City of Ridgecrest

INDIAN WELLS VALLEY GROUNDWATER AUTHORITY

Groundwater Pumping Assessment Data Package

Special Workshop

April 5, 2018 5:00 PM City of Ridgecrest Council Chambers

Groundwater Pumping Assessment Data Package

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City of Ridgecrest

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potentially subject to pumping assessment)

Item 1: Special Workshop Agenda

Indian Wells Valley Water District

Kern County

INDIAN WELLS VALLEY **GROUNDWATER AUTHORITY**

Inyo County

100 W California Ave., Ridgecrest, CA 93555 Ridgecrest City Hall

SPECIAL WORKSHOP AGENDA

Thursday, April 5, 2018 5:00 p.m.

In compliance with the Americans with Disabilities Act, if you are a disabled person and you need a disability-related modification or accommodation to participate in this meeting, please contact Ricca Charlon at (760) 499-5002. Requests must be made as early as possible and at least one full business day before the start of the meeting.

*The public will be allowed to address the Board during Public Comments. The Public Comments portion of the meeting shall be limited to three (3) minutes per speaker with public comment limited to two (2) hours total. Each person is limited to one comment during Public Comments. Time permitting, and at the discretion of the chair, second comments may be allowed.

*Members of the public wishing to provide comment will need to submit a comment card. Comment cards will be available at the entrance to chambers 30 minutes prior to the meeting until 15 minutes after start of meeting (4:30-5:15). Speakers will be heard in order.

1. CALL TO ORDER

- 2. STAFF PRESENTATION
 - a. Discussion of Groundwater Pumping Fees to Finance Development and Adoption of a Groundwater Sustainability Plan and IWVGA Administrative Costs
- 3. PUBLIC COMMENTS* Members of the public wishing to provide comment would need to submit a comment card – 2 hours total time for this item
- 4. POLICY ADVISORY COMMITTEE (PAC) COMMENTS 30 minutes total time for this item
- 5. TECHNICAL ADVISORY COMMITTEE (TAC) COMMENTS 30 minutes total time for this item
- 6. IWVGA BOARD COMMENTS/DISCUSSION
- 7. CLOSING COMMENTS
- 8. ADJOURN

Item 2: IWVGA Staff Report

IWVGA ADMINISTRATIVE OFFICE

Memorandum

TO: IWVGA Board Members DATE: April 5, 2018

FROM: James Worth, IWVGA Staff

SUBJECT: Groundwater Pumping Fees to Finance Development and Adoption of a

Groundwater Sustainability Plan and IWVGA Administrative Costs

DISCUSSION

On January 18, 2018, the Indian Wells Valley Groundwater Authority ("IWVGA") Board of Directors ("Board") directed IWVGA staff to develop a fee proposal to finance the development and adoption of a Groundwater Sustainability Plan ("GSP"). The Board directed that the fee be based on volumetric usage of groundwater and be assessed on pumpers, with the exception of de minimis extractors.

On February 15, 2018, IWVGA staff outlined an initial concept to generate a revenue stream sufficient to finance the development and adoption of a GSP and associated IWVGA administrative costs. Following staff's presentation, the Board directed and authorized staff to continue working on the development of a groundwater pumping fee proposal and to identify and develop the information needed for an actual proposal, pursuant to California Water Code Section 10730. The following is staff's recommendation on how to implement the fee.

The elements of the proposed groundwater pumping fee identified by staff are as follows:

Authority to Impose Fees:

Staff recommends the IWVGA Board adopt a fee pursuant to California Water Code Section 10730 ("Section 10730"), which was enacted through the California Sustainable Groundwater Management Act ("SGMA"). Section 10730 grants a Groundwater Sustainability Agency ("GSA") the authority to impose a groundwater pumping fee. Section 10730(a) states in part as follows:

(a) A groundwater sustainability agency may impose fees, including, but not limited to, permit fees and fees on groundwater extraction or other regulated activity, to fund the costs of a groundwater sustainability program, including, but not limited to, preparation, adoption, and amendment of a groundwater sustainability plan, and investigations, inspections, compliance assistance, enforcement, and program administration, including a prudent reserve.

Public Engagement:

Before imposing a fee, a GSA shall hold a public meeting, "at which oral or written presentations may be made" (Section 10730(b)). The GSA must provide notice prior to the meeting, pursuant to California Government Code Section 6066, including the time and place of the public meeting, "a general explanation of the matter to be discussed and a statement that the data required by this section is available." *Id.* At least 20 days prior to the meeting, the GSA "shall make available to the public data upon which the proposed fee is based. *Id.* After the public meeting, the fee shall be imposed or increased "only by ordinance or resolution."

Although Section 10730 only requires the IWVGA to hold a public meeting, noticed and published pursuant to California Government Code Section 6066, staff was directed to schedule a Board workshop on April 5, 2018 to provide the public with the opportunity to address the Board on the proposed fee in advance of the public meeting required by Section 10730. Members of the PAC and TAC will have the opportunity to comment on the proposed fee at the workshop. Staff was also directed to make the data upon which the proposed fee is based available to the public no later than March 29, 2018. Notice of the workshop was posted on the IWVGA website (iwvga.org) and published in the Daily Independent.

Gap Funding Requirement:

Expenditures: As the GSA for the Indian Wells Valley Basin, the IWVGA is required to adopt a GSP by no later than January 31, 2020. The IWVGA Water Resources Manager ("WRM") has estimated that the total cost of developing and adopting the GSP to be about \$3.1 million. Additionally, as part of the Proposition 1 grant funding request, the WRM identified \$646,000 in costs for initial projects benefitting Severely Disadvantaged Communities ("SDAC"). The WRM has identified an additional \$435,250 in estimated costs for the WRM's support of the IWVGA. IWVGA Administrative Costs and Legal Costs are estimated at \$511,500 which includes \$350,000 for legal expenses moving forward and an expected validation action. The City of Ridgecrest has or expects to provide \$210,466 in services which are referred to as Reimbursable Costs. Finally, a 20% reserve in the amount of \$939,070 is included for unanticipated expenditures.

Revenue: On February 6, 2018, the California Department of Water Resources ("DWR") announced its recommendation that IWVGA receive the full Proposition 1 grant award of \$2,146,000 -- \$1.5 million for development of the GSP and \$646,000 for SDAC projects. While the local match requirement for the SDAC projects grant award may be waived, the GSP development grant award requires a \$1.5-million local match. It is estimated more than two-thirds (\$1,157,300) of the local match requirement can be achieved with in-kind services and existing investments by parties in the Basin.

The following table summarizes all of these estimated financial impacts resulting in a total estimated gap funding requirement of \$2,541,586 which the proposed pumping fee would address.

Budget Items ¹	Estimated Costs
EXPENDITURES	
GSP Development and SDAC Costs (Prop 1)	\$3,748,600
GSP Preparation	\$3,102,600
Water Conservation and Rebate Program	\$206,000
Water Audit, Leak Detection, & Leak Repair Program	\$440,000
IWVGA Support Costs	\$435,250
IWVGA/TAC/PAC Coordination	\$144,250
Prop 1 Application/Reporting	\$103,000
Schedule/Budget Management	\$52,000
Groundwater Pumping Assessment Support	\$121,500
Database Management Coordination	\$10,000
CASGEM Coordination	\$4,500
IWVGA Administrative Costs	\$161,500
GSA Board Meetings	\$42,000
Consultant Management and GSP Development	\$24,500
Financial Management	\$8,500
Community Outreach	\$21,000
Budget Development & Administration	\$12,500
PAC/TAC Meetings	\$19,000
Travel	\$6,000
Insurance	\$15,000
Conferences/Training	\$3,000
Miscellaneous	\$10,000
City of Ridgecrest Reimbursable Costs	\$210,466
Legal Costs	\$350,000
Reserve	\$939,070
Total Expenditures	\$5,844,886
REVENUE	
Proposition 1 Grant Award	\$2,146,000
GSP Preparation	\$1,500,000
Water Conservation and Rebate Program	\$206,000
Water Audit, Leak Detection, & Leak Repair Program	\$440,000
In-kind Services	\$1,157,300
U.S. Navy/Federal Services	\$1,097,300
IWVWD/City of Ridgecrest Services	\$60,000
Total Revenue	\$3,303,300
TOTAL GAP FUNDING REQUIRED	\$2,541,586

 $^{1\,}$ Background information on the Budget Items is included in Item 3 of the Data Package. $\,\,$ 3

Calculation of Fees:

As previously directed by the Board, the standard volumetric fee would be imposed on each impacted well owner pumping groundwater and would be based on the amount of groundwater pumped. Fees would be imposed based on the amount of groundwater pumped in relation to the funds required to develop and adopt the GSP and the additional IWVGA expenditures identified above. The initial calculation of a per acre-feet ("AF") fee would be based on existing estimates of the aggregate annual groundwater extractions by impacted pumpers.

