EASTERN SAN JOAQUIN GROUNDWATER AUTHORITY

Board of Directors Meeting

AGENDA

Wednesday, September 12, 2018
11:00 a.m. – 12:00 p.m.

San Joaquin County – Robert J. Cabral Agricultural Center
2101 E. Earhart Avenue – Assembly Room #1, Stockton, California

I. Call to Order/Pledge of Allegiance & Safety Announcement/Roll Call

II. SCHEDULED ITEMS – *Presentation materials to be posted on ESJGroundwater.org and emailed prior to the meeting. Copies of presentation materials will be available at the meeting.*

A. Discussion/Action Items:

1. Approval of Minutes of August 8, 2018 (See Attached)
2. GWA Financial Report (See Attached)
3. Roadmap Update and Project Schedule
4. Outreach & Groundwater Sustainability Workgroup Update (See Attached)
5. GSP Action Update
    - Thresholds Status
    - Projected Water Budget
    - Sustainable Yield
    - Projects and Management Actions
    - October Workshop
6. Approval of Workshop Lunch Provided by Eastern San Joaquin Groundwater Authority
7. DWR Update
8. October Agenda Items

B. Informational Items (see attached):

1. August 6, 2018, Letter to Ms. Mary Elizabeth, Delta-Sierra Group Mother Lode Chapter, "Use of Zone 2 Money to Fund San Joaquin County Groundwater Sustainability Agency #2 (Cal Water-County GSA) Obligations"

(Continued on next page)

EASTERN SAN JOAQUIN GROUNDWATER AUTHORITY
Board of Directors Meeting
AGENDA
(Continued)

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2. August 15, 2018, Letter from Stockton East Water District to Department of Water Resources regarding "Basin Boundary Modifications Request, City of Lathrop, Eastern San Joaquin Groundwater Basin"
3. August 27, 2018, westernfarmpress.com, "State Water Board 'Kicks Can' on River Decision to November"
4. August 29, 2018, legal-planet.org, "California Court Finds Public Trust Doctrine Applies to State Groundwater Resources
5. August 30, 2018, California Department of Water Resources, "Sustainable Groundwater Management Program (SGMP) August Newsletter"
6. September 5, 2018, westernfarmpress.com, "Grower Sees Potential for Groundwater Recharge"

III. Public Comment (non-agendized items)

IV. Directors' Comments

V. Future Agenda Items

VI. Adjournment

Next Regular Meeting
October 10, 2018 at 11:00 a.m.
San Joaquin County - Robert J. Cabral Agricultural Center
2101 E. Earhart Ave., Assembly Rm. #1, Stockton, California

Action may be taken on any item

Agendas and Minutes may also be found at http://www.ESJGroundwater.org
Note: If you need disability-related modification or accommodation in order to participate in this meeting, please contact San Joaquin County Public Works Water Resources Staff at (209) 468-3089 at least 48 hours prior to the start of the meeting.

EASTERN SAN JOAQUIN GROUNDWATER AUTHORITY
Board Meeting Minutes
August 8, 2018

I. Call to Order/Pledge of Allegiance & Safety Announcement/Roll Call

The Eastern San Joaquin Groundwater Authority (GWA) Board meeting was convened by Chair Chuck Winn at 11:06 a.m., on August 8, 2018, at the Robert J. Cabral Agricultural Center, 2101 E. Earhart Ave. Stockton, CA. Following the Pledge of Allegiance, Brandon Nakagawa, Water Resources Coordinator of San Joaquin County, provided the required safety information.

In attendance were Chair Chuck Winn, Vice-Chair Mel Panizza, Directors Rich Silverman, Elbert Holman, Russ Thomas, David Fletcher, Mike Henry, Eric Thorburn, Alternate Directors Steven Cavallini, Charlie Swimley, Joe Valente, and Doug Heberle.

II. SCHEDULED ITEMS

A. Discussion/Action Items:

1. Approval of Minutes of July 11, 2018

Ms. Mary Elizabeth, Sierra Club, indicated that though not specifically stated in the minutes, the Outreach & Groundwater Sustainability Workgroup Update section of the minutes reflects a name change. She stated it had been indicated that the name change was done by vote; however, no vote was taken. Ms. Elizabeth proposed the term "stakeholder" be put back in the group name.

Motion:
Dr. Fletcher moved, and Vice Chair Panizza seconded, the approval of the July 11, 2018 minutes. The motion passed (Chair Winn abstained).

2. Roadmap Update and Project Schedule

Ms. Alyson Watson, Woodward & Curran, indicated that the project is on schedule, although some items are moving around in duration.

3. Outreach & Groundwater Sustainability Workgroup Update

Ms. Watson provided an update of the upcoming public meeting scheduled for August 29, highlighting the various related materials available promoting the event as well as information on the website. She stated each month Groundwater Sustainability Agency (GSA) representatives will be asked to fill out a survey template to indicate outreach activities planned for the coming month. She also provided a Groundwater Sustainability Workgroup update and reviewed the 12 key values they discussed. Ms. Elizabeth noted that she had spoken earlier at the GWA Advisory Committee, asking that the group make sure they are updating the main website. She further noted that, as of a few days ago, the Open House event was not listed on the website. Ms. Elizabeth indicated that it will be too late for agencies to include a mailer in their bill inserts or newsletters. She then indicated her appreciation that moving forward, GSAs will be accountable for outreach and reporting planned activities monthly. She also noted that she was not contacted by a Department of Water Resources (DWR) representative as part of a stakeholder interview process that should be underway through DWR funding. She next stated that she would like to thank Ms. Watson for agreeing to speak at the Sierra Club September General Meeting and Ms. Elizabeth invited all to attend.

4. Groundwater Sustainability Plan (GSP) Update

Ms. Watson provided an overview of GSP development. The GWA Advisory Committee and Groundwater Sustainability Workgroup are currently working through developing the concept of what sustainability means for the Subbasin, identifying high priority values around groundwater, identifying where undesirable

results are occurring now or have occurred in the past, and developing minimum thresholds for each sustainability indicator.

To develop preliminary thresholds, the lowest elevations between 1992 and 2015 have been mapped, and each GSA had an individual meeting with the consulting team to confirm understanding. Based on these discussions, monitoring locations for groundwater thresholds were identified, with an alternate methodology developed in area with high or stable groundwater levels.

5. Hydrogeologic Conceptual Model

Ms. Watson presented on the Hydrogeologic Conceptual Model (HCM). She showed the potential cross-sections and gave an update to where the HCM is headed.

6. Department of Water Resources Update

Mr. Paul Wells of DWR gave an update on the TSS application. The general application was approved, and the next step is to put in the service order request. There will be options to apply for video logging and converting existing wells to monitoring wells. It was noted that Proposition 65 could provide more funding for this as well. Additionally, the grant agreement is being worked on. The plan is to get it to Financial Assistance team next week, and the goal is to have it finalized before next meeting.

The Basin Boundary Modification request deadline was extended through September 28th.

7. Schedule Recap

Ms. Watson indicated that the September Board meeting will focus on Projects and Management Actions and an October brainstorming session following the October Board meeting will be held. Ms. Elizabeth indicated her preference that the brainstorming session be open to the public. Mr. Nakagawa noted that a budgetary item will be added to the September meeting.

B. Informational Items:

1. July 24, 2018, westernfarmpress.com, “Capitol Rally to Protest Water Agency’s Bay-Delta Plan”

2. July 24, 2018, pleasantonweekly.com, “Zone 7 Asked to Endorse New $8.8 Billion Water Bond Measure”

3. July 25, 2018, Eastern San Joaquin Groundwater Authority Letter of Support to Northern Delta Groundwater Sustainability Agency, “Groundwater Basin Boundary Modification Request”

4. July 25, 2018, agalert.com, “Commentary: Why a Water Board Plan Should Worry the Whole State”

5. July 27, 2018, mavensnotebook.com, “News Worth Noting: 58 Groups Sign on to Letter Demanding Stronger Flow Standards in Water Board’s Bay-Delta Plan Updates; DISB Report on Water Quality Science in the Delta”

6. July 30, 2018, news.UCSC.edu, “Newscenter – Groundwater Recharge Project Informs Statewide Sustainability Efforts”

7. July 31, 2018, westernfarmpress.com, “Ag Groups Urge Board to Reject Flows Plan”

8. July 31, 2018, newsdeeply.com, “Does the Bay Area Have Enough Water for Economic Growth and Salmon?”

Mr. Nakagawa noted that the State Water Quality Control Plan is an important topic for agencies to understand and follow and requested sharing the articles.

III. Public Comment (non-agendized items):

George Hartman asked Chair Chuck Winn to say a few words about what plans the GWA has to address the Water Quality Control Plan, and how the increased flow requirements will impact groundwater recharge efforts. Mr. Hartman then made a second comment that he met with Mr. Bruce Babbit who was deployed by the Governor to meet with water agencies. Mr. Hartman indicated that nothing came out of meeting and encouraged people to keep this issue on their radar if they are farming or get water from the Delta, as there may be diversion restrictions in the future. He then commented on the proposed increase to salinity levels from 0.7 to 1, noting that the South Delta is already hugely impacted by salinity.

Chair Chuck Winn responded that the Water Quality Control Plan could have a devastating impact on the region and should be discussed further, stating that the basis for increasing flows is claimed to benefit the numbers of salmon. The large magnitude of proposed flow increase is hundreds of thousands acre square feet; however, the projected benefit to salmon is minimal (approx. 250). The environmental impact reports suggest a significant and devastating impact on the economy in the region. Delta Counties Coalition members continue to speak out, pointing out these facts and its potential impacts to the Delta. He encouraged all agencies to look at it and noted that there is a rally planned by Mr. Adam Gray, Assembly member, and several activities are happening around the plan. He stated that the issue is not limited to the Delta region, but it is a statewide issue. He concluded by stating that the problem is not a lack of water, but the management of water. Mr. Peter Rietkerk of South San Joaquin Irrigation District (SSJID) echoed Supervisor Winn's comments, stating that this is becoming a larger issue than in just this area. He explained that it will have large and far-reaching implications and recommended a larger group band together to oppose the Water Quality Control Plan. He indicated that the current plan could limit the potential for water for future projects that may be considered as part of GSP development and urged the group to make public comments at the session.

Supervisor Dennis Mills, Eastside GSA, indicated that supply areas of California are engaged on this issue. He noted that it is important to get a voice out there and emphasized the need to speak out as a large group.

IV. Directors' Comments:

None

V. Future Agenda Items:

No comments

VI. Adjournment:

The meeting was closed at 12:01 pm.

Next Regular Meeting: September 12, 2018 at 11:00 a.m.
San Joaquin County - Robert J. Cabral Agricultural Center, 2101 E. Earhart Ave., Assembly Rm. #1, Stockton, CA

EASTERN SAN JOAQUIN GROUNDWATER AUTHORITY

Joint Exercise of Powers Board of Directors Meeting

MEMBER SIGN-IN SHEET

Location: SJ COUNTY ROBERT J. CABRAL AG CENTER Date: 8/8/18 Time: 11:00 AM

INITIAL	Member's Name	GSA	Phone	Email
	John Freeman	Cal Water Member	209-547-7900	jfreeman@calwater.com
	Steve Cavallini	Cal Water Alternate	209-464-8311	scavallini@calwater.com
	George Biagi, Jr.	Central Delta Water Agency Member	209-481-5201	gbiagi@deltabluegrass.com
	Dante Nomellini	Central Delta Water Agency Alternate	209-465-5883	ngmplcs@pacbell.net
	Grant Thompson	Central San Joaquin Water Conservation District Member	209-639-1580	gtom@velociter.net
	Reid Roberts	Central San Joaquin Water Conservation District Alternate	209-941-8714	reidwroberts@gmail.com
	Stephen Salavatore	City of Lathrop Member	209-941-7430	ssalvatore@ci.lathrop.ca.us
		City of Lathrop Alternate		
	Alan Nakanishi	City of Lodi Member	209-333-6702	anakanishi@lodi.gov
	Charlie Swimley	City of Lodi Alternate	209-333-6706	cswimley@lodi.gov
	Rich Silverman	City of Manteca Member	209-456-8017	rsilverman@ci.manteca.ca.us
	Mark Houghton	City of Manteca Alternate	209-456-8416	mhoughton@ci.manteca.ca.us
	Elbert Holman	City of Stockton Member	209-937-8244	hoytjr63@yahoo.com
	Mel Lytle	City of Stockton Alternate	209-937-5614	mel.lytle@stocktonca.gov

INITIAL	Member's Name	GSA	Phone	Email
	Russ Thomas	Eastside San Joaquin GSA Member	209-480-8968	rthomasccwd@hotmail.com
	Walter Ward	Eastside San Joaquin GSA Alternate	209-525-6710	wward@envres.org
	David Fletcher	Linden County Water District Member	209-887-3202	dqfpe@comcast.net
	Paul Brennan	Linden County Water District Alternate	209-403-1537	ptbrennan@verizon.net
	Mike Henry	Lockeford Community Services District Member	209-712-4014	midot@att.net
	Joseph Salzman	Lockeford Community Services District Alternate	209-727-5035	lcsd@softcom.net
	Eric Schmid	Lockeford Community Services District Alternate	209-727-5035	lcsd@softcom.net
	Tom Flinn	North San Joaquin Water Conservation District Member	209-663-8760	tomflinn2@me.com
	Joe Valente	North San Joaquin Water Conservation District Alternate	209-334-4786	jcvalente@softcom.net
	Eric Thorburn, P.E.	Oakdale Irrigation District Member	209-840-5525	ethorburn@oakdaleirrigation.com
		Oakdale Irrigation District Alternate		
	Chuck Winn	San Joaquin County Member	209-953-1160	cwinn@sjgov.org
	Kathy Miller	San Joaquin County Alternate	209-953-1161	kmiller@sjgov.org
	John Herrick, Esq.	South Delta Water Agency Member	209-956-0150	jherrlaw@aol.com
	Jerry Robinson	South Delta Water Agency Alternate	209-471-4025	N/A
	Dale Kuil	South San Joaquin GSA Member	209-670-5829	dkuil@ssjid.com
	Robert Holmes	South San Joaquin GSA Alternate	209-484-7678	rholmes@ssjid.com
	Melvin Panizza	Stockton East Water District Member	209-948-0333	melpanizza@aol.com
	Andrew Watkins	Stockton East Water District Alternate	209-948-0333	watkins.andrew@verizon.net
	Anders Christensen	Woodbridge Irrigation District Member	209-625-8438	widirrigation@gmail.com
	Doug Heberle	Woodbridge Irrigation District Alternate	209-625-8438	heberlewid@gmail.com

Eastern San Joaquin Groundwater Authority Staff & Support

INITIAL	Member's Name	Organization	Phone	Email
	Kris Balaji	San Joaquin County	468-3100	kbalani@sjgov.org
	Fritz Buchman	San Joaquin County	468-3034	fbuchman@sjgov.org
BN	Brandon Nakagawa	San Joaquin County	468-3089	bnakagawa@sjgov.org
	Mike Callahan	San Joaquin County	468-9360	mcallahan@sjgov.org
	Alicia Connelly	San Joaquin County	468-3531	aconnelly@sjgov.org
	Kelly Villalpando	San Joaquin County	468-3073	krvillalpando@sjgov.org
	Danielle Barney	San Joaquin County	468-3089	dbarney@sjgov.org
	Rod Attebery	Neumiller & Beardslee / Legal Counsel	948-8200	rattebery@neumiller.com
	Monica Streeter	Neumiller & Beardslee / Legal Counsel	948-8200	mstreeter@neumiller.com

EASTERN SAN JOAQUIN GROUNDWATER AUTHORITY

Joint Exercise of Powers Board of Directors Meeting

OTHER INTERSTED PARTIES - SIGN-IN SHEET

Location: SJ COUNTY ROBERT J. CABRAL AG CENTER Date: 8/8/18 Time: 11:00 AM

INITIAL	Member's Name	Organization	Phone	Email
	Christy Kennedy	Woodard & Curran	415-321-3409	ckennedy@woodardcurran.com
	Alyson Watson	Woodard & Curran	415-321-3400	awatson@woodardcurran.com
	Ken Vogel	Farm Bureau	209-815-5803	
	Elaine St John	Fish & Game	2098407735	Elaine@Calte[illegible]
	Paul Wells	DWR	916 376-9656	paul.wells@water.ca.gov
	DENNIS MILES	CALAVERAS COUNTY		
	Greg Gibson	C.O.L	209 9417442	ggibson@ci.lathrop.ca.us
	Neil Law	City of Lodi		
	Marcus Richmond	NV5		marcus.richmond@nv5.com
	PAT DUNN	NV5		pat.dunn@NV5.com
	Fritz Buchman	SJC PW		
	JOE EILES	KLEINFELDER	916 366 7701	jeiles@kleinfelder.com
	Jane Wagner-Tyack	Communication Consultant	209-642-5105	JaneTyack@mac.com
	Arun Su	EBMUD		

OTHER INTERESTED PARTIES – SIGN-IN SHEET

INITIAL	Member's Name	Organization	Phone	Email
	Heather Carr		209) 9937316	Fm5Star@outlook.com
	Mary Elizabeth	Sierra Club		
	Grant Thompson	Central S.J		
EM	Elba Mijango	City of Manteca		

OTHER INTERESTED PARTIES – SIGN-IN SHEET

INITIAL	Member's Name	Organization	Phone	Email
AHS	Annette Henneberry Schermesser	AWC		
[illegible]	[illegible]	EBMUD		
GHH	George Hartmann	AWC 1RD 2074 / RD 2030		gvhlaw@gmail.com
RT	Russ Thomas	CCWD		
	Charlotte Mitchell	CA Farmland trust		cmitchell@cafarmtrust.org
AT	Ali Taghavi	Woodard & Curran		ataghavi@woodardcurran.com

ATTACHMENT II
A.2.

