# **Appendix D**Response to Comments

This appendix contains a listing of public comments received by the Montecito GSA through Groundwater Sustainability Plan adoption (as is required by GSP Emergency Regulations, §354.10(c)). Additionally, responses to each comment are provided including references to changes in the Plan that resulted from particular comments.

(This appendix is referenced in Section 2.1.7.3 of this GSP.)

Comment Source	Date	Commentor	Subject	Section, Page Number, Figure, Table	Comment or Issue	Addressed By	Response	Status/Notes
TAC Member	9/16/2020	Tim Thompson	Land Subsidence	2.2.4.5	In some basins there are survey data of monuments collected by the County in some areas, so I am wondering if that type of data might exist for the MWD area?	DP	The location of existing survey monuments and continuous global positioning system (CPGS) stations operated by the County of Santa Barbara, UNAVCO, USGS, DWR, and NOAA were reviewed. There are no CPGS stations within or near the basin that can be used for monitoring land subsidence. Yes, the County has survey monuments, at least one of which is in the basin; however, there is currently no plan to regularly survey the monument as the risk for inelastic subsidence in the basin has been determined to be low. (Note that this is a duplicate comment - identical response).	Completed
TAC Member	9/16/2020	Tim Thompson	Groundwater Modeling	2.3.3.2	A better characterization or quantification of groundwater interchange to the west of the basin (towards Santa Barbara) and to the east (towards Carpinteria) will be valuable for long term basin management. I was anticipating that this could be done as part of the groundwater modeling which I understand is currently in process. Will this be the case?	TJ	Yes, this is the case. The Basin Numerical Model will treat the jurisdictional boundaries between the Montecito Groundwater Basin and the Santa Barbara and Carpenteria Basins using a general head boundary condition - this approach allows the model to directly compute rates and volumes of groundwater interchange between Basins throughout time.	Completed
TAC Member	9/16/2020	Tim Thompson	Groundwater Modeling	2.3.3.2	Return flow evaluation would benefit from assessing the quantification of groundwater interchange at most if not all of the parcels in the District, rather than only at the larger parcels.	TJ	The Basin Numerical Model will incorporate return flows for both large and small parcels. Return flow estimates and locations will be based on MWD water delivery rasters that characterize historical deliveries across the basin. These rasters do not directly relate deliveries to individual parcels, but provide delivery volumes at a 500 x 500-ft spatial resolution. Dudek will use these rasters to help characterize initial estimates of return flows, which will be adjusted, as needed, during model calibration.	Completed
TAC Member	9/16/2020	Tim Thompson	Monitoring Wells	NA	Interested in where new monitoring wells will be recommended to fill some of the data gaps	DP, MN	The location for new monitoring wells will be addressed later in the GSP process in Chapter 3 - Sustainable Management Criteria and Monitoring Network. Based on data gaps and location of existing wells, potential locations for new monitoring wells include areas of the Toro Canyon Storage Unit and Storage Unit 2 where groundwater level and quality data are currently sparse. Note that the TAC will be consulted as locations are considered.	Completed
TAC Member	9/16/2020	Tim Thompson	Groundwater Modeling	2.3.3.2	It will be important in the characterization and modeling of Storage Units 1 through 3 to consider the evidence that the aquifer materials are highly heterogeneous. Our thoughts during previous work for MWD were that historical debris flows are a likely mechanism for the formation of these aquifers. We've surely seen that areas such as where many of the MWD wells exist have pretty good yield, whereas not far away yields from other wells area considerably less. This aspect will also likely tie into the discussion that occurred during the meeting regarding the difference in groundwater, i.e. Slade's 1991 estimate. How is this variability being addressed in the model?	TJ	Aquifer heterogeneity will be incorporated into the model to the extent that is required to match historical water level trends in the basin. Development of the model will begin using average values of aquifer properties within a given storage unit. Following the ASTM groundwater model development guidelines, Dudek will initialize aquifer properties using simplified, homogeneous property representations, and introduce zonal heterogeneity as is needed and evidenced by the model's ability to reproduce water levels. Dudek will incorporate, to the best of their ability, depositional setting and understanding when introducing higher levels of heterogeneity into the model.  This approach is supported by data on aquifer properties that are largely collected by pumping a test well during development and measuring drawdown at that given well. These tests help characterize transmissivity and specific capacity at the test well, but do not provide information on the length-scales over which these properties are correlated.	Completed
TAC Member	9/16/2020	Steve Bachman	Geology	Figures 2-12 to 2-14	Cross Sections have different scales. Consider making same scale for consistency.	DP	Recommendation noted. Adjustment of the scales will be discussed and considered. The horizontal scale on Figure 2-14 can easily be adjusted to match Figures 2-12 and 2-13. Adjusting the vertical scale on all of the figures would require either eliminating some valuable information from the figures with the larger scales (e.g., Figure 2-12), or adding information that is currently unavailable to extend the scale on the figures with smaller scales (e.g., Figure 2-13).	Completed

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TAC Member	9/16/2020	Steve Bachman	Groundwater Modeling	2.3.3.2	How will groundwater-in-storage versus recoverable groundwater be defined/calculated? Will sea-level be used as a reference point?	TJ	Groundwater in storage will be directly computed from the model using calibrated estimates of storage properties, water levels, and basin geometry. The groundwater in storage calculations will provide an estimate of total groundwater stored within the principal aquifer, from land surface to bedrock. Recoverable groundwater will be defined based on the definitions of undesirable results for the basin, which will be addressed in Chapter 3 of the GSP. Sea-level as a reference point will be considered when defining minimum thresholds and measurable objectives for the basin.	
TAC Member	9/16/2020	Rick Hoffman	Monitoring Wells	NA	Suggest targeting higher productive areas for monitoring wells.	DP, MN	Recommendation noted. The installation of new monitoring wells in the more productive areas of the basin will be considered during the well siting and design process. Note that the TAC will be consulted regarding the placement and design of the proposed monitoring wells.	Completed
TAC Member	9/16/2020	Rick Hoffman	Monitoring Wells	NA	Will provide recommendations on regional drilling companies that can construct multi-zone completion monitoring wells.	DP	Great, thank you.	Completed
TAC Member	9/16/2020	Rick Hoffman	Seawater Intrusion	NA	Age of wells to be considered. Suggest using wells with PVC casing vs steal for monitoring network, consider running video logs on wells in network to determine casing condition.	DP	Recommendation noted. The use of PVC for new seawater intrusion monitoring wells and completion of video logs in existing wells will be considered during development of the monitoring network.	Completed
Public	9/16/2020	Steve Slack	Streamflow Monitoring	NA	Requested being informed of locations and gage types when they are installed.	DP, MN	Mr. Slack and the general public will be informed of the locations and gage types installed when the work is completed. A description of the streamflow monitoring network and gage locations will likely be provided in report format. In addition, the project development will be presented at TAC and other public meetings prior to its implementation.	Completed
TAC Member	9/16/2020	Steve Bachman	Seawater Intrusion	2.2.4.3	Seawater Intrusion reference is confusing and should be reworded- refer to Loaiciaga section. As written in the draft the topic of seawater intrusion is referenced as currently occurring which has yet to be determined.	DP	As currently written, the Section 2.2.4.3 does not draw any conclusions, rather it presents the observations and hypotheses presented in previous published works which are speculative but inconclusive. As stated in Section 2.2.4.3, "additional monitoring at regular intervals and with adequate spatial coverage is necessary to establish whether seawater intrusion has occurred and to evaluate and adapt sustainability criteria related to seawater intrusion."	Completed
TAC Member	9/16/2020	Steve Bachman	Seawater Intrusion	2.2.4.3	Noted the advisability of using the northern-most well as an "ambient well" for comparison and it might be good to add another. (Staying within Storage Unit 3).	DP	Recommendation noted. The spatial coverage of monitoring wells will be considered during development of the seawater intrusion groundwater monitoring network.	Completed
TAC Member	9/16/2020	Rick Hoffman	Streamflow Monitoring	NA	Will the program be gaging surface flow only, or shallow sub-surface flow as well?	GSA	Currently, the plan is to design the streamflow monitoring program for monitoring surface flow only; however, monitoring of hyporheic zone flow will be discussed and considered prior to finalizing the streamflow monitoring program.	Completed
TAC Member	9/16/2020	Steve Bachman	Monitoring Wells	NA	Requested that the preliminary design of wells to be reviewed by the TAC.	GSA	Draft monitoring well design and construction details will be presented to the TAC for review and comment when available.	Completed
SAC Member	9/24/2020	Donna Senauer	General	NA	How long will the length of public comment period be for Chapter 2?	GSA	There are two different types of public comment timeframes. First there is a comment period for the public to comment on any element of the GSP. This is open as long as any GSP chapter is in draft. The second is a public review period for entire GSP, which will be 90 days once all the chapters of the GSP had been drafted, reviewed and compiled into a final administrative draft.	Completed
SAC Member	9/24/2020	Stan Roden	General	NA	What is the deadline for committee comments to current draft of GSP Chapter 2?	GSA	The GSA is requesting SAC comments on the Chapter 2 draft by the first week of October 2020.	Completed
SAC Member	9/24/2020	Donna Senauer	General	NA	Are comments preferred as verbal or in written form?	GSA	Comments are preferred to be received in written format via email, dropbox, or hard copy. An Excel spreadsheet will be created and used to track all meeting comments as well as comments on the draft of Chapter 2 of the GSP.	Completed
SAC Member	9/24/2020	Donna Senauer	Monitoring Wells	NA	What regulatory agencies handle permitting for these monitoring wells which only are meant to acquire "monitoring data"?	GSA	All monitoring wells that the GSA intends to drill will be permitted through County of Santa Barbara Department of Environmental Health Services, which is the regulatory agency for monitoring and producing groundwater wells. If the wells are located within the coastal zone, they may also require Coastal Commission approval.	Completed