For example, estimated pumping by impacted pumpers for 2016 is 21,600 AF, as reported to the Indian Wells Valley Cooperative Groundwater Management Group. A groundwater pumping fee of \$50 per AF would generate \$1,080,000 per year and the required Gap Funding of \$2,541,586 would be met in approximately 29 months. See Item 4 of the Data Package, Determination of Assessment. The proposed fee could include a sunset clause tied to collection of revenue sufficient to fund the Total Gap Funding Requirement identified above. A further noticed public meeting pursuant to Section 10730 would be required to increase the amount of the fee if the Gap Funding requirement increased.

Groundwater Pumping Measurement:

For those wells that have approved meters, groundwater pumping would be measured based on meter readings.² Although the IWVGA has the authority to impose groundwater extraction fees, it will not acquire the authority to require metering of groundwater wells until the GSP is adopted. In light of this, the IWVGA should develop criteria and a procedure for measuring extractions by those non-metered wells. Item 6 of the Data Package includes a memorandum on Methods to Quantify/Report Groundwater Production prepared by the WRM with assistance from the TAC.

<u>Impacted Pumpers Identification:</u>

Existing pumpers who would be assessed the proposed fee are being identified using county records or other available public documents.³ A list of the impacted pumpers subject to the proposed fee are included in Item 6 of the Data Package. Once the fee is adopted, a process for assessing new pumpers who start operations after the fee is implemented should be developed. This process should include notification from the counties following the granting of new well permits.

² The Indian Wells Valley Water District and SVM have meters installed on their wells. It is not presently known how many of the other impacted pumpers have meters.

³ A groundwater sustainability agency, before imposing or increasing a fee pursuant to Section 10730 or 10730.2 relating to a groundwater basin that includes a water corporation regulated by the Public Utilities Commission, shall notify the Public Utilities Commission. [Cal. Water Code Section 10730.1].

Exempted Pumpers:

While the Board's approved motion to develop a fee proposal did not identify federal groundwater extractions, United States Navy ("Navy") and United States Department of Interior Bureau of Land Management ("BLM") pumping should be excluded. SGMA exempts federal agencies from the requirements of SGMA and prohibits the imposition of fees on de minimis extractors unless regulated pursuant to SGMA.⁴

Fees Collection and Delinquent Account:

Water Code Section 10730.6 of SGMA authorizes the IWVGA to collect groundwater fees imposed pursuant to Section 10730 and provides multiple remedies that the IWVGA may pursue to collect delinquent accounts. It is recommended that all options available pursuant to Section 10730.6 be available to pursue delinquent accounts.

Fee Collection: The IWVGA would send monthly billing invoices to the impacted pumpers and require payment within thirty (30) days of the date of the invoices. Payments would be made to the IWVGA. Payments not made with thirty (30) days of becoming due would be considered delinquent.

Delinquent Accounts: Delinquent accounts shall be liable for interest at the rate of 1 percent per month on the delinquent amount of the groundwater fee and may be liable for an additional 10-percent penalty on the delinquent amount of the groundwater fee. Additional remedies available to the IWVGA include, but are not limited to, (1) commence a lawsuit to collect delinquent fees, interest or penalties; (2) collect delinquent fees, interest and civil penalties under the laws applicable to the County of Kern; and (3) after a public hearing, order an impacted pumper to cease extraction of groundwater until all delinquent fees are paid. The remedies are cumulative and may be pursued alternatively or may be used consecutively.

Recommended Board Action:

Staff recommends that the Board:

- 1. Authorize staff to schedule the public meeting required by Section 10730(b) to consider and potentially act on imposing the fee, on a date to be determined by the Board.
- 2. Authorize staff to make the data upon which the proposed fee is based available to the public no later than 20 days before the public meeting.

⁴ For purposes of this Proposal, any reference to groundwater pumpers excludes de minimis extractors, the Navy and BLM unless otherwise specified.

Item 3: Estimated Costs Required to be Funded by **Groundwater Pumping Assessment**

Supporting Attachments

• Prop 1 Application Budget Tables

Kern County

- **IWVGA Support Costs**
- City of Ridgecrest Reimbursable Costs Budget Breakdown
- Draft Funding Recommendations

Indian Wells Valley Groundwater Authority

Estimated Costs Required to be Funded by Groundwater Pumping Assessment

Budget Items	Estimated Costs
Expenditures	
GSP Development and SDAC Costs (Prop 1)	\$3,748,600
GSP Preparation ¹	\$3,102,600
Water Conservation and Rebate Program ¹ ²	\$206,000
Water Audit, Leak Detection, and Leak Repair Program 1 2 2	\$440,000
IWVGA Support Costs 3 J	\$435,250
IWVGA/TAC/PAC Coordination	\$144,250
Prop 1 Application/Reporting	\$103,000
Schedule/Budget Management	\$52,000
Groundwater Pumping Assessment Support	\$121,500
Database Management Coordination	\$10,000
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IWVGA Administrative Costs	\$161,500
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Consultant Management and GSP Development	\$24,500
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Budget Development & Admin	\$12,500
PAC/TAC Meetings	\$19,000
Travel	\$6,000
Insurance	\$15,000
Conferences/Training	\$3,000
Miscellaneous	\$10,000
City of Ridgecrest Reimbursable Costs ⁴ J	\$210,466
Legal Costs ⁵ J	\$350,000
Reserve ⁶ J	\$939,070
Total Expenditures	\$5,844,886
Revenue	
Proposition 1 Grant Award 1 7 3	\$2,146,000
GSP Preparation	\$1,500,000
Water Conservation and Rebate Program	\$206,000
Water Audit, Leak Detection, and Leak Repair Program	\$440,000
In-kind Services	\$1,157,300
U.S Navy/Federal Services 1 8	\$1,097,300
IWVWD/City of Ridgecrest Services ¹ ⁹	\$60,000
Total Revenue	\$3,303,300
TOTAL GAP FUNDING REQUIRED	\$2,541,586

Indian Wells Valley Groundwater Authority

Notes

- 1] From Prop 1 Grant Application. See attached budget tables from Prop 1 Grant Application.
- 2] The Water Conservation and Rebate Program (\$206,000) and Water Audit, Leak Detection, and Leak Repair Program (\$440,000) together are collectively referred to as the SDAC Groundwater Conservation Pilot Project for a total of \$646,000.
- 3] Additional IWVGA support costs not eligible for Prop 1 Grant. See attached table for description of costs.
- 4] Reimbursable costs include legal, IT support, and building usage costs.
- 5] Legal costs anticipated to be incurred by IWVGA Special Counsel for a validation action and associated legal costs for GSP development and implementation.
- 6] Reserve is 20% of the total of GSP Development and SDAC Costs (\$3,748,600), IWVGA Support Costs (\$435,250), IWVGA Administrative Costs (\$161,500), and Legal Costs (\$350,000).
- 7] Grant award amounts are assumed from DWR's Prop 1 Draft Funding Recommendations.
- 8] Federal services include numerical modeling and monitoring well installation.
- 9] IWVWD/Ridgecrest services include development of the Salt and Nutrient Management Plan.

Excerpt from Prop 1 Grant Application

		Table 5 - Proposal Budget	osal Budget			
Prop Cons	Proposal Title: Indian Wells Valley Groundwater Basin - Groundwater Sustainability Plan Development and SDAC Groundwater Conservation Pilot Project	ısin - Groundwat	er Sustainability Pla	ın Developmen	t and SDAC Gr	oundwater
		(a)	(q)	(0)	(p)	(e)
	Individual Project Title	Requested Grant Amount	Cost Share: Non- State Fund	Other Cost Share	Total Cost	% Cost Share
_	Indian Wells Valley Groundwater Basin - Groundwater Sustainability Plan Development ¹	\$1,500,000	\$1,602,600	0\$	\$3,102,600	52%
		4	4	Ç	400,600	\0C4
	Proposal Lotal	\$1,500,000	\$1,602,600	•	\$3,10 Z ,600	%76

1. Sources of funding from the IWVGA (including Kern County, Inyo County, San Bernardino County, Indian Wells Valley Water District, and City of Ridgecrest), Searles Valley Minerals, and from the U.S. Navy. A breakdown of funding sources is provided in Table 4.

