KERN GROUNDWATER AUTHORITY

Regular Meeting of Board of Directors
December 19, 2018, 8:00 a.m.
1115 Truxtun Ave., Bakersfield, CA 93301
Multi-Purpose Room – 3rd Floor

Kern Groundwater Authority Board of Directors Agenda

This meeting is held in accordance with the Brown Act pursuant to Section 54956 of the California Government Code and the Kern Fan Authority Joint Powers Agreement.

1. Roll Call - Quorum Determination
In the absence of a quorum of the Board the meeting will be adjourned.

2. Public Input
This portion of the meeting is set aside to provide the public an opportunity to bring to the attention of the Board matters of which the Board may not be aware and which are not on the current agenda. No action can be taken on any matter raised during this portion of the meeting; however, a Board member may request that the matter be placed on any future agenda for further review and possible action. Members of the public may directly address the Board of Directors on any item of interest within the Board's subject matter jurisdiction, before or during the Board's consideration of the item. The President may limit the time allowed for comment.

3. Approval of Minutes
- **a**. October 24, 2018 Regular Board Meeting Minutes*

4. Treasurer's Report
- **a**. Accounts Payable/Receivable*
- **b**. Approval of 2019 Budget*

5. Basin Coordinator/Planning Manager Report
- **a.** KRGSA Cost Share Agreement on second phase of Todd water modeling*
- **b**. Prop 1 Grant sub-agreement with KRGSA*
- **c.** 2019 KGA Board Meeting Dates*
- **d**. 2019 KGA Stakeholder Committee Meeting Dates*
- **e.** Provost & Pritchard 2019 Contract*
- **f.** Definitions of Undesirable Results* - Presentation & Approval
- **g**. Kern County withdrawal from KGA – Policy Direction*

- Denotes Action Item

h. Urban Committee Meeting Update – cancelled meeting for Nov/Dec
i. GSA's Policy Coordination Meeting Update
j. Accomplishments
k. Forward Work Plan

6. New Business

This Portion of the Meeting is set aside to provide each Board member an opportunity to bring to the attention of other Board members and the public matters which have come to their attention and/or which may be appropriate for future consideration. No action can be taken on any matter raised during this portion of the meeting, however, a Board member may request that the matter be placed on any future agenda for further review and possible action.

7. Correspondence

a. Kern County Notice of Preparation of a Draft EIR -
South Kern Industrial Center Composting Facility by Synagro Technologies
b. Chevron – Undesirable Results definitions comments
c. Kern County Letter of Withdrawal

8. Attorney(s) Report

9. Closed Session

a. Conference with Legal Counsel – Potential Litigation: Closed Session pursuant to Government Code section 54956.9(d)(2),(e)(1)(one matter)

10. Closed Session Action

11. Adjournment

A person with a qualifying disability under the Americans with Disabilities Act of 1990 may request the Authority provide disability-related modification or accommodation in order to participate in any public meeting of the Authority. Such assistance includes appropriate alternative formats for the agendas and agenda packets. Requests should be made in person, by telephone, facsimile and/or written correspondence to the Authority office, at least 48 hours before a public Authority meeting. Written materials related to an item on this agenda to be considered in open session that are public documents and that are distributed to board members after the posting of the agenda, will be made available for public inspection when they are so distribution at the office of the Authority located at 849 Allen Road, Bakersfield, California during normal business hours. Documents that are public documents provided by others during a meeting will be available at the same location during business hours after the meeting.

- Denotes Action Item

JPA Board Meeting Minutes
Kern Groundwater Authority
Wednesday, October 24, 2018

JPA DISTRICT REPRESENTATIVES AND ALTERNATES PRESENT

Bob Rodriguez, Arvin Community Services District
Kevin Pascoe, Arvin-Edison WSD
John Gaugel, Cawelo WD
Chad Givens, City of Shafter
Supervisor David Couch, County of Kern
Chad Hathaway, Eastside Water Management Area
Marty Milobar, Kern County Water Agency
Royce Fast, Kern County Water Agency
Andrew Pandol, Kern-Tulare WD
Bill Taube, Kern Water Bank Authority
Kevin Andrew, North Kern Water Storage District
Jason Selvidge, Rosedale-Rio Bravo WSD
Gary Unruh, Rosedale-Rio Bravo WSD
Rick Wegis, Semitropic WSD
Mark Franz, Shafter-Wasco ID
Jim Regan, SSJMUD
Ryan Fachin, Tejon-Castac WD
Gary Morris, West Kern WD
Rob Goff, Westside District Water Authority
Dennis Mullins, Wheeler Ridge-Maricopa WSD
Michael Blaine, Wheeler Ridge-Maricopa WSD

JPA DISTRICT REPRESENTATIVES ABSENT

OTHERS PRESENT

Alan Peake, Arvin Community Services District
Raul Barraza Jr., Arvin Community Services District
Jeevan Muhar, Arvin-Edison WSD
Steve Collup, Arvin-Edison WSD
Monique Roberts, AECOM
Michael James, City of Shafter
Dave Hampton, Cawelo WD
Steve Lewis, E&B
Jim Beck, East Water Management Agency
Matt Mayry, GEI Consultants
Max Bricker, Henry Miller WD
Megan Chicoine, John Hancock
Alan Christensen, Kern County Administration Office
Florin Core, Kern County Administration Office
Holly Melton, KCWA

Dave Beard, KCWA ID4
Gene Lundquist, KCWA ID4
Mark Mulkay, Kern Delta WD
Steve Dalke, Kern-Tulare WD
Joe Hughes, Klein Law
Dan Raytis, Belden Blaine Raytis, LLP
Jon Parker, Kern Water Bank Authority
Robert Hartsock, McMurtrey, Hartsock & Worth
Alex Shafer, Materra Farming
Marinelle Duarosan, North Kern Water Storage District
Dick Diamond, North Kern Water Storage District
Valerie Kincaid, O'Laughlin Paris, LLC
Doug Nunneley, Oildale Water
Pres Brittan, Pacific Resources
Rebecca Gomez, Provost & Pritchard
Terry Erlewine, Provost & Pritchard – via conference call
Patty Poire, Kern Groundwater Authority
Eric Averett, Rosedale-Rio Bravo WSD
Dana Munn, Shafter-Wasco ID
Bret Sill, Sill Properties
Todd Turley, South Valley Farms
Alan Becker, Sun World
Angelica Martin, Tejon-Castaic WD
Harry Starkey, West Kern WD
Sunny Kapoor, West Kern WD
Wendy Rosenberger, West Kern WD
Greg Hammett, Westside District Water Authority
Sheridan Nicholas, Wheeler Ridge-Maricopa WSD
George Cappello, Wheeler Ridge-Maricopa WSD
Tim Gobler, Wonderful Orchards
Alan Doud, Young Wooldridge
Devon Yurosek, Yurosek Farming
Craig Lynch, Lynch & Lynch, LLP
Jasmene de Aguila, Leadership Counsel for Justice & Accountability
Dan Raytis, Belden, Blaine Raytis

1. Call to Order – Director Mullins called the meeting to order at 8:05 a.m. after it was confirmed there was a quorum. The Board met the threshold for a quorum under the JPA and operated under it.

2. Public Comments – None

3. Approval of Minutes
    a. October 24, 2018 Regular Board Meeting Minutes
    Mr. Erlewine made a recommendation to correct the September 24, 2018 meeting minutes to reflect Bob Rodriguez, Arvin Community Services District

board member was present prior to the motion being made. A motion was made by Director Pascoe and seconded by Director Taube to approve the October 24, 2018 Regular Board Meeting Minutes with recommended corrections. The motion was unanimously carried.

4. Treasurer's Report
    a. Accounts Payable/Receivable – Mrs. Duarosan presented the Treasurer's Report Memo for the period from September 1, 2018 through September 30, 2018. Exhibit A of the Treasurer's Report showed the beginning cash balance of $474,323.95. Deposits from cash calls were received in the amount of $122,982.03. Disbursements for the month of September total $62,651.69. The cash balance as of September 30, 2018 was $534,654.29. Exhibit B summarized accounts receivable total of $76,026.74, of deposits received as of September 30, 2018. Summarized in Exhibit C, Accounts Receivables for all members. Exhibit D summarized accounts payables as of September 30, 2018. It was reported the outstanding payables total $130,535.73 the requested amount for payment approval was $78,972.68. Invoices totaling $51,563.05 remained on hold pending verification of charges. A motion to approve the treasurer's report and payables was made by Director Gaugel and seconded by Director Goff. The motion was unanimously carried.
    b. Draft 2019 Budget – Ms. Poire reviewed the Draft 2019 Budget totaling $563,750, the draft 2019 budget handout was provided as part of the board packet for this meeting. The draft 2019 Budget will be presented to the board for approval at the December Board Meeting.
    c. SAA#4 – Second invoice of $100,000 going out October 30th – Ms. Poire reported the SSA#4 invoice will be sent to members and participants on October 30th totaling $110,000.

5. Basin Coordinator/ Planning Manager Report
    a. Adjust (cancel or move) KGA Board Nov. and Dec. meeting dates – Chairman Mullins recommended November's Board Meeting be canceled due to the number of district managers and district staff attending the ACWA Conference in San Diego. It is also recommended that December's Board Meeting remain on the calendar for December 19th. A motion to approve canceling November's meeting and keeping the December 19th meeting date was made by Director Fast and seconded by Director Wegis. The motion was unanimously carried.
    b. Letter of support for West Kern Basin Boundary Adjustment – Harry Starkey, West Kern Water District and Steve Lewis, E&B Resources presented the basin boundary adjustment submitted to DWR for approval. The lands being removed from the basin are mostly located in the West Kern Water District but are also located in, Belridge, Lost Hills, Brenda Masa, Elk Hills and some white lands area. The lands being removed from the Kern Sub basin are lands that do not function as part of the groundwater basin. Mr. Lewis reported the that the lands being

removed do not participate in the groundwater subbasin by the land itself being formation or does not fit the definition of an alluvial basin and that no groundwater is being produce from it therefore to remove it is not going to negatively impact the management of the sustainable groundwater. Mr. Hammett of Westside District is also supportive of the submittal to DWR. A motion was made to authorize sending a letter of support for Groundwater Basin Boundary Adjustment for the Kern County Subbasin by Director Goff and seconded by Director Taube. The motion was unanimously carried.

c. Non-districted Area Update – Nothing to report.
d. Water trading Concept – Presentation by Eric Averett– Mr. Everett presented an idea that is concept based on discussions of how to develop and form a GSP. The idea is that groundwater is managed and allocated in a way that it is an asset/resource for the landowner and avoid any impacts associated with reductions that maybe necessary to comply with SGMA. The concept is allowing the movement of water to leverage the economic value. Several options are being discussed and it is suggested that these types of conversations need to start happening now for every district.
e. Urban Committee Meeting Update – Nothing to report.
f. Policy Coordination Meeting Update – Ms. Poire reported that the Policy Coordination Committee met last Wednesday. The discussion was the receipt of a letter from County Counsel of Kern County dated October 5th, the discussion was where and how do we move forward. The board has copy of the letter and major landowners are aware of the letter. The letter will be analyzed and digested for the benefit of how to make sure KGA and its landowners are not impacted. Also discussed was the preparation of the Coordination Agreement, the Kern River GSA will prepare the first draft, the preliminary draft will hopefully be done in the first week to middle of November or possibly as early as December. The managers meetings that are happening every Friday, there is a lot of work and discussion regarding preparing chapter gsa's the need to start and our plans to be ready for submittal in February or March 2019.
g. Accomplishments – Ms. Poire referred to the write-up in the board package.
h. Forward Work Plan – Ms. Poire reports that Olcese Water District will participate in the Friday Manager's Meeting going forward.

6. New Business – No new business to report.

7. Correspondence – All the following correspondence received and accepted.
    a. County Counsel of Kern County Letter dated 10/5/2018
    b. West Kern Water District – Completed Basin Modification 10/3/2018

8. Attorney(s) Report – Ms. Kincaid had nothing to report.

9. Closed Session – Closed session 9:09 a.m. A motion was made to respond to the County Counsel of Kern County Letter dated October 5, 2018 by Director Fast and seconded by Director Taube. The motion was unanimously carried.

10. Adjournment – 10:02 a.m.

P.O. Box 81435
Bakersfield, CA 93380-1435
Administration
Telephone: 661-393-2696
Facsimile: 661-393-6884

33380 Cawelo Avenue
Bakersfield, CA 93308-9575
Water Orders and Operations
Telephone: 661-393-3361
www.northkernwsd.com

NORTH KERN WATER STORAGE DISTRICT

November 19, 2018

TO: Kern Groundwater Authority Members

FROM: Richard Diamond, General Manager

RECOMMENDED MOTION

Approve the Treasurer's Report as presented and authorize disbursement of accounts payable in the amount of $226,246.42 per **Exhibit E.** (Note that total outstanding payables are $291,495.29, the difference of $65,248.87 is not requested for payment at this time due to pending items as noted in Exhibit E which requires further review by the Planning Manager).

DISCUSSION

Exhibit A is the Treasurer's Report for the Authority's financial activities from November 1, 2018 through November 30, 2018. Cash deposits for the month were $62,170.21 related to SAA#3 and SAA#4 Cash Calls. There were no disbursements in November due to cancelled Board Meeting. The cash balance at November 30, 2018 was $536,488.56. **Exhibit B** reflects the status of cash receipts and deposits from December 1 through December 13, 2018 which totals $32,128.24.

Exhibit C reflects Accounts Receivable balance from Members & Participants as of November 30, 2018 which totals $48,704.97 related to SAA#3 and SAA#4 Cash Calls. After offsetting cash collections received through December 13th as per **Exhibit B**, the current outstanding A/R balance is $16,576.73. Receivable from Grants total $47,568.49 as detailed in **Exhibit D**. Total Accounts Receivable at November 30, 2018 was $96,273.46.

Exhibit E is the detail of Accounts Payable as of November 30, 2018. Outstanding payables total $291,495.29, however, the amount being requested for payment approval at this time is $226,246.42. Invoices totaling $65,248.87 remains on hold pending open items as noted and will require further review.

Exhibit F is the Authority's unaudited financial statements at November 30, 2018. They include a Statement of Net Position as of November 30, 2018 and a Statement of Revenues and Expenses for the 11 months ended November 30, 2018. Both statements present the financial position and results of the Authority's activities for the general JPA membership and each specific Special Activity Agreements. Certain adjustments have been reflected to match expenses to the proper accounting period (prior year) and reclasses of amounts between cost centers (General Account vs SAA level) in both the current and prior year based on detail review of invoices and KGA approved budgets. North Kern and KGA's Planning Manager continue to review expenses to determine proper classification of amounts into the correct cost centers. More adjustments and/or reclasses could be made in future reports as a result of this review. Please direct questions regarding the above to the District's General Manager, Richard Diamond (rdiamond@northkernwsd.com). You may also reach us at the District's Office, 661-393-2696.

Exhibit A
Kern Groundwater Authority
Treasurer's Report - through November 30, 2018

CURRENT ACTIVITY

Cash Balance, Prior Report (October 31, 2018) 474,318.35

Deposits	Date	Purpose	Amount
County of Kern	11/8/2018	SAA#4 Call #2	4,290.00
West Kern WD	11/15/2018	SAA#4 Call #2	1,529.00
Westside District Water Authority	11/16/2018	SAA#4 Call #2	1,000.00
Rosedale-Rio Bravo WSD	11/19/2018	SAA#4 Call #2	6,193.00
Arvin-Edison WSD	11/19/2018	SAA#4 Call #2	14,300.00
Wheeler Ridge-Maricopa WSD	11/19/2018	SAA#4 Call #2	12,991.00
Kern Water Bank Authority	11/19/2018	SAA#4 Call #2	2,926.00
North Kern WSD	11/21/2018	SAA#4 Call #2	11,440.00
Cawelo WD	11/27/2018	SAA#4 Call #2	6,644.00
County of Kern	11/8/2018	SAA#3 Budg Shortfall	95.25
Arvin Community Services District	11/12/2018	SAA#3 Budg Shortfall	95.25
Westside District Water Authority	11/16/2018	SAA#3 Budg Shortfall	95.24
Rosedale-Rio Bravo WSD	11/19/2018	SAA#3 Budg Shortfall	95.24
Arvin-Edison WSD	11/19/2018	SAA#3 Budg Shortfall	95.25
Wheeler Ridge-Maricopa WSD	11/19/2018	SAA#3 Budg Shortfall	95.24
Kern Water Bank Authority	11/19/2018	SAA#3 Budg Shortfall	95.25
North Kern WSD	11/21/2018	SAA#3 Budg Shortfall	95.24
City of Shafter	11/27/2018	SAA#3 Budg Shortfall	95.25

Total Deposits from Cash Calls 62,170.21

Disbursements	Date	Ck #	Amount
No Disbursements made in November 2018 - Board Meeting cancelled			

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Cash Balance, Current Report (November 30, 2018) 536,488.56

Accounts Receivable

See Attached "Aged AR" for Members/Participants (Exhibit C)			48,704.97
Other Receivables:			
Prop 1 Distress Grant - 5% retention Req #2 (Gen Acct)		8,415.39	
Prop 1 Distress Grant - 10% retention Req #3 (Gen Acct)		6,669.22	
ITRC Grant - Req #1	see Exhibit D	31,206.38	
ITRC Grant - Req #12	see Exhibit D	1,277.50	
Grant Receivable			47,568.49
			96,273.46

Accounts Payable

See Attached A/P Detail (Exhibit E) 291,495.29

Net Assets, November 30, 2018 **341,266.73**

Exhibit B

Kern Groundwater Authority
Treasurer's Report - Deposits through December 13, 2018

Cash Call Deposits - Dec 1 - Dec 13, 2018	Dep Date	Amount	
Semitropic WSD	12/3/2018	31,933.00	
Westside Water District Authority	12/11/2018	100.00	
Deposits SAA#4 - Cash Call #2			**32,033.00**
Tejon-Castac WD	12/7/2018	95.24	
Deposits SAA#3 - Cash Call #2 (Budget Shortfall)			**95.24**
Total Deposits (thru 12/13/18)			**32,128.24**

Exhibit C

Date: Thursday, December 13, 2018
Time: 10:13AM
User: MDUAROSAN

Kern Groundwater Authority
Period Sensitive Aged AR - Historical
Period: 11-18 As of: 11/30/2018

Cust ID / Type	Ref Nbr	Customer Name / Terms	Telephone / Doc Date	Contact	Current	1 To 30	31 To 60	61 To 90	Over 90	Total
Company:	**GW**						Days Past Due			
ACSD		Arvin Community Services Distr	(661) 854-2127	Raul Barraza Jr.						
PA	023848		8/30/2018		0.00	0.00	0.00	0.00	-363.00	-363.00
PA	024057		11/12/2018		0.00	-95.25	0.00	0.00	0.00	-95.25
IN	2018-108	Upon Receipt	10/25/2018		0.00	0.00	95.25	0.00	0.00	95.25
IN	2018-121	Upon Receipt	10/25/2018		0.00	0.00	363.00	0.00	0.00	363.00
			Customer Total		**0.00**	**-95.25**	**458.25**	**0.00**	**-363.00**	**0.00**
									Avg Days To Pay	8
ARVEDI		Arvin-Edison Water Storage Dis	(661) 854-5573							
IN	2018-109	Upon Receipt	10/25/2018		0.00	0.00	95.25	0.00	0.00	95.25
IN	2018-122	Upon Receipt	10/25/2018		0.00	0.00	14,300.00	0.00	0.00	14,300.00
IN	2018-93	Upon Receipt	8/23/2018		0.00	0.00	0.00	0.00	20,079.42	20,079.42
PA	39319		10/12/2018		0.00	0.00	-20,079.42	0.00	0.00	-20,079.42
PA	39454		11/19/2018		0.00	-14,300.00	0.00	0.00	0.00	-14,300.00
PA	39454-2		11/19/2018		0.00	-95.25	0.00	0.00	0.00	-95.25
			Customer Total		**0.00**	**-14,395.25**	**-5,684.17**	**0.00**	**20,079.42**	**0.00**
									Avg Days To Pay	48
CAWWD		Cawelo Water District	(661) 393-6070							
IN	2018-123	Upon Receipt	10/25/2018		0.00	0.00	6,644.00	0.00	0.00	6,644.00
PA	31299		11/27/2018		0.00	-6,644.00	0.00	0.00	0.00	-6,644.00
			Customer Total		**0.00**	**-6,644.00**	**6,644.00**	**0.00**	**0.00**	**0.00**
									Avg Days To Pay	30
COS		City of Shafter	(661) 746-5001	Scott Hurlbert						
PA	134071		11/27/2018		0.00	-95.25	0.00	0.00	0.00	-95.25
IN	2018-110	Upon Receipt	10/25/2018		0.00	0.00	95.25	0.00	0.00	95.25
			Customer Total		**0.00**	**-95.25**	**95.25**	**0.00**	**0.00**	**0.00**
									Avg Days To Pay	38
COUKER		County of Kern								
PA	11-385442		10/12/2018		0.00	0.00	-6,021.96	0.00	0.00	-6,021.96
IN	2018-111	Upon Receipt	10/25/2018		0.00	0.00	95.25	0.00	0.00	95.25
IN	2018-124	Upon Receipt	10/25/2018		0.00	0.00	4,290.00	0.00	0.00	4,290.00
IN	2018-95	Upon Receipt	8/23/2018		0.00	0.00	0.00	0.00	6,021.96	6,021.96
PA	390163		11/8/2018		0.00	-4,290.00	0.00	0.00	0.00	-4,290.00
PA	390163-2		11/8/2018		0.00	-95.25	0.00	0.00	0.00	-95.25
			Customer Total		**0.00**	**-4,385.25**	**-1,636.71**	**0.00**	**6,021.96**	**0.00**
									Avg Days To Pay	48
KCWA		Kern County Water Agency	(661) 634-1400							
PA	115131		10/2/2018		0.00	0.00	-447.63	0.00	0.00	-447.63
IN	2018-125	Upon Receipt	10/25/2018		0.00	0.00	319.00	0.00	0.00	319.00
IN	2018-96	Upon Receipt	8/23/2018		0.00	0.00	0.00	0.00	447.63	447.63
									Avg Days To Pay	53

