SACRAMENTO CENTRAL GROUNDWATER AUTHORITY REGULAR MEETING OF THE BOARD OF DIRECTORS

Wednesday, May 14, 2014; 9:00 am 10060 Goethe Road Sacramento, CA 95827 (SASD South Conference Room No. 1212 – Sunset Maple)

The Board will discuss all items on this agenda, and may take action on any of those items, including information items and continued items. The Board may also discuss other items that do not appear on this agenda, but will not act on those items unless action is urgent, and a resolution is passed by a two-thirds (2/3) vote declaring that the need for action arose after posting of this agenda.

The public shall have the opportunity to directly address the Board on any item of interest before and during the Board's consideration of that item. Public comment on items within the jurisdiction of the Board is welcomed, subject to reasonable time limitations for each speaker.

1. CALL TO ORDER AND ROLL CALL - 9:00 a.m.

2. PUBLIC COMMENT: Members of the public who wish to address the Board may do so at this time. Please keep your comments to less than three minutes.

3. CONSENT CALENDAR

• Minutes of March 12, 2014 Board meeting. *Action: Approve Consent Calendar items*

4. BUDGET SUBCOMMITTEE REPORT

 Review Budget Subcommittee recommendations for the 2014/2015 fiscal year budget.

Action: Adopt Resolution No. 2014-01 to fund the Authority's administrative budget for fiscal year 2014/2015 and provide for the collection of the annual contributions as described in the JPA. Staff further recommends adoption of the aforesaid resolution for the WPP Trust Fund budget for fiscal year 2014/2015.

5. GROUNDWATER MANAGEMENT – PAST, PRESENT, FUTURE

• Presentation by Carl Hauge, Chief Hydrogeologist, California Department of Water Resources, retired.

Action: Receive and file.

6. AGRICULTURAL DEMAND ESTIMATE AND BASIN MANAGEMENT REPORT

• Presentation by Jim Blanke with RMC. *Action: Receive and file.*

7. EXECUTIVE DIRECTOR'S REPORT

- a) CASGEM
- b) Legislation
- c) WELL Project Progress Report

8. DIRECTORS' COMMENTS

ADJOURNMENT

Upcoming meetings –

Next SCGA Board of Directors Meeting – Wednesday, July 9, 2014, 9 am; 10060 Goethe Road, South Conference Room No. 1212 (Sunset Maple).

Sacramento Central Groundwater Authority Board Meeting May 14, 2014

AGENDA ITEM 3: CONSENT CALENDER

BACKGROUND:

Minutes of the March 12, 2014 SCGA Board meeting.

STAFF RECOMMENDATION:

Action: Approve Consent Calendar items.

SACRAMENTO CENTRAL GROUNDWATER AUTHORITY (SCGA)

Governing Board Meeting Draft Minutes March 12, 2014

LOCATION: 10060 Goethe Road, Room 1212

Sacramento, CA 95827 9:00 a.m. to 11:00 a.m.

MINUTES:

1. CALL TO ORDER AND ROLL CALL

Bruce Kamilos called the meeting to order at 9:00 a.m.

The following meeting participants were in attendance:

Board Members (Primary Rep):

Tom Mahon, Agricultural Interests
Rick Bettis, Conservation Landowners
Ron Lowry, Omochumne-Hartnell Water District
Ed Crouse, Rancho Murieta Community Services District
David Armand, California-American Water Company
Dave Ocenosak, Sacramento Regional County Sanitation District
Paul Schubert, Golden State Water Company

Board Members (Alternate Rep):

Darren Wilson, City of Elk Grove Britton Snipes, City of Rancho Cordova Bruce Kamilos, Elk Grove Water District Forrest, Williams Jr., Sacramento County Water Agency Jose Ramirez, Sacramento Regional County Sanitation District

Staff Members:

Darrell Eck, Executive Director Heather Peek, Clerk Ping Chen, SCGA Ramon Roybal, SCGA

Others in Attendance:

Mark Roberson, Water Forum Joe Turner, Brown and Caldwell Ali Taghavi, RMC Water and Environment Jim Blanke, RMC Water and Environment SACRAMENTO CENTRAL GROUNDWATER AUTHORITY (SCGA)
Governing Board Meeting
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Rodney Fricke, Aerojet Corp. Bill Konigsmark, Department of Water Resources Alex MacDonald, RWQCB-CVR Craig Altare, MWH

Member Agencies Absent

Agricultural-Residential City of Folsom City of Sacramento Public Agencies Self-Supplied

2. PUBLIC COMMENT

None.

3. CONSENT CALENDAR

The draft meeting minutes for the January 8, 2013 Board meeting were reviewed for final approval.

Mr. Kamilos reminded the Board of an agenda item from the January meeting titled, Sacramento Central Groundwater Authority Basin Management Objective Threshold Development and Recharge Mapping Project, which was tentatively approved contingent upon legal counsel's review and on staff providing the scope of work, schedule, and budget to the Board. On January 10, 2014, the Executive Director provided the required information and legal opinion to the Board members via e-mail. Mr. Kamilos stated that he was under the opinion that as a result of those actions; the board item was completed. The Board concurred with that opinion.

Motion/Second/Carried – Mr. Wilson moved, seconded by Mr. Schubert, the motion carried unanimously to approve the minutes.

Action: Approve Consent Calendar items.

4. **BUDGET REPORT**

Mr. Eck provided a mid-year budget update reporting that expenditures as of December 31, 2013, which accounted for 50% of the budget year, were \$93,917, leaving an approved budgetary amount of \$460,133 to work with. Expenditures to date were about 17% for the fiscal year.

Action: Receive and file.

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5. FISCAL YEAR 2014/2015 BUDGET

Mr. Eck reported that in order to have the budget for the 2014/2015 fiscal year in place for by the beginning of the fiscal year, a budget would need to be approved by the Board at the May 14, 2014 meeting. To facilitate this, staff requested that the Board appoint a budget committee to work with staff in making a budget recommendation. Additionally, water purveyors were requested to submit groundwater pumping data for 2013 to assist calculating annual budget contributions.

Mr. Bettis, Mr. Ocenosak, Mr. Schubert, and Mr. Kamilos volunteered to serve on the budget committee for development of a fiscal year 2014/2015 budget recommendation.

Action: Appoint a budget committee to prepare a budget recommendation for the 2014/15 fiscal year.

6. 2012/2013 AUDIT REPORT

Bill Konigsmark, Accounting Manager, Sacramento County Water Agency, presented the 2012/2013 audit report and its contents.

Action: Information Presentation.

7. UPDATE ON GROUNDWATER REMEDIATION PROGRESS AT AEROJET

Alex MacDonald, Regional Water Quality Control Board, presented an informational update on the groundwater remediation progress at Aerojet.

Mr. Lowry asked how deep the contaminated water percolates. Mr. MacDonald replied that on Aerojet property, groundwater is between 10 - 12 feet below ground surface to the east and drops to about 100 feet as you progress to the west. He stated that some of the plumes that extend towards Mather Field were due to injections of water treated for TCE in the early 1980's that also contained perchlorate which was not treated during that time. The injected water was sent down to about 200 feet and had since migrated down to about 300-400 feet.