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SAC Member	9/24/2020	Donna Senauer	Monitoring Wells	NA	Clarification on the difference between monitoring wells and producing wells and how it relates to the wells the GSA plans to drill.	GSA	Monitoring wells will not be permitted as extraction wells, and the GSA believes that monitoring wells will not be able to be converted to extraction wells for the life of the wells. GSA will confirm with Legal on this issue.	Completed
SAC Member	9/24/2020	Donna Senauer	Streamflow Monitoring	NA	Could the GSA use the one operational gage in the Basin	GSA, MN	Data from the existing stream gage on Montecito Creek monitored and maintained by the County of Santa Barbara will be used to the extent that the data are made available and are determined to be of use (e.g., of sufficient temporal resolution). Data being used for calibration of BNM.	Completed
SAC Member	9/24/2020	Donna Senauer	General	NA	Is the Groundwater Sustainability Parcel Fee proportional to acreage and, if so, recommends that this be more-widely publicized	GSA	Yes, the fee is proportional to the parcel acreage that overlies the groundwater basin. More information will be added to the GSA website on this subject.	Completed
SAC Member	10/5/2020	Donna Senauer	Land Subsidence	2.2.4.5	In some basins there are survey data of monuments collected by the County in some areas, so I am wondering if that type of data might exist for the MWD area?	DP	The location of existing survey monuments and continuous global positioning system (CPGS) stations operated by the County of Santa Barbara, UNAVCO, USGS, DWR, and NOAA were reviewed. There are no CPGS stations within or near the basin that can be used for monitoring land subsidence. Yes, the County has survey monuments, at least one of which is in the basin; however, there is currently no plan to regularly survey the monument as the risk for inelastic subsidence in the basin has been determined to be low.	Completed
SAC Member	10/5/2020	Donna Senauer	General	NA	Needs consistency with identifying acronyms with their associated description (am certain there will be an intro with equivalencies).	DP	An abbreviations and acronyms list will be included with the GSP.	Completed
SAC Member	10/5/2020	Donna Senauer	General	NA	Always reference the origin date of any Act etc. (i.e. Porter Cologne etc.).	DP	The origin dates of all Acts referenced in the GSP have been added.	Completed
SAC Member	10/5/2020	Donna Senauer	Jurisdictions	2.1	Need clarify on a descriptive where 'a 210 acre portion of the eastern edge of the City of Santa Barbara' lies.	DP, MN	Figure 2-2, Water Purveyors within and adjacent to the Groundwater Sustainability Agency Boundary shows where the City of Santa Barbara overlaps the basin. The complexity of the boundary does not lend itself to a narrative.	Completed
SAC Member	10/5/2020	Donna Senauer	Jurisdictions	2.1	'Coincident with' needs more clarity when described coincident term should be actually 'one and the same basin' or 'interconnected' i.e. the parameters of the boundaries are on 'paper only' for purposes of jurisdiction, particularly with the MGB coastal groundwater basin.	DP	Coincident in this context means 'occupying the same place or position,' meaning the basins share a mutual boundary.	Completed
SAC Member	10/5/2020	Donna Senauer	Regulatory	2.1.1.1	Santa Barbara County: no mention of EHS (division of County Public Health)as the permitting agency for the County for groundwater well development EXCEPT for well applications within the Coastal Zone a Coastal Development Permit (CDP) is required FROM THE COUNTY and is a ministerial review from P&D NOT THE COASTAL COMMISSION. ONLY IF P&D denies or approves the groundwater CDP and there is an appeal, the appeal FIRST goes to the MPC for review, and if MPC action approves the appeal or denies, THEN the MPC decision, if appealed, goes on to the Coastal Commission for Substantial Issue determination review and de novo action etc. The Coastal Commission is NOT the originating approval/permitting authority for groundwater well development in the MGB Coastal Zone.		Additional information on groundwater well permitting in the Coastal Zone has been added to Section 2.1.4.2, Groundwater Well Permitting.	Completed
SAC Member	10/5/2020	Donna Senauer	Private Water Companies	2.1.1.2	No mention that these private municipal water companies have been required to report extraction data and quality metrics to the State, County and MWD since their inception. Believe it is quarterly but could be monthly.	DP	See Section 2.1.4.3 for additional information on the requirements of water companies defined as public water systems. Information on private water companies in the MGB have been incorporated into the GSP where available. Single-Parcel and Multiple-Parcel/State Small Water Systems are regulated by the County.	Completed
SAC Member	10/5/2020	Donna Senauer	Monitoring Wells	2.1.2.1	Need clarity on if MWD is collecting data for 'all' MWD active/some inactive wells only or 'all' wells etc as it reads.	DP	Revised sentence so it reads: "Under its groundwater monitoring program, MWD has been collecting semi-annual, static groundwater levels for all active and some inactive MWD groundwater levels for all active and some inactive MWD groundwater production wells since 1983, occurring each spring and fall for high and low season groundwater levels."  Additionally, the sentence after provides clarification in the case it is unclear to the reader.	Completed

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SAC Member	10/5/2020	Donna Senauer	Water Use	2.1.3.3	When referencing 'per capita' use, must always state each time mentioned it is per capita PER DAY for consistency . Would be good to see if indoor (public health and safety) usage could be cited out from the total GPPPD).	DP, MN	Text has been revised to ensure "per capita per day" is used throughout GSP. Public health and safety usage is not directly relevant to the GSP and would be difficult to determine.	Completed
SAC Member	10/5/2020	Donna Senauer	Water Use	2.1.3.3	In Table 2-4, is the citation of Ag Deliveries referencing MWD non potable groundwater supply or other is that in addition to MWD GW extraction metrics.		Agriculture deliveries include water conveyed through the MWD system for agricultural use. Agriculture deliveries have been removed from Table 2-4 as they are not part of the MWD municipal supply portfolio.	Completed
SAC Member	10/5/2020	Donna Senauer	Water Sources	2.1.3.3	Should state why Jameson's production supply is diminished to 10% of MWD total production silting due to fires, debris flow etc., (and not economic to de-silt).	DP	Added following text to GSP: "due to naturally occurring reservoir siltation." Although wildfire has likely exacerbated natural siltation, conclusions cannot be made without including a reference or data.	Completed
SAC Member	10/5/2020	Donna Senauer	Water Sources	2.1.3.3	Again 'per capita' should include per day (GPD). Reference to GSI 2020 should be specified as the GSI( spelled out,). MWD Groundwater Augmentation Feasibility Study; also cite the MSD/MWD argumentation study 2017?). "7: With groundwater being an important LOCAL source(LOCAL should be added).	DP	Text has been revised to ensure "per capita per day" is used throughout GSP. Acronyms within citations are not defined in body text of GSP, but instead defined in References section. The appropriate references are currently cited in the GSP. Added the word "local" to the sentence to clarify that groundwater is an important local source of supply.	
SAC Member	10/5/2020	Donna Senauer	Regulatory	2.1.4.2	This section should be integrated with the information in 2.1.1.1 (or at least provide a reference to this section). COSB EHS now in fact does bi monthly well application and status reports which includes location, depth and proposed use on its website but not pumping capacity. 'MGB is not designated as critically overdrafted' would add 'at this time' (there truly are no data/metrics that supports that it is not in an overdraft statein fact the Loaiciga Report to the Coastal Commission 2015 does cite overdraft conditions.).	DP	Section 2.1.1.1 references Section 2.1.4. Added "at this time" to the sentence regarding MGB's status.	Completed
SAC Member	10/5/2020	Donna Senauer	Regulatory	2.1.5.1	Paragraph 4: first sentence: The MONTECITO Community Plan cite MGMO, MLUDC also which is found later in. Would include additional CDP/CDH permit requirements within the CZ Inland and CZ have different codes/regs. Groundwater Resource Section: last sentence should add 'gross groundwater supplyrather than just water supply.	DP	The abbreviation "Community Plan" is presented earlier in the text and used throughout GSP instead of the full name of plan. Additional language describing well permitting requirements in the Coastal Zone has been added to GSP. Unable to locate referenced sentence that describes groundwater supply. Page number needs to be provided in order to review sentence.	Completed
SAC Member	10/5/2020	Donna Senauer	Management Plans	Table 2-7	Goal 1:and to eliminate prolonged overdraft (delete prolonged). Goal 2: delete 'where feasible'. Goal 3: although MGB is not determined to be 'critically in overdraft', term 'seriously or prolonged overdraft' could be applied. Policy 2-3: "To be determined"?.	DP	All of the text in Table 2-7 that describes a "Goal" or "Policy" is verbatim from the referenced general and community plans. Therefore, it is not appropriate to modify the text.	Completed
SAC Member	10/5/2020	Donna Senauer	General	2.2.1.2	Temperatures 'within' should rather be in the vicinity of.'	DP	The sentence has been revised to read "in the vicinity of."	Completed
SAC Member	10/5/2020	Donna Senauer	Groundwater Levels	2.2.2	Date & citation needed for 'More recent groundwater elevation contour maps".	DP	The sentence has been revised to include a reference to Section 2.2.4.1, Groundwater Elevation Data, where the data and maps are described in greater detail. The groundwater elevation contour maps referenced were created as part of the data analysis associated with the GSP.	Completed
SAC Member	10/5/2020	Donna Senauer	General	NA	Paragraph 2: 'amsl' needs to be spelled out: Above Mean Sea Level) then going forward can be cited as AMSL.	DP	All references have been changed to msl, mean sea level. It is included in the acronyms list.	Completed
SAC Member	10/5/2020	Donna Senauer	Groundwater Levels	2.2.4.1	Paragraph 2: There should be a mention of the relationship of the increased amount of groundwater water well developments during the drought to the increased groundwater extractions which is quantified by EHS data from 2007-2019.	DP	A description of groundwater extractions and the increase in the number of production wells in the MGB during the last drought is provided in Section 2.3.3, Outflow from Groundwater System. Section 2.2.4.1, Groundwater Elevation Data, is based on empirical data and focused on groundwater flow direction and changes in groundwater elevation over time.	Completed
SAC Member	10/5/2020	Donna Senauer	Seawater Intrusion	2.2.4.3	Paragraph 1: add and cite 'hydraulic head' descriptive. Last sentence: add many coastal aquifers globally as well as in the United States, west coast (cite examples: Salinas etc. etc.).	DP		Completed

