



**Eastern San Joaquin Groundwater Authority
Groundwater Sustainability Workgroup
March 13, 2019
4 – 5:30 p.m.
San Joaquin County Public Works Department
1810 E. Hazelton Ave., Stockton – Conference Room A**

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
	Robert Dean	Calaveras County Resource Conservation District
X	Mary Elizabeth	Sierra Club
X	David Fries	San Joaquin Audubon
	Joey Giordano	The Wine Group
	Jack Hamm	Lima Ranch
	Mary Hildebrand	South Delta Water Agency
X	George V. Hartmann	The Hartmann Law Firm
X	Michael Machado	Farmer
	Ara Marderosian	Sequoia ForestKeeper
	Ryan Mock	J.R. Simplot Company
	Yolanda Park	Coop
X	Jonathan Pruitt	Catholic Charities of the Diocese of Stockton
	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
	Ted Wells	Trinchero Family Estates and Sutter Home Winery
	John Lambie	Safe Water for All
	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
X	Bryan Pilkington	Private citizen
	Staff and Consultants	

X	Brandon Nakagawa	County ESJ GSP Project Representative
X	Michael Callahan	County ESJ
	Alicia Connelly	County ESJ
X	Alyson Watson	ESJ GSP Project Manager
X	Christy Kennedy	ESJ GSP Deputy Project Manager
X	Lindsay Martien	ESJ GSP Deputy Project Manager
X	Cindy Thomas	Stakeholder Engagement & Public Outreach Consultant

Meeting Notes

I. Welcome

- a. Alyson Watson welcomed the group at 4:07.
- b. Alyson Watson reviewed the meeting agenda, emphasizing the focus would be on the preliminary approach to groundwater-dependent ecosystems and would include an interactive mapping exercise.
- c. Alyson Watson mentioned the group would be reviewing policy recommendations from the Advisory Committee.

II. Meeting Objectives

- a. Alyson Watson discussed the meeting objectives.
 - i. Review and discuss groundwater-dependent ecosystems (GDEs).
 - ii. Review and discuss Advisory Committee recommendations on policy decisions related to implementation plan.
 - iii. Consider approaches to addressing undeveloped agricultural land.

III. Roadmap and Deliverables Update

- a. Alyson Watson provided an updated schedule based on the desire for an administrative review period. The GSP chapters in each are:
 - i. Bundle 1 – Administrative Information, Plan Area, HCM.
 - ii. Bundle 2 – Water Budget (at basin scale).
 - iii. Bundle 3 – Undesirable Results and Minimum Thresholds, Monitoring Network, Projects.
- b. Alyson Watson noted Bundles 2 and 3 will be released in June.

IV. Groundwater-Dependent Ecosystems

- a. Alyson Watson presented the preliminary methodology for identifying GDEs in the basin.
- b. The draft results will be reviewed with GSAs to ground-truth areas that have and have not been identified as GDEs through this analysis.
- c. DWR's groundwater dataset was used and The Nature Conservancy was consulted
- d. Areas with access to supplemental water supplies were removed, including:
 - i. Managed wetlands and areas without shallow groundwater.
 - ii. Areas adjacent to canals and ditches, irrigated agricultural fields, losing streams, perennial rivers, and managed wetlands.
- e. Alyson Watson reviewed the maps and the topography while explaining the criteria and buffers used.

- f. Alyson Watson asked if there were questions or if any information on the maps that were incorrectly coded.
- g. Mary Elizabeth said she has been informed that receiving surface water does not preclude an environment from being groundwater dependent. Eliminating areas that get water from another source may have eliminated GDEs.
- h. Mary Elizabeth suggested reducing the water level in screening so that groundwater dependent ecosystems could consider well locations and well construction levels.
- i. Bryan Pilkington said The Nature Conservancy published a book that is SGMA-compliant and has pictorials with guidance on GDEs. You can find the information on their website.
(<https://www.scienceforconservation.org/assets/downloads/GDEsUnderSGMA.pdf>)
- j. Brandon Nakagawa stated Oak Grove Park has been mapped using the screening criteria, although it is not necessarily a GDE.
- k. Mary Elizabeth noted the water that the County is using to irrigate the grass is not enough for the trees.
- l. Alyson Watson indicated that there may be GDEs missing that were not caught in the screening. She encouraged reaching out if there are any GDEs that were missed.
- m. Bryan Pilkington asked how golf courses fit into GDEs.
- n. Alyson Watson said they may be in the original dataset. Looking at the depth of water, a golf course would not be included if groundwater levels were not shallow.