FISCAL YEAR 2018-19 BUDGET STATUS

AS OF AUGUST 30, 2018

September 12, 2018

Eastern San Joaquin Groundwater Authority

Budget Status (as of August 30, 2018)

Eastern San Joaquin Groundwater Authority - Budget Status
Fund No. 21451

Revenue

Item	Invoiced	Paid (through 8/30/2018)	Balance
Member GSP Contributions:			
Eastside GSA	$ 39,789	$ 19,895	$ 19,895
San Joaquin County GSA No. 2 (Cal Water)	$ 11,664	$ -	$ 11,664
Central Delta Water Agency	$ 11,664	$ -	$ 11,664
Central San Joaquin WCD	$ 11,664	$ -	$ 11,664
City of Lathrop	$ 11,664	$ 11,664	$ -
City of Lodi	$ 11,664	$ 5,832	$ 5,832
City of Manteca	$ 11,664	$ -	$ 11,664
City of Stockton	$ 11,664	$ -	$ 11,664
Linden County Water District	$ 11,664	$ 5,832	$ 5,832
Lockeford Community Services Distict	$ 11,664	$ 11,664	$ -
North San Joaquin WCD	$ 11,664	$ 5,832	$ 5,832
Oakdale Irrigation District	$ 11,664	$ 5,832	$ 5,832
San Joaquin County	$ 11,664	$ 11,664	$ -
South Delta Water Agency	$ 11,664	$ -	$ 11,664
South San Joaquin GSA	$ 11,664	$ 11,664	$ -
Stockton East Water District	$ 11,664	$ 11,664	$ -
Woodbridge Irrigation District	$ 11,664	$ -	$ 11,664
Revenue from Member GSP Contributions	**$ 226,413**	**$ 101,543**	**$ 124,871**

Revenue Sources	Year-to-Date (through 8/30/2018)	Estimated
GSP Grant (DWR)	$ -	$ 1,500,000
Member GSP Contributions	$ 101,543	$ 226,413
Interest Income	$ 2,088	$ 8,352
Total Estimated/Actual Revenue *(through June 30, 2019)*	**$ 103,631**	**$ 1,734,765**

Budget Status (as of August 30, 2018)

Eastern San Joaquin Groundwater Authority - Budget Status
Fund No. 21451

Year-to-Date Expenditures

Item	Subtotal	Amount
Postage Expense (June)	*$ 150*	
Office Expenses (Postage)		**$ 150**
Neumiller & Beardslee #292543 (Apr)	*$ 825*	
Neumiller & Beardslee #293908 (Jun)	*$ 2,158*	
Authority Counsel		**$ 2,983**
Woodard & Curran #151957 (Apr/May)	*$ 196,807*	
Professional Services - GSP Grant		**$ 196,807**
Room Rental-GWA (May)	*$ 182*	
Rents-Structures & Grounds		**$ 182**
YTD Actual Expenditures (July 1 through August 30, 2018)		**$ 200,122**

Estimated Expenditures

Office Expenses (General)	$	1,000
Office Expenses (Postage)	$	1,089
Auditor's Payroll & A/P Charges	$	600
Authority Counsel	$	29,017
Professional Services - GSP Grant	$	1,673,108
Professional Services - Public Works*	$	(9,195)
Rents-Structures & Grounds	$	2,002
EST Expenditures (September 1 through June 30, 2019)	**$**	**1,697,621**
Total EST/ACT Expenditures (through June 30, 2019)	**$**	**1,897,743**

*County staff costs in FY 2017-18 to support the ESJGWA should have been paid for by the Zone No. 2 budget; credit amount in FY 2018-19 reflects this correction.

Budget Status (as of August 30, 2018)

Eastern San Joaquin Groundwater Authority
Fund No. 21451

Revenue and Expenditure Detail	2017-2018 APPROVED	2017-2018 ACTUAL	2018-2019 APPROVED	2018-2019 YEAR-TO-DATE	2018-19 EST/ACTUAL
FUND BALANCE - JULY 1	**$ -**	**$ -**	**$ 441,592**	**$ 441,592**	**$ 441,592**
GSP Grant (DWR)	$ 1,500,000	$ -	$ 1,500,000	$ -	$ 1,500,000
Member GSP Contributions	$ 226,420	$ -	$ 226,413	$ 101,543	$ 226,413
Zone No. 2 GSP Contribution	$ 450,000	$ 450,000	$ -	$ -	$ -
Initial Member Dues	$ 85,000	$ 85,000	$ -	$ -	$ -
Zone No. 2 Contribution to Authority Expenses	$ 35,000	$ 35,000	$ -	$ -	$ -
Interest	$ -	$ 713	$ -	$ 2,088	$ 8,352
TOTAL REVENUE	**$ 2,296,420**	**$ 570,713**	**$ 2,168,005**	**$ 103,631**	**$ 1,734,765**
Office Expenses (General)	$ 800	$ 43	$ 2,500	$ -	$ 1,000
Office Expenses (Postage)	$ 1,800	$ 1,203	$ 3,000	$ 150	$ 1,239
Auditor's Payroll & A/P Charges	$ 600	$ -	$ 600	$ -	$ 600
Special Studies and Reports - GSP Application	$ 85,000	$ 34,983	$ -	$ -	$ -
Authority Counsel	$ 30,000	$ 26,156	$ 32,000	$ 2,983	$ 32,000
Professional Services - GSP Grant	$ 2,176,420	$ 56,505	$ 1,869,915	$ 196,807	$ 1,869,915
Professional Services - Public Works*	$ -	$ 9,195	$ -	$ -	$ (9,195)
Rents-Structures & Grounds	$ 1,800	$ 1,036	$ 4,000	$ 182	$ 2,184
TOTAL EXPENDITURES	**$ 2,296,420**	**$ 129,121**	**$ 1,912,015**	**$ 200,122**	**$ 1,897,743**
FUND BALANCE - JUNE 30	**$ -**	**$ 441,592**	**$ 255,990**	**$ 345,101**	**$ 278,614**

*County staff costs in FY 2017-18 to support the ESJGWA should have been paid for by the Zone No. 2 budget; credit amount in FY 2018-19 reflects this correction.

ATTACHMENT II
A.4.

EASTERN SAN JOAQUIN GROUNDWATER AUTHORITY

1810 E. Hazelton Avenue
P. O. Box 1810
Stockton, CA 95201

(209) 468-3089
ESJgroundwater@sjgov.org
esjgroundwater.org

Eastern San Joaquin Groundwater Authority Stakeholder Committee
June 12, 2018
4:30 - 6 p.m.
Robert J. Cabral Agricultural Center
2101 E. Earhart Ave., Stockton, CA
Calaveras Room

Agenda

I. Welcome & Member Self-Introductions

II. Review of Stakeholder Committee Structure and Role

III. Identify Member Resources

IV. Meeting Date/Time

V. Program Overview and Background

VI. Review and Agree to Stakeholder Committee Charter

VII. Stakeholder Outreach and Engagement Plan

VIII. Open Discussion around Outreach Goals and Concerns

IX. Discuss Initial Public Meeting in July
   a. Recommended locations, time, day of week

X. Additional Resources
   a. Tool Kit/Outreach Materials
   b. Questions for DWR

XI. Next Month's Topics
   a. Non-Agenda Items

Eastern San Joaquin Groundwater Authority Stakeholder Committee Meeting

June 12, 2018 at 4:30-6 p.m.

Calaveras Room, Robert J. Cabral Agricultural Center, 2101 E. Earhart Ave., Stockton, CA

Committee Members in Attendance

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

x	Lucy Eidam Crocker	Facilitator, Stakeholder Engagement & Public Outreach Consultant
x	Sheri Madsen	Stakeholder Engagement & Public Outreach Consultant

Meeting Notes

1. Welcome & Member Self-Introductions
    a. Brandon Nakagawa introduced the purpose of the committee, the transparency of the process and how quickly items are being completed in order to meet the state's mandated deadline
    b. The facilitator Lucy Eidam Crocker described her role in guiding the process
    c. Members described their interest in joining the committee; the facilitator noted the most commonly mentioned interests were environmental justice, the balance between surface and groundwater and many elements within groundwater management
    d. Consultants described roles and qualifications

2. Review of Stakeholder Committee Structure and Role
    a. The facilitator described the various groups the stakeholders represent
    b. The facilitator explained the GSP decision-making process: the technical team develops information and solicits input from the Advisory Committee, the Stakeholder Committee, and the public; the GWA Board ultimately provides the final formal decisions on the GSP
    c. The Advisory Committee is comprised of 17 GSAs and San Joaquin County No. 2 (Cal Water) who make formal recommendations on technical and policy issues
    d. The Stakeholder Committee provides feedback and input from their interest areas

3. Identify Member Resources
    a. A clipboard was handed around asking for member input on best media outlets, reporters and organization newsletters to help in outreach efforts
    b. This will be compiled and added to the database for future use for stakeholder and public outreach

4. Discuss Future Meeting Date/Time
    a. No consensus during meeting. Crocker & Crocker will email doodle poll

5. Program Overview and Background
    a. See PPT Presentation on website dated June 12, 2018.

6. Review and Agree to Stakeholder Committee Charter
    a. Charter to be revised and re-sent to Stakeholder Committee members via email

7. Stakeholder Outreach and Engagement Plan
    a. The plan is being updated and will be sent later this month

8. Open Discussion around Outreach Goals and Concerns
    a. A Stakeholder Committee member asked if they could communicate to other members through an email list. Four of the 17 members said yes to communication

with all members via email

9. Discuss Initial Public Meeting in July
    a. Committee suggested holding first meeting in August so the committee has more background first
    b. Discussed rotating venues for best turnout, such as Robert J. Cabral Agricultural Center or Civic Auditorium on Hazelton
    c. Evenings recommended for best turnout (except first Tuesday and Thursdays, City Council and Farm Bureau meetings are conflicting)

10. Additional Resources
    a. Tool Kit/Outreach Materials – outreach flyers, e-blasts, website (esjgroundwater.org), social media content and media relations
    b. Questions for DWR – none asked

11. Next Month's Topics
    a. Background on groundwater conditions
    b. Work completed
    c. SGMA terminology

12. Non-Agenda Items
    a. Public comments –
        i. Gene Bigler, representing PUENTES, expressed interest in joining the committee

EASTERN SAN JOAQUIN GROUNDWATER AUTHORITY

1810 E. Hazelton Avenue
P. O. Box 1810
Stockton, CA 95201

(209) 468-3089
ESJgroundwater@sjgov.org
esjgroundwater.org

Eastern San Joaquin Groundwater Authority Groundwater Sustainability Workgroup
July 10, 2018
4 – 5:30 p.m.
Robert J. Cabral Agricultural Center
2101 E. Earhart Ave., Stockton, CA
Calaveras Room

Agenda

I. Welcome

II. Comments on Meeting Notes

III. Workgroup Committee Role and Major GSP Topics

IV. Background on Groundwater Conditions

V. Brainstorming: What Does Sustainability Look Like in the ESJ Subbasin?

VI. Announcements
   a. First public meeting: August 29, 2018 6:30 p.m., room TBD, Robert J. Cabral Agricultural Center
   b. Next Workgroup meeting date: August 15, 4-5:30, room TBD, Robert J. Cabral Agricultural Center

VII. Other topics
   a. Non-agenda items
   b. Public comment

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Eastern San Joaquin Groundwater Authority
Groundwater Sustainability Workgroup
July 10, 2018
4 – 5:30 p.m.
Robert J. Cabral Agricultural Center
2101 E. Earhart Ave., Stockton, CA, Calaveras Room

Committee Members in Attendance

	Name	Organization
	Colin Bailey	The Environmental Justice Coalition for Water
x	Tim Stroshane attending for Barbara Barrigan-Parrilla	Restore the Delta
x	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
x	Joey Giordano	The Wine Group
x	Jack Hamm	Lima Ranch
x	Mary Hildebrand	South Delta Water Agency
x	George V. Hartmann	The Hartmann Law Firm
	Michael Machado	Farmer
x	Ara Marderosian	Sequoia Forest Keeper
	Ryan Mock	J.R. Simplot Company
x	Yolanda Park	Catholic Charities of the Diocese of Stockton
	Will Price	University of the Pacific & Vice Chair, SJ County Advisory Water Commission
x	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
	Linda Turkatte	San Joaquin County Environmental Health Department
x	Ken Vogel	San Joaquin Farm Bureau Federation
x	Ted Wells	Trinchero Family Estates and Sutter Home Winery
	General Public	
x	Yanin Kramsky	PhD Student at Regional Planning Department at UC Berkeley
x	Jane Wagner-Tyack	League of Womens Voters of SJ County
x	Michael Kelly	Catholic Charities of the Diocese of Stockton
	Staff and Consultants	
x	Brandon Nakagawa	County ESJ GSP Project Representative

x	Michael Callahan	County ESJ
x	Alicia Connelly	County ESJ
x	Alyson Watson	ESJ GSP Project Manager
x	Christy Kennedy	ESJ GSP Deputy Project Manager
x	Sheri Madsen	Stakeholder Engagement & Public Outreach Consultant

Meeting Notes

I. Welcome

a. Alyson Watson welcomed group.
b. The name of the group changed from Stakeholder Committee to GW Sustainability Workgroup to better reflect the work being conducted.
c. Purpose of the group is to get feedback from interested parties within the basin.
d. The Outreach Plan has been posted to the website.
e. Charter will be streamlined and name may be changed to something similar to "process document." It has not been finalized since it will be talked about today before finalization.

II. Comments on Meeting Notes

a. Mary Elizabeth – interested in having presentation template changed so it is an easily printable format to save ink and to write notes on.

III. Workgroup Committee Role and Major GSP Topics

a. Shared slides about Workgroup role and Stakeholder Engagement requirements.
b. DWR guidance – timeline for Phase 1 of project was 2015-17. We are in Phase 2 - GSP preparation and submission.
c. SGMA encourages stakeholder and public engagement.
d. Purpose of the group is to provide meaningful input – above and beyond what is required of SGMA.
e. Information flow – goal to provide Workgroup with the opportunity to comment and provide input on draft documents.
f. Workgroup was created to understand the different perspectives throughout the region.
g. Topics to work on – Technical, Policy and Implementation
    i. Technical - Start with hydrologic model –used to create historic water budget, current baseline and projected water budget. Also working on hydrogeologic analysis as well as a data management system.
    ii. Policy - Sustainability Goals – what does it mean? Where are we now? Where do we want to go? How are we going to get there?
        1. Undesirable results
        2. Minimum thresholds
        3. Measurable objectives
    iii. Implementation – how do we get there – projects and management actions, economics and funding, draft GSP and implement plan?

IV. Pause for comments and questions:

a. Some members noted that the acoustics in the room were challenging. Alyson indicated the project team would research new rooms for next month's meeting.
b. A member requested the PPT be in more readable/printable format. (*printing in black and white is an option)*
c. Members asked clarifying questions about the GSP area and where the problem (groundwater overdraft) is in the basin. Alyson noted the basin has been designated as critically overdrafted by the state. Alyson also described the current water balance and reiterated that part of the process is looking to see if in fact there is a problem, and what the local area defines as undesirable results.
d. Members discussed the possibility of creating a mission statement and it wasn't seen as

needed. Alyson noted the group would revisit the concept of mission statement at the end of the meeting and could add this topic to a future agenda if warranted (note – meeting went over time and this was not revisited). Members also discussed a consensus-based approach and agreed consensus won't always be reached and Alyson reiterated the goal with this group is to hear different perspectives and concerns.

e. Alyson detailed how the feedback from the Workgroup will be incorporated.
    i. Comments reflected in work and meeting notes will be included in the plan.
    ii. There will be a standing agenda item at the Advisory Committee and JPA meetings about Stakeholder feedback.
    iii. Include meeting Workgroup meeting notes in JPA agenda packets.
    iv. Members suggested they receive topics in advance of the meeting so they can comment. A member's comments were sent in advance and will be appended to the meeting notes.
    v. Alyson indicated that notes will be sent out two weeks ahead of the next meeting and include comments on notes as an item before they go to the Board.
    vi. Members asked about the process of getting feedback from the board i.e. "we've looked at it, this is what we've decided," etc. and if individual comments about the notes could be appended. Alyson indicated there would be no downside to include this.

V. Situation Assessment

– Alyson touched on the Situation Assessment prepared by DWR. She noted they can interview the group to get their feedback and concerns, summarize the issues so they can document them and give them back to group. The assessment will be done by Lisa Beutler. She will reach out after July 23 and plans to wrap up assessment in August. Ideally, she will present findings at the August meeting (if the assessment is complete in time for development).

a. A member asked if this is part of existing facilitation contract. Alyson answered yes.

VI. Background on Groundwater Conditions

a. Members discussed the conditions and how some people may not understand that the ESJ Subbasin is critically overdrafted east of Stockton and what the county's efforts on recharge projects have been.
b. A member asked which wells are used for analysis and commented that some have not been monitored for 30 years. Alyson indicated that future analysis will show which data is used in the analysis and that all The California Statewide Groundwater Elevation Monitoring (CASGEM) wells are being monitored.
c. Members discussed the map shape and noted the San Joaquin River needs to be added (*note the river is on the map – on the western border).*
d. Members asked clarifying questions about how it was determined which area's groundwater levels had recovered and if the City of Stockton's reliance on the treatment plant was considered. Alyson indicated it's a snapshot comparing 1992 to 2016 elevation, both taken in the fall and that blue areas could be substitute supply, projects or other.