Exhibit C

Date: Thursday, December 13, 2018
Time: 10:13AM
User: MDUAROSAN

Kern Groundwater Authority
Period Sensitive Aged AR - Historical
Period: 11-18 As of: 11/30/2018

Cust ID / Type	Ref Nbr	Customer Name / Terms	Telephone / Doc Date	Contact	Current	1 To 30	31 To 60	61 To 90	Over 90	Total
			Customer Total		0.00	0.00	-128.63	0.00	447.63	319.00
KERTUL		Kern Tulare Water District	(661) 327-3132							
									Avg Days To Pay	33
IN	2018-112	Upon Receipt	10/25/2018		0.00	0.00	95.25	0.00	0.00	95.25
IN	2018-126	Upon Receipt	10/25/2018		0.00	0.00	1,595.00	0.00	0.00	1,595.00
			Customer Total		0.00	0.00	1,690.25	0.00	0.00	1,690.25
KERWAT		Kern Water Bank Authority	(661) 398-4900							
									Avg Days To Pay	32
PA	021156		11/19/2018		0.00	-2,926.00	0.00	0.00	0.00	-2,926.00
PA	021156-2		11/19/2018		0.00	-95.25	0.00	0.00	0.00	-95.25
IN	2018-113	Upon Receipt	10/25/2018		0.00	0.00	95.25	0.00	0.00	95.25
IN	2018-127	Upon Receipt	10/25/2018		0.00	0.00	2,926.00	0.00	0.00	2,926.00
			Customer Total		0.00	-3,021.25	3,021.25	0.00	0.00	0.00
NKWSD		North Kern Water Storage Distr								
									Avg Days To Pay	45
PA	024712		11/21/2018		0.00	-11,440.00	0.00	0.00	0.00	-11,440.00
PA	024712-2		11/21/2018		0.00	-95.24	0.00	0.00	0.00	-95.24
IN	2018-114	Upon Receipt	10/25/2018		0.00	0.00	95.24	0.00	0.00	95.24
IN	2018-128	Upon Receipt	10/25/2018		0.00	0.00	11,440.00	0.00	0.00	11,440.00
			Customer Total		0.00	-11,535.24	11,535.24	0.00	0.00	0.00
RRBWSD		Rosedale-Rio Bravo Water Stora	(661) 589-6045							
									Avg Days To Pay	26
PA	13101		11/19/2018		0.00	-6,193.00	0.00	0.00	0.00	-6,193.00
PA	13101-2		11/19/2018		0.00	-95.24	0.00	0.00	0.00	-95.24
IN	2018-115	Upon Receipt	10/25/2018		0.00	0.00	95.24	0.00	0.00	95.24
IN	2018-129	Upon Receipt	10/25/2018		0.00	0.00	6,193.00	0.00	0.00	6,193.00
			Customer Total		0.00	-6,288.24	6,288.24	0.00	0.00	0.00
SEMTRO		Semitropic Water Storage Distr	(661) 758-5113							
									Avg Days To Pay	32
IN	2018-130	Upon Receipt	10/25/2018		0.00	0.00	31,933.00	0.00	0.00	31,933.00
			Customer Total		0.00	0.00	31,933.00	0.00	0.00	31,933.00
SHAWAS		Shafter-Wasco Irrigation Distr	(661) 758-5153							
									Avg Days To Pay	31
IN	2018-116	Upon Receipt	10/25/2018		0.00	0.00	95.24	0.00	0.00	95.24
IN	2018-131	Upon Receipt	10/25/2018		0.00	0.00	5,566.00	0.00	0.00	5,566.00
			Customer Total		0.00	0.00	5,661.24	0.00	0.00	5,661.24
SSJMUD		Southern San Joaquin Municipal	(661) 725-0610							
									Avg Days To Pay	41
IN	2018-117	Upon Receipt	10/25/2018		0.00	0.00	95.24	0.00	0.00	95.24
IN	2018-132	Upon Receipt	10/25/2018		0.00	0.00	8,811.00	0.00	0.00	8,811.00
			Customer Total		0.00	0.00	8,906.24	0.00	0.00	8,906.24
TEJCAS		Tejon-Castac Water District	(661) 248-3000							
									Avg Days To Pay	102

Exhibit C

Date: Thursday, December 13, 2018
Time: 10:13AM
User: MDUAROSAN

Kern Groundwater Authority
Period Sensitive Aged AR - Historical
Period: 11-18 As of: 11/30/2018

Cust ID / Type	Ref Nbr	Customer Name / Terms	Telephone / Doc Date	Contact	Current	1 To 30	31 To 60	61 To 90	Over 90	Total
						Days Past Due				
PA	18401015		10/2/2018		0.00	0.00	-1,399.50	0.00	0.00	-1,399.50
IN	2018-104	Upon Receipt	8/23/2018		0.00	0.00	0.00	0.00	1,399.50	1,399.50
IN	2018-118	Upon Receipt	10/25/2018		0.00	0.00	95.24	0.00	0.00	95.24
		Customer Total			**0.00**	**0.00**	**-1,304.26**	**0.00**	**1,399.50**	**95.24**
WESKER		West Kern Water District	(661) 763-3151						Avg Days To Pay	29
IN	2018-105	Upon Receipt	8/23/2018		0.00	0.00	0.00	0.00	2,150.24	2,150.24
IN	2018-133	Upon Receipt	10/25/2018		0.00	0.00	1,529.00	0.00	0.00	1,529.00
PA	43580		10/2/2018		0.00	0.00	-2,150.24	0.00	0.00	-2,150.24
PA	43795		11/15/2018		0.00	-1,529.00	0.00	0.00	0.00	-1,529.00
		Customer Total			**0.00**	**-1,529.00**	**-621.24**	**0.00**	**2,150.24**	**0.00**
WESSID		Westside District Water Author		c/o Greg Hammett-Belridge WSD					Avg Days To Pay	34
PA	10383		11/16/2018		0.00	-365.08	0.00	0.00	0.00	-365.08
IN	2018-119	Upon Receipt	10/25/2018		0.00	0.00	95.24	0.00	0.00	95.24
IN	2018-134	Upon Receipt	10/25/2018		0.00	0.00	1,100.00	0.00	0.00	1,100.00
PA	32307		11/16/2018		0.00	-365.08	0.00	0.00	0.00	-365.08
PA	36573		11/16/2018		0.00	-365.08	0.00	0.00	0.00	-365.08
		Customer Total			**0.00**	**-1,095.24**	**1,195.24**	**0.00**	**0.00**	**100.00**
WHERID		Wheeler Ridge-Maricopa Water S	(661) 858-2281						Avg Days To Pay	31
PA	19241		11/19/2018		0.00	-12,991.00	0.00	0.00	0.00	-12,991.00
PA	19241-2		11/19/2018		0.00	-95.24	0.00	0.00	0.00	-95.24
IN	2018-120	Upon Receipt	10/25/2018		0.00	0.00	95.24	0.00	0.00	95.24
IN	2018-135	Upon Receipt	10/25/2018		0.00	0.00	12,991.00	0.00	0.00	12,991.00
		Customer Total			**0.00**	**-13,086.24**	**13,086.24**	**0.00**	**0.00**	**0.00**
		Statement Cycle Total			**0.00**	**-62,170.21**	**81,139.43**	**0.00**	**29,735.75**	**48,704.97**
		Company Total			**0.00**	**-62,170.21**	**81,139.43**	**0.00**	**29,735.75**	**48,704.97**

Exhibit D

Kern Groundwater Authority

Treasurer's Report - Grant Detail as of November 30, 2018

Agency	Description	Date of Submittal	Invoice Amount	Amount Received	Date Received	Rem. Balance Due	Retention %
DWR	Prop1-Distress Draw#1	12/21/2017	168,307.80	159,892.41	6/11/2018	8,415.39	5%
DWR	Prop1-Distress Draw#2	3/23/2018	66,692.20	60,022.98	8/22/2018	6,669.22	10%
DWR	ITRC - Draw #1:	8/1/2018					
	General Account		120.00				
	SAA #1		12,500.00				
	SAA #4		18,586.38				
			31,206.38	0		31,206.38	
DWR	ITRC - Draw #2:	10/31/2018					
	General Account		738.84				
	SAA #1		538.66				
			1,277.50	0		1,277.50	
	TOTAL GRANTS OUTSTANDING as of 11/30/18					**47,568.49**	

Exhibit E

Kern Groundwater Authority

Treasurer's Report - Accounts Payable detail as of November 30, 2018

Vendor	Description	Invoice #	Invoice Date	Invoice Amount	
O'Laughlin & Paris	General legal services	8857	11/1/2018	18,996.00	
	General legal services	8889	11/29/2018	9,030.00	
Provost & Pritchard	CEP & Outreach Impl	70365	10/24/2018	234.00	
	Management/Admin & GSP	70601	11/12/2018	25,065.23	
	Prop1 Wtr Use/Eff Grant Admin	70562	11/9/2018	832.00	
	Sustainable Mgmt Criteria	70600	11/12/2018	1,625.52	
Robert M Gailey	Hydrogeologic Consult/GSP	1008	11/1/2018	11,806.52	
	Hydrogeologic Consult/GSP	1018	12/3/2018	5,062.50	
City of Bakersfield	Todd GW Modeling	WB007	10/25/2018	153,594.65	
			TOTAL REQUESTED FOR PAYMENT	**$ 226,246.42**	
ADDITONAL PAYABLES PENDING FURTHER REVIEW:					
GEI Consultants	T.O. #16-Water Supply	3035829	5/9/2018	1,415.20	PENDING CREDITS
	T.O. #16-Water Supply	3037495	6/8/2018	3,172.00	PENDING CREDITS
	T.O. #16-Water Supply	3038768	7/10/2018	1,366.40	PENDING CREDITS
GEI Consultants	T.O. #17 - Umbrella	3038301	6/20/2018	23,306.56	PENDING DELIVERABLES
	T.O. #17 - Umbrella	3042485	9/25/2018	2,646.61	PENDING DELIVERABLES
	T.O. #17 - Umbrella	3042889	10/9/2018	9,011.45	PENDING DELIVERABLES
	T.O. #17 - Umbrella	3044298	11/8/2018	8,907.71	PENDING DELIVERABLES
	T.O. #17 - Umbrella	3045704	12/10/2018	4,367.09	PENDING DELIVERABLES
GEI Consultants	T.O. #7 - Proj Mgmt	3036793	5/21/2018	5,686.07	PENDING AMENDMT1
	T.O. #7 - Proj Mgmt	3042885	10/9/2018	4,958.76	PENDING AMENDMT1
	T.O. #7 - Proj Mgmt	3045698	12/10/2018	411.02	PENDING AMENDMT1
			TOTAL Invoices on HOLD	**$ 65,248.87**	
			TOTAL PAYABLES @ 11/30/18	**$ 291,495.29**	

Exhibit F

Kern Groundwater Authority
Statement of Net Position
As of November 30, 2018

Assets

Current Assets		
Cash		536,489
Accounts Receivable-Members/Participants		48,705
Accounts Receivable-Grants		47,568
Total Current Assets		632,762
Total Assets		**632,762**

Liabilities and Net Position

Current Liabilities		
Accounts Payable		291,495
Accrued Payables		-
Total Current Liabilities		291,495
Net Position		
KGA JPA - #100		
Current Earnings	64,546	
Net Position - Prior Year	133,853	
Prior Year Adjmt-accrual of 2017 P&P invoice	(16,267)	
Prior Year Adjmt-reclass GEI invoice to SAA 1 - #110	275	
Prior Year Adjmt-accrual of 2017 OLP invoice #8524	(1,785)	
Prior Year Adjmt-accrual of Barbich 2016 & 2017 audit fee	(12,085)	
Prior Year Adjmt-2016 reclass OLP invoice from SAA 2 - #130	(2,135)	
Prior Year Adjmt-2016 reclass OLP invoice from SAA 3 - #120	(3,815)	
Prior Year Adjmt-2017 reclass OLP invoice from SAA 2 - #130	(5,600)	
Prior Year Adjmt-2017 reclass OLP invoice from SAA 3 - #120	(22,265)	
Prior Year Adjmt-reclass 2017 RMC invoice from GSA GW Mod	(4,024)	
Prior Year Adjmt-2017 accrual of Prop1 Distress Grant	168,308	299,006
Evapotranspiration Study - SAA 1 - #110		
Current Earnings	58,846	
Net Position - Prior Year	27	
Prior Year Adjmt-accrual of 2017 ITRC invoice	(55,000)	
Prior Year Adjmt-reclass GEI invoice from General #100	(275)	3,598
Kern River GSA Groundwater Model - #130 (combined)		
Current Earnings	18,706	
Net Position - Prior Year	(7,735)	
Prior Year Adjmt-accrual of 2017 RMC invoice	(50,283)	
Prior Year Adjmt-reclass 2017 RMC invoice to SAA#4 & General	31,577	
Prior Year Adjmt-2016 reclass OLP invoice to KGA JPA - #100	2,135	
Prior Year Adjmt-2017 reclass OLP invoice to KGA JPA - #100	5,600	(0)
KGA GSA - SAA 3 - #120		
Current Earnings	1,238	
Net Position - Prior Year	(27,318)	
Prior Year Adjmt-2016 reclass OLP invoice to KGA JPA - #100	3,815	
Prior Year Adjmt-2017 reclass OLP invoice to KGA JPA - #100	22,265	0
KGA GSP - SAA 4 - #140		
Current Earnings	79,703	
Net Position - Prior Year	-	
Prior Year Adjmt-accrual of 2017 OLP invoice #8524	(13,488)	
Prior Year Adjmt-reclass 2017 RMC invoice from GSA GW Mod	(27,553)	38,662
Total Net Position		341,267
Total Liabilities and Net Position		**632,762**

Exhibit F

Kern Groundwater Authority
Statement of Revenues and Expenses
11 Months Ended November 30, 2018

	Current Month							Year to Date - 2018						
	KGA JPA Dept. 100	ET Study SAA #1 Dept. 110	KRGSA - RMC Peer Review Dept. 131	KRGSA - TODD GW MODELING Dept. 132	KGA GSA SAA #3 Dept. 120	KGA GSP SAA #4 Dept. 140	Combined	KGA JPA Dept. 100	ET Study SAA #1 Dept. 110	KRGSA - RMC Peer Review Dept. 131	KRGSA - TODD GW MODELING Dept. 132	KGA GSA SAA #3 Dept. 120	KGA GSP SAA #4 Dept. 140	Combined
Member Contributions(Refunds)	-	-	-	-	-	-	-	317,653	55,248	33,466	307,189	1,238	532,404	1,247,198
Grant Revenue	-	-	-	-	-	-	-	67,551	13,039	-	-	-	18,586	99,176
Total Revenue	-	-	-	-	-	-	-	385,204	68,287	33,466	307,189	1,238	550,990	1,346,374
Accounting	-	-	-	-	-	-	-	6,085	-	-	-	-	-	6,085
Prior Yr Adj-Acctg	-	-	-	-	-	-	-	(6,085)	-	-	-	-	-	(6,085)
Engineering	411	-	-	-	-	4,367	4,778	152,556	25,142	50,283	-	-	284,749	512,729
Reclassify costs-Engineering	(8,108)	-	-	-	-	8,108	-	(112,884)	(18,716)	(50,283)	-	-	68,918	(112,964)
Legal	9,030	-	-	-	-	-	9,030	133,844	-	-	-	-	17,811	151,655
Reclassify costs-Legal	-	-	-	-	-	-	-	(7,730)	(1,050)	-	-	-	8,780	-
Prior Yr Adj-Legal	-	-	-	-	-	-	-	(15,273)	-	-	-	-	-	(15,273)
Office / Bank	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Outside Services	-	-	-	-	-	5,063	5,063	154,011	4,064	14,760	307,189	82,124	33,626	595,774
Reclassify costs-Outside Svcs	-	-	-	-	-	-	-	16,134	-	-	-	(82,124)	57,404	(8,586)
Total Expenses	1,333	-	-	-	-	17,538	18,871	320,658	9,440	14,760	307,189	-	471,288	1,123,335
Change in Net Position - Current Earnings	(1,333)	-	-	-	-	(17,538)	(18,871)	64,546	58,846	18,706	-	1,238	79,703	223,039

Kern Groundwater Authority

DRAFT Proposed Budget Calendar Year 2019 v5

	Budget Item	CY 2019	Contract Amount	2018 Costs as of Oct.	Status - Closed and/or Funds
KERN GROUNDWATER AUTHORITY JPA EXPENSES					
	General and Administrative Costs				
1	KGA Management				
1A	Management Support (Basin Coordinator / Planning Coordinator	$ 170,000	$ 170,000	$ 152,700	
1B	General Attorney Support	$ 110,000		$ 133,844	
1C	General Technical Consultant Support	$ 50,000	$ 50,000	$ 20,000	
1D	Website Management	$ 3,000	$ 3,000	$ 3,000	
2	Governance				
2A	JPA Amendments / Coordination Agreement / Legal Opinion	$ 75,000	$ -		$ -
3	Miscellaneous				
3A	Audit / Financial Reports	$ 10,500	$ 10,500	$ 12,000	
3B	Woodard & Curran Original Contract		$ 53,724	$ 35,970	Closed
3C	GEI Kern River Study		$ 4,900	$ 4,868	Closed
3D	Miscellaneous Admin Costs	$ 15,000			
	General and Administrative Costs Subtotal	*$ 433,500*	*$ 292,124*	*$ 362,382*	$ -
	Technical Consultant Costs				
4	Coordination				
4A	Coordination Agreement	$ -	$ -		$ -
4B	Legal Issues Paper	$ -	$ -		$ -
4C	Technical Issues Review	$ -	$ -		$ -
4D	Kern County Facilitation Services - Center for Collaborative Policy		$ -		$ -
5	Groundwater Sustainability Plan Preparation				
5A	Develop GSP Framework for Chapters / Coordination	$ -	$ -		$ -
5B	KGA GSP Technical Coordination / Preparation	$ -	$ -		$ -
6	Stakeholder Outreach				
6A	Stakeholder Outreach Meetings - P&P	$ 50,000	$ 70,000	$ 11,113	
7	Grant Administration				
7A	Prop 1 Grant Administration	$ 50,250	$ 57,750	$ 7,500	
	Technical Consultant Costs Subtotal	*$ 100,250*		*$ 18,613*	$ -
	KERN GROUNDWATER AUTHORITY JPA EXPENSES SUBTOTAL	**$ 533,750**	**$ 419,874**	**$ 380,995**	**$ 299,000**

Kern Groundwater Authority

DRAFT Proposed Budget Calendar Year 2019 v5

SPECIAL ACTIVITY AGREEMENT EXPENSES					
1	Special Activity Agreement No. 1 - ITRC METRIC Study				
1A	1993 - 2012 and 2015 Evapotranspiration Data		$ 245,000	$ 25,000	**Closed**
1B	GEI Task Order No. 12 - Remote Sensing Post Processing		$ 47,000	$ 45,625	**Closed**
1C	Water Efficiency Grant Admin	$ 23,000	$ 35,000	$ 12,000	$ -
	Special Activity Agreement No. 1 - ITRC METRIC Study Subtotal	*$ 23,000*	*$ 327,000*	*$ 82,625*	
2	Cost Share Agreement - Water Groundwater Model				
2A	Todd Groundwater Kern Subbasin CV2Sim Groundwater Model		$ 307,189	$ 307,189	**$ 153,595**
2B	Todd Groundwater - Future Water Budget	$ 218,768	$ 218,768		
2	Cost Share Agreement - Peer Review				
2C	Woodard-Curran Groundwater Modeling Support Services		$ 44,928	$ 33,466	**Refunded**
2D	Woodard-Curran Future Water Budget Review	$ 33,811	$ 33,811		$ -
	Cost Share Agreement - Water Groundwater Model Subtotal	$ 252,579	$ 604,696	*$ 340,655*	
3	Special Activity Agreement No. 3 - Groundwater Sustainability Agency				
3A	GEI Task Order No. 13 - GSA Formation Support		$ 31,238	$ 31,238	**Closed**
	Special Activity Agreement No. 3 - Groundwater Sustainability Agency Subtotal	*$ -*	*$ 31,238*	*$ 31,238*	
X	Special Activity Agreement No. X - Database Development				
XA	GSA Database Development	$ -			$ -
	Special Activity Agreement No. X - Database Development Subtotal	*$ -*	*$ -*	*$ -*	*$ -*
4	Special Activity Agreement No. 4 - GSP Preparation Support				
4A	GSP Coordination Support (Basin Coordinator/Planning Manager)		$ 230,000	$ 149,900	
4B	Prop 1 Grant Application - Submittal		$ 57,404	$ 57,404	**Closed**
4C	GEI Task Order No. 16 - Surface Water Data Reconciliation		$ 75,000	$ 75,000	**Closed**
4D	Attorney Evaluation of Water Rights Precedents		$ 60,000	$ 26,000	
4E	GEI Task Order No. 17 - Umbrella GSP Basin Setting		$ 110,000	$ 110,000	
	Original Amount Approved - Total		$ 532,404		**$ 38,662**
4F	GSP Coordination Support (Basin Coordinator/Planning Manager)	$ 200,000	$ 200,000		
4G	GEI Task Order No 17 - Umbrella GSP Basin Setting - Increased	$ 35,000	$ 35,000		
4H	P&P SMC Development	$ 54,684	$ 54,684		
4I	Robert Gailey - SMC Development	$ 80,799	$ 80,799		
	Special Activity Agreement No. 4 - GSP Preparation Support Subtotal	$ 370,483	$ 370,483		
5	Special Activity Agreement No 5 - GSP				
5A	GEI Task Order No 19 Umbrella GSP Preparation	$ 500,000	$ 500,000		
	Special Activity Agreement No 5 - GSP Subtotal	*$ 500,000*	*$ 500,000*		
6	Special Activity Agreement No 6 - Data System				
6A	Data System - contractor to be determined	*$ 250,000*	*$ 250,000*		
	SPECIAL ACTIVITY AGREEMENT EXPENSES SUBTOTAL	**$ 1,396,062**	**$ 2,615,821**	**$ 872,822**	**$ -**

NOTES:

[1] Kern Groundwater Authority JPA General Expenses shall be shared equally between General Members as specified in Section 4.05 of the Kern Groundwater Authority Amended and Restated JPA dated March 22, 2017.