Table 4 - Project Budget
Proposal Title: Indian Wells Valley Groundwater Basin - Groundwater Sustainability Plan Development and SDAC Groundwater

Conservation Pilot Project

Project Title: Indian Wells Valley Groundwater Basin - Groundwater Sustainability Plan Development Yes Yes Project serves a need of a DAC?: Cost Share Waiver Request?:

		(a)	(q)	(c)	(p)
	Tasks	Requested Grant Amount	Cost Share: Non-State Fund Source	Other Cost Share	Total Cost
	Objective 1				
	Task 1 - Model Development	\$235,072	\$691,328	0\$	\$926,400
	Task 1a - Hydrogeologic Conceptual Model	\$24,137.54	\$7,262 1	\$0	\$31,400
	Task 1b - Numerical Groundwater Model (Review Existing Model, Create Sustainable Basin Model Updates and Scenarios, Trasport Modeling to Evaluate Groundwater Quality, Evaluate Potential Land Subsidence)	\$210,934.40	\$63,466 1	0	\$274,400
	Previous and Ongoing Model Development In-Kind Services	0\$	\$620,600 2	\$0	\$620,600
N	2 Task 2 - Salt and Nutrient Management Plan Development	\$20,000	\$60,000°	\$0	\$80,000
	Task 2a - Loading Analysis (Existing)	0\$	\$30,000	\$0	\$30,000
	Task 2b - Mixing Model Development (Existing)	0\$	\$30,000	\$0	\$30,000
	Task 2c - Reporting and Coordination	\$20,000	0\$	\$0	\$20,000

		(a)	(q)	(c)	(p)
	Tasks	Requested Grant Amount	Cost Share: Non-State Fund Source	Other Cost Share	Total Cost
	Objective 2				
3	Task 3 - Data Management System	\$274,737	\$82,663 1	0\$	\$357,400
	Task 3a - Develop a Web-Based GeoDatabase (DMS)	\$37,436.24	\$11,264	\$0	\$48,700
	Task 3b - Establish Monitoring Protocols and Reporting Standards	\$23,753.18	\$7,147	\$0	\$30,900
	Task 3c - Populate Database with Historical Data	\$41,664.16	\$12,536	\$0	\$54,200
	Task 3d - Install Transducers and Telemetry Equipment	\$138,137.43	\$41,563	\$0	\$179,700
	Task 3e - Integrate GSP Goals and Objectives - Adaptive Management	\$33,746.43	\$10,154	80	\$43,900
4	Task 4 - Identify and Evaluate Hydrogeologic Data Gaps	\$51,273	\$15,427	\$0	\$66,700
	Task 4a - Review Existing Model and Monitoring Network	\$32,593.36	\$9,807	\$0	\$42,400
	Task 4b - Identification and Prioritization of Data Gaps	\$18,679.69	\$5,620	\$0	\$24,300
2	Task 5 - Monitoring Wells	\$108,619	\$509,381	\$0	\$618,000
	Task 5a - Design and Location Siting	\$11,453.80	\$3,446 1	\$0	\$14,900
	Task 5b - Work Plan and Well Construction				
		0\$	\$476,700 4	\$0	\$476,700
		\$53,886.67	\$16,213 1	\$0	\$70,100
	Task 5c - Collection of Monitoring Well Data	\$43,278.45	\$13,022 1	0\$	\$56,300

Task 6 - Stream Gages			(a)	(q)	(c)	(p)
Task 6 - Stream Gages \$114,154 \$34,346		Tasks	Requested Grant Amount	Cost Share: Non-State Fund Source	Other Cost Share	Total Cost
Task 6 - Fugipment Purchase, Installation, and Testing \$16,373.55 \$4,926 \$0 Task 6 - Equipment Purchase, Installation, and Testing \$66,801.69 \$19,788 \$0 Task 7 - Weather Stations \$66,01.69 \$19,788 \$0 Task 7 - Weather Stations \$17,603.49 \$5,297 \$0 Task 7 - Design and Location String \$17,603.49 \$3,350 \$0 Task 7 - Equipment Purchase \$27,750.48 \$8,350 \$0 Task 8 - Design and Location String \$19,371.53 \$5,287 \$0 Task 8 - Water Quality and Stable Isotope Sampling and Analysis \$62,441 \$0 Task 8 - Water Quality and Stable Isotope Sampling and Analysis \$20,908.95 \$18,800 \$0 Task 8 - Perform Geochemical Reaction and Transport Analysis \$20,908.95 \$6,291 \$0 Task 9 - Perform Aquiller Testing \$104,608.49 \$104,608.49 \$104,608.49 \$104,608.49	9		\$114,154	\$34,346	0\$	\$148,500
Task To - Equipment Purchase, Installation, and Testing \$51,978.39 \$9,622 \$0 Task To - Equipment Purchase, Installation, and Testing \$66,801.69 \$19,798 \$0 Task To - Design and Location String \$1,603.49 \$5,297 \$0 Task To - Design and Location String \$1,603.40 \$5,297 \$0 Task To - Design and Location String \$19,371.53 \$5,297 \$0 Task Ro - Water Quality and Stable Isotope Sampling and Analysis \$83,569 \$25,141.1 \$0 Task Ro - Water Quality and Stable Isotope Sampling and Analysis \$26,649.98 \$18,685 \$0 Task Ro - Perform Goochemical Reaction and Transport Analysis \$20,908.95 \$5,20,911.1 \$0 Task Bo - Perform Aquifer Test Work Plan \$22,750.48 \$33,851.1 \$0 Task Bo - Perform Aquifer Testing \$10,4688.49 \$10,4688.49 \$31,502 \$0		Task 6a - Hydrologic Analysis	\$16,373.55	\$4,926	\$0	\$21,300
Task 7 - Weather Stations \$64,725 \$19,796 \$0 Task 7 - Weather Stations \$17,603.49 \$5,297 \$0 Task 7 - Design and Location Siting \$17,603.49 \$5,297 \$0 Task 7 - Design and Location Siting \$27,750.48 \$8,350 \$0 Task 8 - Design and Location Siting \$17,603.49 \$8,350 \$0 Task 8 - Water Quality and Stable Isotope Sampling and Analysis \$83,559 \$25,141		Task 6b - Design and Location Siting	\$31,978.39	\$9,622	\$0	\$41,600
Task 7 - Weather Stations \$64,725 \$19,475		Task 6c - Equipment Purchase, Installation, and Testing	\$65,801.69	\$19,798	0\$	\$85,600
Task 7 - Weather Stations \$64,726 \$19,475						
Task 7a - Design and Location Sting \$17,603.49 \$6,297 \$6 Task 7b - Equipment Purchase \$27,750.48 \$8,350 \$0 Task 7c - Installation and Testing \$19,371.53 \$5,228 \$0 Task 8 - Water Quality and Stable Isotope Sampling and Analysis \$83,559 \$25,141	2		\$64,725	\$19,475	\$0	\$84,200
Task 7c - Installation and Testing \$27,750.48 \$8,350 \$0 Task 8c - Installation and Testing \$19,371.53 \$5,828 \$0 Task 8c - Water Quality and Stable Isotope Sampling and Analysis \$83,559 \$25,141 \$0 Task 8c - Surface and Groundwater Sampling \$62,649.98 \$18,850 \$0 Task 8b - Perform Geochemical Reaction and Transport Analysis \$20,308.95 \$6,291 \$0 Task 9c - Aquifer Tests \$132,449 \$39,851 \$0 Task 9b - Perform Aquifer Testing \$104,698.49 \$31,502 \$0		Task 7a - Design and Location Siting	\$17,603.49	\$5,297	\$0	\$22,900
Task 8 - Water Quality and Stable Isotope Sampling and Analysis \$83,559 \$25,141 \$0 Task 8 - Water Quality and Stable Isotope Sampling and Analysis \$62,649.98 \$18,850 \$0 Task 8a - Surface and Groundwater Sampling \$62,649.98 \$18,850 \$0 Task 8b - Perform Geochemical Reaction and Transport Analysis \$20,908.95 \$6,291 \$0 Task 9b - Aquifer Test \$132,449 \$39,851 \$0 Task 9b - Perform Aquifer Testing \$104,698.49 \$31,502 \$0		Task 7b - Equipment Purchase	\$27,750.48	\$8,350	\$0	\$36,100
Task 8 - Water Quality and Stable Isotope Sampling and Analysis \$62,441 ¹ \$0 Task 8a - Surface and Groundwater Sampling \$62,649.98 \$18,850 \$0 Task 8b - Perform Geochemical Reaction and Transport Analysis \$20,908.95 \$6,291 \$0 Task 9 - Aquifer Tests \$132,449 \$39,851 \$0 Task 9b - Perform Aquifer Testing \$104,698.49 \$31,502 \$0		Task 7c - Installation and Testing	\$19,371.53	\$5,828	\$0	\$25,200
Task 8 - Water Quality and Stable Isotope Sampling and Analysis\$83,559\$25,141						
Task 8a - Surface and Groundwater Sampling \$62,649.98 \$18,850 \$0 Task 8b - Perform Geochemical Reaction and Transport Analysis \$20,908.95 \$0 \$0 Task 9 - Aquifer Test \$39,851 \$0 Task 9a - Prepare Aquifer Test Work Plan \$27,750.48 \$8,350 \$0 Task 9b - Perform Aquifer Testing \$104,698.49 \$31,502 \$0	∞	Task 8 - Water Quality and Stable Isotope Sampling and	\$83,559	\$25,141	\$0	\$108,700
Task 8b - Perform Geochemical Reaction and Transport Analysis \$20,908.95 \$6,291 \$0 Task 9 - Aquifer Tests \$132,449 \$39,851 \$0 Task 9a - Prepare Aquifer Test Work Plan \$27,750.48 \$8,350 \$0 Task 9b - Perform Aquifer Testing \$104,698.49 \$31,502 \$0		Task 8a - Surface and Groundwater Sampling	\$62,649.98	\$18,850	\$0	\$81,500
Task 9 - Aquifer Tests \$132,449 \$39,851 ¹ \$0 Task 9a - Prepare Aquifer Test Work Plan \$27,750.48 \$8,350 \$0 Task 9b - Perform Aquifer Testing \$104,698.49 \$31,502 \$0		Task 8b - Perform Geochemical Reaction and Transport Analysis	\$20,908.95	\$6,291	\$0	\$27,200
strain \$27,750.48 \$8,350 \$0 \$104,698.49 \$31,502 \$0	<u></u> ნ	-	\$132,449	\$39,851	0 \$	\$172,300
\$104,698.49 \$31,502 \$0		Task 9a - Prepare Aquifer Test Work Plan	\$27,750.48	\$8,350	\$0	\$36,100
		Task 9b - Perform Aquifer Testing	\$104,698.49	\$31,502	0\$	\$136,200