VII. Brainstorming: What Does Sustainability Look Like in the ESJ Subbasin?

a. Alyson described key values.
b. SGMA requires six sustainability indicators to be addressed – slide 21.
c. Recap important considerations we've heard so far.
d. Put together 12 key values to see how they match up – slide 27:
    i. Be implemented in an equitable manner
    ii. Be affordable
    iii. Exhibit multiple benefits to local land owners and other participating agencies
    iv. Minimize adverse impacts to the environment
    v. Maintain or enhance the local economy
    vi. Minimize adverse impacts to entities within the Subbasin
    vii. Maintain overlying landowner and Local Agency control of Subbasin
    viii. Protect the rights of overlying land owners

ix. Protect groundwater and surface water quality
x. Provide more reliable water supplies
xi. Restore and maintain groundwater resources
xii. Increase amount of water put to beneficial use within the Subbasin

e. Asked workgroup - What's missing?
f. Members discussed that the following be added:
    i. climate change
    ii. incentivizing water reuse or water recycling
    iii. exploring what other countries do with similar water challenges
    iv. "accessible and affordable"
g. Members also noted the financial challenges to make it affordable and accessible, create a tax?
h. Members discussed how exporting supplies creates groundwater sustainability issues as well as raising salinity levels in tidal zones.
i. While viewing slides that showed agriculture was the dominant land in the subbasin with a listing of its crops, a member noted they felt that farmers were singled out and wondered why urban use slides weren't included. Alyson insisted that was not the intent.
j. Members pondered what technology needs to be developed and thought UC Davis could help conduct research to find solutions.

VIII. Four Sustainability Thought Questions:

Alyson introduced four questions for discussion:

1. What do you envision as the preferred future of the ESJ Subbasin and how is it different from how it is today?
2. When you think about the importance of groundwater and the 12 key values, which are of most concern for you?
3. What indicators or factors would best show the groundwater conditions are improving or deteriorating? For these indicators, is there a minimum or maximum level depending on the indicator, below/beyond which the basin's groundwater should not be allowed to go?
4. What objectives or targets would you want to see achieved to show that the Subbasin is sustainable?
    a. **Flow Requirements** - Member asked when SGMA will bump up against flow requirements. Others noted WaterFix decisions coming in September and wondered how that will affect flows. Member suggested the JPA consider the State Water Quality Control plan and its effects on ability to achieve sustainability. Some members think the JPA needs to take it to another level and advocate for our water rights.
    b. **Groundwater Well Depth** - A member suggested looking at where the groundwater is coming from in the aquifer and at its quality profile. They don't want to deplete or contaminate water with how they are constructing wells. They stated that the deeper, larger agriculture wells (over 500-800 feet) pull up higher salinity water. The member noted the SGMA data tool database could be queried. They would like characterization of the well # and well depth.
        i. Brandon interjected there are a handful of wells over 500 ft. and the yield and quality diminishes as they go deeper. Might exist in Stanislaus and Calaveras counties.
        ii. A member would like a profile of what groundwater levels are and the distribution of water quality. Brandon noted sending the link on the website.
    c. **Sources of Contamination in Groundwater -** A member also inquired about other sources of contamination and noted the Boggs Tract Area in Stockton, post-war dumping of building materials, etc. This is important to consider. Boggs Tract is a disadvantaged community.
    a. **Water Accessibility and Affordability** - A member was curious to know about water accessibility and affordability and if there are similar concerns about where people don't have drinking water.
    b. There was further discussion about reflection on farmers feeling like they are singled

out as bad guys since previous slides show crop type and changes. A member asked if there is a similar urban water use pie chart. Another member noted water use is oversimplified.

IX. Announcements

a. First public meeting: August 29, 2018: 6:30 p.m., room TBD, Robert J. Cabral Agricultural Center.
    i. Members noted their availability and that CA WaterFix project has scheduled hearings in Sacramento that day
b. Next Workgroup meeting date: August 15, 4-5:30, room TBD, Robert J. Cabral Agricultural Center.

X. Other topics

a. Non-agenda items

b. Public comment
    i. Yanin Kramsky - PhD Student at Regional Planning Depart at UC Berkeley, offered research support to environment justice coalition for water. He is here through end of July helping EJCW and could be available after August in a limited capacity. His focus in on disadvantaged communities. He could do a survey to contacts for ways that they might want to engage.

Comments by Ara Marderosian on Meeting Notes

ESJ Groundwater Sustainability Workgroup meeting on Tuesday, July 10.

DATE: Tuesday, July 10
TIME: 4 - 5:30 P.M.
LOCATION: Calaveras Room, Robert Cabral Agricultural Center, 2101 E. Earhart Avenue, Suite 100, Stockton, CA 95206

See attached agenda, PowerPoint, and June 12 meeting recap.

Follow CA-99 N to Arch Airport Rd in Stockton. Take exit 250 from CA-99 3 h 18 min (222 mi)

Continue on Arch Airport Rd. Drive to E Earhart Ave 3 min (1.3 mi)

Use any lane to turn slightly left onto Arch Airport Rd 0.9 mi

Turn left onto Pock Ln 0.1 mi

Pock Ln turns slightly right and becomes E Earhart Ave

Destination will be on the right 0.2 mi

San Joaquin County Agricultural Commissioner

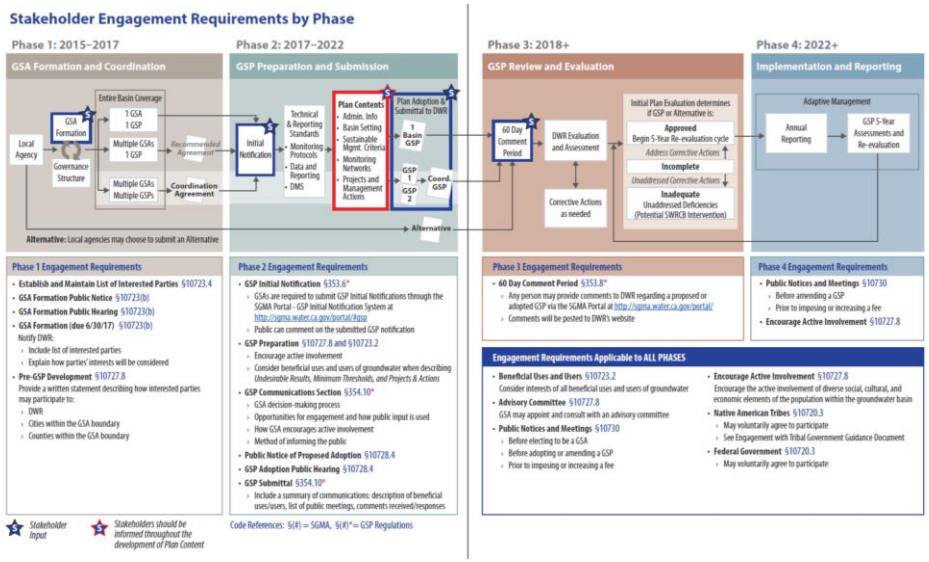
2101 E Earhart Ave #100, Stockton, CA 95206

REQUEST: Could you please provide a list of abbreviations and their meaning in provided documents? Like JPA = ? San Joaquin Joint Powers Authority?

COMMENT: The meeting notes June 12, 2018 say: 6. Review and Agree to Stakeholder Committee Charter
I do not recall Reviewing and Agreeing to the Stakeholder Committee Charter. We were each handed the binder that contained a document that supposedly was the charter, but the meeting AGENDA was so full that we did not have time to review or agree to the Stakeholder Charter. Nor did we have time, because time ran out at 6 PM, to discuss Stakeholder concerns or complete the agenda item
8. Open Discussion around Outreach Goals and Concerns, even though parts of AGENDA Items 9, 10, 11 and 12 were covered throughout the meeting when those issues were addressed. I had to email my concerns to the group after the meeting AND MY concerns were not included in the notes. I also emailed my suggestions of overlooked members of the public who should have been extended an invitation for Stakeholder Committee membership in the Community Outreach phase.

Responses by Ara Marderosian to PowerPoint

Stakeholder Engagement Requirements by Phase



REQUEST: Please explain the Stakeholder Engagement Requirements

Workgroup Provides Opportunity for More Meaningful Input

- JPA and GSA Leadership – overall authority for decision-making, GSP development and implementation (monthly meetings open to the public)
- Advisory Committee – advise JPA on plan development (monthly meetings open to the public)
- **Groundwater Sustainability Workgroup – diverse basin interests and provide input to plan development, Advisory Committee, and JPA (monthly meetings open to the public)**
- General public – awareness and understanding; emphasis on engagement of DACs (quarterly meetings)

REQUEST: Please explain the difference between the Stakeholder Committee and the Groundwater Sustainability Workgroup.

Anticipated Information Flow
Information flow provides the Groundwater Sustainability Workgroup with an opportunity to comment on working draft concepts and documents with adequate time to incorporate feedback

What Topics Will the Workgroup Work On?
Hydrologic Model
Historical Water Budget
Current Baseline
Projected Water Budget
Hydrogeologic Analysis
Data Management System

Undesirable Results
Minimum Thresholds
Measurable Objectives

Interim Milestones
Water Accounting
Monitoring Network

Projects & Management Actions
Economics & Funding
Draft GSP & Implement. Plan

SGMA Requires Six Sustainability Indicators to be Addressed
- Chronic lowering of groundwater levels indicating a significant and unreasonable depletion of supply
- Significant and unreasonable degraded water quality

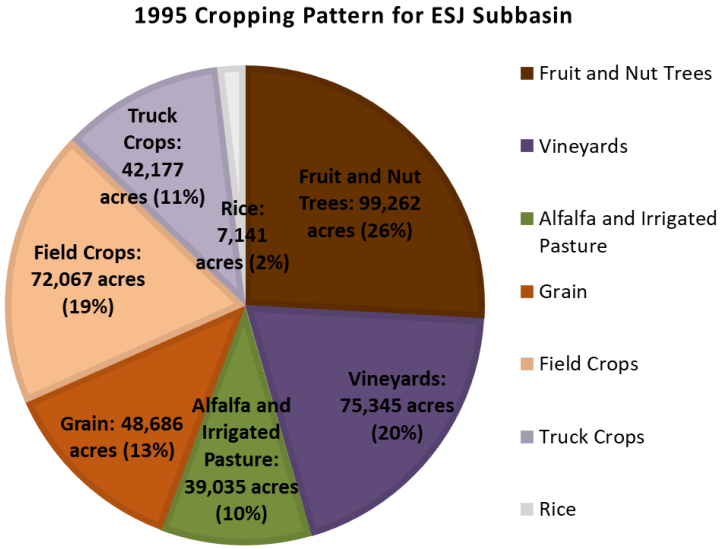
- Significant and unreasonable reduction of groundwater storage
- Significant and unreasonable land subsidence
- Significant and unreasonable seawater intrusion
- Depletions of interconnected surface water that have significant and unreasonable adverse impacts on beneficial uses of the surface water

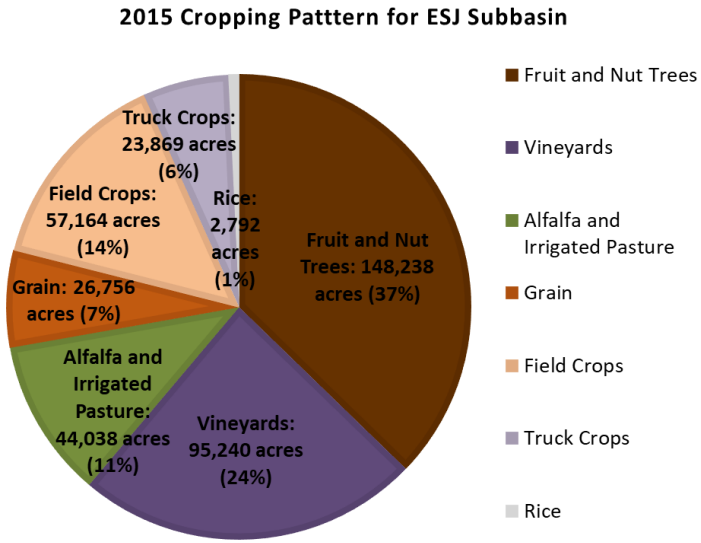
ESJ is a Well-Monitored Subbasin

Several Rivers and Streams Traverse the Subbasin

Agriculture is a Dominant Land Use in the Subbasin

Primary Cropping Patterns





QUESTION: Does the expansion from 46% to 61% of permanent drops (fruit and nut trees and vineyards:) and the subsequent decrease percentage in all other cropping patterns, as well as an increase in farmland acres demanding water from 1995 to 2015 from 383,713 acres to 398,097 acres (a 3.7% increase in disturbed ground), constitute reasons for the water demand increase and ground subsidence as well as accompanying habitat loss and associated loss of carbon sequestration capacity of the soil, shade loss, ground heating and increase greenhouse gas production, as well as associated drought conditions and climate disruption due to cropping patterns?

Groundwater Storage

The Subbasin has a Substantial Amount of Groundwater in Storage

Groundwater Elevation Levels

Some Areas Have Recovered and Some Have Declined Since Last Drought

Groundwater Quality
Salinity Contamination of Freshwater Wells is a Concern

Brainstorming: What Does Sustainability Look Like for the ESJ Basin?

SGMA Requires Six Sustainability Indicators to be Addressed
- Chronic lowering of groundwater levels indicating a significant and un-reasonable depletion of supply
- Significant and unreasonable degraded water quality
- Significant and unreasonable reduction of groundwater storage
- Significant and unreasonable land subsidence
- Significant and unreasonable seawater intrusion
- Depletions of interconnected surface water that have significant and unreasonable adverse impacts on beneficial uses of the surface water

OBSERVATION: SGMA should also consider the sustainability factors required by California Environmental Quality Act (CEQA).
Does the discretionary project being considered conform to a plan to stabilize the climate at a livable level? Or does it contribute to destabilization? CEQA is about the actual environmental quality. That means the environmental outcome, considering the most up-to-date understanding of physics, not legislation and not Executive Orders.

We Will Develop Measurable Objectives for Each Sustainability Indicator
These objectives, and the pathway to achieving them (projects, management actions, etc), are the "guts" of the GSP

- Document Potential Undesirable Results for Each Sustainability Indicator
- Identify "Minimum Thresholds" (Levels Where Undesirable Results Could Occur)
- Develop "Measurable Objectives" Above Each Minimum Threshold

We start by thinking about what our desired future condition looks like, and what negative impacts we are trying to avoid

OBSERVATION: Potential Undesirable Results that should be considered are **the impacts of each use of water on the environment. The Plan's Goals must:**

1) Reduce carbon emissions (CO_2, methane, NOx, PM<2.5, PM10, H_2S, NH_3, Endotoxins, O_3, and other GHG emissions) by allocating water to uses that do not directly or indirectly produce these emissions.
2) Clearly define reducing greenhouse gas emissions in the short term and increasing carbon sequestration in the long term, with the short-term being the priority as climate change is an immediate and global existential threat.
3) Set specific greenhouse gas emission reduction goals protect environmental justice and global communities.
4) Prioritize healthy soils.
5) Prevent habitat destruction.

Example "Undesirable Results" for Each Sustainability Indicator

Sustainability Indicators	Lowering GW Levels	Reduction of Storage	Land Subsidence	Surface Water Depletion	Degraded Water Quality
Metrics Defined by SGMA	Groundwater elevation	Total volume	Rate and extent of subsidence	Volume or rate of depletion	Migration of plumes; constituent concentrations
Approach for measurement	Measured at "representative wells"	Estimate as a function of GW elevations	Estimate as a function of GW elevations	Estimate as a function of GW elevations	Measured at "representative wells"

But first, let's talk about what is most important…or what sustainability means in this setting.

Important Considerations We Have Heard So Far (1 of 2)

- Adequate representation, involvement, and consideration for environmental justice and disadvantaged communities
- Transparency and openness of process for all stakeholders
- Water quality and susceptibility to drought
- Impacts of industrial agriculture on groundwater quality, quantity, habitat, and economic vitality of smaller operations
- Impacts to surface water resulting from groundwater operations
- Habitat and wildlife protection in the context of water use
- Access of farmers and growers to water at a reasonable cost (lower than for urban water uses)

Important Considerations We Have Heard So Far (2 of 2)

- Groundwater contamination, salt water intrusion, storage and recharge challenges, and lack of access to groundwater
- Replacing groundwater use with surface water
- Protecting water rights
- Recognizing that sustainability may mean different things in different parts of the basin
- Economic impact of pumping fees
- Protecting the nation's largest agriculturally productive region
- Protecting water supply and quality

COMMENT: The list does not indicate the Impacts of industrial agriculture on climate change, which was the focus of my concerns in the first meeting.

Potential Undesirable Results that should be considered are **the impacts of each use of water on the environment. The Plan's Goals must:**

1) Reduce carbon emissions (CO_2, methane, NOx, PM<2.5, PM10, H_2S, NH_3, Endotoxins, O_3, and other GHG emissions) by allocating water to uses that do not directly or indirectly produce these emissions.

2) Clearly define reducing greenhouse gas emissions in the short term and increasing carbon sequestration in the long term, with the short-term being the priority as climate change is an immediate and global existential threat.
3) Set specific greenhouse gas emission reduction goals protect environmental justice and global communities.
4) Prioritize healthy soils.
5) Prevent habitat destruction.