[2] Special Activity Agreement Expenses shall be shared among the Special Activity Agreement participants as detailed in the respective Special Activity Agreement.

[3] Received $220,000 from the Distressed County Grant - funds are deposited into the General Account

[4] SAA#1 - Water Efficiency admin costs to be covered under the grant reimbursements. At this time, not looking to invoice members.

[5] TODD Groundwater Second Cost Share Agreement is set for tasks 1-4 in the amount of $107,713 will invoice in Jan 2019. The remaining amount will be invoiced in a second cash call.

[6] Woodard-Curran Groundwater Modeling Support Services have an approved Task Order for the amount of $98,652. A cost share agreement with the other GSAs in the amount of $44928 was included. The cost share agreement is now closed with $11,462 being refunded to all participants. Second Cost Share Agreement to be presented in Dec 2018 in the amount of $47,588.

[7] Received the amount of $220,000 from the Distressed County Grant - funds are deposited into the General Account

[8] P&P Coordination Support Contract (Basin Coordinator/Planning Manager) is divided into the General Account and SAA#4 GSP Preparation. 2019 Contract Proposed for $370,000 total

[9] SAA#3 went over budget by $1,238.18. Invoiced in October for the amount.

[10] SAA#4 original amount was $532,404. Second phase contracts have been approved in the amount of $170,483. P&P contract of $370,000 to be presented in Dec 2018.

[11] SAA#5 will be presented in January 2019 for the Umbrella GSP Preparation. Will be equally shared by all members.

[12] SAA#6 maybe presented in late 2019

Those figures under Cash Balance in Accounts are as of November 2018

October 29, 2018

Dennis Mullins, Board President
c/o Kern Groundwater Authority
1800 30th Street
Suite 280
Bakersfield, CA 93301

Re: Reimbursement Agreement for Projected Water Budgets Developed with the C2VSim Groundwater Model for the Kern County Sub-basin

Dear Mr. Mullins:

The Kern River Groundwater Sustainability Agency (Kern River GSA) and the Kern Groundwater Authority (KGA) are currently participating in the Kern GSA's groundwater modeling effort referred to as the Todd Groundwater Model of the Kern Sub-basin (Model). Todd Groundwater is using the Department of Water Resources (DWR) C2VSim Model to develop the Kern Sub-basin Water Budget. The Kern River GSA and KGA wish to continue Model coordination efforts to simulate projected water budgets to assess and support future sustainability for Groundwater Sustainability Plans being developed within the Kern Sub-basin. Todd Groundwater's proposal to set up a 50-year baseline and climate change baselines is provided as Attachment 1. All parties agree to cost share this effort according to following terms and conditions:

1. The participant signatories below will pay their share of the proposed budget of $335,768 as shown on Attachment 2 for the Todd Groundwater proposal dated September 25, 2018.

2. All payments shall be due 45 days after the receipt of invoice from the City of Bakersfield.

3. It is understood that the proposed budget is an estimate only. If costs for the projected water budget development modeling effort increase more than ten (10) percent over the proposed budget, the increase must be approved by the KGA. Costs above the initial proposed budget will be paid in the same percentages in the attached table, unless otherwise agreed.

4. Costs will be reconciled at the end of the project and refunds or additional payments will be due 45 days after the final accounting.

If the above terms and conditions are acceptable, please sign and date all copies of this letter and return them to the Kern River GSA. A fully executed original will be returned to the KGA.

Sincerely,

Rodney Palla
Chairman

Accepted:

Kern Groundwater Authority

By:_____

Title:_____

Date:_____

TODD GROUNDWATER

September 25, 2018

REVISED DRAFT PROPOSAL

To: Mark Mulkay, Art Chianello, and David Beard
Kern River Groundwater Sustainability Agency (KRGSA)

Patty Poire and Terry Erlewine
Kern Groundwater Authority (KGA)

From: Mike Maley, PG, CHG, Senior Hydrogeologist / Groundwater Modeler
Phyllis Stanin, PG, CHG, Vice President / Principal Geologist

Re: Proposal - Projected Water Budgets Developed with C2VSim for the Kern County Subbasin

The KRGSA and KGA are cooperating on preparation of subbasin-wide water budgets for the Kern County Subbasin in compliance with regulations for Groundwater Sustainability Plans (GSPs). Todd Groundwater has been revising the California Central Valley Model (C2VSim) developed by the Department of Water Resources (DWR) to provide a subbasin-wide tool for application to this analysis. The objective of the C2VSim revision is to incorporate local managed water supply and demand data into the model to provide a more accurate simulation of historical groundwater conditions in the Kern County Subbasin. Model runs of the revised C2VSim are currently underway to develop historical and current water budgets for the Kern County Subbasin GSAs.

The next step in the water budget analysis is to simulate projected water budgets to assess and support future sustainability for the Subbasin GSPs. The KRGSA and KGA wish to continue the model coordination efforts for development of the projected future water budgets. The analysis would use C2VSim to set up a 50-year baseline and climate change baselines, with which to assess key GSP management actions. This proposal provides a scope of work for Todd Groundwater to develop these baselines and conduct subbasin-wide water budget modeling for projected future water budgets.

Approach for Developing Projected Water Budgets Using C2VSim

Development of the projected water budgets will be performed to comply with GSP regulations and best management practices (BMPs), as appropriate. GSP regulations require projected water budgets to estimate future baseline conditions of supply, demand, and aquifer response to GSP implementation (§354.18(3)). Future baseline conditions are developed over a 50-year planning and implementation horizon. The approach to the baseline development incorporates GSP requirements and also includes the use of:

- 50 years of historical precipitation, evapotranspiration, and streamflow information as the future baseline hydrology condition
- recent land use, METRIC-based evapotranspiration, and urban population growth information as the baseline condition for estimating future water demand
- recent water supply information as the baseline condition for estimating future surface water supply, while applying the historical surface water supply reliability identified in §354.18(c)(2)
- DWR Climate Change Guidance and Data Sets to incorporate the estimated climate change conditions for the Kern County Subbasin
- specialized analysis of the Kern River watershed and estimated runoff volumes under climate change conditions, being evaluated in a separate study by the Miller-Haggin Group.

We will use the revised C2VSim to support GSP compliance for the projected water budgets. Our preliminary analysis suggests an appropriate baseline period of 1960 to 2010 for the 50-year historical hydrology. This period will have near average conditions on the Kern River and keep the baseline from ending in either an extreme drought (2012 to 2015) or extreme wet year (2011).

The projected water budgets are required to evaluate the proposed GSP implementation plan for the Kern County Subbasin. Our approach includes direct coordination with the KRGSA and the other Kern County Subbasin GSAs to understand and incorporate each agency's estimated future water supply, demand, managed aquifer recharge and groundwater banking activities consistent with the implementation plans in the local GSPs.

A key feature of C2VSim is DWR's agricultural and urban water supply and demand management module that dynamically simulates both surface water and groundwater supplies based on demand estimates, as affected by usage and climatic conditions. C2VSim also provides the capability to identify and evaluate of the level of uncertainty in the projected water estimates through a sensitivity analysis of key parameters. Use of these modules, along with a sensitivity analysis, will facilitate the analysis of future conditions.

PROPOSED SCOPE OF SERVICES

Our proposed scope of services incorporates our approach discussed above and is organized around the GSP regulations for the projected water budgets in Section 354.18(3).

Task 1: Projected Baseline Development

Projected water budgets are required by GSP regulations to represent future conditions over a 50-year GSP planning and implementation horizon. A baseline condition will be developed that projects water supply, demand and operations based on current land use requirements over the subsequent 50 years. The baseline then serves as a basis of comparison for evaluating proposed sustainability management actions and projects for achieving sustainability over the planning and implementation horizon.

Much of the projected baseline development is prescribed by DWR, which allows this task to be conducted while historical and current water budgets are being finalized; this will assist in expediting the schedule. Key required components for the Projected Future Baseline, as summarized in the DWR Water Budget BMP, include the following:

- The projected baseline hydrology condition will be based on 50-years of historical precipitation and streamflow. As mentioned previously, our anticipated baseline period is 1960 to 2010 to represent near average conditions on the Kern River and prevent the baseline from ending in either an extreme drought (2012 to 2015) or extreme wet year (2011).
- Surface water supply will be based on available information from DWR and others to project future water imports from the State Water Project (SWP), Central Valley Project (CVC) - Friant-Kern (FK) and Kern River diversions. It is anticipated that sufficient information will be available by others for imported supply estimates; no original analyses of future imported water supplies are assumed in this scope. For the Kern River, recent diversion practices based on entitlements will be used to develop a water use consistent with the baseline hydrology.
- The most recent available land use data, along with the associated water demands, will be used to develop the entire 50-year simulation period.
- Consumptive use for agriculture and undeveloped lands will be based on the recent land use and METRIC-based evapotranspiration. Following DWR guidance, METRIC data over the baseline period will be varied according to varying hydrologic conditions (e.g.., water year type).
- Urban water demand will be based on projections from recent urban water management plans and recent regulations for estimating future water use. Urban demand will be estimated in the model based on projected urban population growth and per capita water demand information (including recent regulatory guidance).

The results of this compilation will be summarized using tables that put the water budget components into a consistent format to illustrate the potential range of conditions and identify potential data gaps. An assessment of these data will be performed to determine the overall strengths and weaknesses of the different data sources.

Task 2: Sustainability Alternatives Screening Analysis

In order to provide some guidance to Subbasin GSAs regarding the level of management required to meet sustainability goals, a series of screening-level sensitivity analyses are included in this scope. The analyses will provide information on where and how much increases in supply or decreases in demand would satisfy sustainability criteria being developed by KGA, KRGSA, and others. GSP regulations require that the projected water budgets are developed using a consistent method over the entire Kern County Subbasin to assess the sustainability of proposed groundwater management actions. This screening-level sensitivity analysis will provide a systematic analysis to quantify the relative effectiveness of conceptual management actions, while the GSAs are evaluating their own management options.

The sensitivity scenarios will be simulated using the projected future baseline and will evaluate several basin-wide conceptual categories that would include the following:

- Alternatives for changing future groundwater supply such as increased managed aquifer recharge, groundwater banking, urban water supply and/or surface water reliability
- Alternatives for changing future groundwater demand such as agricultural use, urban demand, and/or water conservation measures.

Task 2 will evaluate these conceptual groundwater management alternatives uniformly over the area; however, results can be used to identify areas for targeted management by local GSAs. Results from the sensitivity analysis can be developed by separate GSAs or hydrologic zones. The sensitivity analysis will also help to quantify uncertainty associated with the simulation of major categories of potential alternatives to achieve long-term sustainability over time as required by DWR.

With these results, local GSAs will have preliminary model results of how potential management actions would be anticipated to perform to help guide their decision making when developing individual management actions. The results of the sensitivity analysis will be presented at a joint workshop and provided to each of the Kern County Subbasin GSAs (see Task 8).

Task 3: Climate Change Baseline Development

Projected water budgets are required to evaluate the potential effects of climate change with respect to achieving sustainability. For this purpose, DWR has issued the *Guidance for Climate Change Data Use During Sustainability Plan Development* Guidance Document that outlines how DWR recommends that climate change be assessed under SGMA. Following this guidance, we will incorporate the DWR data sets for climate change into C2VSim for Kern County.

For Task 3, we will modify the Projected baseline conditions following DWR guidance and using climate change data sets. DWR requires that the climate change is applied to the Projected Baseline Condition based a 50-year historical record that is representative of the range of seasonal and annual climatic variability. DWR has provided two climate change data sets. These include:

- Water budget representing projected 2030 climate conditions to evaluate projects and actions that will evaluate sustainability under the "short-term" future conditions compared to baseline conditions.
- Water budget representing conditions at 2070 climate conditions to show that sustainability will be maintained into the planning and implementation horizon even with reductions in natural hydrology (i.e., "long-term" future conditions), within 50 years after GSP approval.

To assist with the development of the Climate Change baseline, it is our understanding that the Miller-Haggin Group has retained GEI Consultants to conduct a Kern River watershed analysis following DWR guidance for climate change. In brief, that analysis will consider

reduced runoff in each of the sub-watersheds contributing to the Kern River and develop revised streamflow estimates at First Point. These estimates will be used to reduce Kern River water diversions from baseline conditions.

The results of the Climate Change Baselines will be compared to the historically-based baseline to assess the potential effects of climate change on the Kern County Subbasin. The climate-change baseline water budgets will be used for evaluating projected management actions and projects to achieve sustainability in the Kern County Subbasin.

Task 4: Projected Future Sustainability Assessment

For Task 4, the projected management actions and projects are added to the baseline conditions to assess the effectiveness of these measures in achieving sustainability goals over the required planning horizon. We anticipate that Task 4 will provide a means to test and verify different types and levels of management actions and projects.

To evaluate future sustainability, different scenarios will be developed based on input from Kern County Subbasin GSAs of the elements of their proposed groundwater sustainability plans. We will develop a data request to provide guidance to local agencies of the types of data we need for the Projected Future Scenarios. The data request will focus on planned projects and managed water supply information. We will compile and review the data provided by local agencies to identify missing or incomplete water budget components. Based on this information we will develop scenarios that contain management actions develop by the GSAs.

The analysis can proceed in an iterative manner with management actions added to areas if preliminary results suggest that sustainability goals are be maintained. Various model scenarios will be developed by adding, removing, or revising various management actions. It is assumed that KGA will provide direction on how management actions should be revised for each scenario based on our presentation of simulation results of each scenario.

Due to schedule constraints, we assume that this sustainability assessment will be limited to five (5) different subbasin scenarios. To further expedite the process, we propose that all scenarios for Task 4 will be based on the 2030 Climate Change Baseline Conditions. This limited number of scenarios does not allow for a separate analysis to be run for an individual GSP or water district to analyze their local management actions and projects. Rather, GSP elements will be combined to evaluate actions on a subbasin basis.

Task 4 results will provide projected future water budgets that will include the change in the volume of water stored. The results of the Projected Future Sustainability Assessment will be presented at a workshop (see Task 8). Results will be reported in tabular and graphical form and provided to each of the Kern County Subbasin GSAs.

Task 5: Preferred Alternative Scenario and Assessment

Based on the results of Task 4, a Preferred Alternative will be selected that will include the final sustainability management actions and projects that will be included in the Kern County GSPs. The Preferred Alterative will be run using with all three baseline conditions (historically-based, 2030 Climate-Change and 2070 Climate-Change).

The results of the Projected Future Sustainability Assessment will be presented at a workshop (see Task 8). The results of the Preferred Alternative will be processed to meet the GSP reporting requirements from the SGMA requirements and DWR guidelines. Summary results in tabular and graphical form and provided to each of the Kern County Subbasin GSAs for inclusion in the GSPs. More detailed results will be developed that will be documented in the Task 6 Technical Report.

Task 6: Technical Report

A technical report will be developed that documents the work performed for this scope of work. The technical report will provide the technical basis for setting up the baseline, documenting the model results, and developing the projected water budgets. The modeling results and water budgets produced for the Technical Report will be consistent with DWR's SGMA guidelines and BMPs. It is anticipated that this report will provide sufficient compliance for all GSAs in the subbasin for the GSP requirements of current and historical water budgets. The following subtasks are included in Task 5.

For costing purposes, we assume that the draft technical report will require two draft versions. An Administrative Draft Technical Report will be prepared for stakeholder review and comments. Comments will be incorporated into a Draft Technical Report. Electronic submittal is assumed for both versions.

The Final Technical Report will address final comments and will be submitted to the GSAs for GSP supporting documentation. For costing purposes, we assume FedEx delivery of 10 hard copies for the Final Technical Report.

Task 7: Project Coordination and Communication

This task covers project coordination with the client throughout the project. Coordination will include project planning, on-going communications and project status updates. We assume that communication during the project will be conducted via emails, telephone and/or web meetings, if needed. Project workshops are presented in Task 8.

Todd Groundwater will track schedule and budget monthly and track document requirements for the GSP. Invoices will clearly show team members, hours, costs, and progress on project tasks. A monthly progress report will be prepared for each invoice showing progress made during the month, next steps for the following billing cycle, and status of both schedule and budget.

Task 8: Projected Water Budget Workshops

Several project updates (via conference call) and three workshops are included in the scope of work over the duration of the project to keep KRGSA and other Kern County Subbasin GSAs up-to-date on the modeling process. We believe that this effort will support the overall transparency of the modeling efforts and help to achieve acceptance of the results to keep the GSPs on schedule to meet GSP deadlines. Workshops are planned to summarize the results near the completion of the following tasks.

- Task 1 and 2 Results

- Task 3 and 4 Results
- Task 5 Results

The Task 5 workshop meeting is planned to present the methods, procedures and results used for developing the Kern County Subbasin projected water budgets to the local agencies and GSAs, and to discuss issues and concerns about the process. Feedback from the group will be used to improve and refine the water budgets.

COST ESTIMATE AND SCHEDULE

A cost estimate summary is provided at the end of this text in **Table 1** with a more detailed cost estimate following in **Table 2.** Todd Groundwater has an existing scope and budget for developing GSP projected water budgets for the KRGSA, which provides additional funding for this total project. **Table 1** shows the cost estimate for expanding Tasks 1 through 8 throughout the subbasin, the addition of the current KRGSA budget, and the total project costs. As summarized on **Table 1**, the subbasin water budget analysis, less the amount budgeted to KRGSA, is estimated to total $241,385 Costs include labor, fees, subconsultants and expenses for each project task.

The Todd Groundwater Team can initiate the project upon receipt of the notice-to-proceed and complete the project to meet the GSP deadline of January 31, 2020. Our proposed schedule is provided by task in **Table 3** and is consistent with the proposed KGA schedule. Proposed workshop meetings are shown as diamonds.

With this aggressive schedule, time is of the essence. The schedule assumes close coordination and cooperation with the Subbasin GSAs to meet this schedule. In order to expedite the work, Todd Groundwater is retaining Dr. Charlie Brush, Ph.D., PE through his modeling consulting firm, Hydrolytics, LLC. Dr. Brush has 20-years of experience developing groundwater models and was one of the original developers of C2VSim at DWR. He has prepared four reports documenting C2VSim, authored peer-reviewed journal articles on the model, and led workshops on IWFM/C2VSim. He brings unparalleled expertise to this project and has already been working closely with DWR on the details of new climate change requirements.