Mr. Kamilos asked if these remedial efforts go on indefinitely or are there projections? Mr. MacDonald responded that the estimate for the Western Operable Unit is 240 years. On property in the major source areas, they are not sure how it will be cleaned up; rather the focus is on containing the plume in order to keep it from migrating off the property. The concentrations within the plumes are diminishing but the extent remains the same.

Mr. Bettis inquired as to which contaminants crossed the American River into Carmichael and Hoffman Park. Mr. MacDonald replied that it was NDMA and that the biggest question is how it actually got there because the highest concentrations are off Aerojet's property.

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Mr. Ocenosak inquired about the practical treatment threshold of NDMA. Mr. MacDonald replied that the treatment method utilizes UV light, though at a great energy expense, to reach detection levels of around two parts per trillion (PPT). Mr. MacDonald then stated that as the order of treatment magnitude drops from 100 PPT to 10 PPT, double the amount of power is required and that furthermore, as the treatment limit goes from to 10 PPT to 2 PPT, the energy consumption grows exponentially thus making it exceptionally difficult and costly to approach the MCL of 1.3 – 3 PPT which is the threshold that Aerojet is treating to.

Action: Information presentation.

8. ARCHITECTURAL AND ENGINEERING SERVICES SELECTION POLICY

Mr. Eck referred to previous discussions by the Board in September of 2013 and January of 2014 that led for a need to have a uniform understanding of how architectural and engineering services are procured, and thus staff recommended that the Board adopt the Architectural and Engineering Services Selection Policy. In general, the proposed policy defined what the meaning of architectural and engineering services is, and provided examples of what could potentially be included as part of those services. The proposed policy also allowed for a consultant to provide services at a cost of \$50,000 or less to be selected pursuant to a selection process determined by the Executive Director. Architectural and Engineering Services costing more than \$50,000 would be obtained by a competitive proposal process by issuance of request for proposal or the issuance of request for qualifications as determined by the Executive Director. A contract of such services would be subject to approval of the Board of Directors. The policy also provided a condition where the Board may waive the policy at any time or may waive the competitive proposal process in the case that an engineering firm had satisfactorily performed the previous project or demonstrates extensive background and working knowledge of the work to be performed or is recognized authority in the field. Mr. Eck added that the proposed policy was identical to the adopted policy of the Sacramental Groundwater Authority. Staff's recommendation was to adopt the policy.

The board discussed the proposed policy and determined that it would like to see more specific language regarding the Executive Director's discretion to initiate a non-competitive bid process. Mr. Kamilos offered to provide Mr. Eck with a copy of his agency's policy regarding such processes. It was decided to carry the item to a future meeting for approval pending modification of the proposed policy addressing the Board's concerns.

Action: Carry proposed Architectural and Engineering Services Selection Policy forward for approval at a future Board meeting pending edits to language regarding Executive Director's discretion to initiate a non-competitive bid process.

9. REVIEW OF POLICIES AND PROCEDURES

Mr. Eck introduced the final policy for review which addressed how information provided to the Authority for inclusion in the HyrdoDMS would be handled in terms of access and confidentiality. Mr. Eck stated that the treatment data provided by the individual purveyors to the Authority would remain in their discretion.

Mr. Schubert asked about an agreement referenced in section 3.9.3 and whether or not his agency has signed it and if so, where is said agreement. Mr. Eck replied that he would have to follow up at a later time to determine which agreement was being referenced.

Action: Make recommendations as necessary.

10. EXECUTIVE DIRECTOR'S REPORT

- a) Local Groundwater Assistance Grant Mr. Eck announced that the State had signed the Authority's AB303 grant agreement and that once the final agreement was received by the Authority, work on the project would commence.
- b) Questionnaire for the Groundwater Accounting Program (GAP) Mr. Eck reminded that Board to submit the questionnaires so that the GAP committee could continue with development of the program.
- c) Form 700 Mr. Eck reminded the Board that Form 700's were due with a wet signature by April, 1, 2014. Mr. Eck stated that the complete submission of those forms were a point of emphasis with the auditors.

11. DIRECTORS' COMMENTS

Mr. Crouse recommended that staff provide an update of proposed groundwater legislation at future meeting. Mr. Crouse then announced his retirement from the Rancho Murieta Community Services District effective July 1, 2014.

Mr. Armand announced that six of his company's wells would not meet the proposed hexavalent chromium standard and that they have noticed that granular activated carbon has a detrimental effect on this concentration.

Mr. Schubert mentioned his discussions with the City of Folsom regarding the transfer of groundwater to their system due to the drought conditions. The goal would be to zero out the groundwater transfers by the end of each year such that they would receive surface water equal to the groundwater provided although it may end up that the balance may have to be made up over multiple years. Mr. Schubert also mentioned that he would be speaking with

SACRAMENTO CENTRAL GROUNDWATER AUTHORITY (SCGA) Governing Board Meeting Draft Minutes – Page 6 March 12, 2014

the Sacramento County Water Agency (SCWA) on an agreement to wheel water though SCWA to Folsom, due to not having direct access from Golden State.

Mr. Ocenosak requested that staff moves forward with the RMC contract to carry out the AB303 grant project that staff provide regular progress updates.

ADJOURNMENT	
Upcoming Meetings –	
Next SCGA Board of Directors Me Goethe Road, South Conference Room	eeting – Wednesday, May 14, 2014, 9 am; 10060 n No. 1212 (Sunset Maple).
By:	
Chairmaraan	Doto
Chairperson	Date
	Date

AGENDA ITEM 4: BUDGET SUBCOMMITTEE REPORT

BACKGROUND:

The proposed 2014/2015 fiscal year budget was developed based on the program requirements (GMP Related Expenses) described in the Central Basin GMP. The budget also provides for support costs (Staff Expenses) including the Executive Director, administrative support, legal counsel, financial support, contract services, and travel/conference expenses; consultant services; and overhead costs such as general liability insurance, office supplies, etc. Based on the Board's decision to postpone work on the Well Protection Program at the January 12, 2011 Board meeting, no funding has been recommended for said program in the 2014/2015 fiscal year budget. The following provides a summary of the attachments to the Board item.

- Attachment C Funding
 - o Funding is based on the provisions of the JPA [Section 8(d)].
 - o Funding from all sources totals \$236,961
- Attachment D Provides a breakdown of the overall budget
 - o Means of financing:

Prior year fund balance: \$168,083 Contributions: \$236,961 Reverse Release: \$227,302 AB303 Grant \$199,824 • Interest income: \$0

■ TOTAL: \$832,170

o Expenditures:

TOTAL: \$832,170

Sufficient money remains in the fund balance to meet the 20 percent reserve requirement identified in the Authority's Policy and Procedures (see Attachment A – Fiscal Year 2014/2015 Authority's Budget).

The proposed budget for SCGA and the WPP was presented, discussed and approval recommended by the SCGA Budget Subcommittee on May 1, 2014. Budget Committee members included Paul Schubert, Bruce Kamilos, Dave Ocenosak, and Rick Bettis.

Staff recommends the Board adopt of Resolution No. 2014-01 to fund the Authority's administrative budget for fiscal year 2014/2015 and provide for the collection of the annual contributions as described in the JPA. Staff further recommends adoption of the aforesaid resolution for the WPP Trust Fund budget for fiscal year 2014/2015.