Include the Value of Sequestration in Upland, Chaparral, and Desert Ecosystems

Groundwater overdraft by planting water-intensive crops in the San Joaquin Valley, especially orchards and vineyards, that cannot be fallowed in California's cycle of drought.

Destruction of habitat by urban and agricultural sprawl occurs when water is taken from basins, which become no longer able to function naturally, and put on desert landscapes. Endangered species have zero protections from agriculture.

Chaparral is a vital source of carbon sequestration that must be specified as such in the Plan, which must distinguish this extensive ecosystem and address the threat of native shrubland loss from plowing and planting, and especially the planting of tree farms in desert-like habitats.

Additionally, California deserts store substantial amounts of carbon, primarily in vast caliche deposits in inland basins. Once the surface of the desert is disturbed, this caliche releases its carbon into the atmosphere.

Currently, the ability of the desert to sequester and store carbon is under threat. Additional, direct threats include water export projects from the desert to urban areas.

Appropriate steps should be taken to protect native shrubland and desert ecosystems and their sequestered carbon.

Water Conservation

Water conservation and storm water management are essential to carbon sequestration on natural and working lands, with a priority of capturing runoff to support and expanding urban forests, forest-woodland, and on restoring eroded chaparral and shrublands as well as percolation into aquifers for agriculture.

Without water, the general increase in the soil carbon sponge and perennial vegetation obviously cannot grow. Restoration of small water cycles is necessary for biological carbon sequestration.

Twelve Key Values

- **Be implemented in an equitable manner**
- Be affordable
- Exhibit multiple benefits to local land owners and other participating agencies
- Minimize adverse impacts to the environment
- Maintain or enhance the local economy
- Minimize adverse impacts to entities within the Subbasin
- Maintain overlying landowner and Local Agency control of the Subbasin
- Protect the rights of overlying land owners
- Protect groundwater and surface water quality
- Provide more reliable water supplies
- Restore and maintain groundwater resources
- Increase amount of water put to beneficial use within the Subbasin

OBSERVATION: Because CEQA requirements are to be considered a priority, plan must stabilize the climate at a livable level—not contribute to destabilization. CEQA is about the actual environmental quality, so of the twelve Key Values, the most important is - Minimize adverse impacts to the environment. And the next most important

are - Protect groundwater and surface water quality and Restore and maintain groundwater resources. And depending on the definition of "beneficial Uses", next is Increase amount of water put to beneficial use within the Subbasin .

What's Missing?
What other issues do we need to be thinking about?

COMMENT: The list does not indicate the Impacts of industrial agriculture on climate change, which was the focus of my concerns in the first meeting.
Potential Undesirable Results that should be considered are **the impacts of each use of water on the environment. The Plan's Goals must:**

1) Reduce carbon emissions (CO_2, methane, NOx, PM<2.5, PM10, H_2S, NH_3, Endotoxins, O_3, and other GHG emissions) by allocating water to uses that do not directly or indirectly produce these emissions.
2) Clearly define reducing greenhouse gas emissions in the short term and increasing carbon sequestration in the long term, with the short-term being the priority as climate change is an immediate and global existential threat.
3) Set specific greenhouse gas emission reduction goals protect environmental justice and global communities.
4) Prioritize healthy soils.
5) Prevent habitat destruction.

The Impacts of industrial agriculture on the environment / climate change is the focus of CEQA, so the PLAN must consider the requirements of CEQA—does the PLAN stabilize the climate at a livable level? Or does it contribute to destabilization? CEQA is about the actual environmental quality. That means the environmental outcome, considering the most up-to-date understanding of physics/science.

Shouldn't water conservation that enhances groundwater storage be a major factor for the PLAN to require of all sectors of use?

Sustainability Thought Questions

1. What do you envision as the preferred future of the ESJ Subbasin and how is that different from how it is today?
2. When you think about the importance of groundwater, and the twelve key values, which are of most concern for you?
3. What indicators or factors would best show the groundwater conditions are improving or deteriorating? For these indicators, is there a minimum or maximum level, depending on the indicator, below/beyond which the Basin's groundwater should not be allowed to go?
4. What objectives or targets would you want to see achieved to show that the Subbasin is sustainable?

ANSWERS:

1. The preferred future of the ESJ Subbasin would be to:

1) Reduce carbon emissions (CO_2, methane, NOx, PM<2.5, PM10, H_2S, NH_3, Endotoxins, O_3, and other GHG emissions) by allocating water to uses that do not directly or indirectly produce these emissions.
2) Clearly define reducing greenhouse gas emissions in the short term and increasing carbon sequestration in the long term, with the short-term being the priority as climate change is an immediate and global existential threat.
3) Set specific greenhouse gas emission reduction goals protect environmental justice and global communities.
4) Prioritize healthy soils.
5) Prevent habitat destruction.

2. **The most important of the key values:**

ANSWERS Because CEQA requirements are to be considered a priority, plan must stabilize the climate at a livable level—not contribute to destabilization. CEQA is about the actual environmental quality, so of the twelve Key Values, the most important is - **Minimize adverse impacts to the environment**. And the **next most important are - Protect groundwater and surface water quality** and **Restore and maintain groundwater resources**. And as long as the "beneficial Uses" agree with the above-listed **1. The preferred future of the ESJ Subbasin**, comply with the California Constitution Section 2, the next **most important of the key values** is **Increase amount of water put to beneficial use within the Subbasin**.

Reduce Emissions with Water for Beneficial Water Uses

Methane production from manure and decomposing crops, which both use enormous quantities of water, have a huge carbon footprint that is exacerbating global climate change in the near-term and as Methane breaks down into CO2 in the long-term.

The Plan must have a formal system for managing the risk that a long-term plan based on current projections and "science-based assessments" of the beneficial uses may require a formal process for review and revision in light of new science down the road.

Mitigate carbon emissions (methane, NOx, and other GHG emissions) by allocating water to uses that do not directly or indirectly produce these emissions.

> While reducing carbon emissions is vital, methane traps more heat than CO_2. California's methane emissions are mostly produced by corporate feedlots whose pungent odors grace Interstate 5 in the western San Joaquin Valley.
>
> Some 2.6 million head of cattle in the Valley (about two-thirds of which are dairy cows) release annual methane emissions that have the CO_2 equivalency of 43 billion pounds into the atmosphere over a 20-year period, similar to 21 billion pounds of coal, or five coal-burning power plants.

(https://www.mercurynews.com/2017/10/01/opinion-delta-farmers-not-waterfix-tunnels-are-our-best-climate-change-defense/)

Air quality degradation by corporate animal and plant agriculture that causes the entire basin to stink in addition to increasing atmospheric PM<2.5, PM10, NOx, H_2S, NH_3, Endotoxins, O_3, MH_4, and CO_2, are in unreasonable use of water.

The violation of Public Trust continues, while corporations have declared that citizens have no rights to water.

Lack of environmental justice in impoverished communities, especially those of color, result from industrial agriculture excesses.

Achievement of California's GHG reduction goals depends upon programs that draw carbon from the atmosphere over many years and sequester carbon in the soil ecosystems.

The Plan should emphasize the importance of carbon sequestration on working lands through programs that promote healthy soils.

Natural wetlands are dried and channelized by corporate agricultural water users, or even worse, water is piped underground where it loses all benefit for the local environment.

Biodiversity should be a guiding principle for working land ecosystems. It is crucial on working lands because greater biodiversity is associated with healthier crops, less pests, and less reliance on toxic inputs that compromise the accumulation of soil carbon.

3. **What indicators or factors would best show the groundwater conditions are improving or deteriorating?**
ANSWERS Dry wells have water as shown by acoustic well depth monitoring systems that upload to publicly available databases that continuously update the independently-maintained database.

Foster Transparent Review and Prioritize Effective Monitoring Tools

Monitoring progress in reducing greenhouse gas emissions must use transparent, science-based models.

Stakeholders must see the model and all its assumptions as early as possible.

The Plan must use monitoring tools that can accurately determine the carbon-outcomes of specific interventions. In addition to an adequate modeling tool, effective monitoring tools are key to measuring the Plan's success.

The Plan must account for the effects of extreme weather—an extreme weather event that has at least a 10% chance of occurring in the next 50 years.

The Plan must have a FORMAL process for regularly revising and updating to account for changed conditions in climate.

The Plan must allow a majority and a minority report from the Stakeholder Committee—not just a consensus opinion, the same as the United States Supreme Court would issue to the public, so the public can understand considered options.

For these indicators, is there a minimum or maximum level, depending on the indicator, below/beyond which the Basin's groundwater should not be allowed to go?
ANSWERS Any level of groundwater that prevents shallow wells from accessing groundwater is **below or beyond which the Basin's groundwater should not be allowed to go.**

4. What objectives or targets would you want to see achieved to show that the Subbasin is sustainable?
ANSWERS The answers provided above should be the basis for a PLAN that achieves a sustainable subbasin, watershed, and healthful global environment for future life. The plan and the State need to recognize the importance of curtailing carbon, methane, and other GHG emissions through the judicious allocation of water to

uses that do not directly or indirectly emit carbon, methane, or other GHG emissions and through carbon sequestration and storage with California's statewide and global climate mitigation goals.

Clearly, implementing these Plan Goals will have immediate, positive impacts of reducing air pollution, reducing impacts to environmental justice and global communities and the air we breathe, as well as reducing climate disruption in the short and long-term. These protection activities will increase stored carbon.

California Constitution, Article 10, Water, states:
"SEC. 2. 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, 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.

Announcements

- First public meeting: August 29, 2018 6:30 p.m., room tbd, Robert J. Cabral Agricultural Center
- Next Workgroup meeting date: August 15, time and room tbd , Robert J. Cabral Agricultural Center

Other Topics

- Non-Agenda Items
- Public Comments

July 10, 2018 Groundwater Sustainability Workgroup Meeting
Comments from Restore the Delta

I would like to add from a Restore the Delta perspective we want to make sure that adequate flows remain in the SJ River as a way to protect groundwater banks from collapsing (separating) near the river. In the struggle between SGMA requirements and flows for the Delta, farmers want to acquire more freshwater flows on the east side for agricultural use almost as a substitute to meet SGMA obligations, but we maintain that flows are also essential for groundwater recharge to protect the physical structure of the basin itself.

Last, we need to look at urban groundwater restoration requirements and urban management water plans. We should also track what cities are doing to improve and comply with SGMA in additional to agricultural users. Science tells us so much water is needed for healthy rivers and groundwater systems. That leaves x amount of water for all the other human uses. We maintain that sacrifice has to be shared by all human use parties. With climate change we will have less and less runoff, which needs to be accounted for in our analysis and planning. We need to protect river systems, especially as they relate to groundwater recharge, and drinking water supplies first -- and from there work for best practices in all other areas.

July 10, 2018 Groundwater Sustainability Workgroup Meeting
Comments from Mary Elizabeth/Sierra Club

Mary Elizabeth Notes for July 10 Meeting Summary

I am sure that you already have heard box is boggs.
The first meeting had folks asking for easier printing – Yolanda parks and I asked again at the July meeting. (you have it twice)

The July meeting had folks asking for full copies to be provided at the meeting.

Folks asked for a characterization of existing recharge projects.

The wells for the model have already been selected and used for calibration so what are those well IDs.

Folks asked for maps to be able to see the details.

Not sure technology for what?

Basin_Subbasin_Number	DWR DATA 5-022.01	Eastern San Joaquin Groundwater Authority
Basin_Subbasin_Name	San Joaquin Valley - Eastern San Joaquin	
Hydrologic_Region	San Joaquin River	
Basin_Area_Acres	772472.7141	
Basin_Area_SqMi	1206.98	
C1_Population_Census	591202	
C1_Population_SqMi	489.81	
C1_Priority_Points	2	
C2_Population_Projection	782849	
C2_Population_Growth	32.41	
C2_Zero_2010_Population	FALSE	
C2_Negative_or_No_Growth	FALSE	
C2_Postive_Growth_and_2010_Pop_1000	FALSE	
C2_Density_50_and_2010_Population_25000	FALSE	
C2_Priority_Points	4	
C3_Public_Supply_Groundwater_Wells	459	
C3_Public_Supply_Wells_SqMi	0.38	
C3_Priority_Points	3	
C4_Total_Groundwater_Wells	13668	
C4_Production_Wells_SqMi	11.32	
C4_Priority_Points	4	
C5_Irrigated_Acres	374146	
C5_Irrigated_Acres_SqMi	309.98	
C5_Priority_Points	4	
C6_Urban_Groundwater_AF	53728	
C6_Agricultural_Groundwater_AF	418721	
C6_Total_Water_Use_AF	1342407	
C6_Surface_Water_Use_AF	869957	
C6_Groundwater_Use_AF	472449	
C6a_Groundwater_Use_AF_BasinAcre	0.61	
C6a_Points	4	
C6b_Groundwater_Percent_Supply	0.3519	
C6b_Points	2	
C6_Priority_Points	3	
C7_Impacts_Declining_Groundwater_Levels_Points	7.5	
C7_Impacts_Declining_Groundwater_Levels_Comment	CRITICAL OVERDRAFT 2016. Source: DWR 1) CASGEM/WDL/GWIDS: Longterm hydrographs show groundwater level decline. Source: DWR 2) The plan also must address whether and how placing water to underground storage and subsequently withdrawing the water, under Permit 10477 will prevent additional overdraft in the Eastern San Joaquin and Cosumnes groundwater subbasins and include measures to avoid any such impacts.Source: http://www.nsjgroundwater.org/uploads/7_NSJWCD_Conjunctive_Use_Plan.pdf	

8 Prioritization Factors

1. The population overlying the basin.

2. The rate of current and projected growth of the population overlying the basin.

3. The number of public supply wells that draw from the basin.

4. The total number of wells that draw from the basin.

5. The irrigated acreage overlying the basin.

6. The degree to which persons overlying the basin rely on groundwater as their primary source of water.

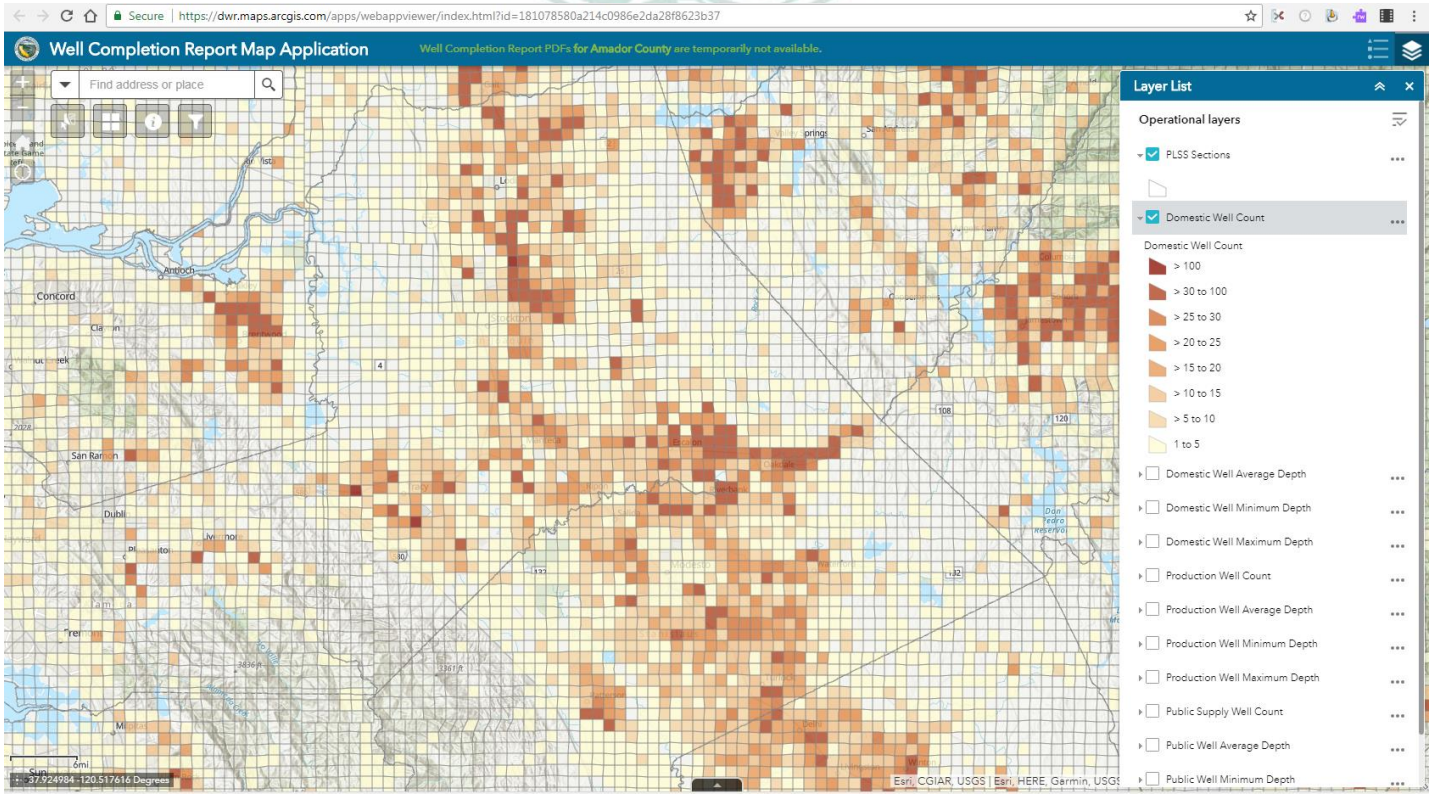
7. Any documented impacts on the groundwater within the basin, including overdraft, subsidence, saline intrusion, and other water quality degradation.