TABLE 1 –Projected Water Budget Cost Estimate Summary

TASKS	KGA Cost Estimate	Allocated KRGSA Budget	Total Cost Estimate
Task 1: Projected Baseline Development	$30,324	$18,278	$48,602
Task 2: Sustainability Alternatives Screening Analysis	$27,605	$1,295	$28,900
Task 3: Climate Change Baseline Development	$28,024	$22,073	$50,097
Task 4: Projected Future Sustainability Assessment	$32,909	$25,786	$58,695
Task 5: Preferred Alternative Scenario and Assessment	$21,958	$1,326	$23,284
Task 6: Technical Report	$64,198	$15,000	$79,198
Task 7: Project Coordination and Communication	$14,746	$1,795	$16,541
Task 8: Projected Water Budget Workshops	$21,621	$8,830	$30,451
TOTAL	$241,385	$94,383	$335,768

Table 2: Projected Water Budgets Developed with C2VSim for Kern County Subbasin GSAs - Budget

Todd Groundwater

Job Name: Kern County Subbasin C2VSim Modeling
Job Description: Projected Water Budget Development for entire Subbasin
Client: Kern Groundwater Authority (KGA) through the KRGSA
Date: 9/25/2018
Todd Job Number: 62307

2017 Hourly Rates	Principal QA/QC $220	Senior PM $215	Senior Engineer $210	Senior Hydrogeo $200	Staff Hydrogeo $150	Total Labor Hours	Total Labor	2% Comm Fee	GIS/ Graphics $110	Admin Costs $100	Subconsultant Hydrolytics $180	Other Direct Costs	10% Expense Fee	Total Costs
Task 1: Projected Baseline Development		40		16	16	72	$ 14,200	$ 284	$ -	$ -	$ 14,400		$ 1,440.00	$ 30,324
Task 2: Sustainability Alternatives Screening Analysis	2	40		12	80	134	$ 23,440	$ 469	$ 1,320	$ -	$ 2,160		$ 216.00	$ 27,605
Task 3: Climate Change Baseline Development		12		8		20	$ 4,180	$ 84	$ -	$ -	$ 21,600		$ 2,160.00	$ 28,024
Task 4: Projected Future Sustainability Assessment	8	32		16	24	80	$ 15,440	$ 309	$ 1,320	$ -	$ 14,400		$ 1,440.00	$ 32,909
Task 5: Preferred Alternative Scenario and Assessment	16	24			8	48	$ 9,880	$ 198	$ -	$ -	$ 10,800		$ 1,080.80	$ 21,958
Task 6: Technical Report	16	80	8	24	48	176	$ 34,400	$ 688	$ 4,400	$ 400	$ 21,600	$ 500	$ 2,210.00	$ 64,198
Task 7: Project Coordination and Communication	16	40				56	$ 12,120	$ 242	$ -	$ 800	$ 1,440		$ 144.00	$ 14,746
Task 8: Projected Water Budget Workshops		40			6	46	$ 9,500	$ 190	$ 1,540	$ -	$ 7,200	$ 2,246	$ 944.60	$ 21,621
Project Budget	**58**	**308**	**8**	**76**	**182**	**632**	**$ 123,160**	**$ 2,463**	**$ 8,580**	**$ 1,200**	**$ 93,600**	**$ 2,746**	**$ 9,635**	**$ 241,385**

Table 3: Projected Water Budgets Developed with C2VSim for Kern County Subbasin GSAs - Project Schedule

Todd Groundwater

Job Name: Kern County Subbasin C2VSim Modeling
Job Description: Projected Water Budget Development for entire Subbasin
Client: Kern Groundwater Authority (KGA) through the KRGSA
Date: 9/24/2018
Todd Job Number: 62307

	2018						2019												2020		
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Task 1: Projected Baseline Development																					
Task 2: Sustainability Alternatives Screening Analysis																					
Task 3: Climate Change Baseline Development																					
Task 4: Projected Future Sustainability Assessment																					
Task 5: Preferred Alternative Scenario and Assessment																					
Task 6: Technical Report																					
Task 7: Project Coordination and Communication																					
Task 8: Projected Water Budget Workshops							*		*		*										

Legend

- Duration of technical tasks for GSP development
- Duration of ongoing project management and outreach tasks
- * Projected Water Budget Workshop

Todd Groundwater Projected Water Budget Modeling Participating Percentages

Activity Agreement Member	Participating Acreage	Participation Percentage	Tasks 1 - 4	Tasks 5 - 8	Total Budget
Buena Vista Water Storage District	47,810	5.68%	6,750	6,958	13,708
Henry Miller Water District	26,055	3.09%	3,679	3,792	7,470
Kern Groundwater Authority	762,948	90.62%	107,715	111,033	218,748
Kern River GSA[1]			67,432	26,951	94,383
Olcese Water District	5,090	0.60%	719	741	1,459
Totals	841,903	100.00%	186,294	149,474	335,768

[1]Kern River GSA previously authorized Todd Groundwater to develop projected water budgets

Kern Groundwater Authority
2019 Board Meeting Dates
Time 8:00am
Location TBD

January 23, 2019

February 27, 2019

March 27, 2019

April 24, 2019

May 22, 2019

June 26, 2019

July 24, 2019

August 28, 2019

September 25, 2019

October 23, 2019

November 27, 2019 (move to November 20, 2019)

December 25, 2019 (move to December 18, 2019)

Kern Groundwater Authority
Stakeholder Committee Meeting Dates
Time 3:30pm
Location TBD

January 7, 2019

February 4, 2019

March 4, 2019

April 1, 2019

May 6, 2019

June 3, 2019

July 1, 2019

August 5, 2019

September 2, 2019 (moved to September 9, 2019)

October 7, 2019

November 4, 2019

December 2, 2019

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December 19, 2018

Dennis Mullins
Kern Groundwater Authority
P.O. Box 20820
Bakersfield, CA 93390-0820

RE: Proposal for 2019 Management Services for the Kern Groundwater Authority, Kern County, California

Dear Mr. Mullins:

Thank you for the opportunity to submit this proposal to provide continuing services for the Kern Groundwater Authority (KGA). We have assisted with management services since September 2017. This proposal is for continuing management services through 2019, consistent with the KGA proposed 2019 budget for P&P management services of $370,000. This proposal also continues separate phases for GSP preparation / coordination services as well as a phase for tracking and billing costs associated with the newly hired, dedicated Planning Manager. This proposal describes the project, recommends a scope of services together with associated fees, deliverables and approximate schedules, sets forth our assumptions and discusses other services that may be of interest as the project proceeds.

Project Understanding

Provost & Pritchard Consulting Group (Provost & Pritchard) is providing staffing for three (3) main positions which shall constitute the management team charged with ensuring KGA meets statutory deadlines with respect to the Sustainable Groundwater Management Act (SGMA, Act) through completion of a compliant Groundwater Sustainability Plan (GSP). The responsibilities of the three positions are as follows:

1. Basin Coordinator – Terry Erlewine has been charged with coordinating the KGA effort in preparation of a GSP with other Groundwater Sustainability Agencies (GSAs) within the Basin. The position involves working with and leading diverse water interests. Terry has been tasked with leading and facilitating group discussions while managing the process for desired outcomes. As part of these responsibilities, Terry has been responsible for routine contacts with KGA stakeholders and outside agencies at a policy and executive level.

2. Planning Manager – Patty Poire will continue to be under the direction of the Board of Directors with guidance from the Basin Coordinator, and will attend to administrative actions required for compliance with the Act. The Planning Manager provides day-to-day coordination and professional assistance to the KGA and its members on issues related to compliance with the Act. This role provides assistance to the Basin Coordinator to meet the goals and objectives of the KGA coordination efforts, as defined by the KGA Board, and oversees and monitors the progress of KGA consultants. The Planning Manager performs financial functions under the Treasurer's direction and provides oversight and assistance with various coordination efforts among KGA members and others within the Basin to coordinate GSPs. This individual provides

oversight, management and direction to the KGA Groundwater Sustainability Agency Special Activity Agreement members to achieve compliance with the Act and special activity objectives.

3. Administrative Assistant – This position will provide support services for the activities of the Basin Coordinator and Planning Manager including coordinating meetings, preparing agendas, supporting materials, and minutes.

The three positions will provide services to Kern Groundwater Authority that fall within the core administrative functions (the General and Administrative Budget) and in coordination and preparation of the GSP (the Special Activities Agreement #4). The two types of services – Administrative and GSP Preparation/Coordination – will be accounted for separately and billed in different proportions to KGA members. Work may be performed by other Provost & Pritchard staff as needed in accordance with our current fee schedule.

Scope of Services

Our proposed scope of work for this project is segregated into three phases – Management/ Administration, GSP Preparation/Coordination, and Planning Manager phase. Provost & Pritchard staff will serve in the roles of the Basin Coordinator, Planning Manager, and Administrative Assistant, described above in the project understanding section. Provost & Pritchard will work with the KGA Board to refine the roles over time to reflect needs that may change.

The Basin Coordinator will help to develop recommendations at the KGA Board level. Terry Erlewine will continue to fill this role, and will work through issues in the coordination agreement, other policy issues, and consultant management. Terry will be the primary contact for the facilitation effort. Terry's role is anticipated to phase out after the GSP is adopted and implementation is underway.

Patricia Poire will continue to fill the role of the Planning Manager. The Planning Manager is anticipated to take on more responsibility over time. The Planning Manager is dedicated to the KGA and is willing to be directly employed by the KGA.

Provost & Pritchard is willing to help to "incubate" the KGA organization. We are willing to place the Planning Manager on Provost & Pritchard's payroll and provide office space and phone service in exchange for a pass through of total employment costs with a 15% markup. (This will include compensation, benefits and payroll taxes. It will not include bonuses and 401k profit sharing.) As circumstances change, this arrangement may be revisited and renegotiated in the future, upon contract renewals/extensions.

Rebecca Gomez and other Provost & Pritchard administrative staff will help to support the Basin Coordinator and Planning Manager roles in the short term. As the workload for the KGA management team starts to solidify, we are willing to hire an administrative assistant to be dedicated to the KGA in the long term.

The services of all employees (except for Patty Poire) will be billed to the KGA in two separate categories – Management Services (Administration) and GSP Preparation Services. Patty Poire will charge her time to her own MGR phase, and will account for Administration vs GSP efforts using activity codes.

Phase MGMT: Management/Administration Services

As noted in our original proposal, the management team will focus on the coordination agreement, GSA organization and issues list early on.

The following are work items that we expect to address:

1. Facilitation and attendance at monthly KGA Board Meetings;
2. Executive Committee meetings, held on an as-needed basis;
3. We understand that North Kern Water Storage District (NKWSD) functions as the fiscal agent for KGA. We are to assist in reviewing invoices and receipts, and approve items for payment, with additional oversight and approval from designated board members.
4. Administration and updating of the KGA website;
5. Assistance with preparation of the budget for the subsequent calendar year; and,
6. Project management.

Phase GSP: GSP Preparation/Coordination Services

The management team will also oversee the development and coordination necessary for the GSP. We expect to engage in extensive communication with stakeholders and other GSP groups to get properly oriented and to assist in building trust and become familiar with respective points of view. The management team's role will be to work with KGA managers and member agencies to formulate and manage consultant task orders to complete the GSP. Additionally, the management team will provide ongoing coordination of KGA member districts, neighboring GSAs and SGMA regulatory agencies.

The following are work items that we expect to assist with:

1. Support and facilitation of Basin Coordination Policy Group meetings, held monthly;
2. Support and facilitation of Coordination Committee meetings, held monthly;
3. Potential support and facilitation of Urban Committee;
4. Oversight and administration of KGA consulting contracts;
5. Provide advice and consultation on the development of KGA services, functions, and policies;
6. Communication with and education of stakeholders on pertinent issues;
7. Maintain public relations through communication with stakeholders including KGA members, landowners, and the general public;
8. Represent KGA with regulatory groups and business organizations, participate in community and professional groups and committees, and act as KGA liaison on various inter-agency coordination projects, as directed by the KGA Board of Directors;
9. Review and tracking of Kern County Water Element of the General Plan; and,
10. Project management.

Phase MGR (KGA Planning Manager)

As noted above, Patty Poire will continue to be involved with all phases of KGA work, but the costs for her employment will be captured only in this phase. Patty Poire was hired by Provost & Pritchard as the KGA Planning Manager and began employment on February 26, 2018. Consistent with our initial proposal, Provost & Pritchard proposes to pass through total costs for compensation, benefits (except for bonuses and 401k profit sharing), payroll taxes, etc., for Patty Poire in our monthly invoices under phase MGR with a 15% markup, until transfer to KGA employment. Transfer to KGA employment is not anticipated in calendar year 2019. Provost &

Pritchard should be notified in writing three months before the desired transfer of the KGA Planning Manager employment from Provost & Pritchard to the KGA.

We intend to continue to treat Ms. Poire consistent with how we treat all other employees of Provost & Pritchard, and thus plan to share bonuses and 401k profit sharing with her, at Provost & Pritchard's expense.

Costs will be invoiced monthly at $3,864 per week. This budget is to be reconciled, accounted for, and finalized near the end of each year. Any necessary adjustments will be made in the December or January billing, as we close out the year. The MGR budget summarized below in the Fee Budget section accounts for the following costs:

- Salary, assuming no raises to be granted in 2019;
- 401k contribution at 3% of salary;
- $3,600 per year car allowance;
- Payroll taxes;
- Medical/dental/vision insurance;
- Life/disability insurance; and,
- Other Provost & Pritchard benefits currently provided to other Provost & Pritchard employees, such as monthly gift card.

Time and Materials (Fee Budget)

Provost & Pritchard Consulting Group will perform the services in these Phases on a time and materials basis, in accordance with our Standard Fee Schedule in effect at the time services are rendered. A budget of $370,000 is proposed. It is allocated by phase according to the table below. Some adjustment of the budget allocation between phases may be needed as work progresses. These fees will be invoiced monthly as they are accrued. Reimbursable expenses will be invoiced in addition to professional fees and are included in the estimated fee. If it appears we will need to exceed the estimate above, we will notify you in writing before we do so, and will provide a revised estimate. We will not continue work beyond the previously approved budgets without additional authorization.

Phase	Proposed Budget
MGMT	$75,000
GSP	$95,000
MGR	$200,000
Total	**$370,000**

Schedule

We understand that most of our work must conform to existing KGA commitments and regulatory requirements.

Assumptions

The KGA Board will provide regular feedback as we work together to implement these management roles.

Additional Services

The following services are not included in this proposal, however these and others can be provided at additional cost, either directly by Provost & Pritchard Consulting Group or through subconsultants, upon request.

- Financial audits; and,
- Other specific technical work not detailed in this proposal.

Terms & Conditions

Our ongoing work will continue to be subject to the terms and conditions detailed in our September 20, 2017 Consultant Services Agreement, incorporated in this budget and phase amendment by reference. If this proposal is acceptable, please sign below and return a copy to our office. This document will serve as our official Notice to Proceed. This amendment is valid for 60 days from the date above.

Respectfully,
Provost & Pritchard Consulting Group

Terry Erlewine, RCE 32985
Project Manager

Jeff Eklund, RCE 75680
Vice President

Terms & Conditions Accepted

By Kern Groundwater Authority

Signature

Printed Name

Title Date

Undesirable Results Definitions

Introduction:

- Management areas shall be identified by the basin and shown on exhibit "A".
- Representative Monitoring Locations shall mean the locations within the basin which are identified and designated by the GSA's for purposes of monitoring sustainability indicators.
- Critical Infrastructure shall mean facilities which are utilized to provide public services such as water, utilities, and or transportation service for a region.
- Prolonged Drought – The undesirable results herein take into account the accommodation of a prolonged drought as defined in DWR's BMP.

Chronic Lowering of Water Levels –
The point at which significant and unreasonable impacts over the planning and implementation horizon, as determined by depth/elevation of water, affect the reasonable and beneficial use of, and access to, groundwater by overlying users.

This is determined when the minimum threshold for groundwater levels are exceeded in at least three(3) adjacent management areas that represent at least 15% of the subbasin or greater than 30% of the subbasin (as measured by each Management Area). Minimum thresholds shall be set by each of the management areas through their respective Groundwater Sustainability Plans.

Groundwater Storage –
The point at which significant and unreasonable impacts, as determined by the amount of groundwater in the basin, affect the reasonable and beneficial use of, and access to, groundwater by overlying users over an extended drought period. (10-years?)

This is determined when the volume of storage (above the groundwater level minimum thresholds) is depleted to an elevation lower than the groundwater level minimum threshold in at least three(3) adjacent management areas that represent at least 15% of the subbasin or greater than 30% of the subbasin (as measured by the acreage of each Management Area).

Minimum thresholds shall be set by each of the management areas through their respective Groundwater Sustainability Plans.

Degraded Water Quality Trends –
The point at which significant and unreasonable impacts over the planning and implementation horizon, as caused by water management actions, that affect the reasonable and beneficial use of, and access to, groundwater by overlying users.

This is determined when the minimum threshold for a groundwater quality constituent of concern is exceeded in at least three(3) adjacent management areas that represent at least 15% of the subbasin or greater than 30% of the designated monitoring points within the basin. Minimum thresholds shall be set by each of the management areas through their respective Groundwater Sustainability Plans.

Land Subsidence Trends –
The point at which significant and unreasonable impacts, as determined by a subsidence rate and extent in the basin, that affects the surface land uses or critical infrastructure.

This is determined when subsidence results in significant and unreasonable impacts to critical infrastructure as indicated by monitoring points established by a basin wide coordinated GSP subsidence monitoring plan.

Kern Groundwater Authority

Kern County, California

GEI Consultants

GSA BOUNDARIES IN KERN SUBBASIN

DECEMBER 2018 DRAFT FIGURE 1

07-Dec-2018 \\Sac1s-fs01\gis\Projects\1800999_Kern_Subbasin\KGA_SubbasinGSAs_MA_v2.mxd AB

Kern Subbasin Management Areas

No.	District	Management Area (Acres)	Percentage of MA in subbasin (%)	Percentage of MA relative to defined MAs (%)
1	Arvin Edison W.S.D	100,353	5.53%	6.81%
2	Belridge W.S.D	93,129	5.13%	6.32%
3	Berranda Mesa W.D	55,823	3.08%	3.79%
4	Buena Vista W.S.D	50,633	2.79%	3.44%
5	Cawelo W.D	65,102	3.59%	4.42%
6	Henry Miller W.D	26,053	1.44%	1.77%
7	K.R.G.S.A - Banking Areas	4,257	0.23%	0.29%
	K.R.G.S.A - Irrigated Agricultural Areas	129,868	7.16%	8.82%
	K.R.G.S.A - Urban Areas	94,399	5.20%	6.41%
8	Kern Tulare W.D	11,303	0.62%	0.77%
9	Lost Hills W.D	74,690	4.12%	5.07%
10	North Kern W.S.D	69,239	3.82%	4.70%
11	Olcese W.D	3,206	0.18%	0.22%
12	Rosedale Rio Bravo W.S.D	49,046	2.70%	3.33%
13	Semitropic W.S.D MA-1	62,001	3.42%	4.21%
	Semitropic W.S.D MA-2	69,539	3.83%	4.72%
	Semitropic W.S.D MA-3	94,276	5.20%	6.40%
14	Shafter-Wasco I.D MA-1	38,920	2.15%	2.64%
	Shafter-Wasco I.D MA-2	10,061	0.55%	0.68%
15	Southern San Joaquin M.U.D	64,712	3.57%	4.39%
16	West Kern W.D MA-1	475	0.03%	0.03%
	West Kern W.D MA-2	889	0.05%	0.06%
	West Kern W.D MA-3	652	0.04%	0.04%
17	Wheeler Ridge Maricopa W.S.D	92,367	5.09%	6.27%
18	Pioneer G.S.A	2,313	0.13%	0.16%
19	Kern Water Bank Authority	20,490	1.13%	1.39%
20	Greenfield County W.D	2,202	0.12%	0.15%
21	Tejon-Castaic W.D	19,277	1.06%	1.31%
22	**Total Defined MA**	**1,305,276**	**71.97%**	
23	**Undistricted Area**	**341,048**	**18.80%**	**-**
24	**Kern Subbasin**	**1,813,627**	**-**	**-**

No.	District	Monitoring Area (Acres)	Percentage of Monitoring Area in subbasin (%)
1	West Kern W.D	167,303	**9.22%**

Kern County Administrative Office

County Administrative Center
1115 Truxtun Avenue, Fifth Floor • Bakersfield, CA 93301-4639
Telephone 661-868-3198 • FAX 661-868-3190 • TTY Relay 800-735-2929

RYAN J. ALSOP
County Administrative Officer

December 12, 2018

Kern Groundwater Authority
Dennis Mullins, Chair
1800 30th Street, Suite 280
Bakersfield, CA 93301

Dear Mr. Mullins,

This letter shall serve as written notice, pursuant to Section 6.02 of the Joint Powers Agreement, that the Board of Supervisors of the County of Kern have elected to withdraw from the Kern Groundwater Authority.

Sincerely,

Ryan Alsop
County Administrative Officer

cc Board of Supervisors
Margo Raison, County Counsel
Rosedale Rio Bravo Water Storage District
Kern Water Bank Authority
Kern County Water Agency
Semitropic Water Storage District
Shafter-Wasco Irrigation District
Southern San Joaquin Irrigation District
North Kern Water Storage District
Kern-Tulare Water District
City of Shafter
Arvin-Edison Water Storage District

Arvin Community Services District
Tejon-Castaic Water District
West Kern Water District
Westside Water Authority
Lorelei Oviatt, Director of Planning and Natural Resources
Kathleen Krauss, Clerk of the Board

MEMORANDUM

To:	KGA
From:	OLP
Issue:	County Participation in KGA and Coverage Under SGMA
Date:	December 13, 2018

The County of Kern (County) is considering withdrawing from the Kern Groundwater Authority (KGA), which is a joint powers authority ("JPA") with seventeen (17) members. (See draft staff report.) The County is included in the Kern Groundwater Authority Groundwater Sustainability Agency (GSA).

I. Background

(a) Communication from County

On October 5, 2018, the County sent the KGA a letter requesting the KGA take over the management of the undistricted areas and provide the County indemnification for the management of these areas. After policy consideration, the KGA responded to the County on November 6, 2018, by offering to provide management and indemnity over undistricted areas that were working with KGA membership on management. The KGA declined to manage and indemnify the County for undistricted areas not working with KGA membership on management. The County rejected the KGA's offer. Thereafter, County staff drafted a Staff Report recommending to the County's Board of Supervisors that the County withdraw from the KGA. On December 11, 2018, the Board of Supervisors took action on staffs' recommendation by voting to withdraw from the KGA.

(b) Communication from the State Water Board

On October 22, 2018, the County requested the State Water Board provide written communication regarding SGMA jurisdiction and coverage of the KGA. The State Water Board responded to the County on December 3, 2018, stating its position that the KGA can manage groundwater in any part of the basin by virtue of the Kern County Water Agency's ("Agency" or "KCWA") membership in the KGA JPA.

II. Options Moving Forward

(a) Options for KGA

Per the State Water Board communication and the nature of the joint powers agreement, the KGA has SGMA jurisdiction over the service area of its members. As long as the Agency remains a member of the KGA, the KGA has SGMA jurisdiction over the entire Kern Subbasin. (See SWB letter to County.) Regarding the County's withdrawal, the KGA's options include:.

(1) Manage the undistricted areas, provide indemnity to the County, and request the County remain a member of the KGA;

(2) Accept the withdrawal of the County and manage the undistricted areas; OR

(3) Accept the withdrawal of the County and NOT manage the undistricted areas.