Sacramento Central Groundwater Authority Board Meeting May 14, 2014

STAFF RECOMMENDATION:

Action: Adopt Resolution No. 2014-01 to fund the Authority's administrative budget for fiscal year 2014/2015 and provide for the collection of the annual contributions as described in the JPA. Staff further recommends adoption of the aforesaid resolution for the WPP Trust Fund budget for fiscal year 2014/2015.

SACRAMENTO CENTRAL GROUNDWATER AUTHORITY CALIFORNIA

For the Agenda of: May 14, 2014

To: Board of Directors

Sacramento Central Groundwater Authority

From: Staff

Subject: Adoption Of The Fiscal Year 2014/2015 Sacramento Central Groundwater

Authority Budget, Fiscal Year 2014/2015 Well Protection Program Trust Fund

Budget, And Authorization To Collect Annual Contributions

Contact: Darrell K. Eck, Executive Director, 874-5039

Overview

The Sacramento Central Groundwater Authority (Authority) was established to maintain the long-term sustainable yield of the Central Sacramento County Groundwater Basin (Central Basin). The Joint Powers Agreement (JPA) between the City of Elk Grove, the City of Folsom, the City of Rancho Cordova, the City of Sacramento and the County of Sacramento creating the Authority provides the funding mechanism necessary to implement the Central Sacramento County Groundwater Management Plan (Central Basin GMP). Collection of the contributions described in the JPA and adoption of the Authority's 2014/2015 fiscal year budget provide the means for the Authority to implement the Central Basin GMPs administrative programs. The JPA also provides for the operation of any Well Protection Program (WPP) that may be prescribed by the Central Basin GMP. While current economic conditions have curtailed any activity on the WPP, adoption of a budget provides an administrative means to report on the status of the fund.

Recommendations

Adopt Resolution No. 2014-01 to fund the Authority's administrative budget for fiscal year 2014/2015 and provide for the collection of the annual contributions as described in the JPA; adopt the WPP Trust Fund budget for fiscal year 2014/2015.

Adoption Of The Fiscal Year 2014/2015 Sacramento Central Groundwater Authority Budget, Fiscal Year 2014/2015 Well Protection Program Trust Fund Budget, And Authorization To Collect Annual Contributions

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BACKGROUND:

On August 29, 2006 the Cities of Folsom, Elk Grove, Rancho Cordova and Sacramento and the County of Sacramento executed a joint powers agreement creating the Sacramento Central Groundwater Authority (Authority). The purpose of the Authority is to maintain the long-term sustainable yield of the Central Basin; ensure implementation of the Basin Management Objectives (BMOs) that are prescribed by the Central Basin GMP; oversee the operation of any Well Protection Program that may be prescribed by the Central Basin GMP; manage the use of groundwater in the Central Basin and facilitate implementation of an appropriate conjunctive use program by water purveyors; coordinate efforts among those entities represented on the governing body of the joint powers authority to devise and implement strategies to safeguard groundwater quality; and work collaboratively with other entities, including other groundwater management authorities that may be formed in the County of Sacramento and adjacent political jurisdictions, in order to promote coordination of policies and activities throughout the region.

On November 8, 2006 the Board adopted the Central Basin GMP. The Central Basin GMP reviews current and future water supply and demands and contains BMOs that address the rate of groundwater extraction, groundwater elevation, land surface subsidence, surface water flows and groundwater contamination. The Central Basin GMP also contains "trigger points" and remedies to ensure full implementation of the BMOs. It also provides for the protection of private groundwater wells and establishes cooperative relationships with Sacramento County's Environmental Management Department and other regulatory agencies to address groundwater contamination.

DISCUSSION:

The proposed 2014/2015 fiscal year budget was developed based on the program requirements (GMP Related Expenses) described in the Central Basin GMP. The budget also provides for overhead expenses (Staff Expenses) including the Executive Director, administrative support, legal counsel, and financial support. The proposed budget also includes funding for consultant services. Based on the Board's decision to postpone work on the Well Protection Program at the January 12, 2011 Board meeting, no funding has been recommended for the Well Protection Program (WPP) in the 2014/2015 fiscal year budget.

The proposed budget for SCGA and WPP was presented, discussed and approval recommended by the SCGA Budget Committee on May 1, 2014. Budget Committee members included Paul Schubert, Bruce Kamilos, Dave Ocenosak, and Rick Bettis.

Based on the Committee's recommendation, staff recommends adoption of Resolution No. 2014-01 to fund the Authority's administrative budget for fiscal year 2014/2015 and provide for the collection of the annual contributions as described in the JPA. Staff further recommends adoption of the aforesaid resolution for the WPP Trust Fund budget for fiscal year 2014/2015.

Adoption Of The Fiscal Year 2014/2015 Sacramento Central Groundwater Authority Budget, Fiscal Year 2014/2015 Well Protection Program Trust Fund Budget, And Authorization To Collect Annual Contributions

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Attachments:

Resolution No. 2014-01

Attachment A – Fiscal Year 2014/2015 Authority's Budget

Attachment B – Fiscal Year 2014/2015 Well Protection Program Budget

Attachment C – Authority's Members Contribution (2014-2015)

Attachment D – Fiscal Year 2014/2015 Authority's 2-Year Budget Break-down

Attachment E – Fiscal Year 2014/2015 Well Protection Program Budget Break-down

Attachment F – Operating Expenses Sacramento Central Groundwater Authority 2014/2015

ATTACHMENT A - Fiscal Year 2014-2015 Authority's Budget

FUND: Sacramento Central Groundwater Authority (096B)
ACTIVITY: Groundwater Supply Operations (0960001)

FISCAL YEAR: 2014-15

	Actual 2010-2011	Actual 2011-2012	Actual 2012-2013	Adopted 2013-2014	Estimate 2013-2014	Requested 2014-2015
MEANS OF FINANCING						
Reserves:						
Prior Year Fund Balance	365,186	631,157	714,927	139,454	139,454	168,083
Revenues:						
Contributions from other Agencies	268,461	264,047	254,492	244,222	244,222	236,961
Interfund Charges (Transfer In / Out) reimbursement from SCGA WPP fund	0	0	0		0	0
Reserve Release	21,939	0	0		0	227,302
Interest Income	3,396	2,862	5,332	2,000	0	0
AB303 Grant	119,034	0	0	200,000	0	199,824
Encumbrance Rollover from Prior Year	104,174	2,900	(1,370)		0	
Total Means of Financing	882,190	900,966	973,381	585,676	383,676	832,170
FINANCING USES						
Provision for Reserves	0	0	707,430	31,626	0	
Interfund Charges (Transfer In / Out) reimbursement from SCGA WPP fund					0	
Salaries / Benefits	0	0	0	0	0	0
Services & Supplies	251,033	186,039	126,497	554,050	215,593	582,170
Capital Project	0	0	0		0	250,000
Total Financing Uses	251,033	186,039	833,927	585,676	215,593	832,170
ENDING FUND BALANCE	631,157	714,927	139,454	(0)	168,083	0

See Attachment D for Budget Detail

ATTACHMENT B - Fiscal Year 2014-2015 Well Protection Program Budget

FUND: SCGA - Well Protection Program Trust (096C) ACTIVITY: Well Protection Program Operations (0961000) FISCAL YEAR: 2014-15

