving groundwater sustainability in our basin.	Eastern Management Area	11/18/2019 15:41
Maygan Cline	CMA Public Outreach and Engagement Plan - DRAFT	N/A	This is a general comment. How will addresses from general comments be used, if they are submitted as part of a general comment and not part of a specific management area?	Central Management Area	10/31/2019 14:23