		(a)	(q)	(c)	(p)
	Tasks	Requested Grant Amount	Cost Share: Non-State Fund Source	Other Cost Share	Total Cost
	Objective 3				
10	Task 10 - Imported Water Study	\$134,524	\$40,476	0\$	\$175,000
	Task 10a - Evaluate Potential Imported Water Sources	\$57,653.35	\$17,347	0\$	\$75,000
	Task 10b - Evaluate Water Banking Alternatives and Extraction Schedule	\$19,217.78	\$5,782	\$0	\$25,000
	Task 10c - Evaluate Infrastructure Requirements	\$19,217.78	\$5,782	\$0	\$25,000
	Task 10d - Prepare Technical Memorandum	\$38,435.57	\$11,564	\$0	\$50,000
7	Task 11 - Recycled Water Study	\$46,891	\$14,109	0\$	\$61,000
	Task 11a - Existing Supply and Demand Analysis	\$5,073.50	\$1,527	\$0	\$6,600
	Task 11b - Identify Existing Recycled Water Infrastructure and Users	\$4,612.27	\$1,388	0\$	\$6,000
	Task 11c - Review Regulatory and Institutional Requirements	\$2,613.62	\$786	0\$	\$3,400
	Task 11d - Identify and Evaluate Potential Recycled Water Users	\$15,374.23	\$4,626	\$0	\$20,000
	Task 11e - Prepare Technical Memorandum	\$19,217.78	\$5,782	\$0	\$25,000

		(a)	(q)	(c)	(p)
	Tasks	Requested Grant Amount	Cost Share: Non-State Fund Source	Other Cost Share	Total Cost
	Objective 4				
12	Task 12 - GSP Development and Compilation	\$233,996	\$70,404	\$0	\$304,400
	Task 12a - Prepare Executive Summary Chapter	\$691.84	\$208	\$0	006\$
	Task 12b - Prepare Introduction Chapter	\$922.45	\$278	\$0	\$1,200
	Task 12c -Prepare Plan Area and Basin Setting Chapter	\$12,453.12	\$3,747	\$0	\$16,200
	Task 12d - Prepare Sustainable Management Criteria Chapter	\$23,061.34	\$6,939	\$0	\$30,000
	Task 12e - Prepare Projects and Management Actions to Achieve Sustainability Goal Chapter	\$38,435.57	\$11,564	\$0	\$50,000
	Task 12f - Prepare Plan Implementation Chapter	\$26,904.90	\$8,095	\$0	\$35,000
	Task 12g- Prepare References and Technical Studies Chapter	\$1,537.42	\$463	\$0	\$2,000
	Task 12h - Develop Draft and Final GSP	\$24,060.67	\$7,239	\$0	\$31,300
	Task 12i - Project Management	\$57,499.61	\$17,300	\$0	\$74,800
	Task 12j - Stakeholder/DWR Coordination	\$48,428.82	\$14,571	\$0	\$63,000
	Grand Total (Tasks 1-12)	\$1,500,000	\$1,602,600	\$0	\$3,102,600

Notes

1. Funding Source: IWVGA

2. Funding Source: Navy

3. Funding Source: City of Ridgecrest and IWVWD

4. Funding Source: Navy, Searles Valley Minerals, and Kern County

Excerpt from Prop 1 Grant Application

		Table 5 - Proposal Budget	osal Budget			
Prop	Proposal Title: Indian Wells Valley Groundwater Basin - Groundwater Sustainability Plan Development and SDAC Groundwater Conservation Pilot Project	asin - Groundwate	er Sustainability Pla	ın Development	and SDAC Gro	oundwater
		(a)	(q)	(c)	(b)	(e)
	Individual Project Title	Requested Grant Amount	Cost Share: Non- State Fund	Other Cost Share	Total Cost	% Cost Share
-	Indian Wells Valley Groundwater Basin - SDAC Groundwater Conservation Pilot Project	\$646,000	0\$	0\$	\$646,000	%0
	Proposal Total	\$646,000	\$0	\$0	\$646,000	%0

	Table 4 - Project Budget	ect Budget			
Pro Pro Cos	Proposal Title: Indian Wells Valley Groundwater Basin - Groundwater Sustainability Plan Development Project Title: Indian Wells Valley Groundwater Basin - SDAC Groundwater Conservation Programs Project serves a need of a DAC?: Cost Share Waiver Request?:	ustainability Plan ter Conservation F	lan Development on Programs on Programs on on one of the one of t		
		(a)	(q)	(c)	(d)
	Tasks	Requested Grant Amount	Cost Share: Non-State Fund Source	Other Cost Share	Total Cost
~	Task 1 - SDAC Water Conservation and Rebate Program	\$173,000	0\$	0\$	\$173,000
	Task 1a - Administration and Project Management	\$22,000	0\$	\$0	\$22,000
	Task 1b - Marketing	\$15,000	0\$	\$0	\$15,000
	Task 1c - Rebate Tracking and Reporting	\$13,000	\$0	\$0	\$13,000
	Task 1d - Rebate Processing	\$83,000	0\$	\$0	\$83,000
	Task 1e - Monitoring Plan	\$24,000	0\$	\$0	\$24,000
	Task 1f - Billing and Reporting	\$16,000	0\$	\$0	\$16,000
7	Task 2 - SDAC Water Audit, Leak Detection, and Leak Repair Program	\$440,000	\$0	0 \$	\$440,000
	Task 2a - Administration and Project Management	\$30,000	0\$	\$0	\$30,000
	Task 2b - Phase 1 : Water Audit	\$10,000	0\$	\$0	\$10,000
	Task 2c - Phase 2: Leak Detection and Repair Program	\$384,000	0\$	\$0	\$384,000
	Task 2d - Billing and Reporting	\$16,000	0\$	0\$	\$16,000
	Grand Total (Tasks 1-2)	\$613,000	\$0	\$0	\$613,000

IWVGA Support Costs

Expenditure	Description	Total Costs (Aug 2017 - Jan 2020)
IWVGA/TAC/PAC Coordination	Additional Costs for coordination with the IWVGA, TAC, and PAC not included directly associated with the Prop 1 Grant costs (meeting preparation, coordination calls, meetings, etc.)	\$144,250
Prop 1 Application / Reporting [1]	Costs to Prepare the Prop 1 Grant Application, Coordination Prop 1 Application / Reporting [1] with DWR, and Prop 1 Grant Administration (invoice processing, reporting, etc.)	\$103,000
Schedule/Budget Management	Additional Project Management costs to develop and maintain a Microsoft Project schedule with budget tracking following the Navy's Plan of Action and Milestone (POAM) format .	\$52,000
Groundwater Pumping Assessment Support [2]	Assist IWVGA with preparing monthly assessments including estimating pumping from non-metered wells.	\$121,500
Database Management Coordination	Coordination with Ramboll and IWVGA regarding database management development.	\$10,000
CASGEM Coordination	Coordination with DWR, Kern County Water Agency, and IWVGA to transfer CASGEM responsibilities to IWVGA.	\$4,500
TOTAL		\$435,250

^[1] Assumes Prop 1 Admin Support begins June 2018. [2] Assumes Groundwater Pumping Assessments administered for 29 months.