(b) Challenges for Each of the Options

(1) Challenges for Option 1

The KGA would need to change its policy position reflected in its November 6, 2018 letter to the County. The KGA would need to develop and negotiate indemnity for the County. After taking over the responsibilities of the County and indemnifying the County, the KGA would be in a very similar position as option 2, except that the County would still remain a member of the KGA.

(2) Challenges for Option 2

Extending SGMA coverage and management to the undistricted areas may result in increased liability or exposure for KGA members. To the extent any undistricted area land owner challenged the GSP or failed to comply with the GSP, this liability to defend or enforce the GSP would be on the KGA and its membership.

(3) Challenges for Option 3

(i) Mechanics of Revising GSA Boundary: If the KGA maintains its position that it will not manage the undistricted area, or a portion thereof, it would need to revise its GSA election with DWR to change the boundaries of the GSA.

(ii) Stakeholder Outreach: The GSA revision would result in the removed area becoming "unmanaged" under SGMA. Thereafter, the well owners in the unmanaged areas would immediately be required to report and pay fees to the State Water Board. (Water Code, §§ 5202 (a)(2), 10824(b).) The KGA would likely need to develop some mechanism in which it provides landowners with notice that the KGA GSA revision will result in areas becoming unmanaged.

(iii) Consideration of Including Landowners: As landowners better understand the potential for becoming unmanaged and having to report/pay fees, there may be increased interest in either becoming managed by a KGA member or the KGA directly. The KGA may consider providing management for undistricted areas in return for indemnity and management by landowner groups. If the KGA were to consider such inclusion, it would need to develop and provide a list of requirements for inclusion.

(iv) Coverage of Areas Working with Members: Consistent with the KGA's previous position, some of the undistricted areas may be covered through management by KGA members. The jurisdiction for this management would be provided by the KGA, which has SGMA jurisdiction over all undistricted areas due to Agency inclusion in the KGA joint powers authority. The management and indemnity would be between the KGA member offering management and the landowners. This may require some revision to GSA elections. It may require KGA to join the GSA of KGA agencies that formed their own GSA(s) but plan to manage undistricted areas outside their service area boundaries. In addition, the GSA boundaries may be need to be revised.

(v) County Wells in Unmanaged Areas. There are a few county-run groundwater wells in the undistricted areas. If the KGA were to revise its GSA boundaries to result in the area becoming unmanaged, the County would have to report and pay fees to the State Water Board. Conversely, if the KGA were to offer management to undistricted areas to avoid their designation as unmanaged in return for indemnity, it would actually be the County that needed to indemnify KGA for managing county-run wells.

(vi) Mapping. If the KGA considers expanded management, it will likely need to revise its GSA election and produce supporting mapping and agreements.

(vii) Probationary Status. The State Water Board has stated its opinion that it will not exercise its jurisdiction to cause a basin to become probationary if the basin includes a small amount of unmanaged land that is covered by a GSP. However, as the area of unmanaged lands increases, the likelihood the area can be covered by a GSP decreases and probability of probationary status increases. If the unmanaged area becomes too large, it is more likely the basin would be in danger of probationary status.

(viii) Indemnity to KCWA. The KGA may need to indemnify KCWA. This indemnity would not be because the KGA is acting on behalf of the Agency. The KGA would be acting in its own capacity as a JPA. However, in case there is a misunderstanding and a litigant attempts to hold KCWA liable for a KGA action, it would be appropriate to indemnify KCWA from any such claim.

III. Next Steps

The KGA needs to consider the above options and provide direction to KGA staff. Particularly, with regard to stakeholder outreach, mapping, and other actions that may take considerable time and resources to ensure GSP development in compliance with SGMA.

***

December 3, 2018

Mark Nations, County Counsel
County of Kern
1115 Truxton Avenue, Fourth Floor
Bakersfield, California 93301
mnations@kerncounty.com
(sent electronically)

Dear Mr. Nations,

Thank you for your letter dated October 22, 2018, in confirmation of our phone conversation on October 12, 2018, during which we discussed Kern County's participation in the groundwater sustainability agency (GSA) for the Kern County Subbasin. This letter confirms our mutual understanding that the withdrawal of Kern County from the GSA for the subbasin would not result in unmanaged areas that would trigger intervention in the sub-basin by the State Water Resources Control Board (State Water Board or Board) pursuant to the Sustainable Groundwater Management Act, Water Code section 10720, et seq. (SGMA).

The Kern Groundwater Authority GSA is a joint powers authority made up of thirteen agency members, including Kern County and Kern County Water Agency. As we discussed and as documented in your letter, Kern County is considering whether to remain a member of the Kern Groundwater Authority GSA. Your letter requests confirmation that Kern County's withdrawal from the GSA would not leave unmanaged areas for purposes of state intervention because Kern County Water Agency has county-wide jurisdiction over the subbasin.

Any local agency or combination of local agencies overlying a groundwater basin may decide to become a groundwater sustainability agency for that basin. (Wat. Code, § 10723, subd. (a).) A joint powers authority may exercise authority over the jurisdictional areas of its members. Both the County and Kern County Water Agency have jurisdiction over all of the lands within Kern County. Therefore, the Kern Groundwater Authority GSA can, and has elected to be, a groundwater sustainability agency for portions of the subbasin and exercise the powers and authorities granted by SGMA. (Wat. Code, § 10726.8, subd. (b).) If the County were to withdraw as a member from the Kern Groundwater Authority GSA, the GSA can retain the same jurisdiction over those portions if Kern County Water Agency remains a participating member. In that case, the Board would continue to consider the entire Kern County Subbasin to be managed and not subject to reporting requirements under Water Code section 5202, subdivision (a)(2).

I appreciate that there are many challenges to establishing an effective governance structure for sustainable groundwater management. The County is in a unique position to offer complementary regulatory authority over land use, planning, and other functions that may assist

in achieving the sustainability goal for the subbasin. I want to encourage the County and the Kern Groundwater Authority GSA to carefully consider how the County can continue to play an active role in groundwater management in the subbasin.

This letter is intended to provide clarity as to the State Water Board's understanding, as requested, to assist in your efforts. These opinions are merely advisory and provided for your information. If you have additional questions, please contact Nicole Kuenzi, Office of Chief Counsel, State Water Board, at Nicole.Kuenzi@waterboards.ca.gov, (916) 322-4142.

Sincerely,

/s/ Sam Boland-Brien

Sam Boland Brien, Chief
Groundwater Management Program
State Water Resource Control Board

MARK L. NATIONS
COUNTY COUNSEL

CHIEF DEPUTIES

MARGO A. RAISON
CHARLES F. COLLINS
GURUJODHA S.KHALSA
ELIZABETH M. GIESICK

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COUNTY COUNSEL
COUNTY OF KERN

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ANDREW C. THOMSON
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JUDITH M. DENNY
JENNIFER E. FEIGE
MARSHALL S. FONTES
BRIAN VAN WYK
BRYAN E. ALBA
PHILLIP W. HALL
BRYAN C. WALTERS
GILLIAN SMITH
EMILY WATTS BLENNER
KATHLEEN RIVERA
PHILLIP T. JENKINS
CARISSA RARICK
GREG KOHLER
ROBERT RICE

*Certified Workers' Compensation Law Specialist,
The State Bar of California
Board of Legal Specialization

October 22, 2018

Nicole L. Kuenzi
Attorney at Law
State Water Resources Control Board
Office of Chief Counsel
1001 I Street, 22nd Floor
Sacramento, CA 95814

Via email to nicole.kuenzi@waterboards.ca.gov

RE: Kern Groundwater Authority and Kern County Water Agency

Dear Ms. Kuenzi:

This letter is a follow up to our telephone conversation of October 12, 2018 in which we along with several of our respective colleagues discussed Kern County's participation in the Kern Groundwater Authority ("KGA"). We found the discussion very informative and helpful as we contemplate the County's future role in groundwater regulation.

I am writing specifically to solicit confirmation of your agreement with the understanding County representatives formed from the referenced conversation and our own independent analysis that should the County of Kern withdraw from the KGA, the State would not intervene in the Kern County Sub-basin ("Basin") since the Kern County Water Agency ("KCWA") is a member of the KGA and confers upon the KGA the needed jurisdictional power and authority for KGA to be a Groundwater Sustainability Agency ("GSA") for all portions of the Basin as to which it has filed to be a GSA.

Nicole L .Kuenzi
October 22, 2018

As you may be aware, Kern County has been considering for some time its options and involvement with the KGA. One of the County's concerns is that it is not equipped with the necessary expertise, personnel and funding required for effective long-term water management in an area as intricate, diverse and complex as the Basin. The County is also concerned that it has not been able to procure an appropriate indemnification agreement from KGA that protects the County's general fund from litigation costs and damage awards, thereby placing upon all taxpayers in Kern County the significant costs and burdens of litigation involving only one of the numerous basins that lay wholly or partly within Kern County.

SGMA provides that any local agency or combination of agencies that have a water supply, water management or land use responsibilities in a basin may decide to become a GSA for a groundwater basin. (Water Code §10721(n) and §10723) The KCWA undoubtedly meets the requirements to be a GSA for the entire Basin. The KCWA's enabling act (Water Code Appendix Chapter 99) expressly provides that KCWA's boundaries shall consist of all the territory lying within the exterior boundaries of the County of Kern. (Section 99-1) The enabling act also provides the KCWA with the necessary water supply and water management powers and duties needed to become a GSA. In particular, Section 99-4 gives the KCWA the express power to take "every lawful act necessary in order that sufficient water may be available for any present or future beneficial use or uses of lands or inhabitants within the agency, including, but not limited to, irrigation, domestic, fire protection, municipal, commercial, industrial, recreational, and all other beneficial uses and purposes...." Furthermore, KCWA receives nearly six million dollars annually of general property tax revenue and has authority to levy special benefit assessments over and above those set forth in SGMA such as a Water Code §10730 basin-wide pump tax.

KGA is a Joint Powers Authority formed through a joint powers agreement for the express purpose of jointly exercising the powers common to each of its Members and to "cooperatively carry out the purposes of SGMA and develop, adopt and implement a legally sufficient GSP covering those portions of the Kern County Sub-basin that are within the jurisdiction boundaries of the Members...." (Joint Powers Agreement) In accordance with this stated purpose, KGA has already filed and received GSA approval for all portions of the Basin that are not subject to other GSA filings. Therefore, with KCWA as a full member, KGA has jurisdiction over all areas that are within the jurisdictional boundaries of KCWA not otherwise subject to other GSA filings. Kern County's participation as a member of KGA is not needed for KGA to exercise jurisdiction over all portions of the Basin as to which it has filed to be a GSA. Therefore, were Kern County to withdraw from KGA, there would be no need for State intervention.

I would very much appreciate it if you would please confirm in writing as soon as possible either by letter or email that our understanding as articulated above and as

discussed with you and the other state representatives on October 12 is correct.

Thank you for your assistance. If you have any questions regarding this request or would like to discuss this issue further, please contact me.

Very truly yours,

Mark L. Nations
County Counsel

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24O8349.DOC

KERN GROUNDWATER AUTHORITY

Memorandum

To: Kern Groundwater Authority Board of Directors

From: Terry Erlewine, Basin Coordinator/Patty Poire, Planning Manager

Date: December 19, 2018

Subject: Accomplishments and Forward Work Plan

Accomplishments

- Finalized definitions of the Undesirable Results for the Kern basin with Managers & other GSAs
- Todd Groundwater workshop on the progress of the water budget modeling with managers and other GSAs
- Worked with KRGSA on a sub-agreement for the administration work on the Prop 1 Grant
- Worked with KGA managers on the 2019 Budget
- Attended the KRGSA workshop in Lamont
- Established a new Agricultural Stakeholder Survey to assist the members in outreach
- Closed and reimbursed members and other GSAs on the first peer review contract
- Worked with KRGSA on agreement for second phase of groundwater modeling
- Worked with all GSAs on agreement for second phase of peer review

Forward Work Plan

- Follow-up with Todd Groundwater to provide districts their water budgets based on draft run of CV2Sim – joint workshop set for January 7th, 2019
- In January 2019, change the Coordination Committee meeting slot to Stakeholder meeting
- Begin discussions on establishing minimum thresholds and safe yield
- Work with KRGSA to complete Lamont boundary adjustment to include in the KRGSA
- Continue work with interested stakeholders in non-districted areas
- Work with KGA members and KRGSA on boundary adjustments to accommodate non-districted landowners
- Work with KGA members and GSAs to provide future water supply information to provide for the second phase of water modeling requirements for the GSPs
- Meeting set with Oil Industry on January 9th to continue the discussion on the revised Basin Setting, the Basin Boundary denied and non-districted lands
- Work with individual KGA members on their development of Sustainable Management Criteria

130 N. Garden Street
Visalia, CA 93291-6362
Tel: (559) 636-1166
Fax: (559) 636-1177
www.ppeng.com

Memorandum

To:	Kern Groundwater Authority Board of Directors
From:	Trilby Barton, Public Outreach Coordinator, Provost & Pritchard Consulting Group
Subject:	Stakeholder Survey Results – Final Report
Date:	December 12, 2018

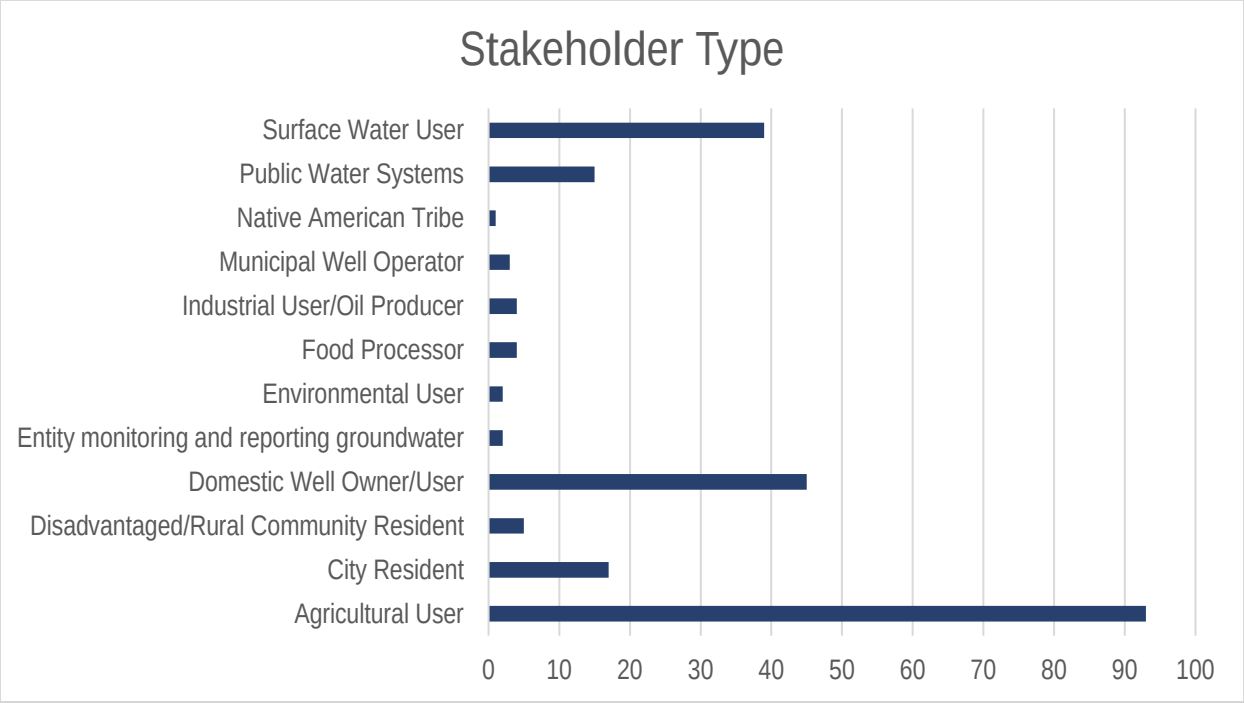
Hard copies and the link to the online version of the Kern Groundwater Authority's Stakeholder Survey (in both English and Spanish) were circulated throughout Kern County. For the final report, the data was sorted through, and duplicate entries were removed. **Kern Groundwater Authority received a total of 123 responses**.

Reponses were received from nearly all stakeholder types identified in the Kern Groundwater Authority's Communication & Engagement Plan. Most responses were received from agricultural users, with domestic well owner/users and surface water users, and city residents following.

Overall, stakeholders are primarily concerned about the economic impacts that SGMA will have on the agriculture and industrial groundwater users within the Kern Groundwater Authority boundaries.

This memo summarizes the data and comments received from the stakeholders who completed the survey.

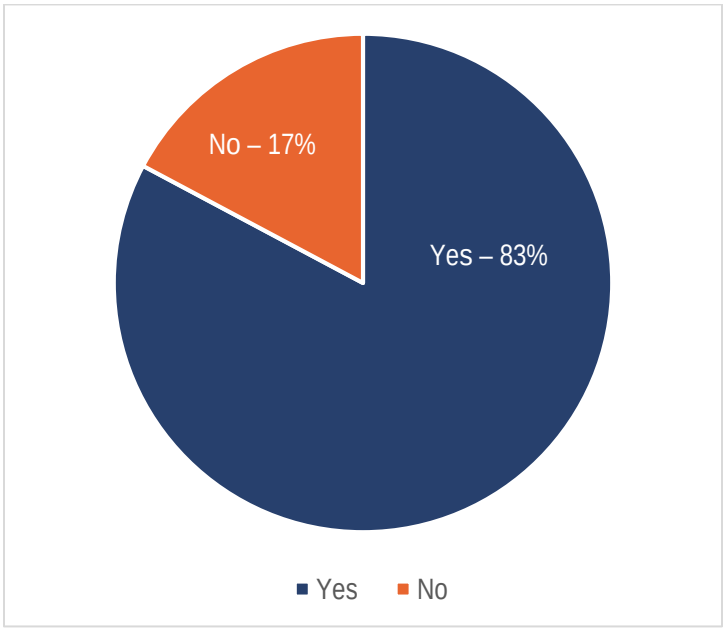
Final Report of Kern Groundwater Authority Stakeholder Survey Results



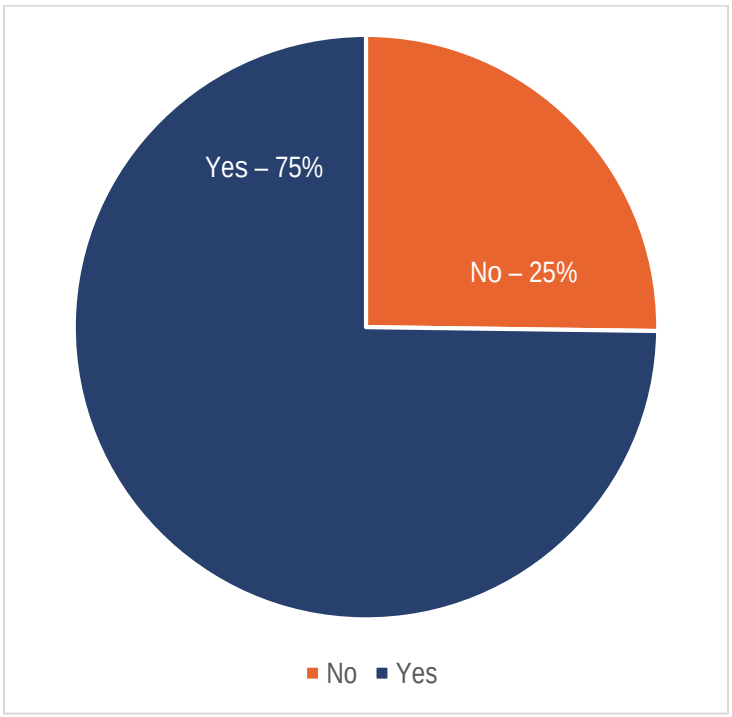
Stakeholder Type Summary:

Agricultural User	93	Domestic Well Owner/User	45
Municipal Well Operator	3	Public Water Systems	15
Local Land Use Planning Agency	0	Environmental User	2
Surface Water User	39	Native American Tribe	1
Disadvantaged/Rural Community Resident	5	City Resident	17
Food Processor	4	Industrial User/Oil Producer	4
Entity monitoring and reporting groundwater elevations in all or part of the groundwater basin			2

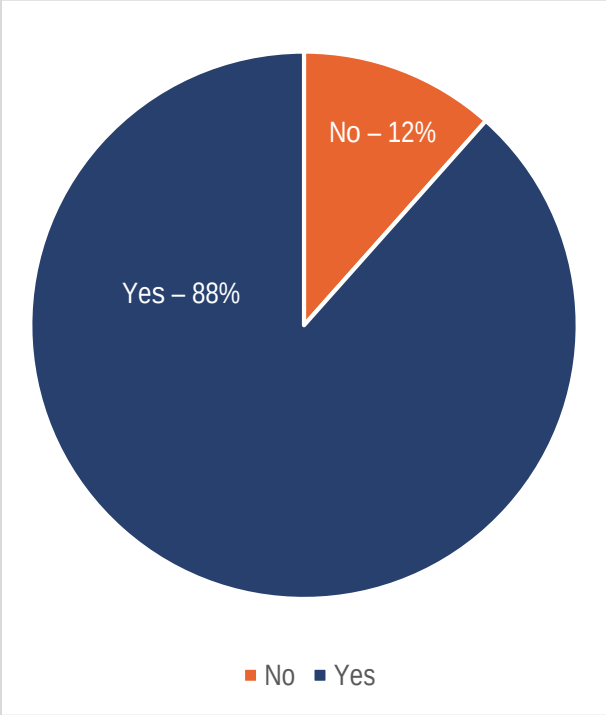
1. Are you familiar with Sustainable Groundwater Management Act (SGMA) regulations? *(122 responses)*