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SAC Member	10/5/2020	Donna Senauer	Seawater Intrusion	2.2.4.3	Para 2: cite the 'several studies'; cite a 'few studies'. Be specific as to the referenced studies. STRIKE/ELIMINATE: 'THE RESULTS OF THE STUDIES THAT HAVE BEEN COMPLETED THUS FAR HAVE GENERALLY BEEN INCONCLUSIVE AS TO THE AREAL AN VERTICAL EXTENT OF SEAWATER INTRUSION, OR ITS OCCURRENCE AT ALL.' This statement is not supported by historical data, is not accurate and should not be included.	DP	Added in text citations for referenced studies. Because the studies on seawater intrusion that have been completed thus far have relied on limited empirical data, the general statement is accurate. The sentence states that at this time it is not known if seawater intrusion has occurred.	Completed
SAC Member	10/5/2020	Donna Senauer	Seawater Intrusion	2.2.4.3	Para 9: starting in sentence two: if these wells are MWD production wells, this citation and description needs to be added for clarity.	DP	Added text to GSP indicating that wells Ennisbrook 2 and 5 are MWD production wells.	Completed
SAC Member	10/5/2020	Donna Senauer	Groundwater Quality	2.2.4.4	Again, for well citations, indicate clearly if these wells are MWD production wells.	DP	Added text to clarify that the wells monitored by MWD are MWD production wells.	Completed
SAC Member	10/5/2020	Donna Senauer	Groundwater Quality	2.2.4.4	Summary of Groundwater Quality Standards Para 2: MCL reference: spell out at first citation with a footnote 19	DP	MCL is spelled out earlier in the GSP in Section 2.1.4.1 on pg. 2- 19. A descriptive footnote is provided in Section 2.2.4.4 on pg. 2- 68.	
SAC Member	10/5/2020	Donna Senauer	Groundwater Dependent Ecosystems	2.2.4.7	Best for clarification in the following Ecosystems: clearly reference MWD production wells vis-a-vis private THROUGHOUT.	DP	Section 2.2.4.7 is planned to be revised to include a more robust analysis of potential GDEs. When the section is revised, clarification on well ownership will be included.	Completed
SAC Member	10/5/2020	Donna Senauer	Groundwater Dependent Ecosystems	2.2.4.7	Para 2: last sentence: identify which are the three units that are identified as potential GDE' that have NO WELLS in the vicinity again, is this MWD production wells or ANY wells.	DP	Section 2.2.4.7 is planned to be revised to include a more robust analysis of potential GDEs. When the section is revised, clarification on well ownership will be included.	Completed
SAC Member	10/5/2020	Donna Senauer	Groundwater Dependent Ecosystems	2.2.4.7	Sycamore Creek Tributaries -wells within 500ft How proximal exactly.	DP	Section 2.2.4.7 is planned to be revised to include a more robust analysis of potential GDEs. When the section is revised, clarification on exact distance to stream channel will be included.	Completed
SAC Member	10/5/2020	Donna Senauer	Groundwater Dependent Ecosystems	2.2.4.7	Para 2: 'bgs'. Define: Below Ground Surfaceequivalent to 'Depth to Water' use one term or the other for consistency but not interchangeably if the equivalency is the same Also 'groundwater level measurements?? Too many descriptives used.	DP	Section 2.2.4.7 is planned to be revised to include a more robust analysis of potential GDEs. When the section is revised, use of a single descriptive for referencing groundwater levels will be considered.	
SAC Member	10/5/2020	Donna Senauer	Groundwater Dependent Ecosystems	2.2.4.7	Oak Creek -again, which wells are the citations referencing: MWD or private	DP	Section 2.2.4.7 is planned to be revised to include a more robust analysis of potential GDEs. When the section is revised, clarification on well ownership will be included.	Completed
SAC Member	10/5/2020	Donna Senauer	Groundwater Dependent Ecosystems	2.2.4.7	San Ysidro 2nd para: three wells are private not MWDsay so	DP	Section 2.2.4.7 is planned to be revised to include a more robust analysis of potential GDEs. When the section is revised, clarification on well ownership will be included.	Completed
SAC Member	10/5/2020	Donna Senauer	Groundwater Dependent Ecosystems	2.2.4.7	3rd para: there are 5 private groundwater wells on ONE property between Santa Rosa and the creek newest added about 3 yrs. agowould have to affect the health of the creek and groundwater The reference since '2012 is interesting MWD Amapola there too (which is in a resting state)last sentence: vegetation health reference should include more than just the debris flow.	DP	Section 2.2.4.7 is planned to be revised to include a more robust analysis of potential GDEs. When the section is revised, an evaluation of the potential impacts of production from the wells located at the referenced property on GDEs will be included. Also, reference to measured NDVI and NDMI trends will be included in addition to impacts of debris flow.	Completed
SAC Member	10/5/2020	Donna Senauer	Groundwater Dependent Ecosystems	2.2.4.7	THERE IS A NEXUS of stream/creek to groundwater depletion from adjacent wells extraction.	DP	If empirical data are available that indicate there is a nexus between groundwater pumping and streamflow depletion, it will be included in the GSP. Currently, field data are limited so it is not appropriate to draw any conclusions as to the degree of stream-aquifer connectivity.	Completed
SAC Member	10/5/2020	Donna Senauer	Groundwater Extraction	2.3.2	Number of Groundwater Wells (add Estimated)	DP	The estimated current number of wells in the MGB is provided in Table 2-18.	Completed
SAC Member	10/5/2020	Donna Senauer	Groundwater Extraction	2.3.2	Table 2-18: 496 Private groundwater well count is not predicated nor supported on all available data.	DP	The estimated number of wells presented in Table 2-18 is based on all data and information available at this time, as described in Section 2.3.2. Well data and information is being updated with recently available data.	Completed
SAC Member	10/5/2020	Donna Senauer	Groundwater Extraction	2.3.2	Table 2-19: should cite Loaiciga 2015 report data (skipped from Slade to Dudek, leaving out Loaiciga).	DP	Loaicigia (2015) simply presents a summary of groundwater extraction estimates provided in previous studies. The extraction estimates presented in Loaicigia (2015) are included in Table 2- 19.	Completed
SAC Member	10/5/2020	Donna Senauer	Seawater Intrusion	2.3.2.1	Delete second sentence: it creates bias that the Rincon Fault precludes significant seawater intrusion	DP	The word "postulated" is included in the sentence to communicate to the reader that previous studies have hypothesized that the Rincon Fault is a barrier to seawater intrusion, but the studies have been inconclusive.	Completed

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SAC Member	10/5/2020	Donna Senauer	Figures	NA	Overall, consistency with legend identifiers would be most helpfuli.e. all MWD production wells same icon, same with monitoring wells Throughoutetc. etc.	DP	Use of consistent symbols on GSP figures will be considered.	Completed
SAC Member	10/5/2020	Donna Senauer	Figures	Figure 2-5		DP	Section 2.1.2.2 and Table 2-2 provide information on wells monitored for groundwater production.	Completed
SAC Member	10/5/2020	Donna Senauer	Figures	Figure 2-20	Not sure what this is: Mosby and Neal identified what are the other two also indicate sub basins where they are located	DP	Figure 2-20 shows hydrographs for four key groundwater wells, one located in each storage unit. The T. Mosby and Neal well names are included in addition to their numerical identifiers. The other two wells (wells 2-2 and 4-4) are private wells monitored by MWD. The MGB subbasins are labeled and symbolized by the black line. See Section 2.2.4.1 for additional information.	Completed
SAC Member	10/5/2020	Donna Senauer	Figures	Figure 2-22	Identify AGF ABD ASF Distribution Station in the Coastal Zone Sub Basin #3 understand this is from GEOTRACKER but does need a bit of further clarification if possible.		See Section 2.2.4.4 and Table 2-15 for a description of the sites shown on the map.	Completed
SAC Member	10/5/2020	Donna Senauer	Figures	Figure 2-24	Legend at bottom needs more clarity in reference to: 64'. Groundwater Level (feet bgs) 1977 Year of last measurement	DP	Each well on the figure is labeled with a groundwater level in feet below ground surface and date of measurement, which is what the legend is attempting to communicate. Edits to the figure legend so that it is more clear to the reader will be considered.	Completed
SAC Member	10/5/2020	Donna Senauer	Figures	Figure 2-26	What are the metrics for 'irrigated areas' what does that mean.	DP	See Section 2.3.1.5 for additional information. In summary, the map shows areas of substantial irrigation based on review of aerial imagery.	Completed
SAC Member	10/5/2020	Donna Senauer	Figures	Figure 2-29	Note if these are 'verified permitted wells'. Should be stated that this is an estimate rather than an exact count of all existing wells.	DP	As stated in Section 2.3.2, the total number of wells in the MGB reported in Table 2-18 and Figure 2-29 is an estimate.	Completed
SAC Member	10/6/2020	Donna Senauer	Metering	NA	MWD had a water meter moratorium in place for xxxxx amount of years which contributed to the increase in water well drilling and development during those drought years.	MN	Information on the water meter moratoriums of 1973 and 2014 has been added to Section 2.1.3.3.	Completed
SAC Member	2/9/2023	Cheryl Trosky	Chapter 2	2.1	Chapter 2.1 raises more questions than it answers. The Draft accurately noted the California Department of Water Resources established Montecito Groundwater Basin as a very low priority basin. It mentions the MGB priority was changed but does not give a reason for the DWR change from very low to a medium priority basin. The subsequent MGB status change to a medium priority basin was by request of the Montecito Water District Board. In response to this request DWR reprioritized MGB to a medium priority basin thereby necessitating the formation of a Ground Water Sustainability Agency funded by taxpayer dollars costing \$2.4M annually. Currently the document mentions there was a change in priority but needs to detail what precipitated the change. The Draft, in many locations, documents the projected 50-year GSP model along with historical data determines the MGB is stable with no indication of over drafting or undesirable results. It is assuring to note that after years of in-depth analysis, studies, monitoring and considerable expenditure the MGSA confirms DWR's evaluation from the outset. Armed with this information the MGSA decided mandated metering of wells be a possible future project, if warranted, but not a baseline project. Yet mandated well metering is referenced in 3.5.2.1.4, 3.5.7.2 and in chapter 44-2, 4.2.2. The January 30, 2023 GSA Finance Committee		Comments noted.	Completed
SAC Member	2/9/2023	Cheryl Trosky	Figures		Chapter 3, figure 3-2 should be accompanied by a graph from an earlier presentation detailing three management action thresholds. This	·	Several draft scenarios were examined toward selecting appropriate SMCs. It is not appropriate nor possible to include information on all potential scenarios. Not included.	Completed
SAC Member	2/9/2023	Cheryl Trosky	General		Why are the MWD wells exempt from the rules imposed on private wells?	GSA, MN	As producers of potable water for a public water system, the MWD wells are subject to more stringent requirements than those for private wells. In addition, they are subject to the same requirements through the GSP.	Completed