V. Working Session

- a. Alyson Watson described how the basin is divided up into four maps for the working session. She asked the group to identify known GDEs.
 - i. George V. Hartmann said that groundwater irrigation is not used in the Delta. The water table is high and a lot of crops use groundwater that is absorbed into the peat soil. With the exception of a few locations, anything along a water course has riparian rights and don't need to use groundwater. You can use a gravity siphon to get water.
 - ii. Alyson Watson clarified that we are looking for a high ground water table.
 - iii. George V. Hartmann stated the Delta does not conform due to the tidal influences. The Delta is like a bowl, not like a tributary. The biggest problem is getting rid of water.
 - iv. George V. Hartmann said McDonald Island had an engineer do calculations related to diversion recording. They pump and divert twice as much water as they take in from seepage, rainfall and underground springs. If you shut off the pumps, Delta islands would flood and waste a lot of water.
 - v. David Fries said everything would be 15-20 feet underwater.
 - vi. George V. Hartmann said these areas are dependent on groundwater but not in jeopardy. If sea level rises as forecasted, it will all be underwater anyway.
 - vii. Mary Elizabeth noted that she was surprised that there were not more GDEs in the South County or farther inland.
 - viii. Alyson Watson said they are going to reach out to the individual GSAs to capture missing areas.
 - ix. Alyson Watson described each screen in the analysis again.
 - x. Mary Elizabeth asked about the 50 feet adjacent to the agriculture screen.
 - xi. Alyson Watson explained supplemental supply and irrigation supply.

xii. Alyson Watson said the maps will be distributed for feedback.

VI. Policy Elements Related to Implementation Plan

- a. Alyson Watson discussed the direction updates from GSA staff and legal counsel. She reviewed identified policy questions and recommendations made by the Advisory Committee.
- b. Policy elements related to implementation plan:
 - i. Water budget planning estimates
 - ii. Sustainability indicators
 - iii. Monitoring, measuring and model refinements
 - iv. Project implementation
 - v. Management actions
- c. Water budget planning estimates – the GSP needs to develop a sustainable yield on a long-term average basis. The consultant recommendation was to use the low end estimate and verify and validate the modeling. There is a staff report with more information. The Advisory Committee and Board will consider this topic next month.
- d. Mary Elizabeth asked why the average was selected.
- e. Alyson Watson said the averages from past, present and predicted future were used for an average. When we look at achieving sustainability, we need to look at the sustainable yield number. There is a 78,000 deficit to make up by 2040.
- f. Linda Turkatte asked about pumping offset and increased demands.
- g. Alyson Watson explained what is needed by 2040 and how to refine a plan once validating numbers.
- h. Michael Machado asked for the deficit today.
- i. Alyson Watson said it is not significantly different due to little change in cropping patterns.
- j. Michael Machado said that people are making investments today based on the sustained plan for over 20 years.
- k. Alyson Watson asked what can be done to recharge to continue support for agriculture development.
- l. David Fries noted that salinity may increase and those using river water will need to find other sources.
- m. Alyson Watson said there is data to suggest no Delta saline intrusion. A network will be monitoring potential increases.
- n. George V. Hartmann asked about the mixing zone, noting it used to be 15 miles further west than it is now.
- o. David Fries said tunnels will bring salinity closer.
- p. Alyson Watson said that the focus, for our purposes, is on salinity in groundwater only.
- q. George V. Hartmann said they are all interconnected. Delta farmers are storing salt during the irrigation season, then floods release the salt back in. Farming there causes a salt banking. In the south Delta, where they don't have adequate flow, the salt content in the land is significant. Part of the Bay Delta Water Quality Control Plan is to increase the salt level.
- r. Alyson Watson said the concern is groundwater quality, as it is controlled by groundwater actions.