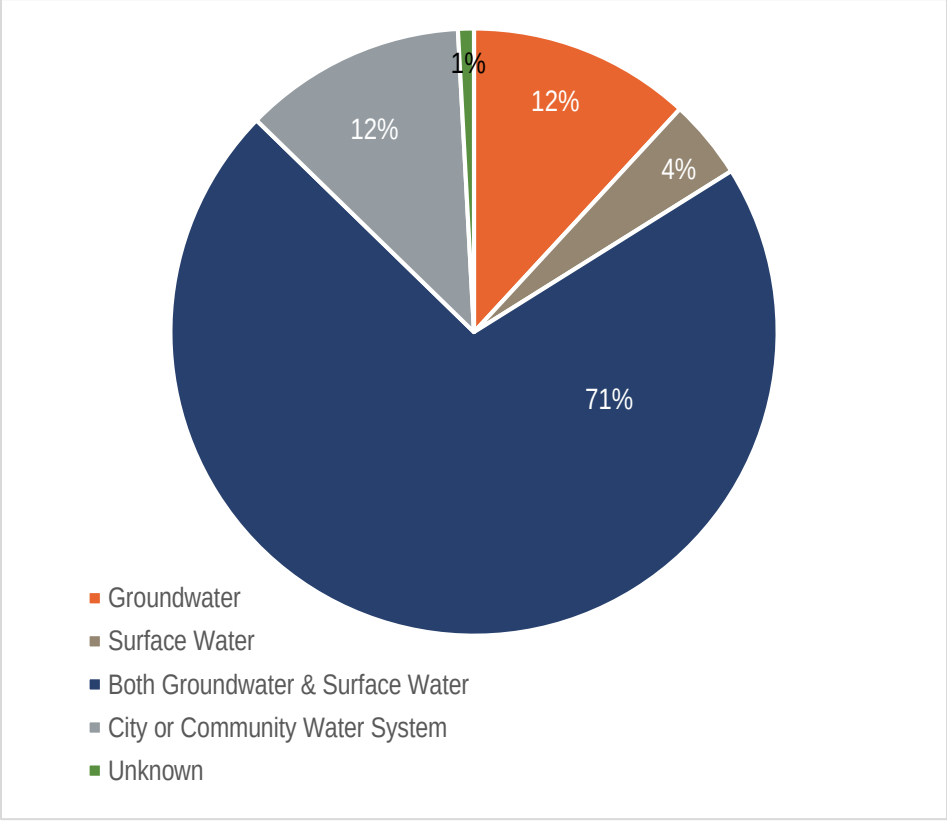
2. Are you currently working on or discussing groundwater management in this region? *(119 responses)*



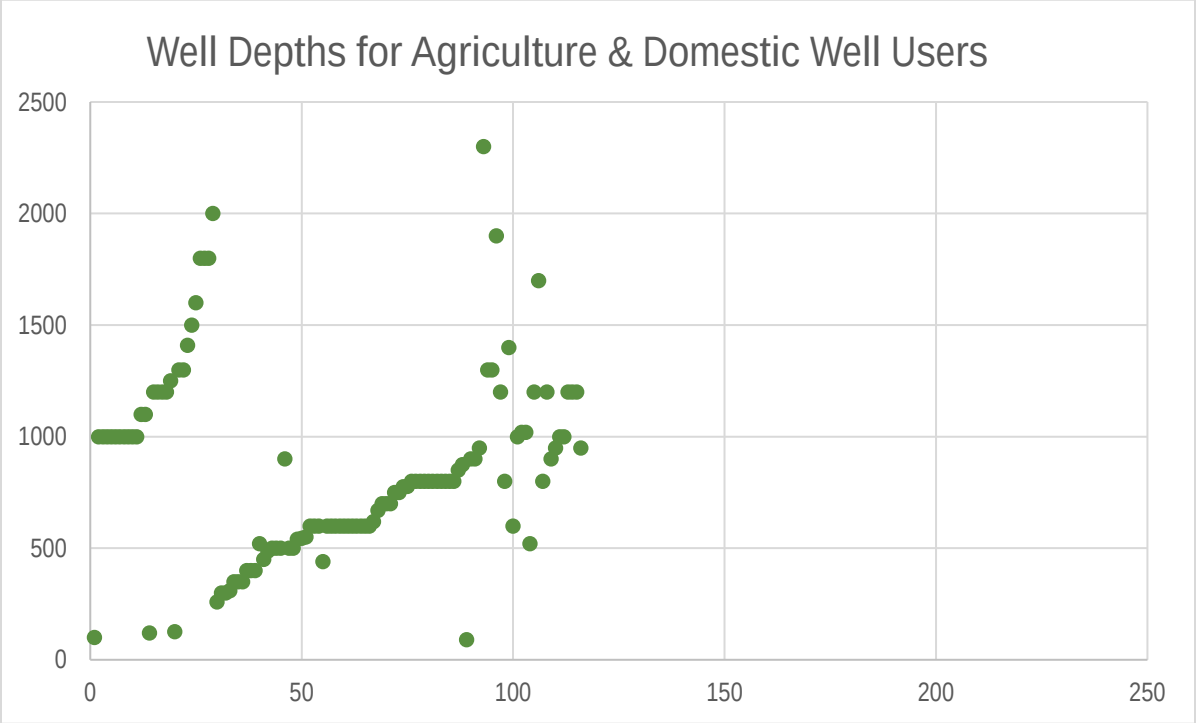
3. Do you own or manage/operate land in this region? *(121 responses)*



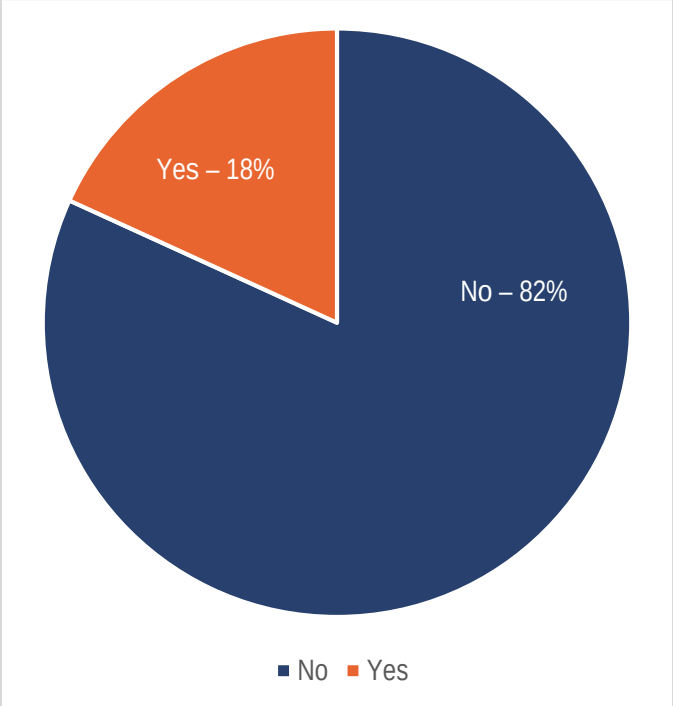
4. Where are you getting your water supply? *(118 responses)*



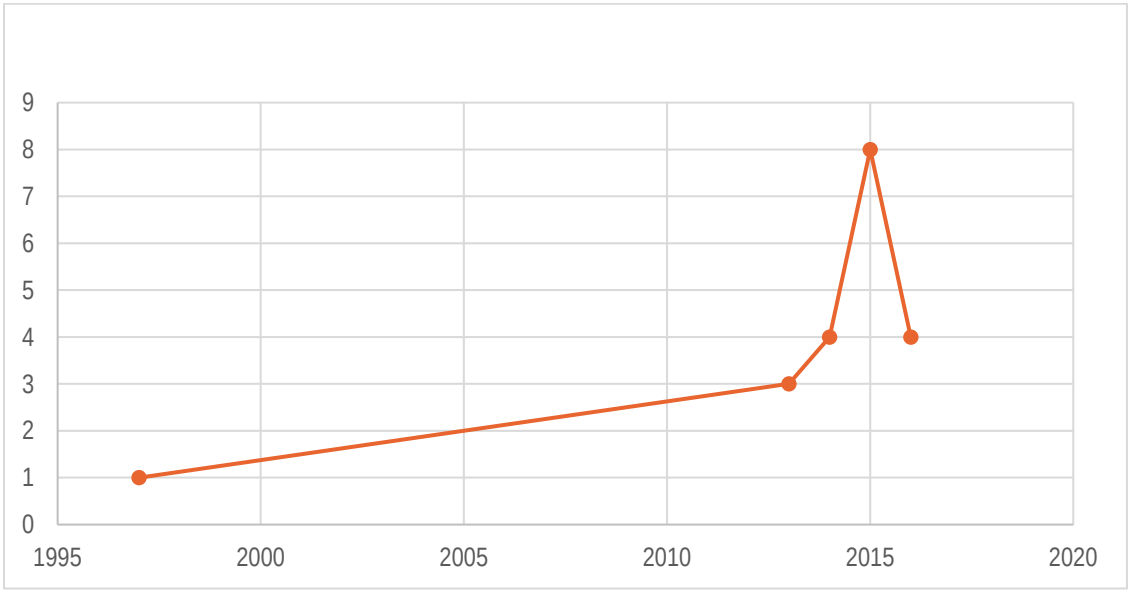
5. Agriculture & Domestic Well Users: What is your well(s) depth? *(92 responses)*



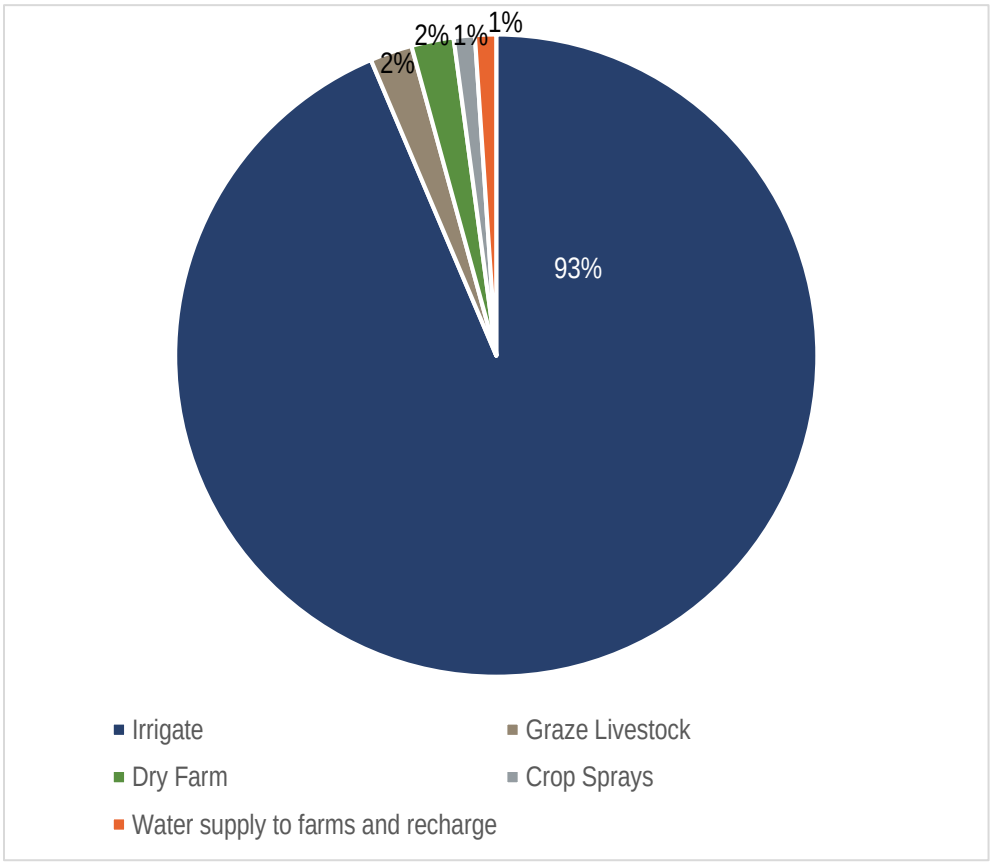
6. Agriculture & Domestic Well Users: Has your well(s) ever gone dry? *(99 responses)*



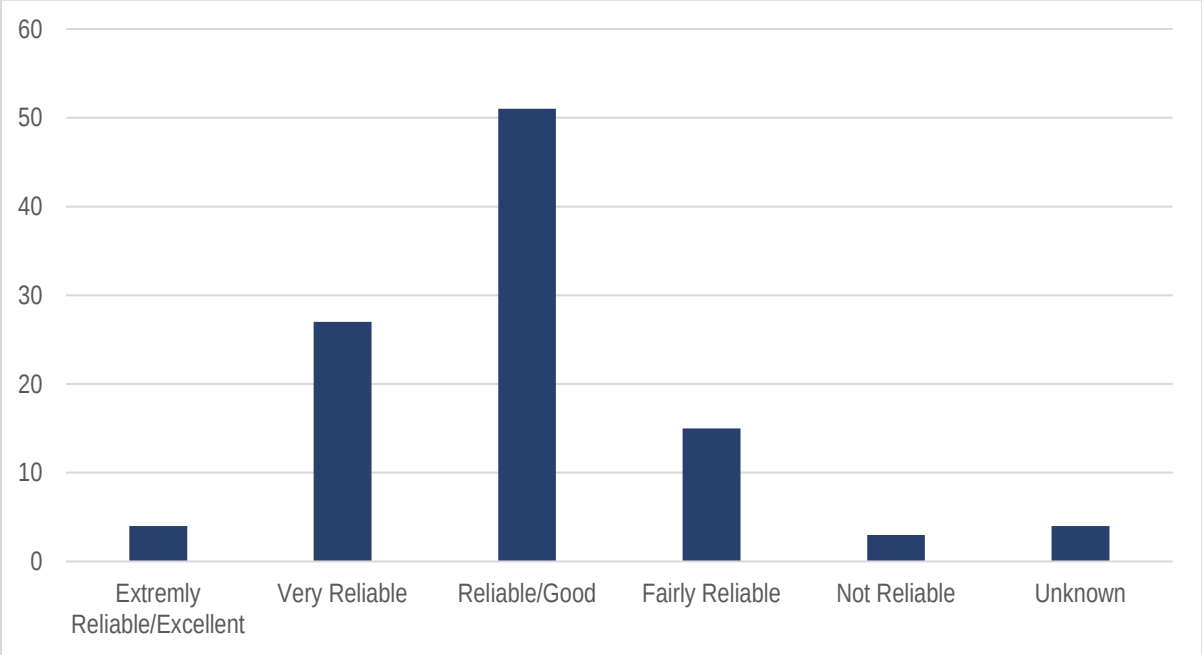
If yes, when? *(20 responses)*



7. If you are an Agricultural User, do you: *(94 responses)*



8. How reliable is your current groundwater supply? *(104 responses)*



Additional comments regarding groundwater reliability:

Currently receiving decent district water so not pumping too much, although it's early in our season

We rely on combination of surface water from AEWSD and Wheeler Ridge-Maricopa districts, and groundwater from wells on our property.

Supplied through district

Standing water level did not drop even during drought.

I've only used my well one time in 25 years

It has been reliable. Serves small residential units that do not have yards, one-room units, one-bedroom units, no washer hookup, serves retired and migrant workers.

It is reliable, however lower aquifer levels increase contamination levels for nitrates, which recently forced us to shut down a municipal well.

Part of Arvin-Edison. No wells on our property but have district wells.

Our water districts have historically done a good job providing water to our ranches. While our water levels have dropped, they are still providing adequate water.

Reliable because I've spent money on them and have maintained them

Reliable in conjunction with surface water

Reliable, but water quality is a bit poor on some wells.

Reliable, pump lowered 2016 in response to drought

Production has stayed steady for 10+ years

Well is for domestic use only, poor quality water but reliable

We feel our current groundwater supply is reliable at this time.

Water deep but well are troublesome

Water supply is not a problem it is basin standards not met.

Average 350 gallons

Unknown given the state's undelivered water

Water quality concerns are becoming more important each year for the current groundwater supply.

Fairly reliable as we invested significant capital in 2013 and 2014 to rehab most of our older wells.

Relatively reliable. Had to extend bowls on one well.

Sufficient for our current needs

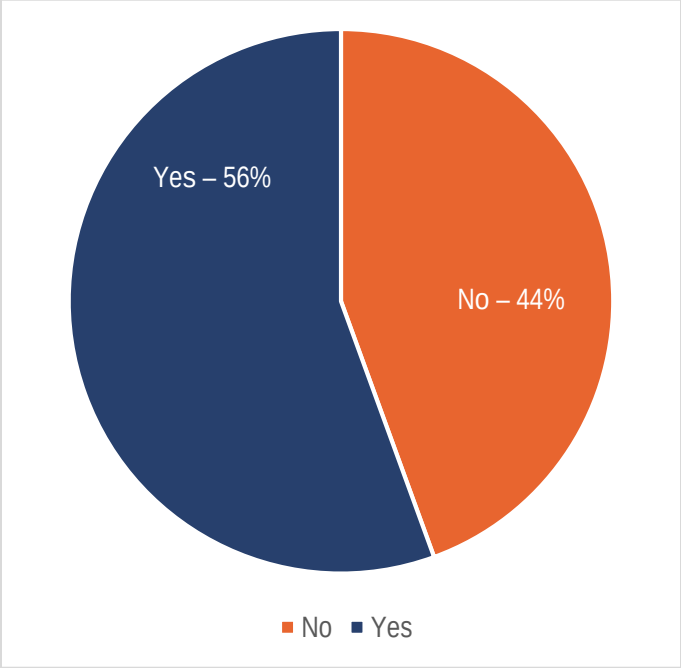
Sufficient for supplemental supply for surface water in most years

Variable. One well is reliable, another is iffy

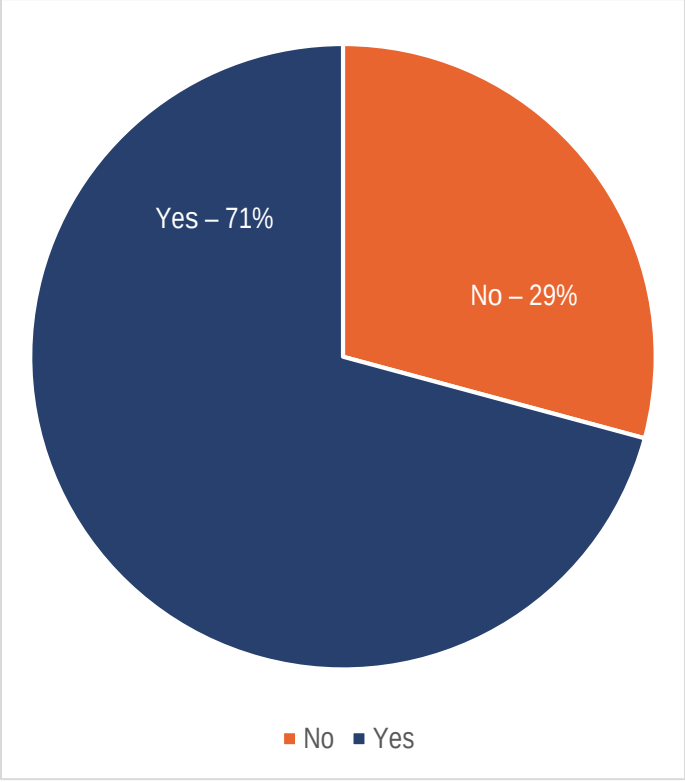
Volume is ok, quality becomes the issue.

Groundwater supply has decreased in quality over the last couple years rapidly.