Comment Source	Date	Commentor	Subject	Section, Page Number, Figure, Table	Comment or Issue	Addressed By	Response	Status/Notes
SAC Member	2/9/2023	Cheryl Trosky	General	Tigure, rabie	It would be helpful to have a definition of the acronyms.	GSA, MN	An acronym table will be included in the Admin Draft.	Completed
SAC Member	2/9/2023	Cheryl Trosky	Chapter 2		There is a typo in chapter 2 on 2-77 third paragraph, second sentence reads 'sweater' and I think it might mean seawater?	GSA, MN	Corrected.	Completed
TAC Member	2/21/2023	Steve Bachman	Chapter 4	4.1.5	Groundwater modeling: It is not clear exactly what will be performed and when during a model update. From the budgeting, it looks like a single update in the first 5 years. Is that "update" a recalibration of the model using the new data (a larger task, but worth the effort), or is it simply to run the model using the new data and see how well it matches reality (more of a verification, lesser effort), The section on Circumstances for Implementation says that the model will be "updated" as new data become available; because new monitoring data become available all the time, this doesn't make any sense. I think you want to say once during first 5-year period.	TJ	Revised language in Section 4.1.5	Completed
TAC Member	2/21/2023	Steve Bachman	Chapter 4	4.1.6	S-year period.  Well Database: Confidentiality is always a concern when private wells are involved. It is possible to keep parts of the database confidential (this has been done for years in Ventura County where the well databases are extensive — thousands of wells). It is not helpful to basin management to just exclude confidential information from the database as stated in the Legal Authority section, It can just be excluded from public documents.	GSA, MN	Section updated to clarify that confidentiality will be maintained including in publicly available databases.	Completed
Public	3/27/2023	Glyn Davies	Multiple	Multiple	Refer to Letter, Appendix D, Page D-9	GSA	See Attached Letter and GSA Response dated 5/8/2023	Completed
Public	3/31/2023	Gregg Zachritz	Funding	Chapter 5	It seems to me a parcel tax does not capture the outsized impact parcels with private wells have on ground water sustainability. Consequently, the owners of such parcels should shoulder an outsized share of the costs. I understand that larger parcels pay a larger parcel tax, but that tax remains the same whether they have a private well or not. I'm looking for something along the lines of a "private well tax". The costs should be shared equitably, not equally.	GSA	The Montecito GSA Groundwater Sustainability Fees adopted in 2020 are for the purposes of funding the costs during the first 5 years of GSA operations, including development of the regulatorily required Groundwater Sustainability Plan. Future changes in fees would be established by a subsequent cost of service study and public notice process, likely to be conducted during 2024 if new fees were to be implemented in 2025. That may be when your comment would have most relevance, as the current fee schedule is set. Please feel free to comment again in the future, particularly if/when a new fee schedule is being considered	Completed
Public	4/5/2023	John Watson	Multiple	Multiple	Refer to Letter, Appendix D, Page D-15	GSA	See Attached Letter and GSA Response dated 5/8/2023	Completed

Comment Source	Date	Commentor	Subject	Section, Page Number, Figure, Table		Addressed By	Response	Status/Notes
Public	5/15/2023	Glyn Davies	Multiple	Multiple	Refer to Letter, Appendix D, Page D-29		In response to 2.b on Page 3 of your comment letter: The MWD Urban Water Management Plan includes a normal year, single year, and multi-year drought risk assessment as prescribed by DWR. DWR requires a 5-year drought risk assessment, which is dicussed further in the UWMP. The GSP does not assume a single dry year in its future availability and demands, please refer to Section 2.3.5.3.1 for additional information on future simulated climate conditions.	

Nick Kunstek

**Groundwater Specialist** 

Montecito Groundwater Sustainability Agency

Nick,

Before discussing my observations and comments on the GSA/GSP I want to thank and recognize the hard work and concerted effort put forth by the board and staff of the GSA. Without such hard graft the report, currently under review, would not be the extensive and comprehensive report that currently exists for the community's review.

Having said that I see no benefit in understating my concerns. Without some revisions the plan will be fatally flawed and will not accomplish the goal for which you all have worked so hard. Having been so critical, I believe it is incumbent on me to first state my observations and concerns clearly and then propose solutions.

Why is the plan fatally flawed.

- 1. It is has long been recognized in business and governmental management that 'if you cannot measure **IT**, you cannot manage **IT**.' The present plan has no ability to accurately measure freshwater withdrawals versus incoming freshwater renewable volumes to the Montecito Groundwater Basin.
- 2. The present plan reveals no effective plan to **manage or measure** the extraction by any person (stakeholder) who chooses to independently access the groundwater which is owned by all stakeholders. In my view a stakeholder is any person residing in Montecito whether an owner or temporary renter of the smallest studio apartment.
- 3. Any stakeholder can presently access the Montecito Groundwater Basin and withdraw any amount of the 'community owned' freshwater for whatever reason. There exists the famous example of the 'Tragedy of the Commons' in the United Kingdom. Historically each village had a sizeable plot of land, generally near the village centre, where if a sheep or cattle farmer needed to graze his or her livestock, should some unforeseen tragedy on their own grazing land occur, they were permitted to use the 'commons'. Thus, saving their livestock until their own grazing land was restored. Unfortunately in many villages the farmers first used the common land in order to preserve their own perfectly usable land. Thus, when the 'commons' were critically needed by a farmer, due to misfortune, they were already overgrazed, and a tragedy occurred for that farmer. Due to the ability for some stakeholders to

- independently withdraw unlimited, and unmeasured, quantities of water, and for the Agency, as part of the current GSP, to not have the ability to measure and regulate those groundwater withdrawals of the Montecito groundwater basin we may likely experience own 'tragedy of the commons'.
- 4. The United Nations World Water Development Report of 2022 states, 'unlocking the full potential of groundwater will require strong and concerted efforts to manage and use it sustainably. And it starts by making the invisible visible.' **The current plan keeps the invisible-invisible**.

How can the GSB become a plan that will avoid the above fatal flaws?

- 1. The same United Nations Report of 2022 also states, 'in the absence of any form of community or government control it is unlikely that an optimal combination of groundwater services will develop in a given area and that all inhabitants will share equally in the benefits of the groundwater.' One can assume that a family in a rented or small workers cottage is using tens of thousands of gallons, perhaps hundreds of thousands of gallons, less water annually than a family of four living on large acreage surrounded by lush green grass. That is not equitable sharing of the benefits of the Montecito groundwater along with the appropriate proportional costs of such water.
- 2. The Groundwater Sustainability Agency has the legal authority to require meters on **all** private wells.
- 3. The Groundwater Sustainability Agency **has the legal authority** to stop or at a minimum, manage the drilling of new private wells.
- 4. The United Nations Report also states that "causes of overuse include 'open access' and a lack of a level playing field." In my analysis the current draft of the GSP is flawed for this and other reasons.
- 5. The United Nations report states the obvious, 'long-term groundwater storage depletion occurs when groundwater discharge exceeds groundwater recharge.' Without the ability measure the groundwater depletion by existing or future unregulated and unmeasured wells this is an obvious risk to all stakeholders.
- 6. Then there is the community support required to make any potential plan effective and successful. I have not spent any time or effort to garner support for my personal views; however, I can assure you that there are a considerable number of residents who are not comfortable with the current policies regarding wells. Currently, they are in my opinion the silent majority, but if and when the inevitable Montecito water crisis occurs in the future, and if you move forward without solving the 'measuring problem' they will likely not remain silent and the GSP and the GSA will legitimately come under attack.