	Actual 2010-11	Adopted 2011-12	Actual 2012-2013	Adopted 2013-2014	Estimate 2013-2014	Requested 2014-2015
MEANS OF FINANCING						
Prior Year Fund Balance Revenues:	0	0	0		0	0
Contributions from other Agencies Interfund Charges (Transfer In / Out)	0	0	0		0	0
Interest Income Total Means of Financing	0	0	0		0	0
FINANCING USES						
Salaries / Benefits	0	0	0		0	0
Services & Supplies Other Charges	0	0	0		0	0
Interfund Charges (Transfer In / Out) reimbursement to SCGA fund	0	0	0		0	0
Total Financing Uses	0	0	0		0	0
ENDING FUND BALANCE	0	0	0		0	0

See Attachment E for Budget Detail

				ATTACHMENT C				
			Authority's	Members Contribution (2014-2	2015)	T		
	Annual Cont		Annual Contribution/Surface Water		water		Annual Contribution/Ag/Res	Total Annual Contribution
Board Members	Paragraph	. , . ,	Paragraph 8(d)(ii)	Paragraph 8(d)(iii)		Paragraph 8(d)(iv)	Paragraph 8(d)(v)	
City of Folsom	\$	10,000						\$ 10,000
City of Rancho Cordova	\$	10,000						\$ 10,000
City of Sacramento		10,000						\$ 10,000
City of Elk Grove	\$	10,000						\$ 10,000
County of Sacramento	\$	10,000						\$ 10,000
Agricultural Interests						\$ 88,493		\$ 88,493
Agriculture-Residential							\$ 3,881	\$ 3,881
Commercial/Industrial Self Supplied								\$ -
Conservation Landowners								\$ -
Public Agencies/Self Supplied								\$ -
Elk Grove Water Service				\$ 25	5.83			\$ 256
Omochumne-Hartnell Water District								\$ -
Rancho Murieta CSD			\$ 6,000					\$ 6,000
California-American Water Co.			. 2,000	\$ 29	9,319			\$ 29,319
Golden State Water Company			\$ 6,000		3,235			\$ 9,235
Sacramento County Water Agency	-		\$ 6,000		3,778			\$ 49,778
Sacramento Regional County Sanitation District			0,000	ų le	,,,,,			Ψ 10,770
Cacramento Regional County Canitation District	·							
Total	\$	50.000	\$ 18.000	¢ 76	6.587	\$ 88.493	\$ 3.881	\$ 236.961
Iotai	Ψ	30,000	Ψ 10,000	Ψ 70	,,507	Ψ 00,493	3,001	φ 230,901
Annual Contribution by Agriculture is 25-percent Annual Contribution by Agriculture/Residential is								
Groundwater/Purveyors	Pumping A	mount	Exclusion	Net Pumping		Rate	Cost	
Orodinawater/i drveyors	(acre-fe		(acre-feet)	(acre-feet)		(\$/acre-foot)	Cost	
Commercial/Industrial Self Supplied	(acre-re	0	(acre-leet)	,	^	\$ 2.07	\$ -	
		0	0			\$ 2.07		
Public Agencies/Self Supplied Elk Grove Water Service		5,124	5,000		124			
Omochumne-Hartnell Water District			· · · · · · · · · · · · · · · · · · ·			\$ 2.07		
Rancho Murieta CSD		0	0			\$ 2.07	*	
		19.164				*		
California-American Water Co. Golden State Water Company			5,000	14	1,164		·	
		-, -		4			Φ 0.005	
		6,563	5,000		,563			
Sacramento County Water Agency - Zone 41		-, -			,563 ,149			
Sacramento County Water Agency - Zone 41		6,563	5,000					
Sacramento County Water Agency - Zone 41 Groundwater/Ag		6,563 26,149	5,000 5,000 25% of estimated pumping	21	,149	\$ 2.07	\$ 43,778	
Sacramento County Water Agency - Zone 41 Groundwater/Ag Agricultural Interests		6,563 26,149	5,000 5,000 25% of estimated pumping 0.25	21	2,750	\$ 2.07	\$ 43,778	
Sacramento County Water Agency - Zone 41 Groundwater/Ag		6,563 26,149	5,000 5,000 25% of estimated pumping	21	2,750	\$ 2.07	\$ 43,778	
Sacramento County Water Agency - Zone 41 Groundwater/Ag Agricultural Interests		6,563 26,149	5,000 5,000 25% of estimated pumping 0.25	21	2,750	\$ 2.07	\$ 43,778	

ATTACHMENT D - Fiscal Year 2014-2015 Authority's 2-Year Budget Comparison

MEANS OF FINANCING	F	oproved Y13/14 Budget		Proposed FY14/15 Budget
Prior Year Fund Balance	\$	139,454	\$	168,083
Revenues:				
Contributions from Member Agencies				
Annual Contribution	\$	50,000	\$	50,000
Surface Water Contribution		18,000		18,000
Groundwater Contribution		83,848		76,587
Agricultural Contribution		88,493		88,493
Ag/Res Contribution		3,881		3,881
Subtotal of Contributions		244,222		236,961
Reserve Release		-		227,302
AB 303 Grant (Prop. 84)		200,000		199,824
Interest Income		2,000		_
Total Means of Financing	\$	585,676	\$	832,170
FINANCING USES				
Salaries/Benefits	\$	-	\$	-
Services & Supplies:		05.050		00.500
Staff Expenses		85,250		86,500
Consultant Expenses		332,000		383,870
Office Expenses		13,400		8,400
GMP Related Expenses		103,400		103,400
Well Protection Program		00.000		-
Reporting Expenses		20,000		- 250,000
Capital Project		-		250,000
Provision for Reserve	¢	31,626	¢	922.470
Total Financing Uses	\$	585,676	\$	832,170

ATTACHMENT E - Fiscal Year 2014-2015 Well Protection Program Budget Break-down

MEANS OF FINANCING Prior Year Fund Balance \$ Revenues: \$ Well Protection Fee Collection \$ Interfund Charges (Transfer In/Out) Interest Income \$ \$ **Total Means of Financing FINANCING USES** Salaries/Benefits \$ Services & Supplies Well Impact Claims \$ Well Registration Subtotal of Services & Supplies \$ Other Charges \$ Interfund Charges (Transfer In/Out) Reimburse to SCGA Fund \$ **Total Financing Uses**