City of Ridgecrest Reimbursable Costs - Budget Breakdown

Attorney Fees		2016		2017		2018		2019	Ü	Cham
Jan.			ş	8,842.50	\$	6,500.00	\$	4,000.00	- Pi	Jan.
Feb			÷	4,860.00	s	6,500.00	s	4,000.00	ŭ	Feb
Mar			ş	7,321.49	ş	6,500.00	s	4,000.00	2	Mar
April			ş	5,767.50	ş	6,500.00	s	4,000.00	⋖	pril
Мау			↔	2,097.30	ş	6,500.00	❖	4,000.00	2	Мау
June			↔	630.00	ş	6,500.00	❖	4,000.00	<u> </u>	ne
July			s	5,308.00	s	6,500.00	s	4,000.00	<u> </u>	ΙΠ
August	❖	2,587.50	s	2,304.49	s	6,500.00	s	4,000.00	⋖	Augus
Sept.	❖	2,452.50	s	2,551.87	s	6,500.00	s	4,000.00	Š	Sept.
Oct.	\$	2,385.00	ş	3,217.50	\$	6,500.00	ş	4,000.00	0	Oct.
Nov.	❖	8,857.78	s	3,037.50	↔	6,500.00	↔	4,000.00	z	Nov.
Dec.	❖	4,977.50	÷	2,677.50	⋄	6,500.00	❖	4,000.00	Δ	Dec.
	₩	21,260.28 \$	÷	48,615.65	٠	48,615.65 \$ 78,000.00 \$	÷	48,000.00		
Total Attorney Costs			s	195,875.93					Ĕ	Total (
									×F	× \$40
								-	:	

6	Chamber hours	2016	2017	2018	2
0	Jan.		4	3	m
0	Feb		3.5	3	3
C	Mar		3	3	3
C	April		3	3	3
C	Мау		3	3	3
C	June		7	3	3
0	July		2.5	3	3
0	August	2	7	3	3
C	Sept.	3.5	m	m	3
0	Oct.	2	2.5	3	3
0	Nov.	2.5	4	3	æ
0	Dec.	2.5	2	3	Э
C		12.5	39.5	36	36
	Total Chamber hours	124			
	X \$40/hour	\$ 40.00			
	Total Chamber costs	\$ 4,960.00			
ı			l		l

	IT Support		2016		2017		2018		2019
e	Jan.			Ŷ	270.00	ς,	250.00	s	250.00
33	Feb			ş	240.00	ş	250.00	s	250.00
33	Mar			ş	210.00	ş	250.00	s	250.00
33	April			ş	210.00	ş	250.00	s	250.00
33	May			ş	210.00	ş	250.00	s	250.00
3	June			ş	450.00	↔	250.00	ş	250.00
Э	July			ş	180.00	s	250.00	ş	250.00
Э	August	÷	150.00	ş	150.00	s	250.00	ş	250.00
Э	Sept.	ş	240.00	ş	210.00	s	250.00	ş	250.00
Э	Oct.	ş	150.00	ş	180.00	s	250.00	ş	250.00
3	Nov.	s	180.00	s	270.00	s	250.00	s	250.00
3	Dec.	\$	180.00	\$	150.00	δ.	250.00	s	250.00
36		÷	900.006	\$	\$ 2,730.00	Š	\$ 3,000.00	\$	\$ 3,000.00
	Council Chamber IT services include:	ğ	vices inc	9					
		5		3					
	Audio monitoring and leveling	and	eveling						
	Broadcasting to OTA Channel 41 and Mediacom Channel 6	Ρ	annel 4:	l an	d Mediaco	Ē	Channel 6		
	Broadcasting to City webpage	Š	ebpage						
	Assistance with PowerPoint presentations	wer	oint pre	sent	ations				
	Digital copy of event/meeting within 2 business days	nt/n	neeting v	ij	n 2 busine	SS	ays		
	Total IT Support \$ 9,630.00	\$,630.00						

Total Attorney Costs	\$ 195,875.93	
Total Chambers use costs	\$ 4,960.00	
Total IT Support	\$ 9,630.00	
2016-2019 Cost to be reimbursed	\$ 210,465.93	

Draft Funding Recommendations 2017 Groundwater Sustainability Plans and Projects Solicitation February 2018