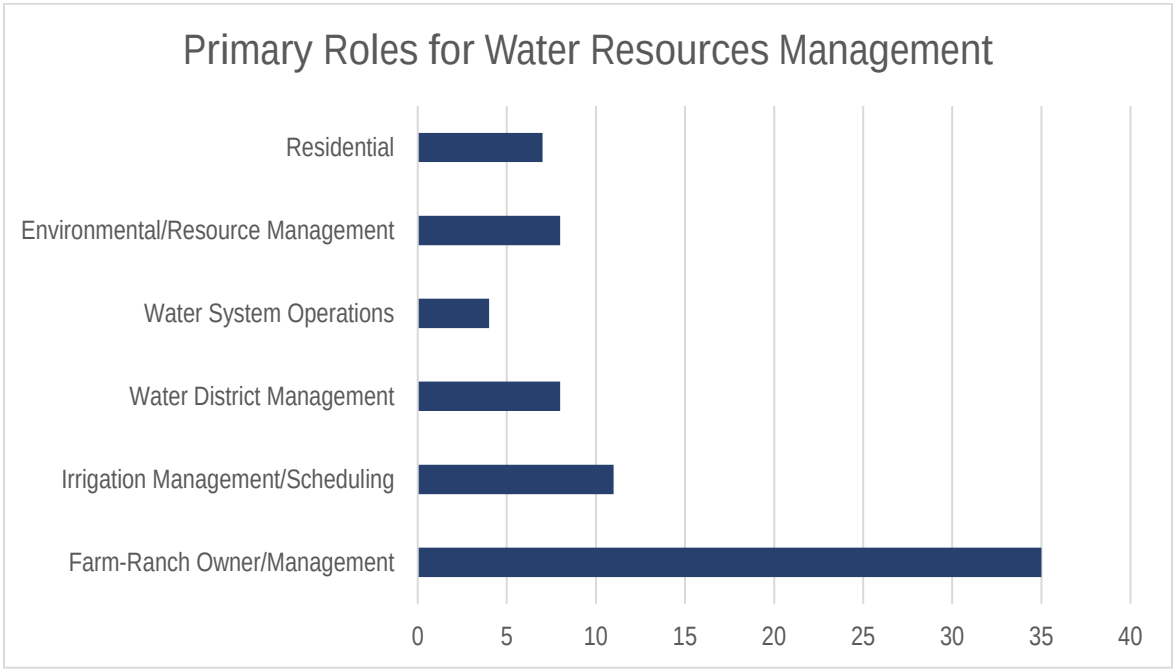
9. If you grow crops, do you use irrigation for frost protection? *(99 responses)*



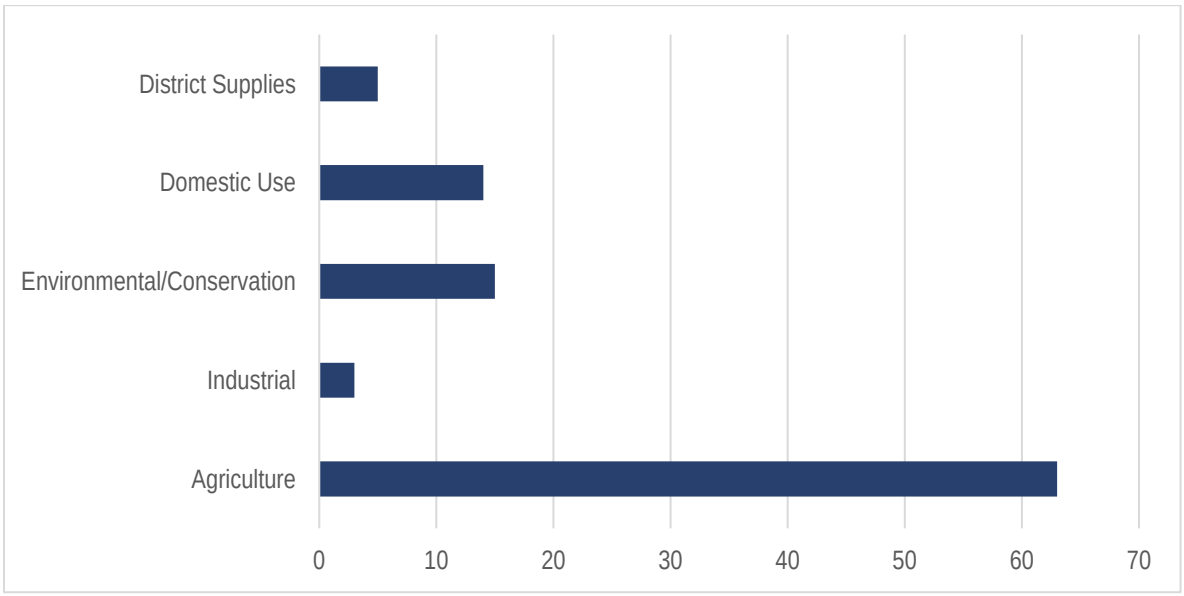
10. Do you manage water resources? *(113 responses)*



If yes, what is your role? *(73 responses)*



11. What is your primary interest in land or water resources management? *(100 responses)*



Additional comments regarding primary interests in land or water resources management:

Continued supply of quality & quantity to farm my property

Ensuring our farming operations continue to have access to irrigation water to maintain our crop production.

Farm Management and water for future generations.

Farming is my livelihood. Without water I can't do what I do.

Future availability for my ranch and all other farmers.

Future water availability. Restrictions on pumping groundwater.

Having enough water for personal use and for growing crops

Having enough water to farm our ground

I am a farm banker. SGMA will drastically affect my customers and my bank.

I have a strong interest in water resource management as we farm a large number of permanently planted acreage. We have invested a lot of money into the development of permanent crops and have made efforts to effectively manage our water use as efficiently as possible.

I want to grow crops. I want to continue to live on my farm using well water.

Ensuring adequate supply for our perennial crops

Long term sustainability of farmland (productive)

Maintaining local and personal control with the least outside regulation possible.

My hope is to be able to farm well into the future. If we don't become sustainable in the near future, we won't have a farming option in a couple years.

Producing crops and staying in business

Making sure we have enough water to grow our crops to feed the world

Sustainability and cost, sustainability for future food production, sustainability for water supplies in agriculture

Preparing information on SGMA for CEO and farm managers to make decisions on planting and long-term business planning

That I be able to continue to irrigate my crops

That water remains available for irrigation

To conserve & use less water to get the same production results

To conserve options for water usage when consider crops

To continue to farm without fallowing acreage

Without water land is invaluable. We employ 3,000 people out of a 21,000-person town. If we fallow our lands, we and every other company will not have enough work for the people.

to use water most economically

As an industrial user, need to ensure continued access to volume of groundwater necessary for operations

Keeping water available for my business

Survival of business

Conservation and efficiency of resources

Finite and necessary resource

For water resources to get used properly

Safety, health and environmental professional

My primary interest is managing both surface and groundwater as efficiently and effectively as possible while remaining cognizant of the value of the resources, both land and water.

Need help getting resources for management in using groundwater

Subsidence

Regulation and water

To know & understand the rules/regulations up and coming. Also, to connect with others that are interested in monitoring solutions as we are in this business

Use water wisely

compliance

Follow up with membership in water coalitions.

Continuing to secure, affordable, reliable and high-quality groundwater for the city of Wasco.

Domestic water for low income families

In a community that has a well for our only water source.

Making sure we have enough water to provide the residents of the city

Making sure small systems needs are met and not forgotten alongside larger water users.

Providing quality drinking water and notification to customers

Quality of water.

to do away with the environmentalists and let fish swim for themselves

To have adequate supply of surface and/or ground water to be able to grow and sustain my permanent crops.

To irrigate all the permanent crops, trees and vines with maximum efficiency in use of available water so that I do not run short of water and that trees do not suffer in any way.

We make our living by growing crops. We have land payments, taxes, high costs in well drilling that we must pay for. Therefore, we must be able to continue to farm so we continue to use our resources in a productive yet not wasteful manner.

We make our living growing crops and we need to be able to maintain our land for survival, therefore, we have always tried to manage our water to our best ability.

We need water to be able to farm in the central valley.

Small disadvantaged community with one well and 18 connections.

That we always have clean and enough water

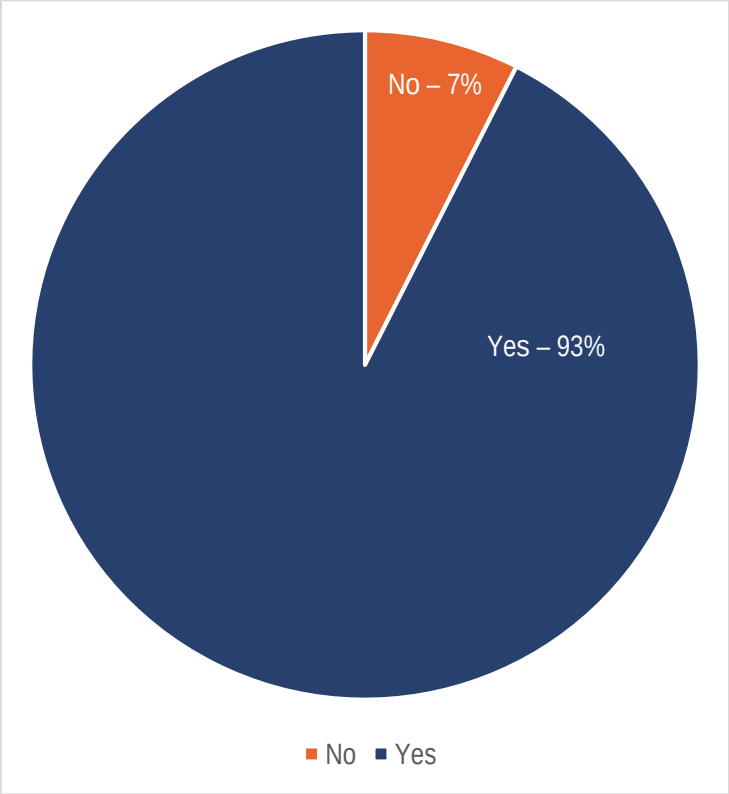
To continue uninterrupted municipal and farm use.

To have water when needed that is safe for drinking, cooking, etc.

Why do residents have to ration water (weekly watering schedules) while our groundwater is being pumped into the California Aqueduct and sent to LA or elsewhere?

United States

12. Do you have concerns about groundwater management? *(107 responses)*



If so, what are they? *(91 responses)*

That the ability to pump groundwater will be taken away.

Amounts we can pump and quality.

As a white zone owner, I am concerned about how we are going to reach sustainability and still make a living.

As the Public Works Director of a city that provides municipal water, I have a direct interest in groundwater. All of our water is supplied via groundwater wells.

Availability

Bureaucrats can raise my rates or cut me off from water.

Concern with endangered species act and how it's the reason for SGMA.

Concerned that private land owners will be burdened with record keeping and reporting to regulatory agencies.

Defining rainfall as groundwater so land can be taxed

Delivery system statewide

Fallowing ground and hurting the economy

Future groundwater pumping restrictions. Who is going to mandate groundwater pumping restrictions?

Government control

Government interference

Government involvement

Government regulation and interference

Government regulations and involvement

Granite Construction has several rural sites which depend exclusively on groundwater resources. Our concern is primarily that as SGMA rules are implemented our sites' operations are not materially impacted.

How much control will the government enforce upon growers? What practical experience do any of the

Need a great deal of underground water storage programs and a fair, effective water trading mechanism in the San Joaquin Valley basins.

Need more surface water and stop sending rainfall out to the Pacific Ocean.

No new water storage has been constructed in over 50 years, now we will be told how much we can pump. That would be a great idea and a must for the future IF we had enough water storage to farm for the year in tough years too! Legal issues are greatly reducing our surface water also. We make payments on our ground and need to farm every inch of it. We can't be cut short because we don't have water.

Over regulation

Over watering

Overpumping and the subsequent legislation. Over regulation.

Quality and supply

Quality of water

Recycling of wastewater for household and industrial users

Running out of water and creating an enforcement where smaller growers can't compete

Scientifically-based determination of sustainable yield of basin/sub-basin & management areas

SGMA limitations

SGMA poses significant challenges, and the uncertainty around how it will be implemented is concerning

SGMA, Sacramento politicians, Water Quality Control Board, DWR, oil industry contamination, etc.

Shortage

Someone will tell me I cannot pump water for my permanent crops

Subsidence in Tulare County reducing Friant Kern Canal capacity

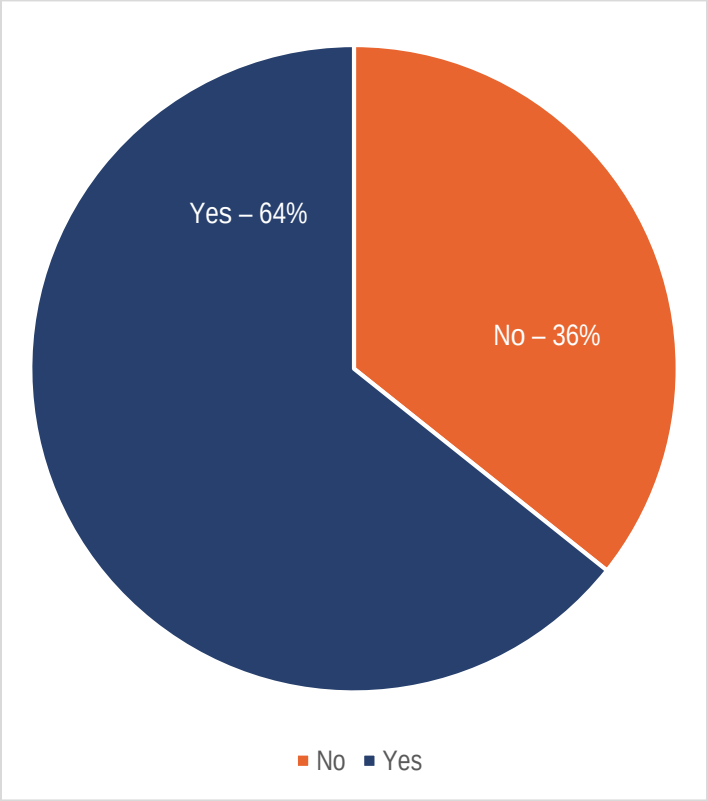
Sustainability

Sustainability - keeping our groundwater within our basin

government agencies/employees and/or mandator's have in the day to day irrigation practices, field experience?	
How much will government control cost us in money and loss of property rights?	That assumptions made regarding subsidence are in alignment with modeling being done by the subsidence team at DWR.
How will it be regulated? Who is appointed to the committee that ultimately will decide how water will be allocated?	That in dry years when there is inadequate surface water, we won't be able to draw enough groundwater to grow and/or sustain my permanent crops.
I am concerned that in the future I will be restricted in my use of groundwater during periods of drought. I do not consider groundwater as a primary source of water but as a reserve to be used in case of drought to augment restricted surface water availability.	That significant farm land acreage in my region will be taken out of production.
I am concerned that SGMA will become a method for taxation without representation or services.	That the state doesn't come in too heavy-handed, and that they allow us to work into SGMA over time.
I am concerned with our ability to continue to farm the permanent acreage we have developed. I am concerned that a GSP might lack a certain level of flexibility to allow for the transfer of pumping credits across the County or not allow for a proper phase in period that would allow a market to develop for water and/or water credits.	That the underground water basin is sufficient for Kern and not all used for Los Angeles
I fear the overdraft is too big of a problem in the Valley. Subsidence is another major concern.	That the water is protected from any type of contamination
I feel the average person does not feel the importance of farming and would prefer to take away our water and sell it to places like Los Angeles. We seem to already have allowed districts to drill wells and pump water out from underneath us to sell out of our area.	The irrigation canal that has replenished water levels for 100 years has been dry the last several years.
I hope within SGMA we are flexible in amounts we can pump to survive through the dry years	The limits will be put on small domestic users that may not be large enough to be heard.
I think evapotranspiration satellite technology will help balance our water use with taxation to the land user for overuse than trying to meter and police all our wells.	The prioritization of surface water allocation between the public, agriculture and the environment. Need more surface water deliveries to correct groundwater overdraft. Any reduction in irrigable acres needs to allow for viable economic adjustment over an extended timeframe.
I understand the reasoning behind SGMA, and sustainability is needed, but it needs to be combined with advocacy for more surface water. It was lack of surface water that caused the issues we face: if our surface water supply was more reliable, agriculture would not need to use as much groundwater.	To know what the water level is and how much water we can use and for how long
I understand we must manage our groundwater, I do not understand why some districts have been able to pump water out from underneath us and send it to LA. Also growers that have been allowed to plant on the westside where there has never been ag, only to help drain our groundwater. Those of us that have paid high dollars for ground that has both ground and surface water are now being punished.	To make sure water is available to meet demands of farming
If we can actually get a plan in action in time	Water usage is low for almonds
If we do not increase the supply of surface water by raising the level of existing reservoirs and making	We already do a good job with conservation in agriculture. Any more reduction in groundwater

more reservoirs to catch every drop of rain water, no matter how many restrictions we put on groundwater we cannot solve the problem. The only solution to solve the groundwater problem is to make more surface water available.	supply will have a direct correlation to a reduction of jobs. It would decimate many communities throughout the valley.
I'm afraid the government will over regulate and make it impossible to farm efficiently.	We are approaching the deadline for monitoring each location. Self Help will be helping us. Our concern is always the cost. My second concern is that it requires a great deal of time for small mutual water companies to comply with all the regulations.
Individuals vs. subbasin	We must manage water to survive.
Insufficient supply for our perennial crops due to extraction restrictions/limitations and/or restricted surface water.	We need more surface water.
Is SGMA going to limit our availability to access groundwater as a source of agriculture irrigation water? If it does, how will we obtain water in order to maintain our permanent crops of almonds and pistachios?	We need reliable surface water restored to our area so that groundwater recharge can offset groundwater pumping.
It appears that state water management problems are landing squarely on the shoulders of farming. This is going to put most small farmers out of business while corporate farming and municipalities thrive. This is a big mistake.	We paid for our well and shouldn't have to show how we use our water to grow our crops. We are all drip & fan jets, so yes we save and do not waste water
Lack of flexibility upon GSP implementation	What costs will be involved to comply? What limits will there be and on what acreage? Metering and monitoring, reporting regulations.
Long term quantity and quality	What will be the end result in restrictions and when?
Long term sustainable use of groundwater	Will there be a prioritization? Others vs. food? Who decides my future? Will I have enough water to grow my crops? If my surface water is curtailed outside of my control, will I be able to make up for that short fall by using my well as needed? Will there be a water market developed to purchase extra water?
Making sure that the rights of property owners are not over looked to solve this issue.	Will we be stopped from pumping our agricultural wells when our permanent crops need water?
Might run out of water on our domestic well and we don't have another source	Will we get enough water?
Monitor the oil wells because they can pollute the entire underground water system.	Will we have water? What regulatory issues? Loss of production of farm land
More government regulations	Yes, limiting groundwater consumption will limit the acres that can be farmed on well water as a primary source. Surface water quality trends are also in a decline and a higher reliance on low quality water gives me pause.
My concern with SGMA is the fact that our groundwater pumping will be limited in conjunction with not getting full allocation of surface water. I understand overdrafting has caused many issues like poor water quality, land subsidence and a water table that continues to drop. But if our groundwater pumping is cut and our surface water is cut, what are we supposed to do with our investment into permanent crops.	

13. Do you have requests or recommendations regarding groundwater management? *(98 responses)*



If so, what are they? *(65 responses)*

Allow farmers more input. We aren't interested in depleting our resources.

Allow more imported water into our region from the north.

An even playing field for all participants

Banking, trades, surface water exchanges, all would help implementation by giving farmers book to adapt

Better communication of GSP development/GSA communication with individual growers

Bring in more surface water to make up for the pending cutbacks on pumping.

Build storage so we can save groundwater!!!

continue communication

Delete land from the Kern water basin that does not have any useable underground water.

Depending on SGMA implementation specifics, we need the ability to bank and trade water as much as possible.

Develop a method of transferring rights to groundwater (i.e. so-called pumping credits). Before

Make it cost effective.

Make sure growers have access to enough groundwater to grow their crops.

More groundwater banking, restore SWP water deliveries to 100%/

More proactive groundwater storage programs within each GSA, including any assessments required for water acquisition and infrastructure.

More water storage reservoirs

None with SWID (who sent us this survey), but many with Semitropic Water District

On-farm recharge is vital to long-term sustainability.

Please continue providing information on SGMA and how it will affect day-to-day farmers who may not be as inclined to "self-education" as most.

Please help local farmers with water or to build new wells.

Possibly opening up a resource or management division for small water mutuals.

Quality of water

limiting extractions outright, attempt to achieve sustainability through the means (i.e. fallowing program, tax on excess extraction, etc.), recharge programs

Develop a water market! Allow water transfers among other water users, farmers. Require the environmentalists to play their part.

Do not constrain groundwater availability to ag users.

Educated, practical, honest people making decisions.

Fixing the Friant so we can receive surface water

Flexibility

Focus on maximum flexibility that will still obtain groundwater equilibrium. GSA should help (where possible) to establish a free market where water and/or water credits can trade among land owners.

Get the state water infrastructure brought up to present day needs and standards.

How will the city manage groundwater so residential usage is managed, not just taxed? Crops before grass.

I admire the GSA's efforts and urge the GSA to continue involving the diverse set of stakeholders that have been engaged so far.

If the state of California wishes to regulate groundwater pumping, then the state and federal systems should guarantee any shortage in the form of surface water deliveries.

Implement groundwater banking credits, ensure areas not within irrigation districts pick up slack as they have not been paying into groundwater banking programs, look at ways to implement wastewater reuse from Bakersfield if possible.

Import more surface water.

Increase surface flows so we are less dependent on groundwater.

Increase surface water flows to reduce dependency on groundwater.

Rely on water districts

Request to be kept in the loop on any issues that may affect the City of Wasco's water supply.

Rural operations and construction projects often only have access to groundwater for operations/dust suppression. We are interested in flexibility of points of extraction (for construction purposes) and insuring that evaluations of current usage include both our construction and mining operations (this is often overlooked in basin usage evaluation as we are neither an agricultural nor residential/municipal service user).

We need flexibility in dry years.

Stop watering the fish.

That we as agricultural water users do our best to utilize surface water but be allowed to pump enough groundwater to grow our crops. I would suggest allowing a certain amount of groundwater to be used annually but averaging it out over a five-year period allow for drier and wetter years.

When we get plenty of surface water, no one would like to pump groundwater by spending so much money in drilling deep wells and electric motors.

The small domestic users keep their water rights.

There should be an equal conservative effort to water storage and infrastructure as regulating SGMA. We can limit pumping but let's figure out a way to capture water throughout the state and increase our efficiency with surface water.

To maintain the right to pump or sell the groundwater now and in the future.

Please put farming as a top priority for water use in the state of California.

To work together to create a plan for a sustainable aquifer

Vote for right-minded politicians, state and federal

We growers conserve as much water as possible. I see the city of Bakersfield wasting water every day – seven days a week, 365 days a year, and nothing has changed since SGMA has come about. What more restrictions will be placed on all farmers? What restrictions will be placed on all non-farm users? Who is exempt? The prison's "CDCR" (California Department of Corrections) wastes millions of gallons

of water per year. Who will address this issue? I am a prior correctional officer, I saw the waste firsthand."

Involve the small communities in decisions

We need to be able to go into this cautiously and not make big cuts at once.