ENDING FUND BALANCE

		Attachment F - Authority's Operating Expenses (2014-2015)
Operating Expenses	(\$ Dollar)	Notes
1. Staff Expenses		"Staff Expenses" were not covered in the cost breakdown provided in the GMP.
Executive Director	\$ 57,000	Executive Director @ 8 hours/week: (\$136/hr)(8hr/wk)(52wk/yr)
Administration Support	\$ 6,500	Board Clerk, Water Resources Admin. Staff, etc.
Legal Counsel	\$ 5,000	Michele Bach - County Counsel
Financial	\$ 15,000	County Water Resource Finance/Accounting Staff (Remie and Bill)
AFS Contract Services	\$ 2,000	Contract payment and writing allocation costs.
Travel/Conference	\$ 1,000	G/L 20202900
Total Staff Expenses	\$ 86,500	
2. Consultant Expenses		
Audit Report	\$ 8,870	VTD & Co. Audit Expense
	A	A. \$25k - Groundwater Accounting Program (GAP) Development; B. \$50k - General Consultant Sevices C. \$10k - Ag-Res water conservation; D. \$5k - Update
Technical Services		Website; \$250k - Update GMP
RWA Regional Model Study		Potential funding to assist in evaluating regional groundwater/surface water model.
Water Quality Testing BMO#2 Implementation and GW	\$ 5,000	GMP Section 3.2.2.2 (water quality data collection related to populating the DMS) See Groundwater Quality under 4.C. Laboratory costs.
Recharge Mapping	\$ 250,000	The Authority awarded an AB303 grant (prop.84) for \$199,824. Balance will be funded by fund reserve.
Total Consultant Expenses	\$ 633,870	
3. Office Expenses	•	
JPIA Membership Dues (ACWA)	\$ -	Range based on FY09/10 actual & FY12/13 operation budget
General Liability Insurance		
Office Supplies/Postage		G/L 20207600
Printing		Printing of letterhead, envelopes, etc.
Website Development/Hosting		G/L 20293403
Food Purchase/Service	\$ -	Monthly Board Meeting
Total Office Expenses	\$ 8,400	, , , ,
4. GMP Related Expenses		Ongoing activities to implement the GMP
A. Stakeholder Involvement	\$ 6,400	
B. GW Resource Protection	\$ 7,000	
C.Monitoring Program	\$ 71,000	
D. Planning Integration	\$ 16,000	
E. Plan Implementation Costs	\$ 3,000	GMP Section 4.7.1
Total GMP Expenses		G/L 20293403
5. Well Protection Program	,	
Ordinance Development	\$ -	Includes on-going coordination with Land Use Agencies, development of cooperating agreements and adoption of ordinance and agreements.
Registration	\$ -	Includes developing parcel map, generating mailing list, update of data base and field verifications. Reimbursed by WPP trust fund later.
Replacement Fund		
Total WPP Expenses	\$ -	
6. Reporting Expenses		
State of the Basin Report	\$ -	
Total Reporting Expenses		
GRAND TOTAL	\$ 832,170	

RESOLUTION NO. 2014-01

SACRAMENTO CENTRAL GROUNDWATER AUTHORITY RESOLUTION ADOPTING AND ASSIGNING COSTS TO FUND SCGA'S ADMINISTRATIVE AND PROGRAM BUDGETS FOR FISCAL YEAR 2014/2015 AND PROVIDE FOR THE COLLECTION OF ANNUAL CONTRIBUTIONS, AND ADOPTING AND ASSIGNING COSTS FOR FISCAL YEAR 2014/2015 FOR THE WELL PROTECTION PROGRAM

WHEREAS, on August 29, 2006 the Joint Powers Agreement Between the City of Elk Grove, the City of Folsom, the City of Rancho Cordova, the City of Sacramento and the County of Sacramento Creating the Sacramento Central Groundwater Authority ("JPA") established a separate public entity identified as the Sacramento Central Groundwater Authority ("AUTHORITY") with its own Board of Directors ("BOARD"); and

WHEREAS, the AUTHORITY was created to maintain the long-term sustainable yield of the Central Basin in accordance with the Central Sacramento County Groundwater Management Plan; and

WHEREAS, the JPA provides for the collection of annual contributions to fund implementation of the Central Sacramento County Groundwater Management Plan;

WHEREAS, the JPA provides for the operation of any Well Protection Program that may be prescribed by the GMP; and

WHEREAS, the AUTHORITY's administrative budget for fiscal year 2014/2015 is specified in Attachment A. The budget includes projections of revenues, staff expenses, consultant expenses, office expenses and Groundwater Management Plan related expenses. The administrative budget is required to finance the administrative activities necessary to manage the Central Groundwater Basin; and

WHEREAS, the Well Protection Program Trust Fund's administrative and program budget for fiscal year 2014/2015 is specified in Attachment B. No funding is recommended for the Central Basin Well Protection Program for fiscal year 2014/2015 at this time.

NOW, THEREFORE, be it resolved by the BOARD as follows:

- 1. The above recitals are correct and the BOARD so finds and determines.
- 2. The BOARD finds and determines that:
 - a. The SCGA administrative budget for fiscal year 2014/2015 as specified in Attachment A is hereby adopted; and
 - b. The Well Protection Program Trust Fund administrative and program budget for fiscal year 2014/2015 as specified in Attachment B is hereby adopted; and
 - c. The annual contribution for the SCGA administrative budget for fiscal year 2014/2015 budget will be collected from the contributors as directed in the JPA pursuant to Appendix C; and
 - d. Billing for the annual contribution shall be mailed not later than thirty (30) days following the adoption of this resolution with payment to be made within thirty (30) days of receipt of billing.

PASSED AND ADOPTED by the BOARD at their regular board meeting on May 14, 2014.

By:			
	Chair		

AGENDA ITEM 5: GROUNDWATER MANAGEMENT – PAST, PRESENT, FUTURE

BACKGROUND:

Presentation by Carl Hauge, Chief Hydrogeologist, California Department of Water Resources, retired.

STAFF RECOMMENDATION:

Action: Receive and file.

AGENDA ITEM 6: AGRICULTURAL DEMAND ESTIMATE AND BASIN MANAGEMENT REPORT

BACKGROUND:

Presentation by Jim Blanke with RMC.

STAFF RECOMMENDATION:

Action: Receive and file.



Agricultural Demand Estimate and Basin Management Report

May 14, 2014

Prepared for:



SCCA Sacramento Central Groundwater Authority

Presenter:

Jim Blanke, PG CHG

Acknowledgements

- SCGA member agencies
- Aerojet
- SCGA staff
- Davids Engineering and RMC staff



Background

- Groundwater Management Plan accepted February 2006
- Plan calls for regular reporting
- Reporting includes BMO analysis, which requires pumping information



Pumping Data and Estimates

- Pumping data available from most public entities and remediation sites
 - Values estimated where not provided
- Agricultural and agricultural-residential pumping requires estimates



Ag Demand Estimates: Overall Process

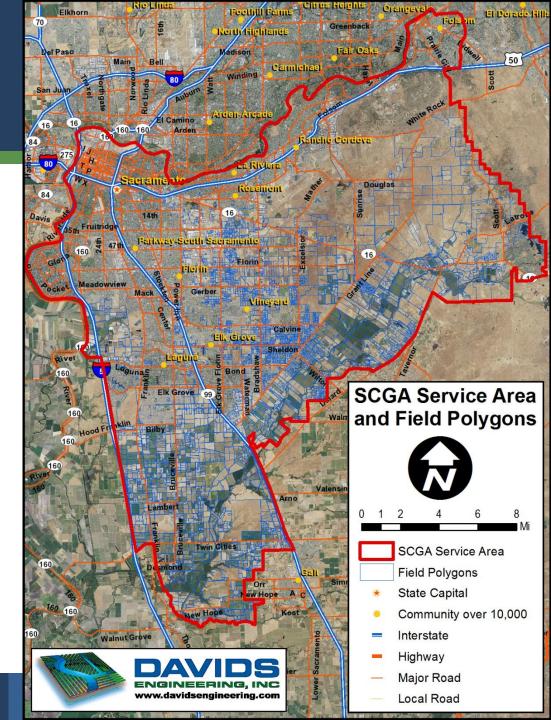
- SACOG 2008 Land Use Data
- Updated using 2011 and 2012 data from the National Agricultural Statistics Service
- Applied evapotranspiration data developed based on previous detailed remote sensing study
- Applied the IWFM Demand Calculator (IDC) for root zone water balance
- Result: estimated applied water need (pumping)