8. Any other information determined to be relevant by the department, including adverse impacts onlocal habitat and local streamflows. [Note: underline text was added by SGMA]

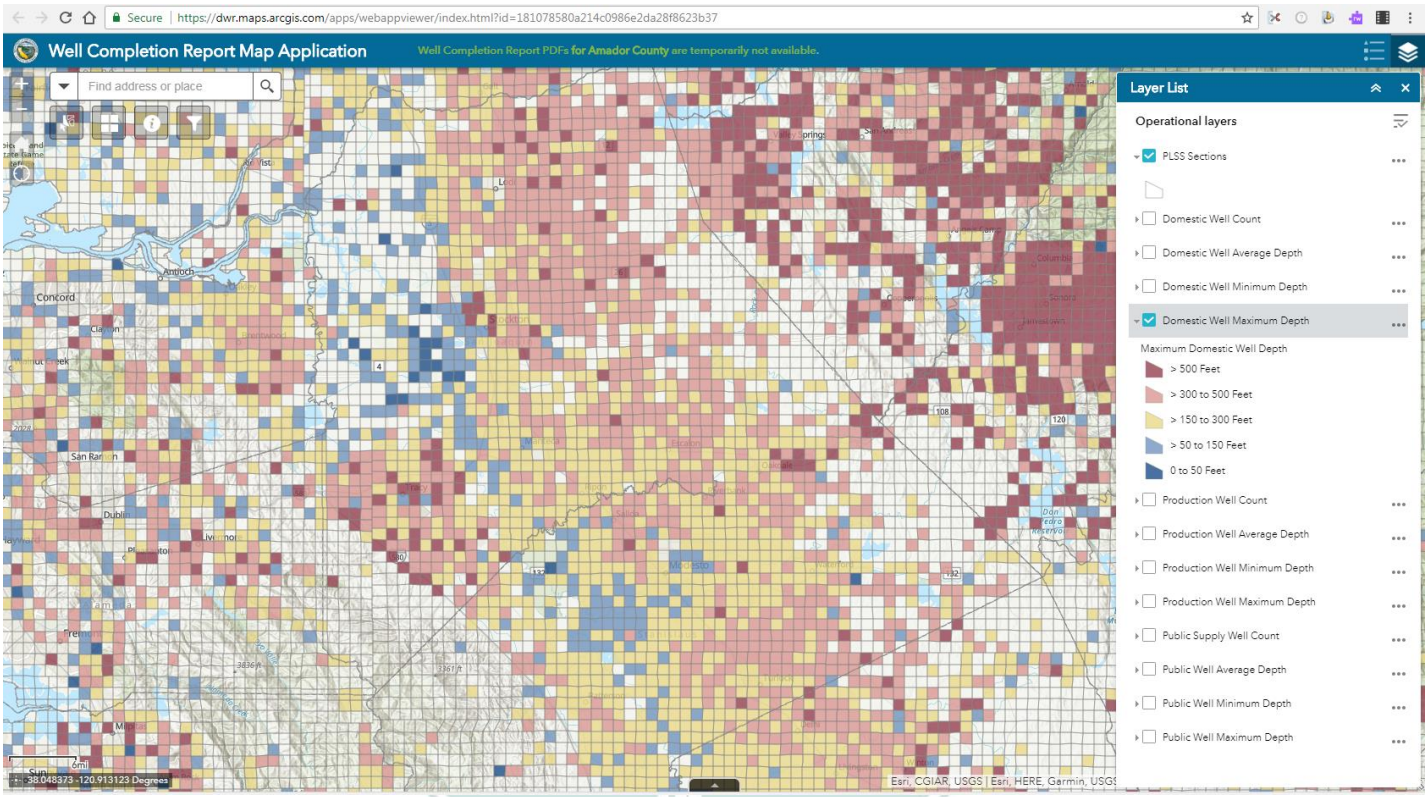
	3) Water levels are declining and chloride concentrations are increasing in western San Joaquin County as a result of pumping in excess of recharge. Source: https://ca.water.usgs.gov/projects/stockton_drill.html 	
C7_Impacts_Subsidence_Points	0	
C7_Impacts_Subsidence_Comment	No documented GW extraction induced subsidence	
C7_Impacts_Salt_Intrusion_Points	5	
C7_Impacts_Salt_Intrusion_Comment	1) In the Eastern San Joaquin subbasin, the groundwater is characterized with low to high salinity levels and localized areas of high calcium or magnesium bicarbonate, salinity, nitrates, pesticides, and organic constituents (DWR 2006j, 2013b). The high groundwater salinity is attributed to poor-quality groundwater intrusion from the Delta caused by the pumping-induced decline in groundwater levels, especially in the groundwater underlying the Stockton area since the 1970s (SJCFCWCD 2008). (pg. 7-34) The east side of the San Joaquin River is underlain by seven groundwater subbasins: the Cosumnes, Eastern San Joaquin, Modesto, Turlock, Merced, Chowchilla, and Madera subbasins. ...Declining groundwater levels in the subbasins east of the San Joaquin River have resulted in an area approximately 16-miles long with high salinity due to saltwater intrusion from the Delta (USFWS 2012). Doesn't say along which 16-mile stretch of which sub-basin (Cosmunes, East San Joaquin, Modesto, Turlock, Merced, Chochilla, Madera). (pgs. 7-32, 7-33) Source: LTO-EIS_USBR_Chapter7-GWResources.pdf 2) In the Eastern San Joaquin Groundwater Subbasin, near Stockton, California, 130 km east of San Francisco (Fig. 1), pumping in excess of recharge and resulting declines in water levels within aquifers to below sea level has led to an increase in chloride concentrations in water from wells (Izbicki et al. 2006). This trend began in the 1950s and has led to exceedances of the USEPA secondary maximum contaminant level (SMCL) of 250 mg/L for chloride in several wells (DWR 1967). In an effort to mitigate the impact of high-chloride water on groundwater supplies, local agencies, led by the Eastern San Joaquin County Groundwater Basin Authority in cooperation with the DWR, Stockton East Water District, and the City of Stockton, implemented strategies involving the conjunctive use of surface water and groundwater to meet demand. ...Artificial recharge programs have also been implemented that promote infiltration of captured local runoff to manage declining water levels and chloride concentrations. Programs include Stockton East Water District's Farmington Groundwater Recharge Program, with a goal of recharging about 43?106 m3 /year annually through field-flooding (Stockton East Water District 2014) and the City of Stockton's Morada Recharge Facility, which utilizes an existing stormflow basin to infiltrate local surface water and stormflow runoff (O'Leary et al. 2012). Source: EasternSanJoaquin-OLearyIzbickiMetzger2015.pdf	
C7_Impacts_Water_Quality_Points	1	

C7_Impacts_Water_Quality_Comment		
C7_Impacts_Total_Points	13.5	
C7_Priority_Points	3	
C8a_Streamflow_Points	1	
C8a_Habitat_Points	1	
C8a_Monitoring	TRUE	
C8a_Monitoring_and_GroundwaterThreshold_Adverse	Monitored with Declining GW Levels and > 0.16 ft GW Use	
C8a_Adverse_Adjustment	0	
C8a_AdverseComment		
C8a_HabitatSF_Priority_Points	2	
C8b_BasinOtherInfo_Priority_Points	0	
C8b_BasinOtherInfoComment		
C8a_and_C8b_Priority_Points	2	
C8c_2kGroundwater	FALSE	
C8c_9.5kGW_NoDocImpacts	FALSE	
C8c_Adjudication	FALSE	
C8c_Groundwater_NonAdj_AF		
C8c_9.5kGW_NonAdj	FALSE	
C8c_CriticalOverdraft	TRUE	
C8c_OutOfBasinGWExports_SubstitutionTransfers	FALSE	
Total_Priority_Points	42	
Priority	High	
Priority_Change_2014_to_2018	No Change	

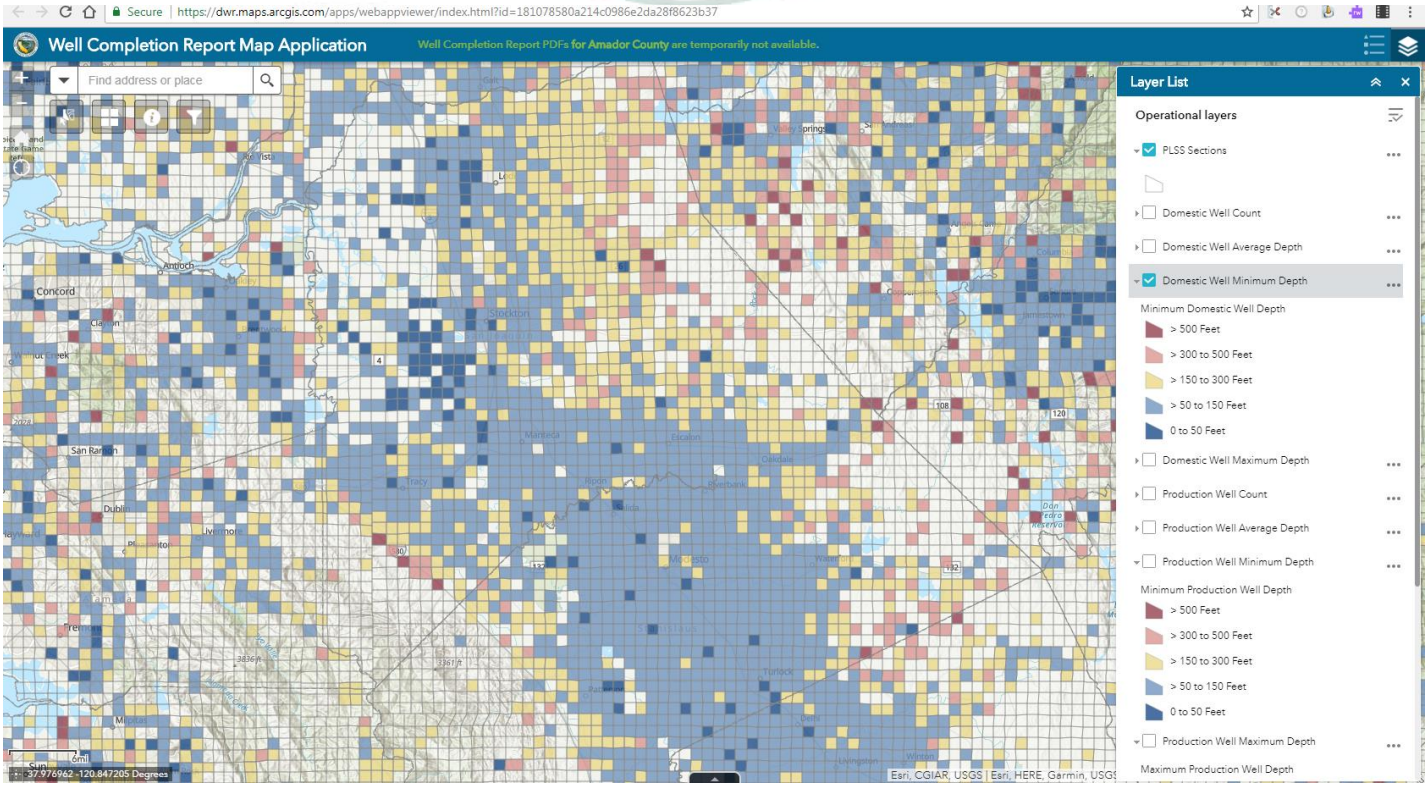
Domestic Well Counthttps://www.water.ca.gov/Programs/Groundwater-Management/Wells