We need to stop allowing our groundwater to leave our county. If its pumped here, it should stay here.

Keep us informed in a timely manner.

We should not over-react and limit that amount of pumping we do too drastically. It should be done slowly and monitored.

We want to see resource management at the basin-level with uniform and consistent methodologies (e.g., accounting, analysis etc.) Sufficient stakeholder engagement and facilitation are of concern as well.

Leave as is, just monitor.

Leave me alone. My use of water does not affect anyone in the San Joaquin Basin.

What methods can we use to control groundwater?

Less government involvement and flawed environmental agendas

Whatever basin plan is approved, the adjustments to land and water use relationships are implemented over the longest period of time allowed by law.

Let us know in advance if you will be stopping us from using our wells.

While M&I and ag need to work together, it can't turn into a situation where ag just gets the leftovers that environmental and M&I don't want.

14. Any other information the Kern Groundwater Authority should be aware of or take into consideration while developing the Groundwater Sustainability Plan? *(41 responses)*

Allow groundwater use averaging over a five-year span.

Quality of water

Board meetings get too in the weeds. Need a place for higher level policy discussion.

Should be district-based not basin-based

Businesses and livelihoods are at stake. No one is going to be regulated out of business without a fight.

Small rural county communities need access to potable water - much of the water is naturally or chemically contaminated. Large cities deal with the problem better due to financial ability. Small systems cannot.

California needs more water storage like dams to help with water management

Somehow consider the sizeable investment that growers (perennial crops, especially) have in their crops and development of infrastructure (i.e. irrigation and trellising), and their desire (need) to preserve the value of this investment, such that as many options as possible will need to be explored to accomplish this.

Conservation should be for all.

Stop the west side (that has never had water) from pumping water out from underneath us and sending it to LA and letting the two largest growers in the area from monopolizing it. Stop Semitropic Water District from drilling more wells just to send the water out of Kern County.

Continue to provide as much feedback as possible with regards to possible direction of GSP so that we are able to better plan for future knowing how/if a market for water will be developed.

Thank you in advance for you work. You are doing a great service for our industry. It does not go unnoticed.

Do what you can to let public know it's the environmentalists that stop the pumps that have created the current groundwater problems. Work to change the regulations and let the fish fend for themselves.

That producing food products are crucial to people of our state and country, whether they realize it or not, and should be protected the best we can.

Don’t have us do unnecessary paperwork. Some of us are just small entities and just want to make a living.

Groundwater should remain a reserve to be used in periods of restricted water availability from the CVP and SWP.

Groundwater pumping should be phased in very slowly (20-50 years): 1) To better monitor groundwater levels and replenishment over time; 2) To better understand where replenishment flows originate for each basin; 3) To allow farmers time to rotate out of permanent crops; 4) To allow water markets and pumping right markets to be formed within basins or water districts.

Groundwater shall not be a marketable resource to be exported or sold across county lines.

I am trying to understand current hydrological inflows and outflows of the area, so not at this point although this will change soon.

I feel that every water user in the state should submit a water management plan just like ag. If you use water in your home and/or business, you should be required to fill out a report just like the state is asking of us (farmers). I feel this is a one-sided implementation of SGMA, I would also like to see the restrictions placed on all consumers be the same across the board. If Sacramento is serious about a fix, this is a fair and impartial way of doing it. I doubt any of this will be taken seriously and implemented across the board, but I remain hopeful

Integration of management areas within basin those with surface vs those dependent on groundwater only.

Is land that is converted from ag to homes helpful for the district?

Much land that has no useable groundwater and has no effect on the basin has been included in the basin boundary.

My groundwater level has not changed substantially in many years.

No, if the action suggested above is taken, we do not need anything else to do at present we are not hitting the target. We are only beating around the bush, or I can say we are putting the cart before the horse.

Our situation took a long time to develop and will take commitment, patience and time to resolve.

Permanent crops are harder to lose than fallowing row crops or alfalfa!

That no restrictions should be put on pumping groundwater from those orchards and vineyards which do not get any district irrigation water, otherwise those orchards and vineyards will die, and part of California will become desert. That will be a big state and national loss.

The loss of jobs, complete industries, the tax base from the working class, housing developments; consumption by more homes means less water for ag.

The required amount of water to farm different crops should not be determined by the GSA or the districts. Farmers/users should have that right.

The runoff from rainfall on the West side of Kern County does not get into the basin groundwater supply. The groundwater that comes from fractured shale formations does not affect the water supply or quality in the basin.

Use common sense, not agenda-driven emotions.

We have several people in our GSA continuing to use groundwater and not surface water. This must be addressed.

We look to be active in developing viable on-farm recharge.

We need transitional pumping.

When I shower, my skin stings, this hasn't always been true. I'm concerned that the water is irritating my skin and making my psoriasis worse.

With so many different standing water depths across the country don't take a one-size fits all.

Without the help from Self Help Enterprises, we would be out of water and with no hope since it is a disadvantaged community. Elizabeth B. has been a wonderful helper.

Yes, now will small growers be able to meet the need of the crop if limits are mandated on how much water we can pump? Large growers and farmers can leave part of their land fallow and use that water on another area of their ranch to meet their water needs.

Yes, start campaigning to do away with saving the delta smelt.

KERN GROUNDWATER AUTHORITY

Agriculture Stakeholder Survey

Please return completed surveys to the Kern Groundwater Authority by emailing tbarton@ppeng.com, fax to (661) 479-7172, or mail to Kern Groundwater Authority, 1800 30th Street, Suite 280, Bakersfield, CA 93301.

Stakeholder Surveys may also be completed online by visiting www.kerngwa.com.

Date: _____

Note: Please complete your name and contact information if you'd like to be added to the GSA's email and mailing list for future updates and information regarding Sustainable Groundwater Management Act (SGMA) and the Kern Groundwater Authority.

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

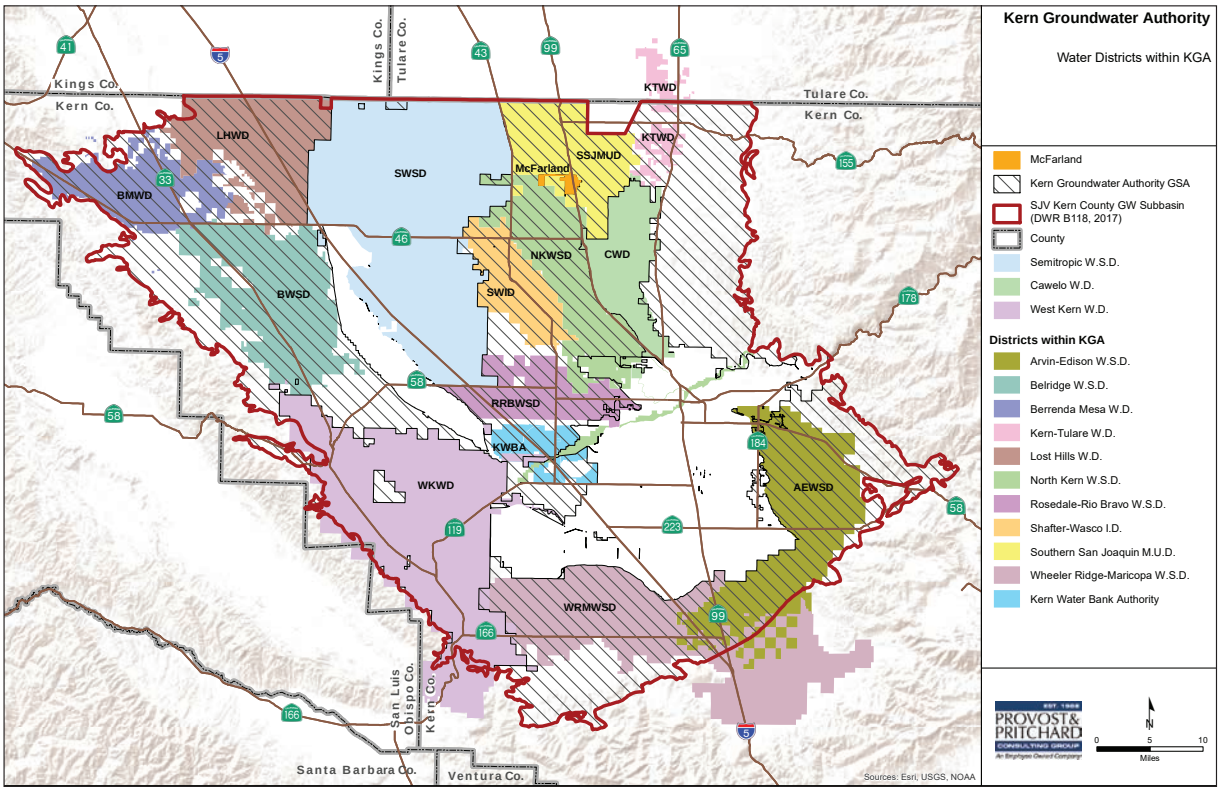
Email: _____ Telephone: _____

APN(s) for lands farmed/managed: _____

_____

1. We have included a map of the Kern Groundwater Authority irrigation and water districts. Please indicate below which districts in which you have land parcels. *Check all that apply.*

- ☐ Arvin Community Services District (ACSD)
- ☐ Arvin-Edison Water Storage District (AEWSD)
- ☐ Cawelo Water District (CWD)
- ☐ City of Shafter
- ☐ County of Kern
- ☐ Kern County Water Agency (KCWA)
- ☐ Kern-Tulare Water District (KTWD)
- ☐ Kern Water Bank Authority (KWBA)
- ☐ North Kern Water Storage District (NKWSD)
- ☐ Rosedale-Rio Bravo Water Storage District (RRBWSD)
- ☐ Semitropic Water Storage District (SWSD)
- ☐ Shafter-Wasco Irrigation District (SWID)
- ☐ Southern San Joaquin Municipal Utility District (SSJMUD)
- ☐ Tejon-Castaic Water District (TCWD)
- ☐ West Kern Water District (WKWD)
- ☐ Westside District Water Authority (WDWA)
- ☐ Wheeler Ridge-Maricopa Water Storage District (WRMWSD)



2. How many total acres do you farm (all land owned, leased and/or managed)?: _____

3. In a typical year, how much of the following crops, animals or land do you manage/own?

Crop or Land Type	Acres Managed or Owned
Fruit trees	
Nut trees	
Row crops	
Seed crops	
Vegetables	
Grain	
Grapes	

Crop or Land Type	Acres Managed or Owned
Hay/alfalfa	
Livestock on pasture/rangeland	
Dairy *(total head)*	
Food Processor/Production	
Other land use *(please indicate)*:	

4. Which of the following sources of water and management do you typically utilize under the following conditions?

Water Source/Management	Dry Years	Normal Years	Wet Years
Irrigation through surface water only			
Irrigation through groundwater only			
Irrigation through a mixture of surface and groundwater			
Wastewater land applied			
No irrigation			

5. If you do use irrigation, which of the following methods of delivery do you use? *Check all that apply.*

☐ Furrow/flood ☐ Sprinklers ☐ Drip ☐ Microsprinkler ☐ Center pivot

☐ Other *(please indicate)*: _____

6. In response to water scarcity, please indicate if you currently use the following practices and your likelihood to use the following practices in the future.

Practice	Currently Use	Future Use					
		Very Unlikely	Unlikely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely
Drill more wells							
Restore existing wells							
Make existing wells deeper							
Pump more groundwater than previous years							
Drip irrigation							
Water monitoring technology							
Fallow fields							
Soil moisture sensors							
Change to a less water intensive crop							
Reduce livestock stocking rates							
Leaf sampling to measure plant-water status							
Purchase additional water							
Purchase crop insurance							
Other:							

7. Please rate the level of importance these potential groundwater conditions are to you *(with "1" being the most concerning, 5 being the least concerning)*. If you have additional concerns, please indicate them in the "Other" category.

Groundwater Condition	Rating of Concern
Lowering of groundwater levels	
Reduction in groundwater storage	
Water quality degradation	
Local subsidence	
Depletions of surface water	
Other *(your opinion)*:	
Other *(your opinion)*:	

8. The following are a list of management options that have been used on the West Coast for water management. Please provide your level of preference for these types of management:

Management Option	Strongly Against	Against	Somewhat Against	Somewhat Support	Support	Strongly Support	Not Familiar
Individual recharge credits (i.e. winter flooding)							
Water metering							
Water trading through markets							
Public program highlighting farmers implementing water saving practices							
Farmer adoption of water management practices							
District investment in conjunctive use infrastructure (i.e. water storage)							
Groundwater replenishment fees							
Fixed quota for water pumping allocated to each farmer							
Incentives for water saving practices							
Moratorium on drilling new wells							
Permits for drilling new wells							
Other *(your opinion)*:							
Other *(your opinion)*:							

9. If groundwater monitoring is required in the future, which of the following monitoring methods would you prefer?

Method of Determining Water Allocation	Strongly Not Preferred	Not Preferred	Somewhat Not Preferred	Somewhat Preferred	Preferred	Strongly Preferred
Well metering						
Use satellite estimates and ground truth						
Use standard crop water requirement indexes						

10. Should disputes arise over SGMA implementation, what is your preferred means of reconciliation?

Dispute Option	Strongly Not Preferred	Not Preferred	Somewhat Not Preferred	Somewhat Preferred	Preferred	Strongly Preferred
State Water Resources Control Board						
Groundwater Sustainability Agency						
County Board of Supervisors						
Superior Court System						
Arbitration						
Other:						

11. If you have any additional information or feedback regarding SGMA, water management or farming in Kern County that should be taken into consideration while developing the Groundwater Sustainability Plan (GSP), please provide the information below:

Please return completed surveys to the Kern Groundwater Authority by emailing tbarton@ppeng.com, fax to (661) 479-7172, or mail to Kern Groundwater Authority, 1800 30th Street, Suite 280, Bakersfield, CA 93301.

Stakeholder Surveys may also be completed online by visiting www.kerngwa.com.

Lorelei H. Oviatt, AICP, Director
2700 "M" Street, Suite 100
Bakersfield, CA 93301-2323
Phone: (661) 862-8600
Fax: (661) 862-8601 TTY Relay 1-800-735-2929
Email: planning@kerncounty.com
Web Address: http://kernplanning.com/

PLANNING AND NATURAL RESOURCES DEPARTMENT

Planning
Community Development
Administrative Operations

NOTICE OF PREPARATION

DATE: October 25, 2018

TO: See Attached Mailing List

FROM: Kern County Planning and Natural Resources Department
Attn: Carlos E. Rojas
2700 "M" Street, Suite 100
Bakersfield, CA 93301
(661) 862-5015; CRojas@kerncounty.com

SUBJECT: NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT

The Kern County Planning and Natural Resources Department as Lead Agency pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15052) has required that an Environmental Impact Report (EIR) pursuant to CEQA Guidelines Section 15161 be prepared for the project identified below. The Planning and Natural Resources Department solicits the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval of projects.

Due to the limits mandated by State law, your response must be received by **November 26, 2018 at 5:00 pm.** In addition, comments can be submitted at a **scoping meeting** that will be held at the Kern County Planning and Natural Resources Department on **November 14, 2018, at 1:30 pm** at the address shown above.

PROJECT TITLE: EIR 01-18; South Kern Industrial Center Composting Facility by Synagro Technologies, Inc. CUP No. 2 Mod, Map 158 (PP18125).

PROJECT LOCATION: The project site is located at 2653 Santiago Road, approximately 7 miles west of Interstate 5, at South Lake Road, and approximately 7 miles east of the City of Taft, in southern Kern County on Assessor's Parcel Number (APN) 220-110-70. The site is located in Section 24 of Township 32 South, Range 25 East of the Mount Diablo Base and Meridian (MDB&M).

PROJECT DESCRIPTION: Implementation of the project as proposed would require: a) modification of the existing Conditional Use Permit (CUP) No. 2, Map No. 158 to include modifications to current operations. The project proponent is proposing the following modifications to current operations: (1) accept additional feedstock as well as digestate in response to AB 1826, SB 1383, CalRecycle, and California State Water Resources Control Board; (2) install new equipment to be used during pre-processing and post composting operations including but not limited to grinders, electrical screens, etc.; (3) increase compost pile heights from 16 feet to 20 feet; (4) increase storage time of finished compost product from 7 to 180 days.

Document can be viewed online at: https://kernplanning.com/planning/notices-of-preparation/

Signature: _____

Name: Carlos E. Rojas, Planner III

Patricia Poire

From: Terry Erlewine <TErlewine@ppeng.com>
Sent: Tuesday, August 28, 2018 7:58 AM
To: Patricia Poire
Subject: FW: Including GDEs in your GSP

Letter to include in correspondence section of Board package.

From: Leslie Jordan <ljordan@TNC.ORG>
Sent: Monday, August 27, 2018 4:35 PM
To: Terry Erlewine <TErlewine@ppeng.com>
Subject: Including GDEs in your GSP

The Nature Conservancy
Protecting nature. Preserving life.™

October 27, 2018

Dear Mr. Erlewine,

As you move forward in developing your groundwater sustainability plans (GSPs), we hope that you are using the Groundwater Resource Hub as a resource. The Hub provides information and tools that can help you comply with SGMA requirements to identify and address groundwater dependent ecosystems (GDEs).

The Conservancy worked with the water community to create this time and money saving resource, which includes a GDE Guidance Document for GSPs to help GSAs create a localized, systematic and defensible framework for including GDEs in GSPs.

SGMA requires that GDEs be identified (23 CCR §354.16(g)) and addressed as a beneficial use (see, DWR Sustainable Management Criteria Best Management Practices, p. 12). The following SGMA provisions for GDEs are found in the California Water Code:

> §10723.2 Consideration of All Interests of All Beneficial Uses and Users of Groundwater
> The groundwater sustainability agency shall consider the interests of all beneficial uses and users of groundwater, as well as those responsible for implementing groundwater sustainability plans. These interests include, but are not limited to, all the following:
> ...(e) Environmental users of groundwater.
>
> §10727.2 Required Plan Elements
> A groundwater sustainability plan shall include all of the following:
> ...(b)(2) A description of how the plan helps meet each objective and how each objective is intended to achieve the sustainability goal for the basin for the long-term beneficial uses of groundwater.
>
> §10727.4 Additional Plan Elements In addition to the requirements of Section
>
> 10727.2, a groundwater sustainability plan shall include, where appropriate and in collaboration with the appropriate local agencies, all of the following:
> ...(l) Impacts on groundwater dependent ecosystems.

§10933 Groundwater Elevation Monitoring; Prioritization of Basins by the Department (b)
The department shall prioritize groundwater basins and subbasins for the purpose of implementing this section. In prioritizing the basins and subbasins, the department shall, to the extent data are available, consider all of the following:
...(8) Any other information determined to be relevant by the department, including adverse impacts on local habitat and local streamflows.

§354.10 Notice and Communication
Each plan shall include a summary of information relating to the notification and communication by the Agency with other agencies and interested parties including the following:
(a) A description of the beneficial uses and users of groundwater, including the land uses and property interests potentially affected by the use of the groundwater in the basin....

§354.14 Hydrogeologic Conceptual Model
(d) Physical characteristics of the basin shall be represented on one or more maps that depict the following:
...(4) Delineation of existing recharge areas that substantially contribute to the replenishment of the basin, potential recharge areas, and discharge areas, including significant active springs, seeps, and wetlands within or adjacent to the basin.

§354.16 Groundwater Conditions
Each Plan shall provide a description of current and historical groundwater conditions in the basin,...based on the best available information that includes the following:
...(f) Identification of interconnected surface water systems within the basin and an estimate of the quantity and timing of depletions of those systems, utilizing data available from the Department, as specified in Section 353.2, or the best available information.
...(g) Identification of groundwater dependent ecosystems within the basin, utilizing data available from the Department, as specified in Section 353.2, or the best available information.

§354.26 Undesirable Results
(b) The description of undesirable results shall include the following:
...(3) Potential effects on the beneficial uses and users of groundwater, on land uses and property interests, and other potential effects that may occur or are occurring from undesirable results.

§354.28 Minimum Thresholds
(b) The description of minimum thresholds shall include the following:
...(4) How minimum thresholds may affect the interests of beneficial uses and users of groundwater or land uses and property interests.
(c) Minimum thresholds for each sustainability indicator shall be defined as follows:
...(6) Depletions of Interconnected Surface Water. The minimum threshold for depletions of interconnected surface water shall be the rate or volume of surface water depletions caused by groundwater use that has adverse impacts on beneficial uses of the surface water and may lead to undesirable results.

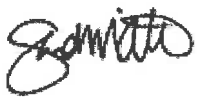
The Conservancy, in partnership with the Departments of Water Resources and Fish and Wildlife, completed statewide mapping of indicators of groundwater dependent ecosystems (iGDEs)[1]. The Groundwater Resource Hub contains the iGDE mapping in addition to other valuable information including an online tutorial about what GDEs are and case studies and references to additional resources on GDEs.

We believe that as you move forward with your basin's plan, you may find these resources quite helpful in fulfilling SGMA's requirements related to GDEs and achieving sustainable groundwater conditions. If you are contracting with a consulting firm to develop your GSP, please share this letter with them.

Local stakeholders who are familiar with the basin's natural resources can be an important source of expertise and data on GDEs, and we urge you to include environmental representation in your groundwater sustainability planning process. This model for governing the process of developing a GSP is being successfully implemented in several basins, including in Ventura County.

If you would like more information about the Groundwater Resource Hub or have any questions related to our work on GDEs, please contact us.

Very truly yours,



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[1] Note: DWR refers to the iGDE database as the Natural Communities Commonly Associated with Groundwater, or NC Dataset. The NC Dataset and the iGDE database are the same.