



**Eastern San Joaquin Groundwater Authority
Groundwater Sustainability Workgroup
August 15, 2018
4 – 5:30 p.m.
Robert J. Cabral Agricultural Center
2101 E. Earhart Ave., Stockton, CA, Mokelumne Room**

Committee Members in Attendance

	Name	Organization
	Colin Bailey	The Environmental Justice Coalition for Water
	Barbara Barrigan-Parrilla	Restore the Delta
	Gene E. Bigler	PUENTES
	Drew Cheney	Machado Family Farms
x	Robert Dean	Calaveras County Resource Conservation District
x	Mary Elizabeth	Sierra Club
	David Fries	San Joaquin Audubon
x	Joey Giordano	The Wine Group
x	Jack Hamm	Lima Ranch
x	Mary Hildebrand	South Delta Water Agency
	George V. Hartmann	The Hartmann Law Firm
	Michael Machado	Farmer
x	Todd Shuman	Sequoia ForestKeeper
	Ryan Mock	J.R. Simplot Company
x	Yolanda Park	Catholic Charities of the Diocese of Stockton
x	Will Price	University of the Pacific & Vice Chair, SJ County Advisory Water Commission
	Daryll Quaresma	2Q Farming, Inc.
	Jennifer Shipman	Manufacturers Council of the Central Valley
	Chris Shutes	California Sportfishing Protection Alliance
	Michael F. Stieler	CGCS, Spring Creek Golf & Country Club
x	Linda Turkatte	San Joaquin County Environmental Health Department
	Ken Vogel	San Joaquin Farm Bureau Federation
x	Ted Wells	Trinchero Family Estates and Sutter Home Winery
	General Public	
x	Jane Wagner-Tyack	League of Women Voters of SJ County
x	Paul Wells	Department of Water Resources
x	Andrew Watkins	Stockton East Water District
	Staff and Consultants	
	Brandon Nakagawa	County ESJ GSP Project Representative
x	Michael Callahan	County ESJ
x	Alicia Connelly	County ESJ
x	Alyson Watson	ESJ GSP Project Manager

	Christy Kennedy	ESJ GSP Deputy Project Manager
x	Lucy Eidam Crocker	Stakeholder Engagement & Public Outreach Consultant

Meeting Notes

I. Welcome

- a. Alyson Watson welcomed the group.
- b. Alyson Watson reviewed the meeting agenda, emphasizing the focus would be on discussing undesirable results and minimum thresholds.

II. Comments on Meeting Notes

- a. Jane Wagner-Tyack – asked for clarification on the situation assessment referenced in Section V of the July meeting notes. Alyson Watson shared that as part of the situation assessment, up to 25 stakeholders and/or small groups will be interviewed and asked questions on their interests and concerns. DWR is still intending to move forward with it, but it is taking longer than anticipated to get going. DWR will be covering the cost of the survey and it is different than the grant for the contract for this effort.
- b. Review of key values – members discussed the two modifications to the 12 key values based on feedback from last time (inclusion of “be *affordable*” and “including climate change”). After discussion of the new additions, the group decided to leave the language as is for now.

III. Update on Background Conditions

- a. Alyson Watson shared slides on data availability and the datasets used to date.
- b. Maps were presented to show the distribution and depth of public supply, agricultural and domestic wells in the Subbasin.
 - i. Public supply wells are clustered around urban centers. 95 public supply wells are deeper than 500 ft.
 - ii. Agricultural wells are widely distributed and increase in depth as you move from east to west. 462 agricultural wells are deeper than 500 ft.
 - iii. Domestic wells are widely distributed, generally shallower, and increase in depth as you move from east to west. 193 domestic wells are deeper than 500 ft., 6,000 domestic wells are between 200-500 ft., and about 4,000 domestic wells are between 0 and 200 ft.
 - iv. Reminder, based on Ara Marderosian’s comments, to have an explanation of acronyms and abbreviations on the slides moving forward. The consulting team will add a description of acronyms as often as possible to documents, PPTs and other supporting information.
 - v. Members discussed the importance of considering topography when looking at well depth and indicated that wells on the east side are more expensive because they have to be drilled deeper.

IV. Undesirable Results & Minimum Thresholds

- a. Alyson Watson reminded the group of the 6 sustainability indicators that must be considered under SGMA: Chronic Lowering of Groundwater Levels, Reduction in Groundwater Storage, Seawater Intrusion, Degraded Water Quality, Land Subsidence, Depletion of Interconnected Surface Water
- b. Alyson Watson gave a review of SGMA terminology
 - i. Undesirable results are negative impacts that can occur for each sustainability indicator
 - ii. Minimum thresholds are the levels at which undesirable results may begin to occur
- c. Alyson Watson reviewed the process through which measurable objectives will be developed. First, they will identify scenarios we do not want to happen and set minimum thresholds that will be protective of beneficial uses.