- Six generalized land uses developed
 - Field and truck crops
 - Pasture and hay
 - Vineyards and orchards
 - Native
 - Riparian / wetlands
 - Rural residential

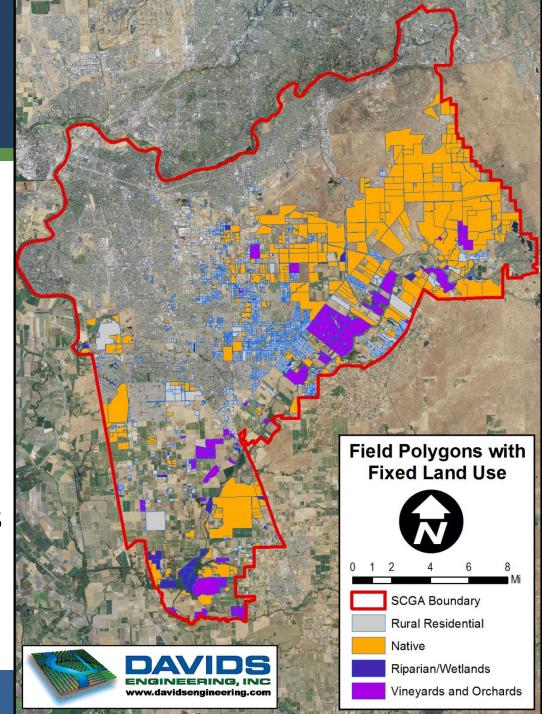


 Field polygons based on 2008
 SACOG land use





- Selected polygons have "fixed" land use:
 - Ag-Res
 - Native
 - Riparian/Wetlands
 - Vineyard/Orchards



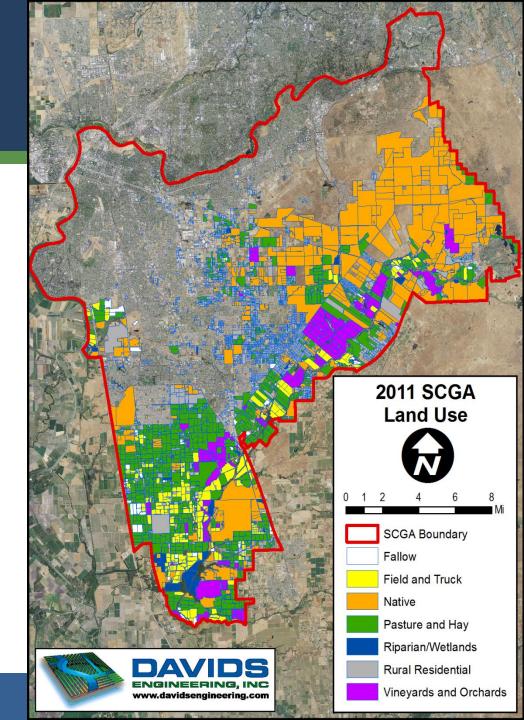


- 2011/2012
 Cropland Data
 Layer from
 USDA NASS applied
 to field polygons
- Polygons with <80% single land use subject to additional QC





Classified2011 land use



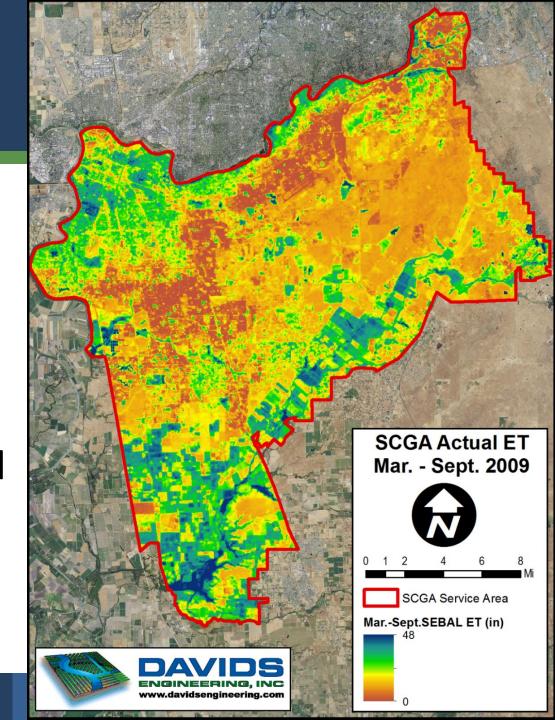


Ag Demand Estimates: Acreage Estimate

Land Use	2011	2012
Fallow	1,838	1,423
Field and Truck	8,568	7,166
Pasture and Hay	30,346	32,073
Vineyards and Orchards	9,175	9,036
Native	48,477	48,477
Riparian/Wetlands	1,721	1,873
Rural Residential	13,878	13,955
Total	114,003	114,003



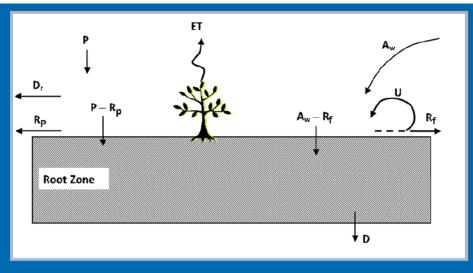
- Crop Coefficients developed based on 2009 study of ET and CIMIS reference ET
- Coefficients used with 2011/12
 CIMIS ET_o data





Ag Demand Estimate – Root Zone Model

Utilized DWR's IWFM Demand Calculator (IDC)