. 8			Application	Cati	gary 1	Cat	едогу 2	Total	recal
į	Applicant Name	Application Title	(Cut 1/Cut2)	Grant Request:	Hecommended Funding ^a	Grant Request	Recommended Funding	Recommended Funding	Cost of Proposal
3	Arroyo Santa Rosa Basin Groundwater	Arroyo Santa Rosa Basin Groundwater Sustalnability Plan	-/15	s -	5	\$ 177,061	5 177,081	\$ 177,081	\$ 354,16
	Sustainability Agency	Term Centre and the control of the c		_		\$ 177,061	\$ 177,061	\$ 400,000	\$ 1.100.00
30	Asian Business Institute Resource Center Attacarlero Mutual Water Co.	Southeast Assan Groundwater and Sustainability Advocacy and Clutreach Program 2017 Atsacaders Basin Sustainable Groundwater Proposal	3/-	\$ 1,000,000	\$ 400,000	5 809,250		5 809,250	\$ 1,660,00
t	Bear Valley Basin Groundwater Sustainability	Bear Valley Base Groundwater Sustainability Plan	-/16	5	\$ -	\$ 177,000		\$ 177,000	\$ 177.00
+	Agency Bestford Coldwater Sub-basin Groundwater				5			5 1,000,000	\$ 2,040.00
	Sustainability Agency Big Bear Lake Department of Water and Power	Bedford-Coldwater Sub-basin Groundwater Sustainability Plan Proposal Basin Resiliency Sawmill Well Pumping Plant Propost	-/19	5 782,298	5 782,298	\$ 1,000,000	\$ 1,000,000	S 782,298	5 782.29
	Biola Community Services District	Biola Groundwater Recharge Project	11/-	5 705,000	5 705,000	š -	\$ -	\$ 705,000	\$ 705,00
Ш	Butte County Department of Water and Resource Conservation	Groundwater Sustainability Plan Development for the Vina, East Butte, West Butte and Wyandotte Creek Subasiles	-/19	\$	\$ -	\$ 1,498,800	\$ 1,498,800	\$ 1,498,800	\$ 1,989,68
Т	Castaic Lake Water Agency	Santa Clarita Valley Groundwater Sustainability Agency 2017 Sustainable Groundwater Planning Grant Program Category 2 Proposal	-/18	s	\$ -	\$ 416,106	\$ 416,106	\$ 416,106	\$ 858,07
t	City of Brentwood	Tracy Subbasin Groundwater Sustainability Plan Development Prop 1 Proposal	-/39	5	5 -	5 1,000,000	5 1,000,000	\$ 1,000,000	5 1,598,53
	City of Corona	Sustainable Groundwater Planning Grant For the City of Corona Ternescal Subbasin	-/18	\$	s	5 732,338	\$ 732,338	\$ 732,338	\$ 983,97
T	City of Modesto	Sustainable Groundwater Planning Grant for the Modesto Groundwater Subbatin	-/18	\$.	5 .	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,668,09
t	City of Paso Robles	Page Robles Basin Geoverdwater Sostainability Plan Development	-/36	5 -	3 .	\$ 1,500,000	\$ 1,500,000	5 1,500,000	5 3,068,24
П	City of Suddieg	Efsinore Valley Groundwater Sustainability Agency Groundwater Sustainability Planning Grant Proposal	-/16	5 -	5 -	\$ 983,230	\$ 983,230	\$ 983,230	5 1,161,59
I	City of San Diego - Public Utilities Department	Groundwater Sustainability Plan for the Sun Pasqual Valley Groundwater Basin	-/18	5	5	\$ 989,550		\$ 989,550	5 1,979,10
10	Colusa Groundwater Authority Community Water Center	Colusa Subbasin Groundwater Sustainability Plan Development Facilitate Participation of Severely Disadvantaged Community Stakeholders In The	11/-	S 614.353	S 614.353	\$ 1,000,000	5 1,000,000 S	\$ 1,000,000 \$ 614,353	S 1,497,40 S 614,35
10	County of Glenn	Tulare Lake Basin And Develop A Orinking Water Vulcerability Tool Groundwater Sustainability Plan Development in the Coming Subbasin	-/17	\$ 614,353	\$ 614,353	5 993,980		5 999.980	5 999,58
1	County of San Diego	San Diego County GSP Development	12/18	5 1,000,000		\$ 2,000,000	\$ 2,000,000	\$ 3,000,000	\$ 4,884,26
+	County of San Luis Obispo	2017 County of San Luis Obinpo Sustainable Groundwater Proposal	-/18	5		5 1,397,125		5 1,397,125	5 2,349,37
,	Cuyama Basin Groundwater Sustainability Agency Del Norte County	Cuyama Basin Groundwaler Sustainability	13 / 18	\$ 648,124	5 648,124	\$ 1,500,000		\$ 2,148,124 \$ 250,000	\$ 2,148,12
H	East Bay Municipal Utility District	Smith River Plain Groundwater Basin GSP Cast Bay Main Subbasin Groundwater Sustainability Man Development.	-/10	3	5	5 1,000,000	\$ 1,000,000	\$ 1,000,000	5 2,018,00
	Eastern San Joaquan Groundwater Authority	Eastern San Joaquin Subbasin Groundwater Sustainability Pfan Grant Elishore Valley Groundwater Sustainability Agency Groundwater Sustainability	-/19	5	5	\$ 1,500,000		5 1,500,000	5 2,176,4
	Elsinore Valley Municipal Water District	Planning Grant Proposal	-/17	\$ 1	\$ ±	\$ 1,000,000		\$ 1,000,000	\$ 2,524,19
l d	Fillmore Piru CSA	Fillmore and Piru Bayins Groundwater Sustainability Plans Engaging Severely Disadvantaged Communicies in the Development of the Solano	/16	5 -	5	\$ 1,500,000		5 1,500,000	\$ 2,045,4
1	Freshwater Trust	Subbasin Groundwater Sustainability Plan Indian Wells Valley Groundwater Basin - Groundwater Sustainability Plan	12/-	\$ 490,000	\$ 490,000	\$ 7	5 -	\$ 490,000	\$ 490,00
13	Indian Wells Valley Groundwater Authority	Development and SOAC Groundwater Conservation Pilot Project	10/18	\$ 646,000	\$ 646,000	\$ 1,500,000		\$ 2,146,000	3,748,60
H	Inyo-Water Department, County of	Groundwater Sustainability Planning for the Owens Valley Groundwater Basin Kern County Subbasin Groundwater Sustainability Plan Support - 2017 Grant	-/19	3	5 .	\$ 713,155		\$ 713,155	\$ 865,95
L	Kern River Groundwater Sustainability Agency	Application	-/15	\$		\$ 1,500,000	\$ 1,500,000	5 1,500,000	\$ 3,072,60
	Lassen County	Big Valley Groundwater Sustainability Plan	-/18		5	5 939,185	-	5 999,185	\$ 1,045,54
14	Leadership Counsel for Justice and Accountability	Partnering for Equitable Groundwater Linda County Water District-Well 17 Project Funding Application Groundwater	10/-	\$ 758,000	\$ 758,000	s +	\$	\$ 758,000	\$ 758,00
15	Linda County Water District	Sustainability Planning Grant Program Proposal	10/-	\$ 999,500	\$ 999,500	\$	\$	\$ 999,500	\$ 12,272,00
	Los Angeles County Waterworks District No. 37, Acton	Fringe Area Antelope Valley Groundwater Sustainability Plan	-/4	\$ -	\$	\$ 300,000	\$ 300,000	\$ 300,000	\$ 600,00
Ħ	Lower Tule River Irrigation District Groundwater	Lower Tule River trigation District GSA, SGWP Planning Grant	-/16	s	5	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000	\$ 1,500,00
H	Sustainable Agency	Groundwater Monitoring Well Installation and GSP Development For The Chowchilla	10/18	\$ 1,000,000	\$ 1,000,000	\$ 1,500,000	\$ 1,500,000	\$ 2,500,000	\$ 2,500,00
16	Madera County Water and Natural Resources	Subbasin	10/18	\$ 1,000,000	\$ 1,000,000	\$ 1,500,000	\$ 1,500,000	\$ 2,500,000	\$ 2,500,00
11	Madera County Water and Natural Resources	Groundwater Monitoring Well Installation and GSF Development for the Madera Subbasin	11 / 14	\$ 1,000,000	\$ 1,000,000	\$ 1,500,000	\$ 1,500,000	\$ 2,500,000	\$ 2,500,00
H	Marina Coast Water Eistrict Mendocino County Water Agency	Monterey Subbasin Groundwater Sustainability Plan Development Phase 2 of the Uklah Valley Saxin Groundwater Sustainability Plan Development	-/19 -/17	5 .	\$ -	5 1,000,000 5 764,235	5 1,000,000 5 764,255	5 1,000,000 5 764,255	5 2,173,24 5 967,67
1	Merced Irrigation District	2017 Merced Groundwater Subbasin Systemability	14/17	5 901,261	\$ 901,261	5 1,500,000	5 1,500,000	\$ 2,401,261	5 2,615,27
H	Mid-Kawesh Groundwater Sustainability Agency	Keweah Sub-Basin Groundwater Sostainability Plans Development	-/17	5	\$	5 1,500,000	5 1,500,000	\$ 1,500,000	5 2,587,70
	MId-Kings River Groundwater Sustainability Agency	Tulare Lake Subbasin GSP Development and SGMA Compliance Project	-/15	\$	\$	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000	\$ 1,597,13
	Mound Basin Groundwater Sustainability Agency	Mound Basin GSA and GSF	- / 19	\$	\$	\$ 758,100	\$ 758,100	\$ 758,100	\$ 1,518,87
2	North Cal-Neva Resource Conservation and Development Council. Inc	Big Valley GSP Monitoring and Data Development	14/-	\$ 782,344	\$ 782,344	\$ -	\$	\$ 782,344	\$ 801,37
П	North Fork Kings Groundwater Sustainability	Kings Basin Groundwater Sustainability Plans	-/17	5	s .	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000	5 5,364,14
Н	Agency		-/18	50	\$	\$ 600,000			\$ 1,200,00
	Padre Dam Municipal Water District Pajaro Valley Water Management Agency	San Diego River Valley Groundwater Sustainability Plan (GSP) Development Proposal Paisto Valley Groundwater Sustainability Plan	-/18	\$	5 -	5 1,500,000		5 1,500,000	5 2,409,86
	Petaluma VM'ey GSA	Petaluma Valley Groundwater Sustainability Plan	-/17	\$.	3 .	\$ 1,000,000		5 1,000,000	\$ 1,097,50
	Sacramento Central Groundwater Authority	Development of the South American Subbasin Groundwater Sustainability Plan (Bulletin 118 Subbasin NO. 5-21.65)	-/17	\$	5	\$ 970,693	\$ 970,693	\$ 970,693	5 1,941,38
	Sacramento Groundwater Authority	North American Subbasin Groundwater Sustainability Plan Development	-/18	\$.	5 .	\$ 994,276	5 994,276	\$ 994,276	\$ 2,046,66
	Salinas Valley Basin Ground Water Sustainability Agency	Salinus Valley Basin Groundwater Systainability Plan	-/16	\$ -	\$.	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000	\$ 3,040,84
	San Antonio Basin Groundwater Sustainability	San Antonio Basin Groundwater Sustainability Plan	-/9	\$ -	\$	\$ 300,000	\$ 300,000	\$ 300,000	\$ 600,00
	San Benito County Water District	Sustainable Groundwater Planning Grant for GSP Preparation: Bolsa, Holister, and	-/18	\$	S E	\$ 830,336	\$ 830,336	\$ 830,336	\$ 1,360,76
	San Bernardino Valley Municipal Water District	San Juan Baufints Groundwater Subbasins Yocalpa Groundwater Sustainability Plan	-/19	5	5	\$ 815,100		5 815,100	\$ 1,358,64
	San Gorgonio Pass Water Agency	2017 Sustainable Groundwater Planning Grant for the San Gorgania Pass Subbasin	13/18	\$ 1,000,000		\$ 1,000,000		\$ 2,000,000	2,625,68
	Santa Crut Mid-County Groundwater Agency	Santa Cruz Mid-County Groundwater Sustainability Flan Development	-/18	5	5	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000	\$ 3,000,00
	Santa Margarita Groundwater Agency	Santa Margarita Groundwater Sustainability Plan Development	-/16	5	5	5 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 2,011,95
	Santa Rosa Main GSA Santa York River Water Conservation District	Santa Rosa Plain Groundwater Sustainability Plan Santa Yeer River Valley Basin GSP Planning and Preparation	-/17	5	5	\$ 1,000,000 \$ 1,000,000	\$ 1,000,000 \$ 1,000,000	\$ 1,000,000 \$ 1,000,000	\$ 1,333,31 \$ 3,481,01
	Self-Heip Exterprises	Self-Help Enterprises - SDACs Project	11/-	\$ 1,000,000		\$.	5	\$ 1,000,000	5 1,000,00
19	Shasta Valley Resource Conservation District Siskiyou County Flood Control and Water	Groundwater Monitoring implementation Program for the Shasta Valley GSA Grant Proposal for the Scott, Shasta and Butte Valley Groundwater Basins GSP	6/-	5 976,884		\$ 1,367,000	\$ 1,367,000	\$ 976,864	\$ 976,88
	Conservation District	Development	-/16	5	\$	\$ 1,367,000			
ш	A bent a contrate at the section of	Solano Subbasin Groundwater Sustainability Plan Development	-/18	\$	\$	\$ 1,000,000	,,	\$ 1,000,000	\$ 3,592,00
	Sproma Valley GSA Southeast Sacramento County Agricultural Water	Sonoms Valley Groundwater Sustainability Plan Establishing a Groundwater Sustainability Plan and Governance Structure for the	-/17	5 .	5 .	\$ 1,000,000	- Chroniana	\$ 1,000,000	\$ 1,240,08
	Authority	Cosumnes Groundwater Sub-Besin.	-/19	5	\$	\$ 1,000,000		\$ 1,000,000	\$ 2,965,00
	Sutter County Development Services Tehama County Flood Control & Water	Sutter Subbasin Groundwater Sustainability Plan Development Tokawa County Groundwater Sustainability Plan Development Grant Application	-/19		5		\$ 956,814	\$ 956,814	5 1,277,44
-	Conservation District	Tehama County Groundwater Sustainability Plan Development Grant Application Demonstrating Multi-Benefit On-Farm Managed Aquifer Recharge in the Central	-/17			\$ 1,498,960		5 1,498,950	\$ 1,498,96
12	The Nature Conservancy	Valley	11/-	\$ 300,000	\$ 300,000	\$	\$	\$ 300,000	\$ 1,194,74
	Tulelake Irrigation District	Protecting Our Groundwater Resource: Securing a Sustainable Future for the Tule Lake Subbasin	-/15	\$	\$	\$ 721,120	\$ 721,120	\$ 721,120	\$ 836,80
	Upper Ventura River Groundwater Agency	Upper Ventura River Basin GSA and GSP	-/19	5 .	5 .	5 630,061		\$ 680,061	S 7,134,85
	Walnut Valley Water District West Stanislaus ID	Spadra Groundwater Basis Groundwater Sustainability Plan Development 2017 Sustainable Groundwater Planning Grant for the Delta-Mendota Subbasin	-/16 10/14	\$ 1,178,500	5 1,178,500	5 338,500 5 1,500,000		\$ 338,500 \$ 2,678,500	5 677,00 5 5,206.65
-	West Turlock Subbasin GSA	Sustainable Groundwater Planning Grant for the Turlock Groundwater Subbasin	-/19	5	\$ 1,178,500	5 1,000,000	5 1,000,000	\$ 1,000,000	5 2,249,53
	Western Municipal Water District	Riverside Arlington Subbasin Groundwater Sustainability Plan Groundwater Monitoring Well Installation Project and Groundwater Sustainability	-/14	5	5	5 130,000		\$ 130,000	\$ 368,22
_	Westlands Water District	Plan Development for the Westside Subbasin		\$ 1,000,000		\$ 1,500,000		\$ 2,500,000	\$ 2,997,50
	White Wolf Groundwater Sustainability Agency Yolo County Flood Control and water Conservation	White Wolf Subbasin Groundwater Sustainability Man Development	-/18	5	5	5 557,998		\$ 357,998	5 1,560,56
П	Yolo County Flood Control and water Conservation District	Yolo Subhasin - GSP Planning and Preparation	-/19	\$	\$	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 2,033,24
	Yuba County Water Agency	Groundwater Sustainability Plans for the North Yuba Subbasin and South Yuba Subbasin	-/14	s e	\$	\$ 893,948	\$ 893,948	\$ 893,948	5 1,191,93
	Int. b. C		-/14	S	\$	\$ 893,948	\$ 893,948	5 893,948	5