- d. Members discussed undesirable results for the following sustainability indicators:
 - a. Chronic Lowering of Groundwater Levels
 - b. Reduction in Groundwater Storage, Seawater Intrusion
 - c. Degraded Water Quality. (i.e., “*What are we trying to avoid?*”)
 - i. Due to time restrictions, the Sustainability Indicators of Land Subsidence and Depletion of Interconnected Surface Water will be discussed at the next meeting.
- e. Discussion of Chronic Lowering of Groundwater Levels
 - Undesirable Results:
 - i. Reduced productivity, dry wells or increased pumping costs for all users including disadvantaged communities.
 - ii. Cones of depression impacting viability of adjacent shallower wells (beyond ability to recharge)
 - iii. Surface water impacts
 - Thresholds:
 - i. Define what is “significant and unreasonable” for wells going dry. (For example, consider the age of the well)
 - ii. Consider draw down vs. recharge rates
 - iii. Affordability or costs as consideration: initial capital and operations and maintenance ongoing costs, esp. for small public water systems
 - iv. Woodard & Curran to follow up on what the relationship is between shallow wells and disadvantaged communities and bring a definition of disadvantaged communities
- f. Discussion of Reduction in Groundwater Storage
 - i. Include threshold to consider future water markets, etc. (note: groundwater elevation thresholds will be more protective)
 - ii. Woodard & Curran to follow up on what is the aquifer depth used in the model (and are there water quality concerns?)
- g. Discussion of Seawater Intrusion
 - i. Direct seawater intrusion does not occur in the Subbasin. Salinity will be addressed via the water quality sustainability indicator
- h. Discussion of Degraded Water Quality
 - i. Salinity – Salinity solutions should not further aggravate current “salt sink”
 - ii. Do not hold basin responsible for conditions that are outside of control
 - 1. Naturally occurring contaminants (e.g., arsenic)
 - 2. Imported contaminants – salts, pharmaceuticals and personal care products (PPCPS), contaminants of emerging concern (CECs) etc. in surface water
 - 3. Questions were asked about whether items such as herbicides and pesticides would be considered

V. Brainstorming for Open House Stations

- a. Members discussed ideas for outreach materials and content to include at the upcoming Open House event on August 29. (“*What is critical to focus on and get across?*”)
 - i. Big questions:
 - 1. What is SGMA?
 - 2. What are we achieving?
 - 3. Why is it important?
 - ii. Handout with acronyms and terminology defined
 - iii. The Union of Concerned Scientists has a booklet called Getting Involved in Groundwater that can be distributed
 - iv. Include large contour maps and have someone to explain where each attendee’s home or business is located on the map
 - v. Information on the geology and hydrogeology of the area
 - vi. Consider a home learning opportunity with information about who to go to with questions about their water
 - vii. Include information about upcoming meetings and how to get involved

Comment by Todd Shuman

No mention of the discussion that occurred concerning nitrates and significant levels of nitrates as an indicator of degraded groundwater quality. The primary Ag rep argued that nitrates should not be considered because dairy operations are supposed to conform with permits and nitrate regulation by other state entities already. Todd Shuman argued the opposite and stated that nitrates levels should be considered in assessing whether the GW Basin is complying with the mandate concerning degraded GW quality. Dairies are not the only source of nitrates, perhaps not even the primary source. Farmer-applied fertilizer to grow crops is likely a significant vector concerning nitrate formation and leakage into GW. Along with herbicides and pesticides, nitrate concentrations should be considered when making determinations concerning the quality of groundwater in the ESJ GW Basin.

Comment by Robert Dean

I recall that in our last meeting there was a comment about the ESJ basin having plenty of water if you consider the quantity of water at depth. It would seem to me that this could be considered a false narrative if we're concerned with water availability, economies of scale and social justice.

The great concern with regard to water availability is; will there be sufficient water supply over time at usable levels of quality. The economies of scale go directly to the costs of securing and distributing this water. We know the costs of drilling and pumping and we can calculate the costs of delivery. The issue of social justice is another matter. As said above we understand the economies of scale but when the sustainability factor is brought in all sorts of issues are raised and these are the things that concern me. For example, how will people be able to afford the increasing cost of water when these costs go up at an always ascending pace? Whether it's the cost of pumping or meeting agency rate requirements, over time these expenses can become prohibitive. This doesn't even factor in the public health cost of treatment. In the context of climate change, when droughts impact ag production and this directly impacts income at both the primary and secondary level, what becomes of sustainability. I think this is a significant threshold issue but it may be outside the purview of our workgroup. It is appropriate to call attention to it because, while decisions to alleviate this condition will happen at the local level, the solution is legislative and needs to be addressed at the state and possibly federal level.

I don't know where this would fit in to our workgroup agenda, but it seems that in order to successfully address groundwater sustainability this need to be part of the conversation.