P = precipitation

A_w = applied water

R_P= direct runoff

U = re-use

 R_f = net return flow

ET = evapotranspiration

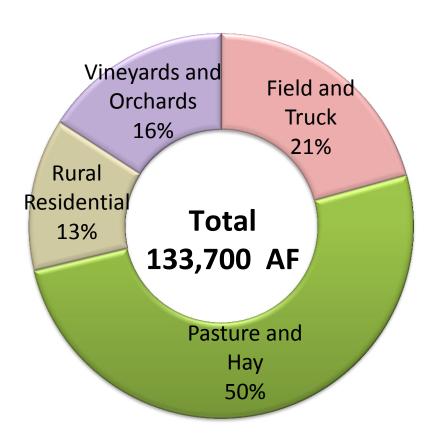
 D_r = drain from ponds

D = deep percolation

Figure source: DWR

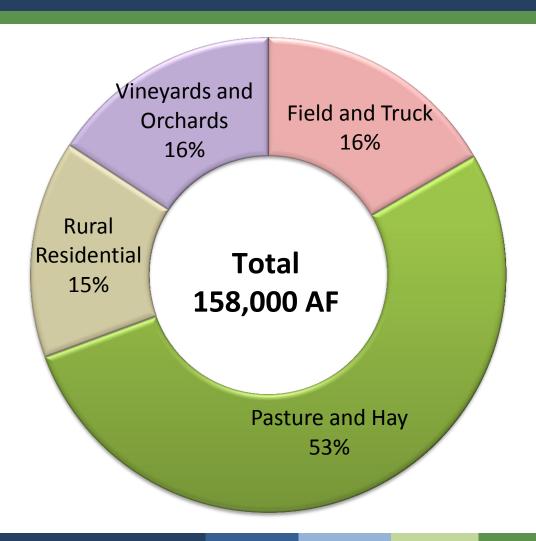


2011 Ag Demand Estimates



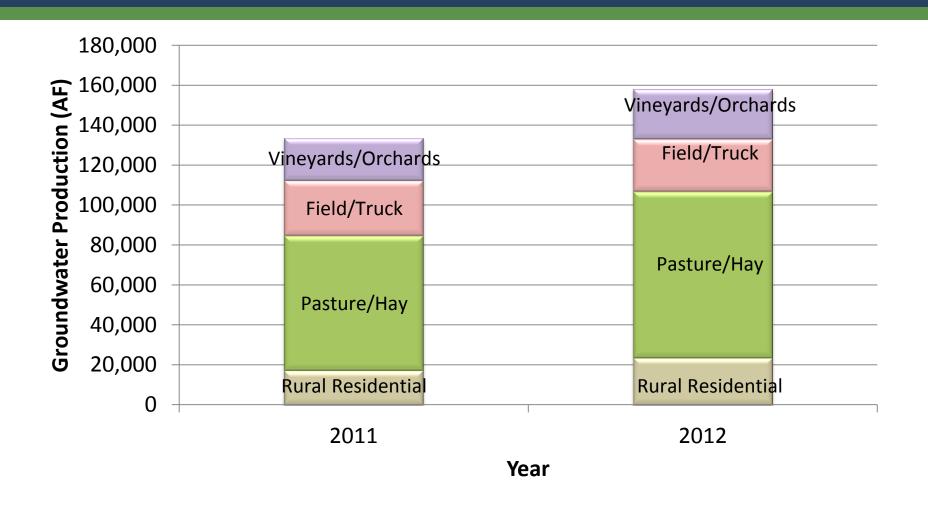


2012 Ag Demand Estimates





2011/2012 Ag Demand Estimates





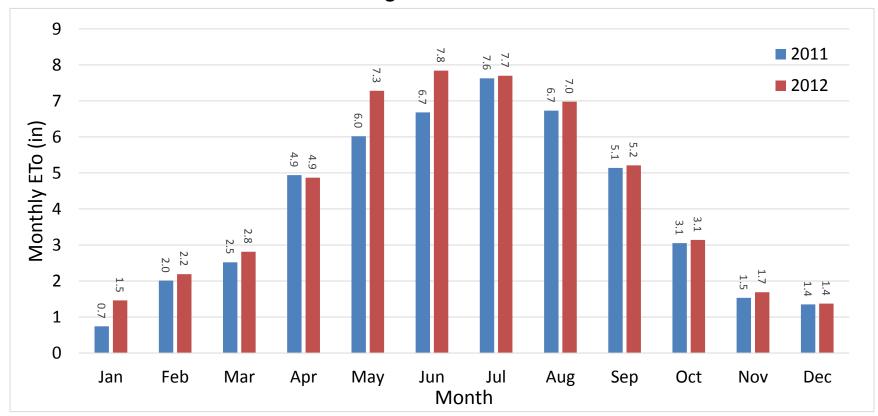
Ag Demand Estimates

- Increase from 2011 and 2012 due to weather
- Land use and cropping is similar
- 2012 weather, compared to 2011:
 - Higher ET
 - Lower growing season precipitation



2011/2012 Reference ET – Lodi West

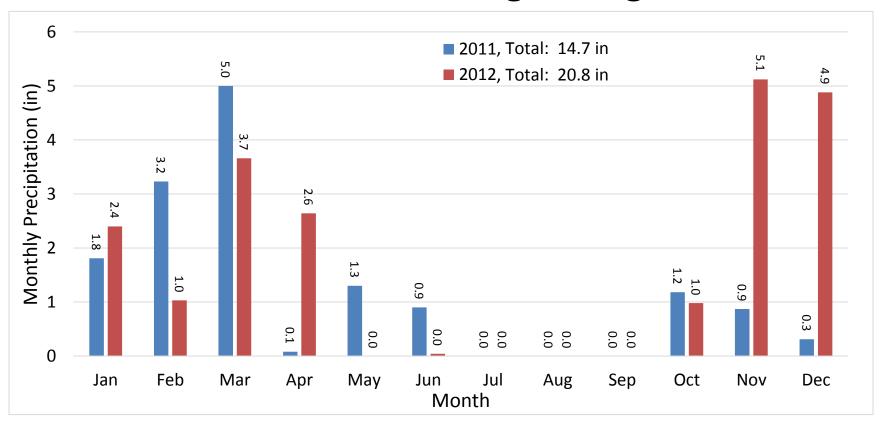
2012 had higher ET_o





2011/2012 Precipitation – Elk Grove Fish Hatchery

2012 had lower rainfall in growing season





Ag Demand Estimates

- Important component of overall pumping estimates
 - Developed for Basin Management Report
 - Measure for BMO compliance
 - Utilizes Ag and Ag-Res estimates
 - Incorporates data and estimates from other users



Basin Management Report Update

- Basin Conditions
- Basin Management Activities
- Conclusions and Recommendations



Year Type

- Sacramento Valley Water Year Type
 - 2011: Wet Year
 - 2012: Below Normal Year
- Water Forum Agreement Water Year Type
 - 2011: Wet Year
 - 2012: Average Year

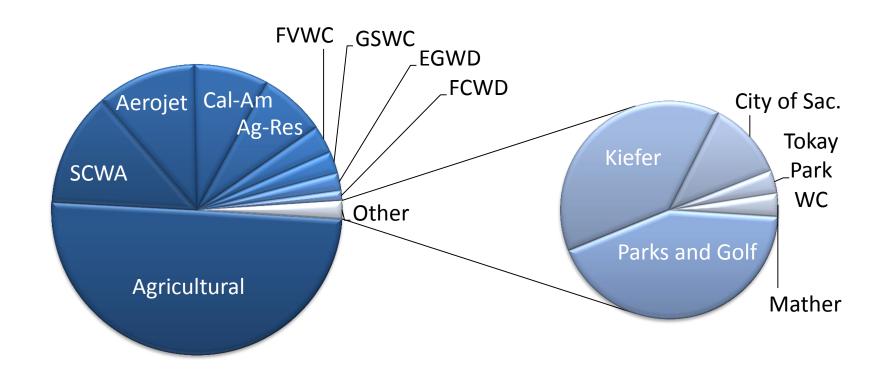


BMO 1: Groundwater Production

- "Maintain the long-term average extraction rate at or below 273,000 acre-feet/year"
- Production based on
 - Reported metered data
 - Large purveyors, Aerojet, and IRCTS
 - Estimated values
 - Tokay Park
 - Florin County
 - Fruitridge Vista
 - Parks, Golf Courses
 - Agriculture
 - Agriculture-Residential
 - Mather Field and Kiefer Landfill