It is with my best wishes for a successful and effective GSP that I submit these observations,

Glyn Davies

BS, MPA



5/9/2023

Cori Hayman, Director Floyd Wicks, Director Tobe Plough, Director General Manager

BOARD OF DIRECTORS:

Brian Goebel, President Ken Coates, Vice President

> General Manager and Board Secretary: Nick Turner

Glyn Davies

Re: Comments on the Draft Groundwater Sustainability Plan

Dear Mr. Davies,

This letter is in reply to your comment letter submitted on March 27, 2023, regarding the Montecito Groundwater Basin Groundwater Sustainability Agency's (Montecito GSA) Draft Groundwater Sustainability Plan (GSP).

First, thank you for providing comments and taking an active role in the development of the GSP. On behalf of the Montecito GSA, we wanted to provide a written response to your communication of March 27, 2023. While an attempt has been made to address your main points, please receive this as an open dialogue. Our goal is to provide clarifying information and we recognize that the discussion may be ongoing.

With regard to your letter, it seems that the focus is suggesting that the GSA could do more with regards to measuring groundwater extractions through metering wells.

#### Please note that:

- The GSP does include a current project to enhance the groundwater well database by creating a groundwater well registry (Section 4.1.6). This project involves the development of a groundwater well registry that contains relevant information on groundwater wells in the Montecito Groundwater Basin (MGB), including location, owner contact information, well activity status, extraction data or estimates, and localized geology. Participation in the registry will be required of all wells within the MGB.
- The GSP also includes a Possible Future Project to Require Well Metering (Section 4.2.2). This possible future project would require installation of well meters on all non-de minimis groundwater extraction facilities to measure and report extraction volumes within the MGB [Water Code Section 10725.8]. The GSA is not authorized to regulate de minimis users, those extracting less than 2-acre feet per year for domestic purposes. More information on this project can be found in Section 4.2.2 of the GSP.
- The Montecito GSA is not pursuing mandatory well metering at this time based on current and modeled future conditions of the MGB which indicate that no undesirable conditions are occurring, nor are they forecast to occur.

- The GSP, in accordance with SGMA, provides for ongoing monitoring of sustainability indicators to identify the potential or likely onset of undesirable results, including significant and unreasonable reduction in groundwater in storage and lowering of groundwater levels. Specific projects and management activities are designated for implementation as additional information becomes available and conditions warrant. Note that nothing in SGMA allows for the alteration or override of existing property rights associated with groundwater use.
- The topic of requiring well metering was discussed at length by the Montecito GSA at numerous Advisory Committee and Board of Directors meetings over the course of GSP development. (All previous meeting materials are available on the Montecito GSA's website here: <a href="www.montecitogsa.com">www.montecitogsa.com</a>)
  The permitting of new groundwater wells in the MGB is under the jurisdiction of Santa Barbara County (County). More information on this and the relationship between the Montecito GSA and the County can be found in Section 2.1.4.2.

Regarding the need for additional measuring, it is important to recognize that considerable data has been collected and modeled to support the GSP and Montecito GSA's current understanding of the MGB. Data is available from numerous sources and both historic and expanded monitoring programs will continue as an integral part of the GSP. This data will be used to assist in updating the GSP as groundwater conditions change in the future. More information on data used in creating the GSP and the GSA's monitoring efforts can be found in Section 2.2.1, 3.5, and 4.1.

Additionally, extensive <u>Estimating of Groundwater Extractions</u> has been performed attendant to the development of the GSP. Historical groundwater extractions were estimated for the period from water year 1950 through 2019 as part of this GSP development and were designed to estimate extraction volumes on a well-by-well basis. Below is a summary of this process; more information on this can be found in Section 2.3.3.1:

- A detailed review of District records, the Santa Barbara Environmental Health Services'
  well completion report database, and the California Department of Water Resources
  well completion report database was performed to identify wells that might be
  constructed and active within the MGB boundaries.
- The estimated groundwater extraction rate at each well was calculated by computing the difference between the parcel's estimated irrigation demand and Montecito Water District's estimated delivery to each parcel.

Groundwater well extraction estimates will be updated and enhanced as the GSP is implemented. The GSP is subject to annual reporting and periodic 5-year evaluations and may be modified as necessary to address changing conditions.

In summary, the Montecito GSA describes itself as being "data driven" and the proposed Baseline projects (Section 4.1) all contribute to increasing the knowledge about the MGB extractions, and other factors over time. The goal is to continue to take incremental actions, as needed, to protect this important source of water for all stakeholders.

Again, thank you for your comments and participation in this process.

Sincerely,

Nick Turner

General Manager

CC:

Brian Goebel, Montecito GSA President Nicholas Kunstek, Groundwater Specialist

# **JOHN WATSON**

To: Nick Turner and Nick Kunstek

Montecito Groundwater Sustainability Agency

583 San Ysidro Road Montecito, CA 93108

RE: Comments on the DRAFT Groundwater Sustainability Plan

Date: April 5, 2023

Dear Nick,

I believe that the Draft Montecito Sustainable Groundwater Plan (PLAN) has left about \$4,250,000 PER YEAR on the table...

Before I make specific comments, let us remember that the State of California "owns" all of the surface and groundwater in the State, and as such, has a right to mandate types of and quantities of use of "its" water as evidenced by the fact that they required this PLAN to be prepared.

I would like to compliment you and Dudek, the consultant that the Montecito Groundwater Sustainability Agency (MGSA) hired to do the research and number crunching for the PLAN, for providing a thorough and comprehensive technical report. Technically Remarkable.

However, I believe that by myopically following the Department of Water Resources' (DWR's) *Groundwater Sustainability Plan (GSP) Annotated Outline*, the MGSA has employed a paradigm (approach, assumptions and attitude) that "legalizes" the existing well owner's uses, and quantities of use for at least the next 50 years, the time horizon mandated by the DWR.

# WATER WASTE

This paradigm ignores the State's PURPOSE requirements delineated in the *Sustainable Groundwater Management Act* (SMGA), codified in California Water Code Section 10720.1:

(b) To enhance local management of groundwater consistent with rights to use or store groundwater AND SECTION 2 OF ARTICLE X OF THE CALIFORNIA CONSTITUTION. (Emphasis added)

This section of the State Constitution states (in part):

It is hereby declared that because of the conditions prevailing in this State the general welfare requires that the water resources of the State be put to beneficial

use to the fullest extent of which they are capable, and that **THE WASTE** or unreasonable use or unreasonable method of use **OF WATER BE PREVENTED** (Emphasis added)

While the definition of water "Waste" is not defined in State Law, at the same time that the SGMA was launched by Governor Brown's 2015 Executive order B-29-15, he also mandated a "refresh" of the Water Efficiency Landscape Ordinance (WELO) [Footnote 1] found in Title 23 of the California Code of Regulations (CCR), the same section of the CCR that deals with the specifications for this PLAN. It states (in part):

## 23 CCR § 490 Purpose

- (b) Consistent with the legislative findings, the purpose of this model ordinance is to:
- (4) use water efficiently **WITHOUT WASTE** by setting a Maximum Applied Water Allowance as an upper limit for water use and reduce water use to the lowest practical amount. (Emphasis added)

In the PLAN's Appendix F, *Table F-4, Land Use Type and Corresponding Water Use Factors Used to Estimate Private Well Extractions in the MGB*, Dudek uses 3.38 Acre Feet per Acre per Year for all Residential Irrigated Land Types in its calculation of water use by well extractors for the Future Water Budget. This number must accurately represent the actual current use, or all other calculations as to Basin usage would be wrong. In sharp contrast, WELO's Maximum Applied Water Allowance (MAWA) is only 2.0 Acre Foot per Acre per Year. (See Footnote 2)

Therefore, the PLAN reveals that on an aggregated basis, private well use is 69% higher (3.38 AFY vs 2.0 AFY) than the State of California's upper limit before usage becomes wasteful. I would expect a discussion of this "overage" and potential "Actions" to reduce usage in the PLAN, but the PLAN goes in exactly the opposite direction. In Chapter 4:

## 4.2 POSSIBLE FUTURE PROJECTS AND MANAGEMENT ACTIONS

4.2.1 Develop/Acquire Supplemental Water for Well Owners

"This project would provide an alternative and/or supplemental source of water supply to well owners to achieve a reduction in groundwater use when the existence of undesirable results are determined to be imminent, acute, or chronic."

In other words, when the well owners have so severely over used the groundwater to the point that the groundwater basin is subject to "undesirable results" (e.g. saltwater intrusion, land subsidence, etc.), the MGSA would provide the well extractors additional water so that they can continue using the same quantity of water that caused the problem in the first place, without restriction... REALLY?

Where is the discussion of Waste? Where are the Actions to reduce/eliminate Waste? It is true that the State is currently developing specific time targets for implementing State Water Code

10609 et.seq. (based on WELO) that is addressing this very issue, but being mute on this at this time gives the well extractors a "pass" and in my opinion misinforms the community.

# **MONEY**

This is probably the real reason private well extractors cherish their wells!

Since it is impossible to know the actual cost of extracting water from each of the private wells, I am using Montecito Water District's (MWD) well water cost found in their 2020 *Montecito Water District Water Cost of Service and Rate Study*, (PDF 49) which is \$1.79 per Hundred Cubic Feet (HCF).

The PLAN states in Chapter 2 (PDF 110) (in part):

These estimates of irrigable area were combined with the water use factors to generate estimates of total water demand for each parcel containing a groundwater well. The estimated groundwater extraction rate at each well was calculated by computing the difference between the parcel's irrigation demand and MWD's estimated delivery to each parcel.