San Bernardino County

Item 4: Determination of Assessment

Supporting Attachments

• IWVGA Groundwater Production Rates – 1975 through Present

Determination of the Groundwater Pumping Assessment Rate

Assessment Annual Pumping Period (Months) (AFY)

AFY = acre-feet per year

AF = acre-feet

[1] See Public Data Package Item 3 for determination of Gap Funding Required.

[2] Monthly pumping is annual pumping (21,600 AFY) divided by twelve months.

[3] Assessment Rate is the Gap Funding required (\$2,541,586) divided by Assessment Period (29 months) divided by Monthly Pumping (1,800 AF).

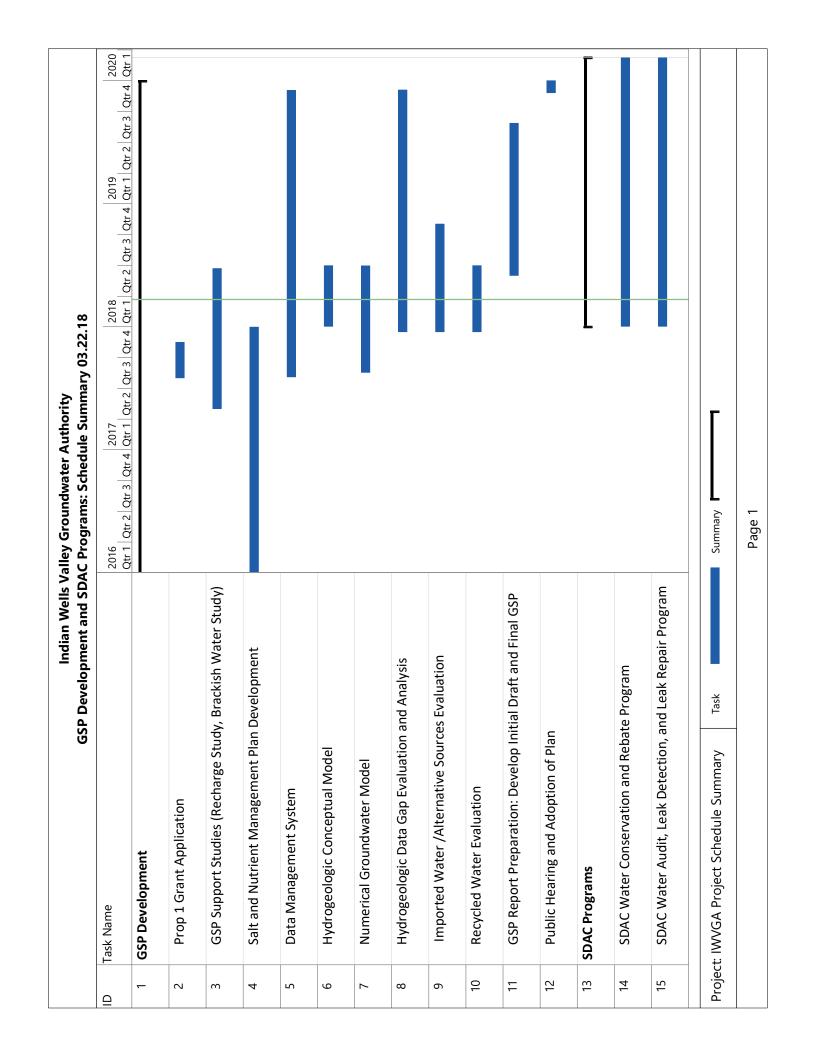
IWV Ground Water Production Estimates 1975 - Present

						3	2011	20000	,	1000					
Year	Meadow- brook	Simmons Ranch (f)	China Lake	City of R/C	SVM	IWVWD	Inyokern	NAWS (c)	Neal Ranch	Private Wells	Quist Farms	Orchards (d)	R/C Heights	S. Leroy (a/b)	Annual Totals
	Farms (e)	;	Acres									ì)		
1975	1516		400		2781	2983	300	2000	2000				1000		15980
1976	1494		400		2911	3099	300	2000	2000				1000	1600	17804
1977	2702		400		3315	3063	300	2000	2000				1000	1600	19380
1978	3216		400		3081	3357	300	2000	2000				1000	1600	19954
1979	3257		400		3081	3402	300	5154	2000	2100			1000	1600	22294
1980	7515		400		2887	3319	300	4995	2041	2100			1000	1600	26157
1981	10036		400		3065	4223	300	4804	2002	2100			1000	1600	29530
1982	10324		400		2887	3963	300	4450	1478	2100			1000	1600	28502
1983	10087		400		2476	4316	300	4402	1752	2400			1000	1600	28733
1984	10312		400		2307	4940	300	4694	1568	2400			1000	1600	29521
1985	10100		400		2397	4981	300	4002	2450	2500			1000	1600	29730
1986	5389		400		2557	5901	300	4430	2353	2500			1000	1600	26430
1987	4141		Purchased		2560	7426	300	4422	1447	2500			Purchased	Ranch	22796
1988	5255		by		2560	7889	173	3980	1195	2500			by	Closed	23552
1989	7064		IWVWD		2320	8725	175	4205	Purchased	2650		200	IWVWD		25639
1990	6187				2505	8600	170	3667	by	2650		525			24304
1991	6737				2406	7700	150	3364	IWVWD	2650		525			23532
1992	7104				2528	7650	141	3351		2650		550			23974
1993	7701				2607	7800	150	3411		2650		575			24894
1994	7504				2607	8300	146	3684		2650		575			25466
1995	7427				2710	8100	125	3848		2650		595			25455
1996	7807				2620	8504	134	3367		2650		009			25682
1997	7800				2522	8534	139	2983		2650		625			25253
1998	7800				2527	7719	102	3018		2700		640			24506
1999	7800				2537	8242	104	2541		2700		069			24614
2000	7800				2701	8148	111	2690		2800		725			24975
2001	8150				2732	8392	97	2840		2800		750			25761
2002	8460			445	2564	8865	115.6	3138		2800	750	750			27887.6
2003	9420			616	2561	8606	126	3325		2800	750	775			29471
2004	9370			413	2470	8992	118.4	2331		2800	750	800		920	28994.4
2002	9580			366	2504	8545	135	2288		2800	750	825		1025	28818
2006	9460			385	2591.2	8864.4	135	2440		2800	750	840		1050	29315.6
2007	9270			420	2530.4	9198.5	2.06	2533		2800	750	840		1000	29432.6
2008	8957			392	2520.7	8264.8	118	2119		2800	750	006		1200	28321.5
2009	9236			400	2534.5	8398.2	118	1883		2800	750	925		1125	28469.7
2010	9437			339	2586.6	7570	118	1710		2800	750	925		1050	27285.6
2011	9827			370	2457.5	7364.25	118	1734		2800	750	925		1050	27395.75
2012	9876			348	2743	7633.45	117.927	1710		2800	750	1062		800	27840.377
2013	9354	918		423	2706	7531.69	117.68	1538		1100	750	2846			27284.37
2014	7524	1,087		392	2679	7318.7	108	1618		1100	750	4087			26663.7
2015	7159	1,003		373	2578	6411.8	102.335	1595		1100	750	438/			25284.532
Total	215200	2006	7000	64.00	110500	200604 70	7546 474	120706	30030	03050	11050	22062	12000	02020	1001106.0
V V	25200	3920	4000	9108	000011	60.100062	182	3369	1878	93230	750	3300Z	1000	13.43	25778
	1001	200) (i	<u> </u>	200	3 3	- - 1	2	2	1647	2	3 :	2 .) 1 1 1 1 1	2