- s. Mary Elizabeth asked if agricultural water usage was reduced, since municipal usage is so much less than agricultural usage.
- t. Brandon Nakagawa said previous agricultural land has been turned into municipal land.
- u. Mary Elizabeth asked if there is data to determine if having more municipal land decreases use.
- v. George V. Hartmann asked what the plan is for Woodbridge Irrigation District pulling out of the JPA.
- w. Alyson Watson said the County has not made a decision and they are not sure what intervention will look like.
- x. Alyson Watson discussed the six sustainability indicators as well as monitoring, measuring and model refinements.
- y. Mary Elizabeth asked about one of the study projects. She thinks there should be more studies, as well as a to-do list for the evaluation.
- z. Alyson Watson discussed project implementation.
 - i. SGMA projects that go into the GSP Implementation Plan can be developed and implemented at the GSA level, at a regional level, or the subbasin level.
 - ii. The level at which projects are implemented could have implications for project implementation, authority, control and cost.
- aa. Alyson Watson said they did not get to item five. The recommendation is a mix of management and supply.

VII. Policy Elements Related to Implementation Plan: Approach to Undeveloped Ag. Land

- a. Brandon Nakagawa said he has been taking comments from the public and there is an expectation of County action. He asked: Should the County have monitoring policies and if so, what do they look like?
- b. George V. Hartmann said it depends on location.
- c. Mary Elizabeth said if there is no change of cropping patterns then you need to expand to include permanent cropping.
- d. Michael Machado said to bring in balance groundwater overdraft it has been estimated that up to 500,000 acres of farmland in the Central Valley would have to be fallowed and that to do so on a piecemeal basis would be expensive and not necessarily meet the goals of SGMA.
- e. George V. Hartmann indicated that weeds use more water than crops. The best option is to practice efficient agriculture.
- f. Andrew Watkins said some of the areas to the east side being developed are an economic engine that fuels jobs to the community. If a moratorium is put on these wells, then we should stop all development. The state would have to do away with all building permits and wells permits. They will have to change agricultural water to urban water.
- g. Michael Machado said basin surface water should not be allowed to be exported.
- h. Mary Elizabeth said that the cones of depressions should not be allowed to have new wells until they recover. Wells can be put in with the sustainable yield and new pumping should be temporarily reduced until it is sustainable.
- i. Bryan Pilkington said to look at what EBMUD and Camanche are doing. He noted the efforts the district is making to go around the water. It would be helpful to have access to that water via in-lieu or conjunctive use.

- j. Mary Elizabeth said groundwater recharge should have a policy where currently undeveloped land can be assessed for recharge ability. Funds can be set aside for us as a basin to acquire the land for purposes of recharge. Once it is developed, it is lost forever.
- k. Jane Wagner-Tyack said we do not do a good job at capturing stormwater. We do not have a lot of low impact urban development.
- l. Bryan Pilkington said it is urgent to get this information out to the public.
- m. George V. Hartmann said during the drought, they enacted legislation about water usage. They had such a favorable response that other water providers had to raise their rates to keep operations up.
- n. Alyson Watson said outreach is going to be important when an implementation and finance plan is ready.
- o. Brandon Nakagawa said another option is building and recharging our way into sustainability. He suggested an impact development fee or a sales tax.
- p. George V. Hartmann said a sales tax is regressive, people who irrigate with groundwater should pay for the cost of replenishing it.
- q. Michael Machado asked if there will be credit for those districts that are already practicing extraction taxes. If it is universal, then some people would be paying twice.
- r. Mary Elizabeth said we need to work on dual projects that reduce flood risk and recharge ground water.

VIII. Announcements

- a. The next meeting takes place on April 10

IX. Other Topics

Comments by Joey Giordano

In Section III.b., it says that GSP Bundles 2 & 3 will be released in June. When will Bundle 1 of the GSP be released?