For the Rate used by MWD customers, I used Residential Tier 3 rate of \$12.31 per HCF from the *Water Rate Study*. (Note: this may be overstating the price somewhat, but given that Tier 2 pricing is just barely lower at \$11.14 per HCF and the given that the MWD's well extraction cost is probably higher than for privately owned wells (Government cost is never cheaper than private cost (not as a criticism, but as an observation)), I felt using this cost was appropriate. Also, since there was some "non residential" use, e.g. golf courses, and given that Residential Tier 2 and 3 are the only "irrigation" focused rate, I used it for all irrigation usage.

Therefore, the cost **savings** for well water is:

\$12.66 - \$1.79 = \$10.87 SAVINGS per HCF AND/OR \$1.79/\$12.66 = 14% of the MWD water cost.

(See Footnote 3)

The Plan goes on to state in Chapter 2 (PDF 110):

**Private well extractions** steadily increased from 1970 through 2014, averaging approximately 340 AFY in the 1970s and 900 AFY between 2000 and 2014 (Table F-5). (Emphasis Added)

(See Footnote 4)

Using the 2000 to 2014 AVERAGE of 900 AFY we get:

(12.66-1.79) \* (900 \* 435.6) = **\$4,261,475** PER YEAR

In Table F-5 (Appendix F, PDF 165) *Groundwater Extractions from wells located within the MGB*, we see that in 2014 *Estimated Extractions (Acre-Feet)* for 364 private wells was 1014 AFY, so we get a slightly higher "savings" for the well owners:

As an example, for a parcel with 1 acre of IRRIGATIBLE landscape area, the monthly cost using private groundwater is:

1 acre x 3.38 AFY x \$1.79 per HCF x 435.6 HCF per AF = \$2,635.47 Per Year Or \$219.62 per month

And for MWD water =

1 acre x 3.38 AFY x \$12.66 x 435.6 HCF per AF = \$18,639.67 Per Year Or \$1,553.31 per month

This very low water costs fully explains why it is so easy for "wasteful" use to occur. And yes, well extractors have initial drilling costs, but these are quickly amortized given the substantial cost savings.

# FOR THE PUBLIC WELFARE

The same provision of the State Constitution goes on to say (in part):

... and that the conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof IN THE INTEREST OF THE PEOPLE AND FOR THE PUBLIC WELFARE. (Emphasis added)

In Chapter 2, Table 2-5 *Summary of Land Use in the Plan Area* (PDF pages 32/33) we find that the total number of Parcels within the boundaries of MGSA is 4,381, but when "Undeveloped and Public Service Infrastructure Parcels" are subtracted out, we end up with 4,373.

Since some wells service more than one parcel (small water companies) and some parcels have more than one well (I assume given that Table 2-8 (PDF 53) states that there are 3 golf courses within the PLAN area and other large parcels may also have more than one well), it is impossible at this "draft stage" to know exactly how many parcels benefit from well water. But assuming (on average) one well serves one parcel:

364/4373 = 8.25% of the total parcels enjoy the lower cost well water

Can anyone conclude that the exclusive use of 900 AFY of this precious resource used by just 8.25% of the total parcels is "IN THE INTEREST OF THE PEOPLE AND FOR THE PUBLIC WELFARE"?

The PLAN does not discuss this either...

And a final thought on MONEY. In the PLAN's Chapter 5, (PDF 5) we find:

The MBGSA's 2020 5-year fee schedule establishes the parcel fee by year and is collected semiannually on the County of Santa Barbara property tax roll FOR ALL PARCELS that reside over the MGB. (Emphasis added)

In other words, 100% of us pay for the MGSA, with 8.25% as primary beneficiary...

# INCREASED STORAGE

California Water Code 10720.1 also includes:

(g) To increase groundwater storage and remove impediments to recharge.

In MWD's October 2022 QUARTERLY DROUGHT AND WATER SUPPLY UPDATE (PDF 3) states (in part):

Groundwater levels are declining due to consecutive years of below average rainfall and are approaching the historic local level reached in 2016.

AND in the PLAN's Chapter 2 (PDF 114)

Throughout the 45-year historical record, the MBNM estimates that groundwater in storage declined by an average of approximately 130 AFY (Table F-2).

And most recently, in the Montecito Water District Memorandum Section 5-C dated October 25, 2022 (PDF 58) (in part):

Water use above budget is occurring across most customer classes with the most significant variance occurring within the residential customer class. The reason(s) for the elevated use remains uncertain but is thought to be attributed to consecutive year of below average rainfall, a historic dry first quarter of 2022, and/or PRIVATE WELL USE DECREASGING DUE TO DECLINING GROUNDWATER LEVELS. (Emphasis Added)

In other words, after overusing the groundwater, well extractors are retreating to the MWD at the time when it is under the greatest stress. They don't want to pay the costs delineated in Footnote 3 to maintain the system, but they want to use it as they wish when "times are toughest".

There is nothing in the PLAN that either places limits on existing usage or on drilling new wells and it is only reasonable to assume that greater use will occur, exactly in contradiction to "increase storage".

While nobody knows, one of the predictions for climate change is "wetter wets and drier dries". In order to prepare for this possible scenario, additional storage space is needed "somewhere". One approach is a new above ground reservoir that would cost billions, take forever to get approved and built, and is subject to significant evaporative loss. Or another approach is using the Montecito Groundwater Basin which would cost little to implement, needs no approval, and is not subject to evaporative loss.

And the PLAN does not discuss this either.

DWR requires the development of "future scenarios". The first extends the current rain patterns into the future and the second uses DWRs prediction of rain patterns which are actually wetter than current conditions. I believe it is only prudent to assume a climate scenario that has less rainfall – perhaps a mirror image of DWR's "wet future", just in case... This is not considered in the PLAN either.

# **FUTURE ACTIONS**

I believe the use of Montecito Groundwater Basin should be at an inflexion point. Do the 4,831 parcels in the GSA plan area accept/endorse the DRAFT PLAN that overwhelmingly favors 8.25% of the overlying parcels by granting them exclusive use of 900 AFY of the State's water meant for *THE INTEREST OF THE PEOPLE AND FOR THE PUBLIC WELFARE* for the next 50 years, or should ALL of overlying parcels enjoy the benefits of this water?

I am sure that the 8.25% will be extremely unhappy with the following, but I see no other alternative to satisfy "IN PUBLIC INTEREST". A community discussion is sure to ensue where perhaps a better idea emerges.

The Sustainable Groundwater Management Act (in part):

10726.2.

A groundwater sustainability agency may do the following:

(d) Perform any acts necessary or proper to enable the agency to purchase, transfer, deliver, or exchange water or water rights of any type with any person that may be necessary or proper to carry out any of the purposes of this part, including, but not limited to, providing surface water in exchange for a groundwater extractor's agreement to reduce or cease groundwater extractions. The agency shall not deliver retail water supplies within the service area of a public water system without either the consent of that system or authority under the agency's existing authorities.

Given the benefit that would be enjoyed by ALL overlying parcels, I see no alternative other than "transferring" the water to the MWD (or MGSA to overcome the possible legal challenge who would then enter into an agreement with the MWD to manage this water) for management and distribution to all of the overlying parcels. (Yes, there is a slight difference in boundaries between the MWD and the MGWB and an accommodation would need to be found to fairly treat those parcels) This should lower the cost of water to all, except the current well extractors of

course, increase storage, strengthen our water security and ensure the water is used IN THE INTEREST OF THE PEOPLE.

Assuming these transfers occur, providing the necessary infrastructure for the 900 AFY (pipe size, pumping capacity, treatment capacity, etc.) will take a while - perhaps 5, 10 or even 15 years. But even so, the long term benefit is overwhelming.

Many may conclude my interests lie in imposing undesirable restrictions, taking away water rights, needlessly restricting personal freedom, and promoting "living small". NO! My interests lie in equitable access for an extremely valuable community resource.

In all of the State Law/Regulations I have reviewed, I only see references to surface water and groundwater, but never to Desal. I don't believe the State has any say on the use of Desal water, including the regulations of usage found in WELO. If the MWD establishes a WELO based water rate pricing structure that includes a Top Tier containing only Desal water, I believe the State would have NOTHING TO say whatsoever on this Top Tier and "living large" would be unchallengeable. Curiously, Landscape Architects inform me that WELO compliance is fairly simple to achieve for large parcels (assuming that the entire landscape is not high water using plants), but that small parcels have trouble qualifying given that WELO balances a "proportion of use" between Very Low, Low, Medium and High (e.g. grass). These smaller parcels often want enough grass for their children to play; an area often exceeding the 25% +/- of high water use (grass) found in a typical WELO calculation. To address this, I have included an EXCEL spreadsheet that can be explored to see how a suggested rate structure would allow this. See Footnote 5 and the included WELO spreadsheet.

Given the large price jump for the 8.25% (and the probable reduction in water use because of this "higher cost"), it would not surprise me if the MWD ends up with "too much" water. This "excess" water could be retained in the Basin, providing the increased storage described above.

In Summary, these "Actions":

- 1) Eliminates waste of "State Water", yet provides a path for those wanting more,
- 2) Ensures that all available water is "for the public interest", and
- 3) Increases storage for drought preparedness.

Water Section 10720.1 is satisfied.

## **CONFLICTS OF INTEREST**

The Fair Political Practices Commission administers the conflict of interest provisions for government officials in California. On their website it says:

Under the Act, a public official has a disqualifying conflict of interest in a governmental decision if it is foreseeable that the decision will have a financial impact on his or her personal finances or other financial interests. In such cases, there is a risk of biased decision-making that could sacrifice the public's interest

in favor of the official's private financial interests. To avoid actual bias or the appearance of possible improprieties, the public official is prohibited from participating in the decision.