(a) Spike Leroy ranch started back up in 2004 with approx. 150 acres of alfalfa x 7
(b) 2012 number is an estimate/converted to pistachio 2013
(c) Navy began aggressive water conservation program in 2007

(d) 2013 number based on March 4, 2014 letter to BOS. 2014/2015/2016 data includes 3,700 and 4,000 AF from Mojave Pistacio "based off the UC Davis Pistachio Cost Study plus dust mitigation." (e) 2005 Brown Road Farming changed to Meadowbrook Farms

Item 5: Groundwater Sustainability Plan Schedule



Item 6: Methods to Quantify/Report Groundwater Production

Supporting Attachments

- Table 1: Water Purveyors with Known Production over de Minimis
- Table 2: Potential Water Purveyors with Production over de Minimis

Indian Wells Valley Groundwater Authority Methods to Quantify/Report Groundwater Production

The Indian Wells Valley Groundwater Authority (GA) is considering the adoption of a "groundwater pumping assessment", under the Sustainable Groundwater Management Act (SGMA), and California Water Code Division 6 Part 2.74 Chapter 8 Section 10730. The GA Board has set a GA Board meeting and public workshop to publicly discuss the planned groundwater pumping assessment.

In order to levy this assessment, the GA must collect information on active wells within the Indian Wells Valley groundwater basin and collect information on the quantity of water pumped from each relevant well. SGMA provides that wells pumping two (2) acre-feet per year of water or less are considered "de minimis" pumping and will not be subject to this assessment (one acre-foot per year is approximately equivalent to 900 gallons per day). In addition, since SGMA is a state-mandated regulation, it is not enforceable upon federal agencies. Accordingly, any pumping by the United States Navy and the U.S. Department of Interior Bureau of Land Management (BLM) is excluded from this assessment.

Quantify/Reporting Groundwater Pumping

The accuracy and completeness of groundwater pumping information within the Indian Wells Valley groundwater basin is extremely important to the GA's mandate to manage groundwater supplies. The GA strongly recommends that all wells owners within the basin install and maintain accurate water meters on the discharge of all wells.

When the GA adopts a DWR-approved Groundwater Sustainability Plan (GSP) for the basin, the GA will be in a position to require accurate water meters be installed and maintained on all wells. This requirement is expected to be established during 2020.

It is anticipated the Board will consider adopting this assessment at its May 2018 Board meeting. If adopted at the May 2018 Board meeting, the first month of "assessed" groundwater pumping would be June 2018.

The GA staff is collecting information on all wells within the basin and associated groundwater pumping. The most current list of wells and well owners subject to this assessment is attached as Table 1 – Water Purveyors with Known Production over de Minimis. (Potential Water Purveyors with Production over de Minimis are provided in Table 2). The GA staff will continue to update Table 1 to make it complete and accurate.

For basin wells with meters, well owners would submit production data to the GA. For basin wells subject to assessments without accurate water meters, the monthly groundwater production must be determined using "alternative methods for reporting groundwater pumping". For wells without accurate water meters, the following alternative methods may be employed by the GA staff to determine monthly groundwater pumping for GA assessment pumpers:

- Electric Power Use. The well, or wells, must have dedicated electric power meters for the well, or wells (no other power use associated with electric meters). The well owner will provide monthly electric power use for each and a wells served by the electric meter. The GA staff will convert electronic power use to acre-feet of water pumped for GA assessment purposes. (Similar procedure for wells powered by other sources.)
- 2. Agricultural Use Estimates. For agricultural-use estimates, the well owner must identify all wells used for agricultural irrigation. The well owner must provide accurate agricultural acreage and type of agriculture. The GA staff will use this agricultural information to estimate annual and monthly groundwater pumping. The methods and references used by the GA staff will be provided to the well owner.

3. Comparable Use to Metered Well(s). The GA staff will consider using groundwater pumping information from "metered" wells, for "comparable" uses from "non-measured" wells, based upon the GA staff's determination of comparability.

Well owners with "non-metered" wells are reminded that if there is dispute with GA staff regarding water use estimates using "alternative methods", the well owner can elect to install an accurate water meter on their well. The GA will provide assistance to the extent it is capable.

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Table 1 Water Purveyors with Known Production over de Minimis

Water Purveyor	Well Name/Number	Production (acre-feet) [1]
	9a	
	10	
	11	
	13	
	17	
Indian Wells Valley Water District ¹	18	6,412 31
	30	
	31	
	33	
	34	
	35 (planned operation in 2019)	
City of Ridgecrest	NO DATA	373 3.1
	WP0013816	
Moistachio 21	WP0013180	375 4
יאוסןמעפ רואנמכוווס -	WP0014367	- 676
	WP0014430	
	WP0014114	
	WP0010853	
Monthly Annual Color	WP0009179	6 287 3
	WP0012242	1,00,0
	WP0012241	
	WP0013993	
Simmons Ranch	NO DATA	918 ³』

Water Purveyor	Well Name/Number	Production (acre-feet) [1]
	IWV Well #2	
	IWV Well #4	
Searles Valley ¹	IWV Well #30	2,377 ₃⊥
	IWV Well #35	
	IWV Well #36	
Quist Farms ^{2,}	WP0002793	750 عا
Sierra Shadows Ranch (John Thomas Conaway) ² J	WP0014649	373 4J
Amber Glow Ranch (Patricia Davis) ^{2,}	WP0014940	48 4J
Art Hickle (Hickle Family Trust) ^{2,1}	WP0013463	85 4J
Inyokern CSD	NO DATA	102 ³J
	WP0006416	
Max Hoveton 2	WP0012086	L4 08V
ואמא ווסאמנפון	WP0014918	000
	WP0014919	

Notes:

- 1] Wells provided by Water purveyor.
- 2] Wells provided in Kern County Environmental Health Database.
- 3] Production data from Cooperative Group IWV Ground Water Production Estimates 1975-Present. Calendar Year 2016 Data 4] Production from IWV Farmers Group Letter to Kern County dated March 4, 2014. 2013 Data.

Table 2 Potential Water Purveyors with Production over de Minimis

Water Purveyor ¹⊥	Well Name/Number ²	Population Served ³」
China Lake Acres Mutual Water Company	NO DATA	09
East Inyokern Mutual Water	NO DATA	28
Hometown Water Association	NO DATA	52
Life Water Co-Op	NO DATA	27
Owens Peak West	NO DATA	82
Sierra Breeze Mutual Water Company	NO DATA	150
South Desert Mutual Water Company	WP0011177	76
Sweet Water Co-Op	NO DATA	47
West Valley Mutual Water Company	WP0011598	02
Buttermilk Acres	NO DATA	09
Club Oasis	NO DATA	
Dune III Mutual Water Company	NO DATA	119
Gateway Market Water System	NO DATA	104
Indian Wells Lodge	NO DATA	47
Sandy's Oasis Mobile Home Park	NO DATA	

1] Purveyor in listing provided by PAC and confirmed in SDWIS database to be active. Other well owners not included in this table are listed in Kern County Environmental Health database with unknown production.

2] Data on Well Names from Kern County Environmental Health Database.

3] Population estimates from SDWIS database.