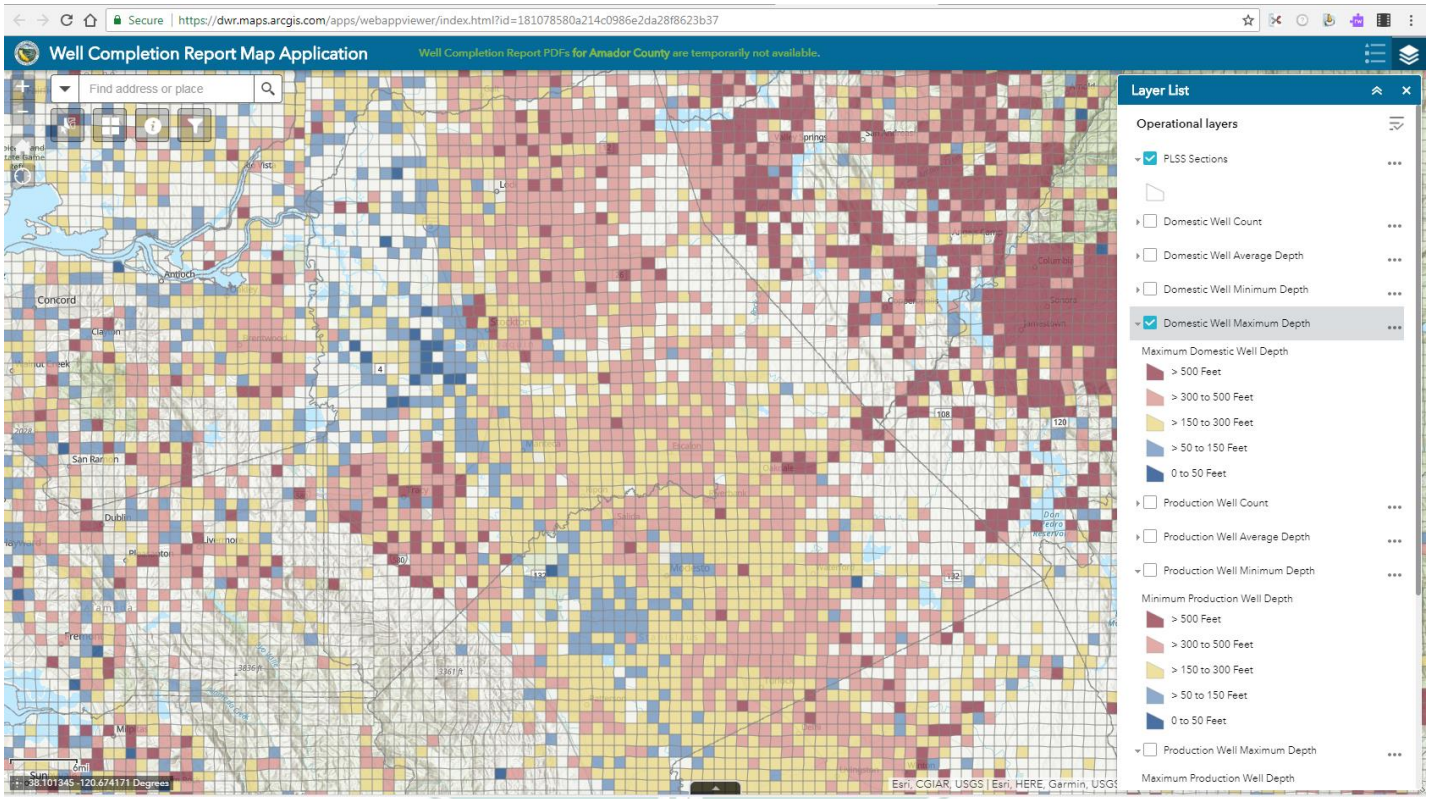
Domestic Well Maximum Depth



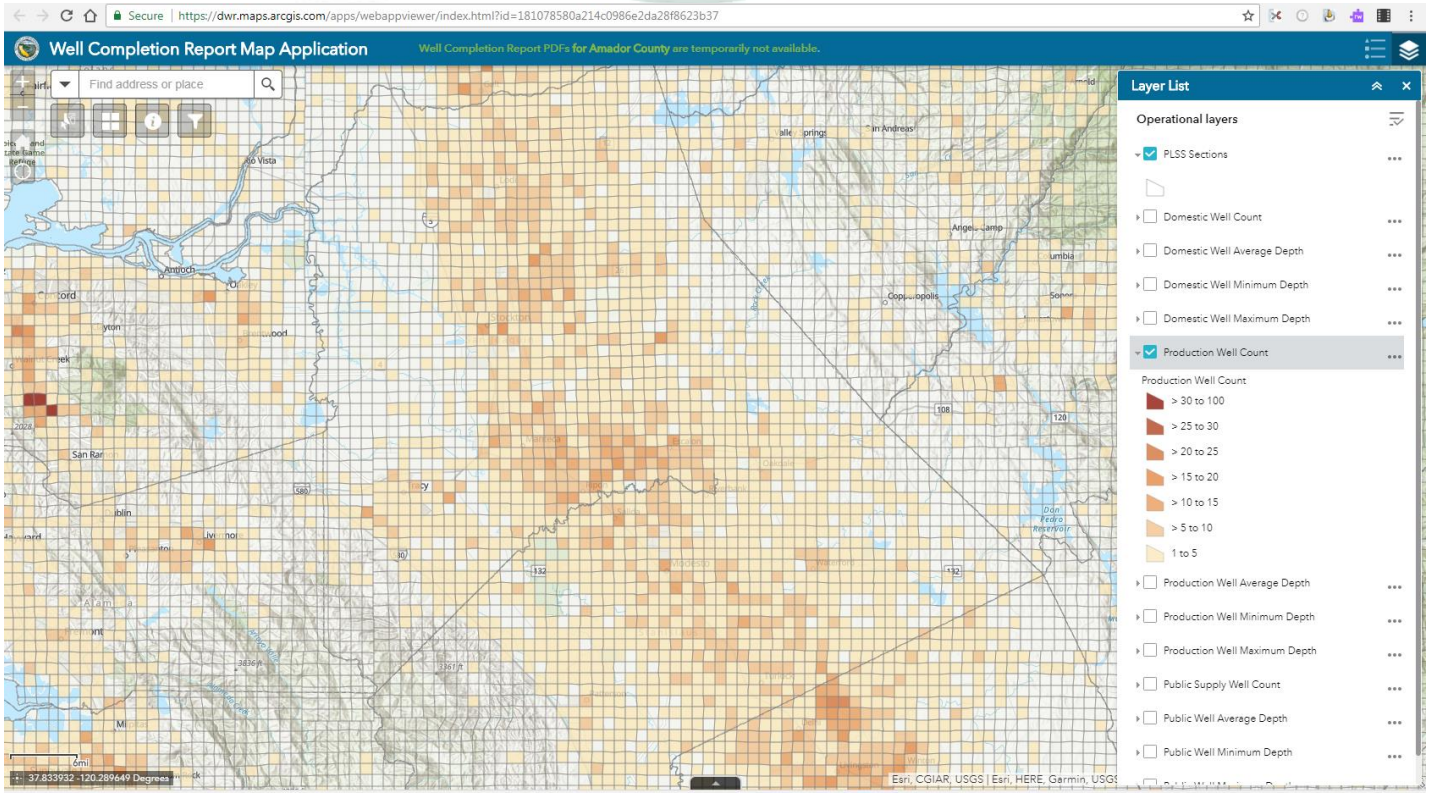
Domestic Well Minimum Depth



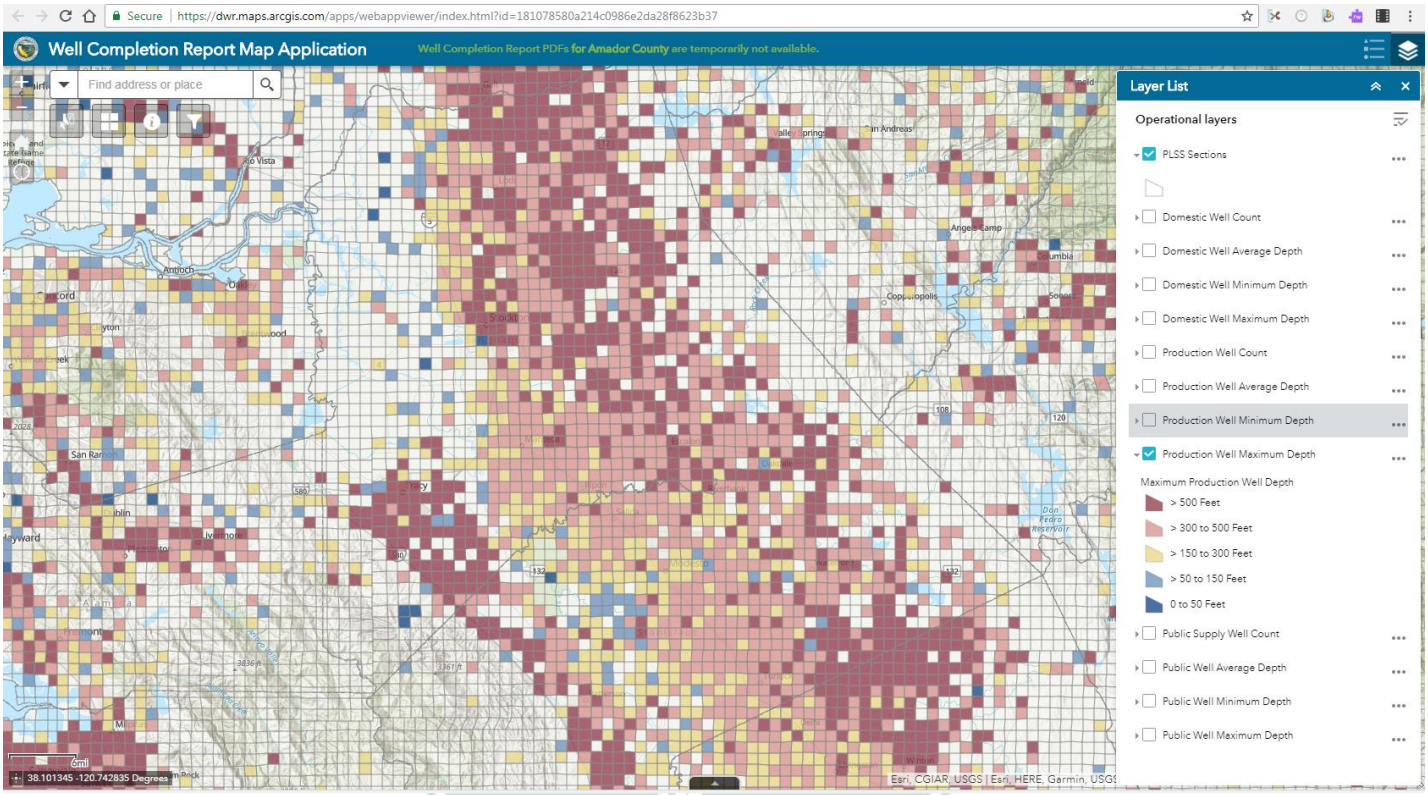
Domestic Well Maximum Depth



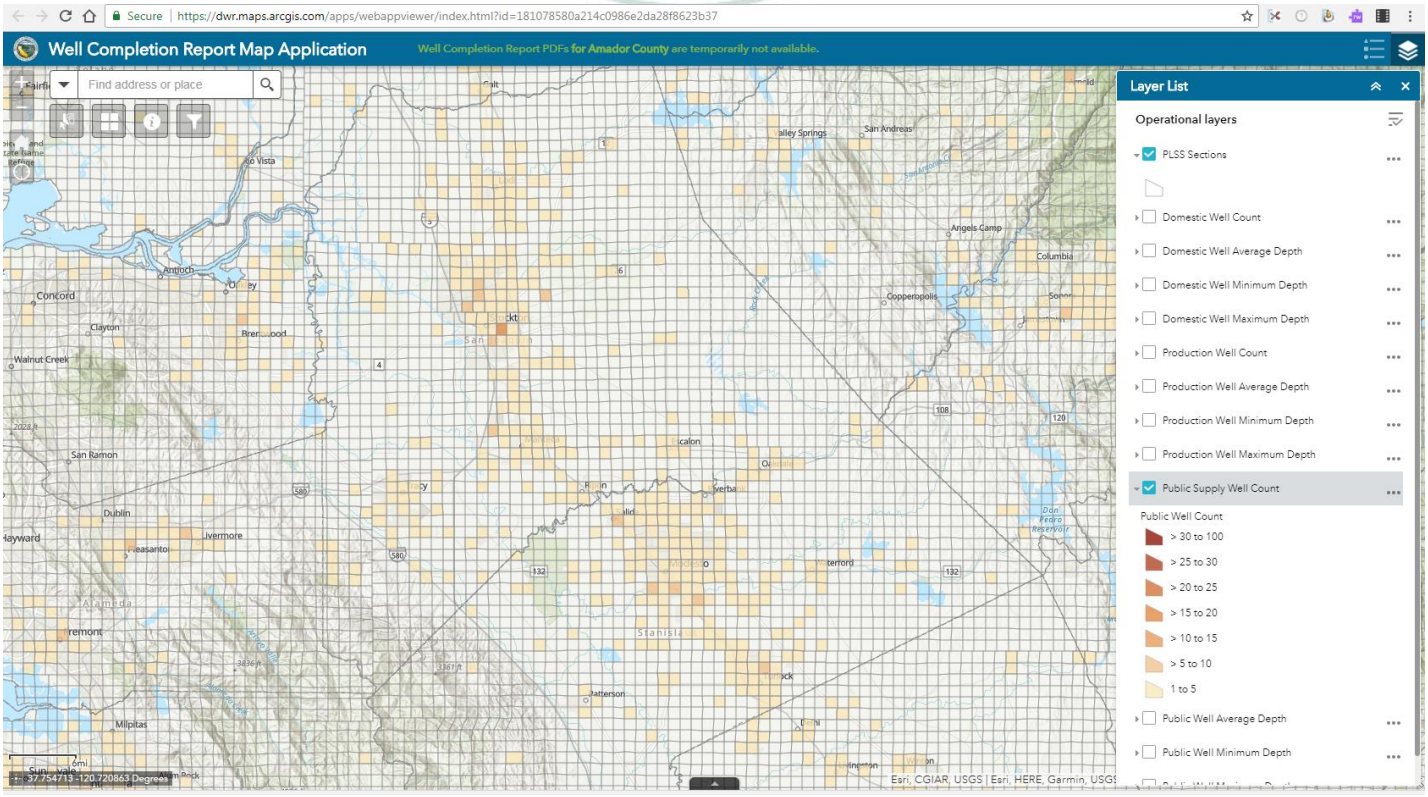
Production Well Count



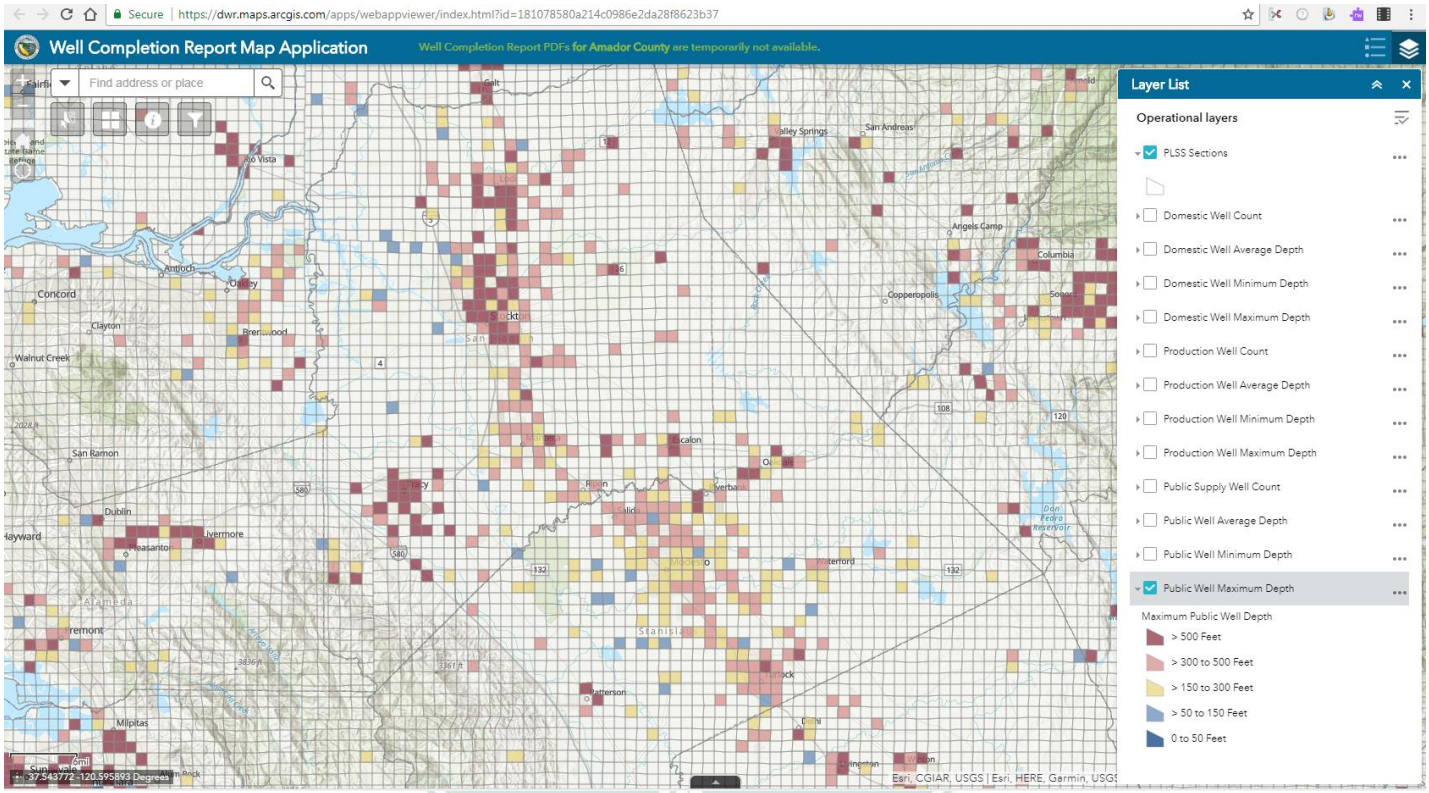
Production Well Maximum Depth



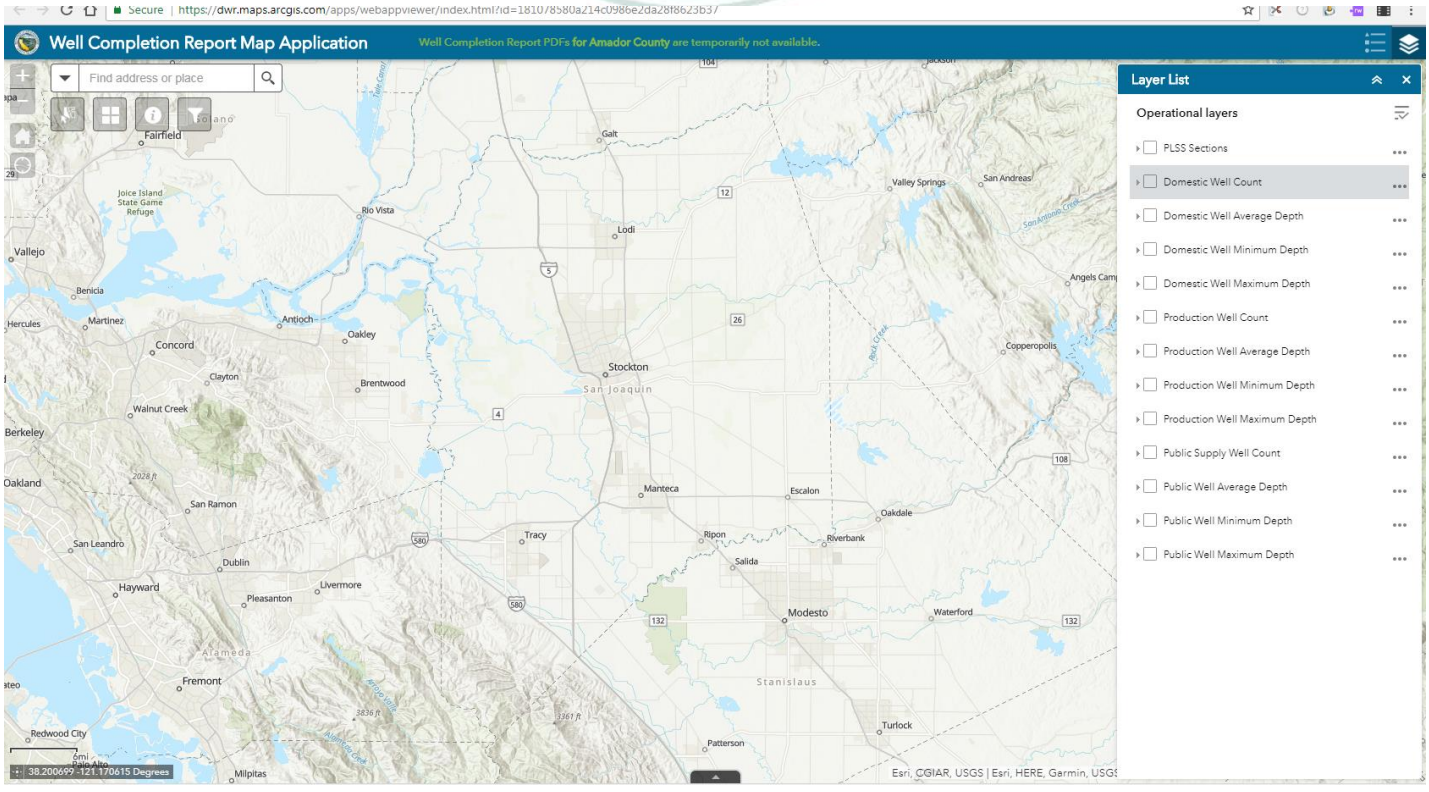
Public Supply Wells Count



Public Supply Well Maximum Depth



Base Map



EASTERN SAN JOAQUIN GROUNDWATER AUTHORITY

1810 E. Hazelton Avenue
P. O. Box 1810
Stockton, CA 95201

(209) 468-3089
ESJgroundwater@sjgov.org
esjgroundwater.org

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
Calaveras Room

Agenda

I. Welcome

II. Comments and Meeting Notes

III. Update on Background Conditions

IV. Undesirable Results and Minimum Thresholds

V. Brainstorming for Open House Station

VI. Announcements
   a. First public meeting August 29, 2018 6:30 pm, Robert J. Agricultural Center, Assembly Room 1

VIII. Other Topics
   a. Non-agenda items
   b. Public Comment

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1810 E. Hazelton Avenue
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For Immediate Release:
Contact: Cindy Thomas
Email: cindy@crockercrocker.com
Phone: 916-562-3284

Local Efforts Underway to Preserve and Secure Eastern San Joaquin Groundwater

First Public Meeting Set to Provide Plan Updates and Seek Feedback

Stockton, CA: The Eastern San Joaquin Groundwater Authority is hosting its first open house about its Groundwater Sustainability Plan on August 29 from 6:30 p.m. – 8 p.m. at the Robert J. Cabral Agricultural Center, Calaveras Room, 2101 E. Earhart Avenue, Stockton, CA. The Eastern San Joaquin Subbasin has been identified as one of 21 critically overdrafted subbasins in the state.

For the first time in California's history, the Sustainable Groundwater Management Act (SGMA) provides a framework for sustainable groundwater management.