I have no idea if any of the GSA Board of Directors has a water well, but given the substantial amount of money involved in any decision on groundwater, I believe this issue should be reviewed by the GSA Board and appropriate action taken.

# **CONCLUSION**

Nick, I apologize for the length, complexity, heavy reliance on numerics, and the citing of State Law/Regulation in this missive. I hope they show this Comment Letter is not simply opinion, but a well considered, holistic and equitable consideration of the PLAN rooted in the paradigm suggested/mandated by Water Code Section 10720.1.

Tha	ank	you.	
	*****		

John Watson

#### Footnote 1:

WELO has become the "go to" standard for outdoor water use for urban water users in the State Regulations:

- 1) Currently, landscape projects with greater than 2,500 sq.ft. are required to apply this standard regardless of water source (i.e. water district, surface water, groundwater, or any combination) in order to get a building permit.
- 2) In the PLAN's Chapter 2, *Groundwater Extraction Estimates* (PDF 109-111), the entire calculation method used for calculating the current water use is based on the DWRs "irrigated" land estimates developed by Quantum Spatial, Inc.
- 3) Quantum Spatial, Inc. was hired by DWR to document the irrigated area of each partial in the state. Water use targets are then derived using WELO. All from State Water Code 10609.6 *Urban Water Use Objectives and Water Use Reporting*, which the MWD is currently implementing.
- 4) It should be noted that these Targets apply to ALL parcels using water district water AND groundwater. Given that the MWD has not had information on groundwater use until now when it has reported its usage vs its DWR target, the MWD has "looked good". Perhaps adding the 900 AFY used by private extractors should be included in the MWDs reporting to tell the whole truth about water use within its district boundary. And symmetrically, perhaps the Desal usage should be subtracted out…
- 5) For the un-initiated, WELO can be daunting. To assist in demystifying WELO, I have included an Excel Worksheet that does all of the calculations for the user. It still requires knowledge of a plants water usage (Very Low, Low, Medium, or High Water use), and it requires a correct area calculations for each. Generally speaking, if high water using plants (lawns most tropical plants and many ornamental flowering plans) is around 25%,

the WELO requirements for water use will be met. Please note: in the Spreadsheet, only "green" cells will accept data AND this worksheet is in a "BETA", so there may be errors, I don't think so, but maybe.

6) Most of the user input is done in Column "O" on Rows 27 through 45. The primary benefit for you is in Section F, where the price of water is revealed based on assumptions discussed above for A) well extractors, B) current MWD water users, and C) a suggestion of how a WELO based rate structure could be constructed, although the exact "break points" and pricing levels need far more investigation if this approach is adopted.

## Footnote 2:

WELO's Maximum Applied Water Allowance (MAWA) per acre (using Dudek's Evapotranspiration calculation of Eto of **43.95** (chapter 2 page 59), **.55** for the "Residential Eto Adjustment Factor", **.62** for the Conversion (converting from Acre Inches to Gallons) and **43,560** (the number of sq.ft. in one acre) is:

"Eto" x "ET Adjustment Factor" x "Conversion Factor" x "Area"

 $43.95 \times .55 \times .62 \times 43,560 = 652,832 \text{ GALLONS per Year, which equals } 2.0 \text{ AFY.}$ 

#### **Footnote 3:**

To be fair, the costs for "irrigation only" groundwater and MWD "potable" water need to be examined:

- 1) Private Groundwater for irrigation includes pumping expense, and maybe (but not certainly) minor treatment.
- 2) MWD "potable" (i.e. drinkable) water includes:
  - A) Cost of water ranging from \$0.51 to \$8.00 per HCF (from MWD Rate Study)
  - B) Treating the water to ensure its safety for drinking
  - C) Pumping the water to its destination
  - D) Providing "Peeking" capacity to meet highest usage demand (hottest hour of the hottest summer day)
  - E) Administrative Costs (Personnel, facilities, trucks, etc.)
- 3) So the "Savings" discussed here will not fully accrue to MWD customers if 100% of this water becomes available to the MWD because we must pay for Items B through E in addition to basic cost of water.
- 4) The MWD customers will benefit because the groundwater cost is on the lower end of the water costs available to the District AND because the Administrative Costs will be distributed across a larger number of delivered water so the per unit cost will go down and if properly distributed, the MWD rates will go down.

#### Footnote 4:

The PLAN indicates that in some areas of the MGB, one groundwater basin "sits on top of" another groundwater basin. The numbers I used are for extractions for BOTH basins (someone's well is deep enough that they can draw water from both basins…) So both the 900 AFY and 1014 AFY account water extracted from both basins even though the MGB is only the "top" basin.

ALSO: AFY means Acre Feet per Year and the "435.6" converts AF to HCF.

## **Footnote 5:**

```
WSA annual costs after 2025 = $4,983,161 (Rate Study Table 2-2 (PDF 17))
WSA yearly purchase agreement is = 1430 AF (MWD website)
Therefore the cost per AF: $4,983,161/1,430 = $3,484.73 Per AF
And Converting AF to HCF = $3,484.73 /435.59 = $8.00 per HCF
Including the "other costs" from Table 4-9 (Rate Study PDF 52)
WSA + Base + Peaking + Treatment + Conservation = Total
$8.00 + 2.45 + $1.44 + $0.65 + $0.30 = $12.84 per HCF
```

Note: ONLY Desal water as a source is used in order to eliminate any claim by the State that it can control this water and its use. Also note, that by creating this separate category for Desal, ALL OTHER rate categories will probably (but not necessarily) "remove" the Desal component cost from its respective rate structure and therefore their respective rate will go down. Also, this Desal Only component does not include the State Water Project, which adds a significant cost to most other rates.



5/9/2023

Brian Goebel, President Ken Coates, Vice President Cori Hayman, Director Floyd Wicks, Director Tobe Plough, Director

BOARD OF DIRECTORS:

General Manager and Board Secretary: Nick Turner

John Watson

Re: Comments on the DRAFT Groundwater Sustainability Plan

Dear Mr. Watson,

This letter is in reply to your comment letter submitted on April 5, 2023, regarding the Montecito Groundwater Basin Groundwater Sustainability Agency's (Montecito GSA) Draft Groundwater Sustainability Plan (GSP).

First, thank you for your comments and taking an active role in the development of the GSP. On behalf of the Montecito GSA and out of respect for the considerable effort you took in providing comments, we wanted to provide a written response. While an attempt has been made to address your main points, please receive this as an open dialogue. Our goal is to provide clarifying information and we recognize the discussion may be ongoing.

## **Water Rights**

With regard to your comment that the State of California "owns" all of the surface and groundwater in the State, the State does not own all surface and groundwater but instead has the authority to determine what water of the State – surface and underground – can be converted to public use or controlled for public protection [Water Code Section 104]. This authority is consistent with Article X, Section 2 of the California Constitution which requires:

"...that the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use, or unreasonable method of use, of water be prevented, and that conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and for the public welfare".

The Sustainable Groundwater Management Act (SGMA) is intended, and designed, to enhance local management of groundwater consistent with the Article X, Section 2 requirements set forth above [Water Code Section 10720.1(b)].

## **Use of WELO's Maximum Applied Water Allowances**

The water-use factors relied upon during development of the Future Scenarios for the Montecito Groundwater Basin (MGB) exceed WELO Maximum Applied Water Allowances. The future scenarios were designed to evaluate the MGB's response to anticipated groundwater demands based on the most recent land use information for the MGB (GSP Emergency Regs,

§354.18(c)(3)(B)). The water-use factors relied upon for future modeling are consistent with DWR and CIMIS estimates (DWR 2020; Costello and Jones 2014). Importantly, the simulation results indicate that undesirable results are not likely to occur under the simulated demand scenarios.

Use of the WELO Maximum Applied Water Allowances during development of the GSP future scenarios would underestimate near-term demands on groundwater, which would, in turn, underestimate the potential onset of undesirable results and impacts to the beneficial uses and users of groundwater. Because of this, the use of WELO's Maximum Applied Water Allowances is inappropriate for incorporation into the GSP model scenarios. However, the Montecito GSA will continue to evaluate and monitor land uses and will update water-use factors relied upon to estimate pumping in future updates to the GSP.

## Possible Future Project to Develop/Acquire Supplemental Water for Well Owners

This contemplated possible future project is to replace groundwater if/when there are indications of undesirable results occurring, or likely to occur, in the groundwater basin. This possible future project is not intended as a provision to address water waste. Groundwater level and storage depletion is not necessarily a result of water use but could be a result of climate change and severe drought.

The State of California is addressing water waste through the development and implementation of urban water use objectives for public water purveyors. These objectives are required to be implemented beginning in 2024.

The Montecito GSA <u>could</u> potentially develop and implement pumping allocations based on similar objectives. This possibility is described as a possible future project in the GSP in Section 4.2.3. No implementation of this project is planned at this time based on current conditions.

#### **GSA Parcel Fee**

The Montecito GSA's Groundwater Sustainability Fees adopted in 2020 are for the purposes of funding GSA costs during the first 5 years of operations, including development of the statutorily required Groundwater Sustainability Plan which benefits stakeholders uniformly. As the Montecito GSA moves forward with any GSP implementation, it will consider an updated fee study, (within the next 1–2 years) that analyzes various approaches to recover its costs to comply with SGMA.

## **Future Scenario Modeling**

The future climate conditions simulated in the GSP were developed based on DWR's climate change guidance (DWR 2018) and using DWR's climate change datasets. Application of this data and methodology to the MGB resulted in a climate that was generally more extreme, with a 5% increase in the frequency of dry water years and a 4% increase in the frequency of wet water years. While the resulting climate scenarios are slightly wetter than historical conditions

(approximately 0.5 inches per year), the future climate projections are based on the best available data science.

## **Transferring Water Rights**

Groundwater rights are fundamentally either overlying (based on property ownership above a common aquifer) or appropriative (based on physical control and use). The stated intent of SGMA is "to preserve the security of water rights in the state to the greatest extent possible consistent with the sustainable management of groundwater" [Water Code Section 10720.1(b)]. SGMA specifically states that "Nothing in this part, or in any other groundwater management plan adopted pursuant to this part, determines or alters surface water rights or groundwater rights under common law or any provision of law that determines or grants surface water rights" [Water Code Section 10720.5]. Based on the foregoing, neither the Montecito GSA, nor the Montecito Water District (MWD), have the unilateral ability to transfer water to MWD under SGMA. While Water Code Section 10726.2 does give the Montecito GSA the option to purchase, transfer, deliver or exchange water or water rights, data indicates that projects of that nature are not required at the current time, and costs attendant to any such purchase, transfer, delivery, or exchange would need to be carefully evaluated.

The Montecito GSA recognizes the importance of optimizing groundwater usage and storage in the MGB. To this effect, the Montecito GSA has led multiple investigations assessing the feasibility of utilizing the MGB for temporary storage and/or long-term storage (Dudek 2015, GSI Water Solutions, Inc. 2020). These investigations have evaluated historical/current groundwater conditions, aquifer properties, and structural characteristics of the MGB. These studies have found that utilizing the MGB for temporary or long-term storage is not feasible for the following reasons:

- 1) The MGB tends to lose water to the Pacific Ocean.
- 2) The MGB groundwater levels tend to be shallow following normal to high rainfall years, which limits available storage, and may create potential risks associated with liquefaction or increased surface flooding associated with recharge projects.
- 3) The MGB's high-density of private wells, and low transmissivities, make it difficult to identify potential recharge locations that could comply with State regulations regarding subsurface residence times for recharged water.

#### **Desalinated Water Supplies**

The State's urban water use objectives, which are required to be implemented beginning in 2024 by all urban water purveyors, do not differentiate between sources of supply. Therefore, the State is incorporating desalination into these regulations and presumably WELO as well.

## **Conflict of Interest**

Under The Political Reform Act of 1974, multiple factors must be evaluated to determine if a conflict of interest exists. The existence of a financial interest is only one factor in determining whether a disqualifying conflict of interest exists. Another factor is whether the effect of a governmental decision on the public official's economic interests is distinguishable from its effect on the general public [Government Code Section 87103]. The GSP, and any management actions related thereto, will impact Montecito GSA Directors in precisely the same fashion as other impacted individuals, and therefore no conflict of interest exists under FPPC requirements.

Again, the Montecito GSA thanks you for your comments and participation in this process.

Sincerely,

Nick Turner General Manager

CC:

Brian Goebel, Montecito GSA President Nicholas Kunstek, Groundwater Specialist

#### References:

Costello, L. R., and K. S. Jones. 2014. Water Use Classification of Landscape Species: WUCOLS IV 2014. January 2014.

California Department of Water Resources (DWR). 2018. Guidance for Climate Change Data Use During Sustainability Development. August 2018.

California Department of Water Resources (DWR). 2020. Land & Water Use 2011-2014. Land & Water Use 2011-2015 - Datasets - California Natural Resources Agency Open Data. Accessed July 2021.

Dudek. 2015. Montecito Groundwater Basin Recharge Feasibility Study. Prepared for Heal the Ocean, Montecito Water District, and Montecito Sanitary District. September 2015.

GSI Water Solutions, Inc. (GSI). 2020. Groundwater Augmentation Feasibility Analysis for the Montecito Groundwater Basin. Prepared for the Montecito Water District. January 2020.

RECEIVED MAY 15 2023

**Summary:** The following analysis of the United Nations Water Development Report of 2022 and the 'Urban Water Crisis' published in the journal *Nature Sustainability* on April 10, 2023, is intended to provide to the GSP board and staff relevant facts to enhance the discussion of the draft GSP.

Recommendation for the board to consider are located and the end of the analysis. As I have in the past, I commend and appreciate the hard work the board and staff have invested in the production of the draft GSP. It is however a draft, and I would hope that additional relevant studies and public comment will result in a limited revision of the way forward.

# **GSP Draft Analysis:**

Following are quotes from the *Nature Sustainability* study that are relevant to Montecito:

- 1. 'Over the past two decades, more than 80 metropolitan cities across the world have faced sever water shortages due to droughts and unsustainable water use.'
- 2. 'The sustainable management of urban water supply constitutes one of the key challenges of our time.'
- 3. '...social power and heterogeneity in society shape both the way urban water crises unfold and who is vulnerable to them.'
- 4. '...conditions of water scarcity and limited access to water result from the prevailing politics and power dynamics that govern the city.' **Montecito** must not fall victim to this same issue.
- 5. 'The analysis.... focuses away from averages of urban water consumption and simulates consumption levels across different social groups. This approach allows an exploration of the role that elite and higher-income classes play in the water balance of a city, while also assessing their ability to respond to drought-related water crises relative to other social groups.'
- 6. 'We first describe the model's estimates of different water consumption levels across an unequal urban space. The results highlight the disproportionate water uses of privileged social groups relative to the rest of the city.' Glyn Davies-the currently constituted GSP does not permit such an analysis of the Montecito Basin due to the inability to measure (as opposed to projections based on limited and unreliable historic data) well use in the basin.
- 7. '...future drought resilience strategy should be more proactive and be able to recognize the long-term socioenvironmental patterns that engender urban water crisis.'

- 8. 'Daily household water uses are as follows by classification:
  - a. Elite-43 units
  - b. Upper middle income-19 units
  - c. Lower middle income-5 units'

Glyn Davies-Montecito has no ability, under the proposed GSP to conduct such an analysis due to unmetered wells.

- 9. 'Analysis shows that most of the water consumed by privileged social groups (elite and upper-middle income) is used for non-basic water needs (amenities) such as the irrigation of residential gardens, swimming pools and additional fixtures, both indoor and outdoor.'
- 10. 'Specifically, privileged water consumption is unsustainable because in the short term, it disproportionally uses the water available for the entire urban population. In the long term, privileged consumption constitutes an environmental threat to the status of local .... groundwater sources.'
- 11. 'Low-income residents are significantly more vulnerable to the demand-measures enforced by the city than are more-affluent inhabitants, who can afford tariff increase and can access and develop alternative water sources.' Glyn Davies-In Montecito the more affluent may develop and then use the limited water resources at no water cost to themselves. Then when the property is marketed for sale the fact that it has a well or several wells on the property is prominently advertised.
- 12. '...the elite and upper-middle-income groups tend to enhance their water security after a drought while low-income groups become more water insecure.' Glyn Davies...my wife was recently getting a hair cut in Montecito and overheard a female Montecito resident say, 'I am putting in a well, I am not giving up my green lawn'. She can do that and use all the water she wishes and not pay a penny for the water consumed under current and future plans according to the presently presented GSP!!!

I have been urged to study specific sections of the GSP to further my education as to the analysis and conclusions reached in the GSP. I have done so. My study has made me appreciate just how much work has occurred to get the community to this point. It has also revealed how much better the GSP can be with some further observations and recommendations.

# Specifically:

1. It is clear to anyone reading the report that the hard work and analysis is based on incomplete data, as old records are not complete and no accurate

measurement of the extraction of water from the basin exists. The analysis is based on educated guesses and projections using this limited data. I now refer back to my first observations provided to the board that is a management and certainly an engineering fact that if you cannot measure you cannot effectively manage.

2. The GSP, as currently constituted, basis the sustainability of our water supply on a number of future projections:

'Future baseline GW extraction due to wells is not anticipated to increase during the model period to 2069.' Without the GSP going on record of opposing future well drilling, I believe that this projection will not be accurate. It is quite apparent to long term residents that the financial demographics of newer residents are those of a much wealthier population. The ability to obtain free, unlimited water, is a temptation that will not be satisfied without a well.

- a. 'An increase in precipitation is anticipated due to climate change.'
  While I recognize that this statement is based on the projections of qualified experts it will not necessarily, as the GSP implies, be beneficial to our local water supply. In fact, an argument could be made that the infrequent 'atmospheric river' surrounded on both sides by drought years might actually decrease our usable supply of basin water. Much of the 'atmospheric river' precipitation ends up in the ocean not the basin.
- b. As I stated earlier, the current projections are based on unreliable, inconsistent historical records back to the early 1970's. Even last year's records are inadequate due to inability to accurately measure usage. The draft GSP states 'MWD's diverse water supply portfolio, which include local surface water, imported water, desalinated water, and local groundwater, is anticipated to satisfy demand in normal and single dry-year conditions. Does anyone who has lived in the area believe that dry years occur as single year events. In fact, climate change might exacerbate the likelihood of multiple dry year events.
- 3. The GSP does not address the fact that well owners benefit from free, unlimited water. They also benefit from increased sales price of their properties due to the water subsidy provided by the community owned basin. The free, unlimited water is most inappropriate during drought conditions, when well usage is almost certainly at a maximum. The general public, during these drought conditions, is subject to financial rationing of their water usage due the cost of the high cost of all but the basic tiers of water usage.

## Recommendations:

- 1. The GSP be amended to require all private wells be metered within 18 months.
- 2. That the GSB, while recognizing that the County of Santa Barbara is the governing body, go on record of opposing future well drilling in the district.
- 3. The GSP be amended to recognize that at some time in the future that water extraction from wells will no longer be free.
- 4. To avoid any conflict of interest any board member that has a well, or resides in a community utilizing unmetered free water, recuse themselves from voting on the GSP draft.