The Eastern San Joaquin Groundwater Authority was established to ensure initial and ongoing SGMA compliance within the subbasin. They are developing a Groundwater Sustainability Plan to reflect local needs and conditions and prioritizes local control over groundwater resources.

The Groundwater Authority is hosting a series of public meetings to provide updates on local efforts to meet the state goals of SGMA. The first public meeting will give an overview on the current groundwater management status and conditions. The public will have the opportunity to ask questions and provide input on the plan.

Additional public meetings will be held between now and summer 2019. SGMA requires that the plan must be complete by January 31, 2020 and the basin must reach sustainability by 2040.

For more information, visit www.esjgroundwater.org. For questions, call (209) 468-3089 or email ESJgroundwater@sjgov.org.

About Eastern San Joaquin Groundwater Authority:
The Eastern San Joaquin Groundwater Authority's mission is to provide dynamic, cost-effective, flexible and collegial organization to ensure initial and ongoing SGMA compliance within the subbasin. Its purpose is to provide coordination among its 17 Groundwater Sustainability Agency members, carry out SGMA purposes, develop, adopt and implement a Groundwater Sustainability Plan and satisfy SGMA's requirements for coordination among the Groundwater Sustainability Agencies. Visit www.esjgroundwater.org for more information.

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JOIN US FOR AN OPEN HOUSE ABOUT

EASTERN SAN JOAQUIN'S GROUNDWATER BASIN

August 29, 2018
6:30 p.m. – 8 p.m.
Robert J. Cabral Agricultural Center, Calaveras Room
2101 E. Earhart Avenue, Stockton, CA

Do you know the Eastern San Joaquin Groundwater Authority is creating a plan to secure and preserve groundwater quality and levels for your groundwater basin? Find out why and how you can provide input to better manage our groundwater basin together in the future.

For the first time in California's history, the Sustainable Groundwater Management Act (SGMA) provides a framework for sustainable groundwater management.

The Eastern San Joaquin Groundwater Authority is hosting a series of public meetings to provide updates on local efforts to meet the state's SGMA goals. We are developing a Groundwater Sustainability Plan that reflects local needs and conditions and prioritizes local control over groundwater resources.

You're invited to attend our first open house on August 29 to learn about sustainable groundwater management. You will have the opportunity to ask questions and provide input about the Groundwater Sustainability Plan. Additional public meetings will be held between now and summer 2019.

For questions, please call (209) 468-3089 or email ESJgroundwater@sjgov.org. We hope to see you at the open house!

EASTERN SAN JOAQUIN GROUNDWATER AUTHORITY

ACOMPÁÑENOS A UNA SESIÓN ABIERTA AL PÚBLICO SOBRE

LA CUENCA DEL AGUA SUBTERRÁNEA DEL ESTE DE SAN JOAQUIN

29 de agosto de 2018
De 6:30 p. m. a 8 p. m.
Robert J. Cabral Agricultural Center, Salón Calaveras
2101 E. Earhart Avenue, Stockton, CA

¿Sabía que la Autoridad del Agua Subterránea del Este de San Joaquin está creando un plan para asegurar y preservar la calidad y los niveles del agua subterránea para su cuenca de aguas subterráneas? Descubra por qué y cómo puede hacer sugerencias para que gestionemos mejor nuestra cuenca de agua subterránea en el futuro.

Por primera vez en la historia de California, la Ley de Gestión Sustentable del Agua Subterránea (Sustainable Groundwater Management Act, SGMA) brinda un marco para la gestión sustentable del agua subterránea.

La Autoridad del Agua Subterránea del Este de San Joaquin organizará una serie de reuniones públicas para brindar actualizaciones sobre los esfuerzos locales para cumplir con los objetivos de la SGMA estatal. Estamos desarrollando un plan de sustentabilidad de aguas subterráneas que refleje las necesidades y condiciones locales y que dé prioridad al control local sobre los recursos de aguas subterráneas.

Está invitado a nuestra primera sesión abierta al público el 29 de agosto, para aprender acerca de la gestión sustentable de aguas subterráneas. Tendrá la oportunidad de hacer preguntas y sugerencias sobre el plan de sustentabilidad de aguas subterráneas. Se realizarán reuniones públicas adicionales desde ahora y hasta el verano de 2019.

Si tiene preguntas, llame al (209) 468-3089 o envíe un correo electrónico a ESJgroundwater@sjgov.org. ¡Esperamos verlo en la sesión abierta al público!

EASTERN SAN JOAQUIN GROUNDWATER AUTHORITY

ATTACHMENT II
B.1-6.

SAN JOAQUIN COUNTY
Greatness grows here.

Public Works
Working for YOU

Department of Public Works
Kris Balaji, Director of Public Works
Fritz Buchman, *Deputy Director/Development*
Michael Selling, *Deputy Director/Engineering*
Jim Stone, *Deputy Director/Operations*
Kristi Rhea, *Manager of Strategic Initiatives*

August 6, 2018

Ms. Mary Elizabeth, Conservation Chair
Sierra Club
Delta-Sierra Group Mother Lode Chapter
P.O. Box 9258
Stockton, CA 95208

SUBJECT: USE OF ZONE 2 MONEY TO FUND SAN JOAQUIN COUNTY GROUNDWATER SUSTAINABILITY AGENCY #2 (CAL WATER – COUNTY GSA) OBLIGATIONS

Dear Ms. Elizabeth:

I am writing in response to your April 27, 2018, letter to the Board of Supervisors and the Eastern San Joaquin Groundwater Authority (ESJGA) Board (attached), in which you object to the use of County Water Investigation Zone No. 2 (Zone 2) money to fund any portion of the Cal Water-County GSA's financial obligation related to the Groundwater Sustainability Plan (GSP) being developed by the ESJGA. The Cal Water-County GSA was formed pursuant to a Memorandum of Agreement (MOA) between the County and California Water Service Company under which, among other provisions, Cal Water is granted limited voting rights on the ESJGA Board and is responsible for costs associated with operating the GSA. A summary of objections raised in your letter and responses thereto follow:

Use of Zone 2 money for the Cal Water - County GSA is inconsistent with the MOA, which provides that Cal Water is responsible for financial obligations of the GSA.

While Section 4 of the MOA holds Cal Water responsible for the GSA's financial obligations, the concluding sentence reads: "Contributions of grant funding, State, Federal, or ***County funding may be provided as funding or a portion of funding on behalf of a party." (Emphasis added.)*** Consequently, use of outside funding (e.g., Zone 2, State grants, etc.) to offset the GSA's financial obligations was anticipated and provided for in the Agreement.

Zone 2 is a Countywide property-related fee collected to support water resources planning activities. In February, 2018, the ESJGA Board approved a cost allocation plan using Zone 2 funds to reduce the financial obligation equally for each of the 16 in-County GSAs in the ESJGA. Cal Water was held responsible for the entire cost allocated to the Cal Water County GSA, which was the same as for each of the other in-County GSA's. Since Cal Water - County GSA constituents pay the Zone 2 fee, it is reasonable and equitable that their GSA receives the same level of support from Zone 2 as the others.

Use of Zone 2 money to satisfy any part of Cal Water's financial obligations for the Cal Water - County GSA may be an unlawful gift of public funds under California Constitution Article XVI, §6.

It is well settled law that the general prohibition on gifts of public funds does not apply when the funds are used for a public purpose, even though there may be incidental benefit to private persons and/or entities. The Sustainable Groundwater Management Act authorized Counties to expend funds on GSP

development; therefore, managing groundwater, especially in a high priority basin, is a public purpose. Additionally, the Fee Analysis Report adopted by the Board of Supervisors when it established the Zone 2 fee in 2015 expressly contemplated use of Zone 2 funds for "Coordination and planning to meet the statutory requirements of the Sustainable Groundwater Management Act of 2014." Therefore, use of Zone 2 funds for GSP development served a public purpose and also served the general interests of the County, the ESJGA, and its member GSAs.

In summary, the County concludes that the approved Zone 2 contribution toward the CalWater-County GSA share of GSP development costs is consistent with the Cal Water - County MOA and the express intent of the Zone 2 fee, is reasonable and equitable, and serves a public purpose. Feel free to contact me at (209) 468-3101 or by e-mail at fbuchman@sjgov.org if you have further questions or concerns.

Sincerely,

FRITZ BUCHMAN, C.E., T.E., CFM
Deputy Director / Development

FB:nt
2018-08-06 RESPONSE TO SIERRA CLUB ZONE 2 COMMENTS - FINAL.DOCX

Attachment

c: San Joaquin County Board of Supervisors
Eastern San Joaquin Authority Board of Directors
Monica Nino, County Administrator
J. Mark Myles, County Counsel
Kris Balaji, P.E., Director of Public Works
Brandon Nakagawa, P.E., Water Resources Coordinator

SIERRA CLUB
FOUNDED 1892

Delta-Sierra Group
Mother Lode Chapter
P.O. Box 9258, Stockton CA 95208

4.27.18

San Joaquin County Board of Supervisors [1] and Eastern San Joaquin Groundwater Authority [2]
44 North San Joaquin Street
Sixth Floor, Suite 627
Stockton, CA 95202

RE: Use of Zone 2 Money to Fund California Water Service's Groundwater Basin Authority JPA assessment for the San Joaquin County Groundwater Sustainability Agency #2

The Delta-Sierra Group within the Sierra Club Mother Lode Chapter objects to the use of public funds, specifically Water Investigation Zone 2 money to fund any part of California Water Service's financial obligation in accordance with the San Joaquin County-California Water Service Memorandum of Agreement that created San Joaquin County GSA #2 and which afforded California Water Service with voting rights for the Eastern San Joaquin Groundwater Authority.

Background

On May 23, 2017 the San Joaquin County Board of Supervisors adopted A-17-146 a Memorandum of Agreement (MOA) between San Joaquin County and California Water Service to allow California Water Service to have voting rights, with restrictions, for the Eastern San Joaquin Groundwater Authority (ESJGA) which is a Joint Powers Authority (JPA) of 17 Groundwater Sustainability Agencies (GSAs). The JPA was formed to coordinate the development of a Groundwater Sustainability Plan for the Subbasin between 17 GSAs. San Joaquin County Board of Supervisors with the adoption of the MOA formed San Joaquin County GSA #2 to allow California Water Service, a privately owned utility to participate beyond just as a stakeholder but as a voting member representing a GSA. According to SGMA[3] "A water corporation regulated by the Public Utilities Commission or a mutual water company may participate in a groundwater sustainability agency if the local agencies approve through a memorandum of agreement or other legal agreement." The MOA also specified how the San Joaquin County GSA #2 was to be funded. Below is an excerpt of the MOA between San Joaquin County and the California Water Service forming the San Joaquin County GSA #2 which is sometimes referred to as the Cal-Water County GSA or California Water Service GSA:

> Cal Water shall be responsible for all operating and administrative costs, expenses, and financial obligations of the Cal Water-County GSA. The obligation of Cal Water to make payments under the terms and provision of this Agreement is an individual and several obligation and not a joint obligation with those of the County. Cal Water shall remain responsible for its proportionate share of any obligation or liability duly incurred by the JPA and apportioned to the Cal Water County GSA.

---

1 Transmitted via email All Board Members allboardmembers@sjgov.org Clerk of the Board mduzenski@sjgov.org

2 ESJgroundwater@sjgov.org

3 https://www.water.ca.gov/LegacyFiles/cagroundwater/docs/2014%20Sustainable%20Groundwater%20Management%20Legislation%20_with%202015%20amends%2011-10-2015_ clean-2.pdf

> Each Party shall otherwise be individually responsible for its own covenants, obligations, and liabilities under this Agreement. No Party shall be the agent or have the right or power to bind the other Party without such Party's express written consent, except as expressly provided in this Agreement. Contributions of grant funding, State, Federal, or County funding may be provided as funding or a portion of funding on behalf of a Party.

The MOA agreement was covered by a recommendation letter dated May 2, 2017, signed by Kris Balaji, Director of Public Works and reviewed by Les Tyler, County Administrator's Office and Larry Meyers, County Counsel Office. This recommendation letter included the following statements:

> FISCAL IMPACT: Costs to Public Works consists of staff time to process the proposed Agreement and is funded by existing appropriations in the 2016-17 Water Investigation Zone No. 2 Budget. The proposed MOA is expected to reduce future County costs for SGMA compliance by shifting the County's financial obligations within the Cal Water-County GSA boundaries to Cal Water.

Use of Property Assessments to pay for California Water Service's share of costs

At the February 14, 2018 meeting the Eastern San Joaquin Groundwater Authority approved the use of San Joaquin County Water Investigation Zone No 2 money to pay part of California Water Service's financial assessment under the JPA for $1/17^{th}$ of the annual cost for the 2020 Groundwater Sustainability Plan. At the same meeting the GBA did not approve the use of Zone 2 money to pay for part of the Eastside GSA because that was out of the county (Calaveras and Stanislaus County GSAs). The Water Investigation Zone No. 2 money is a property assessment paid by all property owners in San Joaquin County. In 2017, the San County Flood Control and Water Conservation District stated [4] that the Water Investigation Zone 2 money was to be used to:

> This fee is used to support efforts to carry out the "Strategic Plan to Meet Water Needs" adopted by the Board of Supervisors, which includes the following goals and objectives: Preserve water rights; Manage groundwater in Eastern San Joaquin County; Protect water quality; Maintain and enhance southwest County water supplies; Develop funding programs; and Support watershed education programs.

The people of San Joaquin did not agree to pay for California Water Service's Eastern San Joaquin Groundwater Authority voting privileges and the San Joaquin County staff recommendation for the Cal Water MOA specifically stated that the expectation is that County costs for SGMA would be reduced not increased as is the case with Water Investigation Zone 2 money being used to fund a portion of California Water Service's financial obligation.

Prior to the vote approving use of Zone 2 money, I objected to giving Zone 2 money to California Water Service because the MOA between San Joaquin County and California Water Service stated that California Water Service would be responsible for all costs associated with the San Joaquin County GSA #2. The initial minutes prepared and made available for the March 14, 2018 meeting did not include my reference to the Memorandum of Agreement between San Joaquin County and California Water Service. I requested during the March 14, 2018 that the February 14, 2018 meeting minutes be amended to specifically reference the formal agreement between San Joaquin County and California Water Service.

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4 http://www.sjwater.org/Documents/ZONE2/2017/ZONE%202%20FAQs%202017-18%20-%20FINAL_05252017.pdf

California Constitution: Use of Public Money

Set forth in Cal. Const., art. XVI, § 6 b. Prohibits the giving or lending public funds to any person or entity, public or private i. Prohibition includes aid, making of gift, pledging of credit, payment of liabilities 1. Encompasses the giving of monetary funds and any "thing of value" ii. "Legislature shall have no power to give or to lend, or to authorize the giving or lending, of the credit of the State, or of any county, city and county, city, township or other political corporation or subdivision of the State now existing, or that may be hereafter established, in aid of or to any person, association, or corporation, whether municipal or otherwise, or to pledge the credit thereof, in any manner whatever, for the payment of the liabilities of any individual, association, municipal or other corporation whatever; nor shall it have power to make any gift or authorize the making of any gift, of any public money or thing of value to any individual, municipal or other corporation whatever"[5]

Summary

The Board of Supervisors or their delegate should direct the Eastern San Joaquin Groundwater Authority to revoke the use of Zone 2 money for California Water Service and use the money to provide extra outreach to disadvantaged communities particularly those having irrigation or water supply wells.

Sincerely,

Mary Elizabeth M.S., R.E.H.S.
Delta-Sierra Group Conservation Chair
Sierra Club
elizabeth@marric.us

5 https://www.cacities.org/Resources-Documents/Member-Engagement/Professional-Departments/City-Attorneys/Library/2016/Annual-2016/10-2016-Annual_Forbath_Gift-of-Public-Funds_Spoile.aspx

STOCKTON EAST WATER DISTRICT
PROVIDING SERVICE SINCE 1948
www.sewd.net

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Division 2

Alvin Cortopassi
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August 15, 2018

Mr. Dane Mathis
DWR - Basin Boundary Modification
P.O. Box 942836
Sacramento, CA 94236-0001

Subject: Basin Boundary Modifications Request, City of Lathrop, Eastern San Joaquin Groundwater Basin

Dear Mr. Mathis,

Stockton East Water District (District) submits this comment letter to oppose City of Lathrop's (City) request for Basin Boundary Modification based on the following reasons.

The City of Lathrop has a history of groundwater use within the Eastern San Joaquin Groundwater Basin (Basin) which is a high priority Basin. The City continues to use groundwater as its main water supply with recycle water and other surface water supply in development. The City's historical and future groundwater use has, and will continue to have impacts on the groundwater Basin and should be thoroughly analyzed in the Groundwater Management Plan (GMP) based on the high priority basin's schedule. The City's wells are hydraulically with the Basin and a jurisdictional boundary change would evade the impact the City's operation had on the Basin from the past and potentially in the future.

The City splits between the Basin and the Tracy Groundwater Basin and many jurisdictions, including the District, have portion(s) of their service area boundaries overlapping groundwater Basins. The Basin is a critically overdraft high priority Basin while the Tracy Groundwater Basin is a medium priority Basin. Allowing the City to modify its Basin boundary would shift the City's groundwater management responsibility to a later date, not consistent with the intent or the requirements of the Sustainable Groundwater Management Act. This delay would set a precedent and the District opposes such actions.

Please do not hesitate to call me at (209) 948-0333 if you have any questions.

Sincerely,

Scot A. Moody
General Manager

WESTERN
FarmPress

Western Farm Press Blog

Shasta Dam remains the cornerstone of federal water projects in California and could see renewed focus by the Trump Administration.

REGULATORY > WATER

State water board 'kicks can' on river decision to November

Will Reclamation's request to negotiate water agreement with California mean better outcome for farmers?

Todd Fitchette | Aug 24, 2018

Earlier this week a water rally spearheaded by a California assemblyman drew an estimated 1,000 people to the north steps of the State Capitol. Not coincidentally, the event fell one day before the State Water Resources Control Board was set to take over one million acre feet of water from three California rivers for fish restoration in the Delta.

Since it's been reported that a similar amount of water may be sent to southern California through the proposed twin tunnels that Gov. Brown wants to build, and Metropolitan Water District agreed to help fund , one can rightly say that the move is simply a shell-game akin to games the Legislature pays with new special taxes said to augment General Fund contributions to help fund things like roads and schools, but I digress.

I'm told the move by the water board was cooked up years ago, waiting for just the right time to be served. It doesn't matter that within the past year farmers, irrigation districts, school districts, and others – armed with scientific and economic studies – complained in unison that the idea will "decimate local communities."

Now it appears the water board has kicked the can again, conveniently until after the November election, to formalize its decision.

I spoke with Assemblyman Adam Gray, D-Merced, at the water rally. Gray hopes to gather enough support from colleagues to perhaps make a difference.

Though Gray belongs to the majority party in Sacramento, I'm also told that he does not always follow the party line. Several years ago Gray was pulled off a state committee by then-Assembly Speaker Toni Atkins after a committee vote on a water bill Gray sponsored apparently did not go as party leaders desired.

From the sounds of it, Gray rightly represents his constituents first – a novel idea in today's world of politics.

While lawsuits are said to be pending the water board's decision, the Trump Administration is now involved, according to The Sacramento Bee. Apparently the Bureau of Reclamation – until recently a curse-word used by federal water contractors denied irrigation water in the past several years – formally told California it wants to renegotiate a 1986 agreement between the state and feds on how water is moved and allocated.

According to The Bee, the feds want the state to pony up more water from the State Water Project for environmental restoration. How this impacts thirsty urban users in southern California and whether it provides more water to San Joaquin Valley farmers who now view 40 percent Central Valley Project deliveries as a full-allocation remains to be seen.

If this happens Lake Oroville may become a much larger player in Delta restoration flows, which could significantly impact Feather River flows currently used for irrigating northern California crops. At the very least California water officials should rethink how they manage the large reservoir, which they've let slip to 47 percent of capacity because of needed repairs to the spillway that failed in early 2017.

Stay tuned as I wade further into murky waters and chat with other water leaders on California's water issues. As I learn more, so will you.

Legal Planet
Insight & Analysis: Environmental Law and Policy

California | Events | General | Litigation | Regulation | Regulatory Policy | Water

RICHARD FRANK August 29, 2018

California Court Finds Public Trust Doctrine Applies to State Groundwater Resources

Court Rejects Claim That SGMA "Displaces" Public Trust's Application to California Groundwater

Scott River, http://www.westernrivers.org/projectatlas/scott-river/

The California Court of Appeal for the Third Appellate District has issued an important decision declaring that California's powerful public trust doctrine applies to at least some of the state's overtaxed groundwater resources. The court's opinion also rejects the argument that California's Sustainable Groundwater Management Act (SGMA) displaces the public trust doctrine's applicability to groundwater resources.

The Court of Appeal's opinion in *Environmental Law Foundation v. State Water Resources Control Board* decides two key issues of first impression for California water law: first, whether the public trust doctrine applies to California's groundwater resources; and, second, if it does, if application of that doctrine has been displaced and superseded by the California Legislature's 2014 enactment of SGMA. A unanimous appellate panel answered the first question in the affirmative, the second in the negative.

The facts of the *Environmental Law Foundation* are straightforward and undisputed: the Scott River is a tributary of the Klamath River and itself a navigable waterway located in the northwestern corner of California. The Scott River has historically been used by the public for recreational navigation and serves as essential habitat for migrating salmon listed under the Endangered Species Act.

Critically, there are groundwater aquifers adjacent to the Scott River in Siskiyou County that are hydrologically connected to the surface flows of the Scott River. Local farmers and ranchers in recent years have drilled numerous groundwater wells and pumped ever-increasing amounts of groundwater from those aquifers. As a direct result, the surface flows of the Scott River have been reduced, at times dramatically. Indeed, in the summer and early fall months, the Scott River has in some years been completely dewatered due to the nearby groundwater pumping. The adverse effects on both the Scott River's salmon fishery and recreational use of the river have been devastating.

Environmental groups and the Pacific Coast Federation of Fishermen's Associations, relying on California's venerable public trust doctrine, initially responded to this environmental crisis by petitioning Siskiyou County and the State Water Resources Control Board to take administrative action to limit groundwater pumping in the Scott River watershed. Both the Board and the County declined to do so.

Plaintiffs responded by filing suit, arguing that groundwater resources that are interconnected with the surface water flows of the Scott River are subject to and protected by the state's public trust doctrine. Siskiyou County disputed that claim, arguing that the public trust doctrine is wholly inapplicable to groundwater and that the country has no duty to limit groundwater pumping, even in the face of the resulting environmental damage to the Scott River ecosystem. (The Board, by contrast, eventually reconsidered its position, ultimately adopting plaintiffs' view that groundwater resources interconnected with surface water flows are indeed subject to the public trust doctrine.)

The trial court concluded that the public trust doctrine does apply to the groundwater resources of the Scott River region. While the litigation was pending there, however, the California Legislature enacted SGMA, which for the first time creates a statewide system of groundwater management in California, administered at the regional level. Siskiyou County seized upon that legislation to argue that even if the public trust doctrine would otherwise apply to the County's groundwater resources, the doctrine was automatically displaced and made inapplicable to groundwater as a result of SGMA's allegedly "comprehensive" statutory scheme. The trial court rejected this backstop argument as well, and the County appealed.

The Court of Appeal's decision today resoundingly affirms the trial court on both issues. On the threshold public trust claim, the justices rely heavily on the California Supreme Court's landmark public trust decision, *National Audubon Society v. Superior Court*. In *National Audubon*, the Supreme Court held that the public trust doctrine, a foundational principle of California natural resources law, fully applies to the state's complex water rights system. Specifically, *National Audubon* found that the City of Los Angeles' diversion of water from the non-navigable, freshwater streams flowing into Mono Lake, which were reducing the lake level and causing environmental damage to the lake ecosystem, could be limited by state water regulators under the public trust doctrine.

The court in the *Environmental Law Foundation* concluded that the rationale and holding of *National Audubon* are fully applicable to the facts of the Scott River case. Rejecting the County's argument that extractions of groundwater should be treated differently from the diversions of surface water that were found in *National Audubon* to be causing environmental damage to Mono Lake, the Court of Appeal declares:

> *"The County's squabble over the distinction between diversion and extraction is… irrelevant. The analysis begins and ends with whether the challenged activity harms a navigable waterway and thereby violates the public trust."*

Accordingly, the *Environmental Law Foundation* court concludes that the public trust doctrine fully applies to extractions of groundwater that adversely affect navigable waterways such as the Scott River.

Turning to the County's SGMA-based defense, the Court of Appeal had little difficulty concluding that by enacting that statute the Legislature did not intend to occupy the entire field of groundwater management and thereby abolish the public trust doctrine's application to the groundwater resources at issue. (The County had argued that SGMA's enactment not only relieves the County of any public trust-related duties, but also precludes the State Water Resources Control Board from acting to protect public trust resources from environmental damage resulting from excessive groundwater extractions.) The Court of Appeal concludes:

> *"[W]e can evince no legislative intent to eviscerate the public trust in navigable waters in the text or scope of SGMA…We conclude that the enactment of SGMA does not, as the County maintains, occupy the field, replace or fulfill public trust duties, or scuttle decades of decisions upholding, defending, and expanding the public trust doctrine."*

Environmental Law Foundation v. State Water Resources Control Board represents an important judicial ruling concerning the public trust doctrine's application to California's water resources– perhaps *the* most important since the California Supreme Court decided the iconic *National Audubon* decision 35 years ago. Additionally, *Environmental Law Foundation* is the first California appellate decision expressly applying the public trust doctrine to (at least some of) the state's groundwater resources. It's also the first appellate decision interpreting SGMA, although that decision limits the application of the statute and harmonizes it with longstanding California public trust doctrine.

Perhaps most importantly, the *Environmental Law Foundation* opinion represents yet another ringing judicial affirmation of the public trust doctrine's continuing, vital and foundational role in California natural resources law and policy. The California judiciary has in recent years consistently given a robust interpretation to and application of the public trust doctrine. *Environmental Law Foundation* is but the latest manifestation of that most welcome trend.

(*Full disclosure notice: the author of this post serves as counsel of record for the prevailing plaintiffs in the Environmental Law Foundation v. State Water Resources Control Board case.)*

Barney, Danielle

Subject: FW: SGMP August Newsletter
Attachments: image005.emz

From: Emard, Joyia@DWR <Joyia.Emard@WATER.CA.GOV>
Sent: Thursday, August 30, 2018 10:59 AM
To: DWR_SGMP@LISTSERVICE.CNRA.CA.GOV
Subject: SGMP August Newsletter

CALIFORNIA DEPARTMENT OF WATER RESOURCES

SUSTAINABLE GROUNDWATER MANAGEMENT PROGRAM

Updates from the California Department of Water Resources' Sustainable Groundwater Management Program.

NEW TODAY August 30, 2018	
News	**Upcoming Events**
• Climate Change Data and Guidance Resource Guide Released • Alternative Plans Review • Basin Boundary Modifications Deadline is September 28, 2018	• Nothing Scheduled

NEW Climate Change Data and Guidance Resource Guide Released

The Sustainable Groundwater Management Program (SGMP) released the Climate Change Data and Guidance Resource Guide which gives a high-level overview of climate change resources and includes datasets provided by the Department of Water Resources (DWR), tools for working with the DWR-provided datasets, and guidance for using DWR-provided data and tools when developing groundwater sustainability plans. The datasets and methods can provide technical assistance to groundwater sustainability agencies when developing projected water budgets.

NEW Alternative Plans Review

SGMP staff continues to prioritize review of Alternatives to Groundwater Sustainability Plans and recognizes the importance of this work to the submitting agencies. DWR is targeting the end of the calendar year for release of assessments for each of the submitted Alternative Plans. If you have any questions or comments, please contact Joyia Emard at joyia.emard@water.ca.gov.

REMINDER Basin Boundary Modifications Submission Period Ends September 28

The Basin Boundary Modifications submission period ends at11:59 p.m., Friday, **September 28, 2018**. Additional information is available on the Basin Boundary Modifications webpage. All information to support basin boundary modifications must be submitted via the Basin Boundary Modifications Request System. For more information, contact Dane Mathis at dane.mathis@water.ca.gov or (559) 230-3354.

- Draft 2018 Basin Boundary Modifications: Release expected in November 2018.
- Final 2018 Basin Boundary Modifications: Release expected in February 2019.

VIEW Basin Prioritization Comments Are Online

Basin prioritization comments submitted and information uploaded in support of comments can be viewed on DWR's webpage for Draft 2018 Basin Prioritization Public Comments. Please be reminded that until the Basin Prioritization list is finalized, the 2014 CASGEM Basin Prioritization continues to define SGMA priority basins.

- Basins not affected by modification requests: Final 2018 Basin Prioritization release expected in November 2018.
- Basins affected by modification requests:
  - Draft 2018 Basin Prioritization release expected in February 2019.
  - Draft release will be followed by a **30-day** public comment period.
  - Final 2018 Basin Prioritization release expected in May 2019.

Connect with Your Basin Point-of-Contact

DWR has designated Basin Points-of-Contact to assist local agencies and groundwater sustainability agencies as groundwater sustainability plans are developed and implemented and to assist with applications for Technical Support Services and Facilitation Support Services. To determine your Basin Point-of-Contact, please see the following links that provide maps and contact information:

Northern Region
North Central Region
South Central Region
Southern Region

For regional inquiries, please contact sgmp_rc@water.ca.gov.
For general inquiries, please contact sgmps@water.ca.gov.

WESTERN FarmPress.

Etna, Calif., rancher Jim Morris checks for armyworm in one of his alfalfa fields, where he has done groundwater recharge field trials in cooperation with the University of California.

REGULATORY > WATER

Grower sees potential for groundwater recharge

Jim Morris' ranch was the site of landmark University of California research into using alfalfa fields to replenish aquifers.

Tim Hearden | Sep 04, 2018

Jim Morris had lots of reasons for embracing a University of California research project to use his alfalfa field for groundwater recharge.

His operation, the Bryan-Morris Ranch in Etna, Calif., has emphasized environmental stewardship since his wife's family started it in the 1850s. The ranch was the site of soil conservation and other studies as long ago as the 1940s.

Morris also believes that being seen as using sustainable practices will help growers become less of a target for critics, he says.

So Morris gladly allowed his ranch to be one of two sites that UC-Davis and UC Cooperative Extension scientists used to flood established alfalfa stands with storm water during the winters of 2015 and 2016.

The study's initial results were published earlier this year in the UC's journal California Agriculture, asserting that alfalfa can tolerate very heavy winter flooding for groundwater recharge.

"I think there's a tremendous future" when it comes to recharge projects in alfalfa fields, Morris says. "For people who are looking for ways to benefit the aquifer under SGMA (the Sustainable Groundwater Management Act), it could be one of the more important tools they have."

But Morris still has plenty of questions he'd like to see answered in the next round of research, including how long it takes the water he floods his field with to get back into the Scott River. Answering this question might reassure critics who think he just wants to bank the water for his own use, he says.

MORE QUESTIONS

Other questions may arise as the work continues, he says.

"I think there will be a lot of things we want to know, but we just don't know what they are yet," he says.

Morris has more than 300 acres in alfalfa and grass hay production and raises Suffolk/Hampshire-cross sheep and Angus cattle. Jim and wife Katie married in 1988 and are partners with Katie's father, Mike Bryan, in running the ranch.

Their ranch in the scenic Scott Valley about 30 miles south of the Oregon-California state line and another farm near Davis were selected for the research because the soils in those areas have relatively high water percolation rates, university officials say.

"We found that most of the applied water percolated to the groundwater table," wrote lead author Helen Dahlke, an integrated hydrologic science professor at UC-Davis.

The alfalfa endured saturdated conditions in the root zone for a short time, but the yield loss was minimal, noted Dahlke and her coauthors – USDA Natural Resources Conservation Service soil scientist Andrew Brown, UCCE specialists Dan Putnam and Toby O'Geen and the late UCCE advisor Steve Orloff.

The scientists noted that the alfalfa trial's results show tremendous potential for the state's groundwater basins. They estimated that if all the suitable alfalfa acreage were flooded with six feet of winter water, and assuming 90 percent percolates past the root zone, it would be possible to bank 1.6 million acre-feet of groundwater each year. The calculation was based on an index created by O'Geen that identifies areas where soils are suitable for on-farm groundwater recharge.

By comparison, Lake Oroville, the second-largest reservoir in the state, has a storage capacity of 3.5 million acre-feet, Dahlke wrote. An acre-foot is about 326,000 gallons, or enough water to serve an average California household for a year, according to the Water Education Foundation.

'GREAT PROMISE'

The alfalfa research was the latest in a series of projects by UC researchers studying the effects of using farmland to capture and bank winter storm water. Other scientists are looking at recharge efforts in almond orchards and vineyards. Such projects have great promise but also often require collaboration among numerous jurisdictions and agencies, the UC explains in a news release.

The alfalfa trials were paused after the death of the Siskiyou County-based Orloff last fall, Morris says. Orloff was instrumental in leading many water conservation-related projects along the Scott River, a key Klamath River tributary and a spawning ground for endangered salmon. Low levels in the Scott have prompted legal challenges and led to state restrictions on irrigation.

An overall lack of water and other complications prevented researchers from doing field trials last winter, but scientists do plan on doing more research this winter, Dahlke told Western Farm Press in an email.

Researchers plan to use two commercial alfalfa fields as well as a field at the Kearney Agricultural Research and Education Center to test the effect of modest and high amounts of winter water application on growing-season alfalfa yield in different soils and under different climate conditions, Dahlke says.

“In addition, we will quantify how winter water application affects growing season water balance and irrigation demand,” she says.

Much of the research in the next round will focus on the Central Valley’s southern end, where alfalfa is grown but doesn’t go dormant because of the warmer climate. Applications on Morris’ farm have been done when the alfalfa is dormant.

WINTER ABUNDANCE

In the Scott Valley, the only time sufficient water is available for recharge is during big winter rains and snow melt in the early spring, Morris says. He tried applying different amounts of water in different segments of the field to learn how much water his alfalfa could take without losing yields, and found that fields with suitable, well-draining soils could work for recharge.

But if the plants are actually growing, too much water saturating the roots for too long will kill the plant, he says. And most growers don't want to fallow fields because it isn't economically feasible, he says.

Among other things for growers to consider is that the times he was flooding his fields for recharge are typically when growers want to put on herbicides. He wouldn't want to use most herbicides when putting water in the aquifer, and eventually the river, so it creates a weed problem, he says.

Morris has responded by over-seeding with orchard grass, which edges out weeds and creates an alfalfa-orchard grass mix, he says.

Another issue is that obtaining state permits for taking offseason storm water from the irrigation ditch for recharge can be a lengthy process, and growers may not see it through considering there's no economic benefit from doing a recharge project.

"I think that will be streamlined over time," he says.