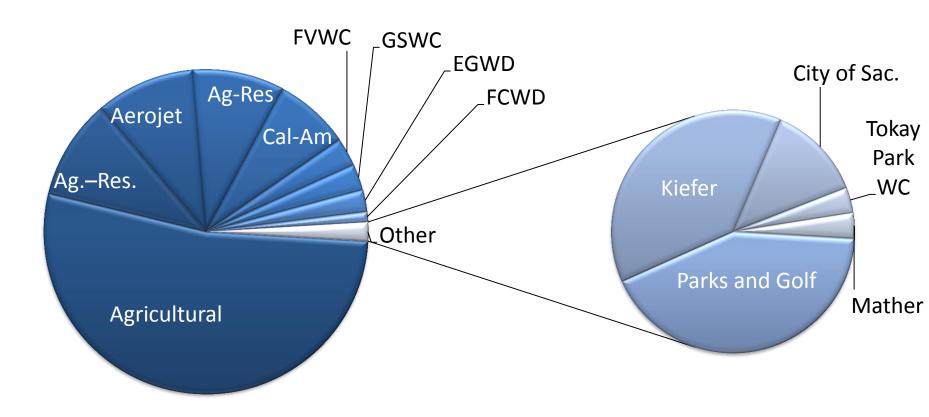
Groundwater Production, 2011



Total 2011 Production: 233,600 AF



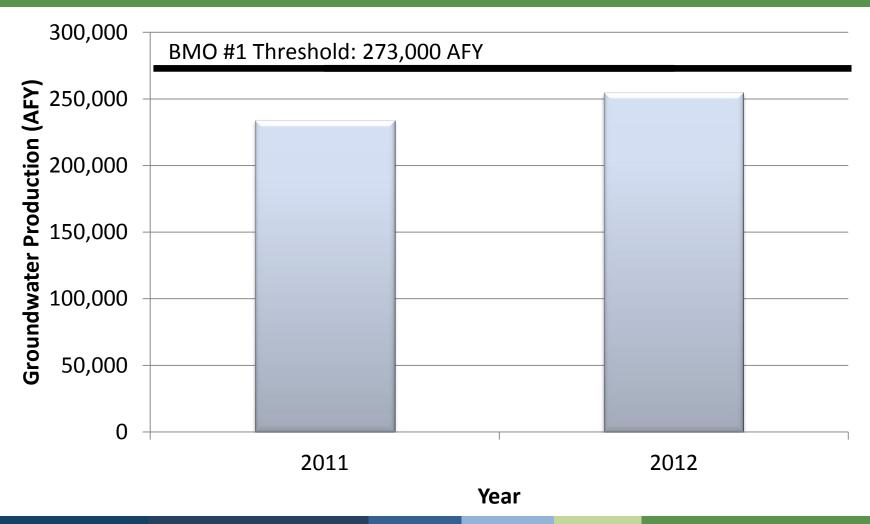
Groundwater Production, 2012



Total 2012 Production: 254,600 AF



Groundwater Production





Groundwater Pumping

Groundwater Pumping (Acre-Feet)						
Groundwater Pumper		2008	2009	2010	2011	2012
Reported Metered Data	Elk Grove Water District ¹	6,460	5,407	3,784	4,615	5,562
	Cal-Am ¹	24,769	23,659	21,525	19,413	19,173
	GSWC ¹	9,162	8,197	6,650	5,731	6,684
	SCWA ¹	34,220	34,248	32,171	29,809	25,363
	City of Sacramento, Utilities ¹	930	837	668	544	600 ⁹
Estimated Values	Tokay Park WC ²	160	160	160	160	160
	Florin County WD ²	2,600	2,600	2,600	2,600	2,600
	Fruitridge Vista WC ²	7,236	7,236	7,236	7,236	7,236
	Parks and Golf Courses ³	2,000	2,000	2,000	2,000	2,000
	Cemetery Districts ³	n/a	n/a	n/a	n/a	n/a
Agricultural and	Agricultural 4	n/a	n/a	n/a	116,500	134,600
Agriculture- Residential	Agricultural – Residential ⁴	n/a	n/a	n/a	17,200	23,400
SUBTOTAL		n/a	n/a	n/a	205,800	227,400
Remediated Groundwater	Aerojet ⁵	19,121	17,816	20,893	21,003	20,492
	IRCTS ⁶	3,405	4,123	4,674	4,872	4,786
	Mather Field ⁷	160	160	160	160	160
	Kiefer Landfill ⁸	1,800	1,800	1,800	1,800	1,800
SUBTOTAL		24,500	23,900	27,500	27,800	27,200
GRAND TOTAL		n/a	n/a	n/a	233,600	254,600

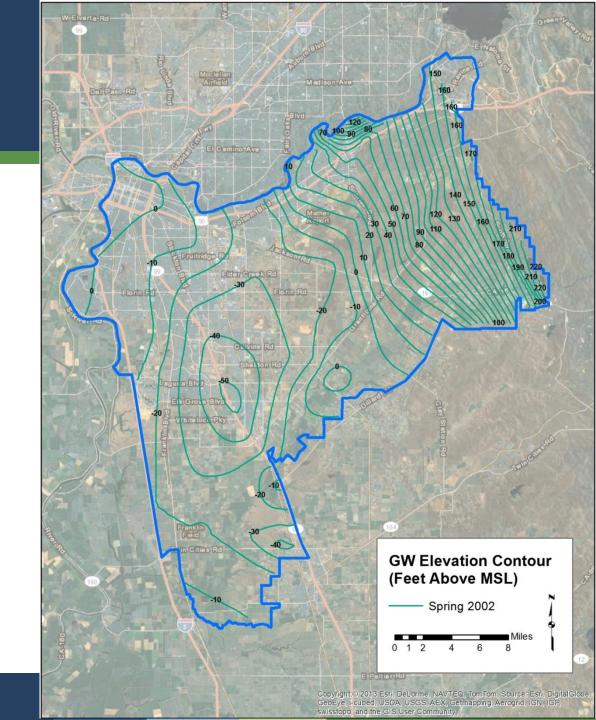


BMO 2: Groundwater Levels

- "Maintain specific groundwater elevations within all areas of the basin consistent with the Water Forum 'solution."
- Groundwater elevations presented as contour maps and hydrographs

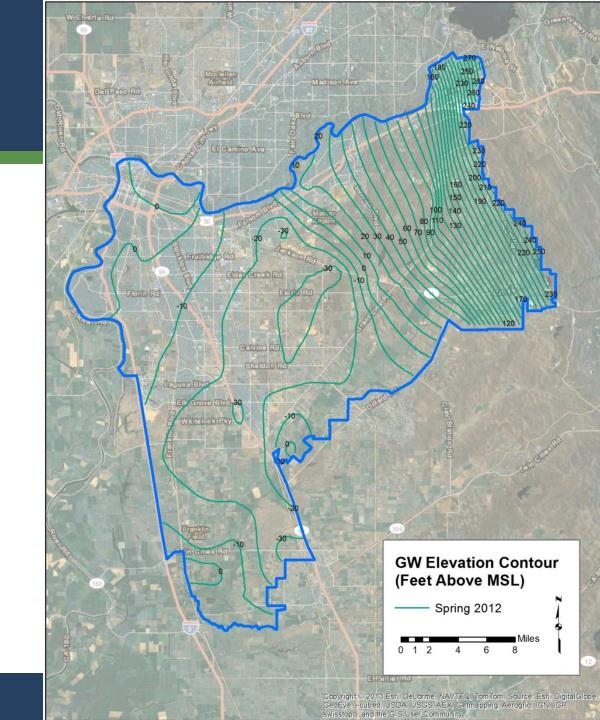


Spring 2002



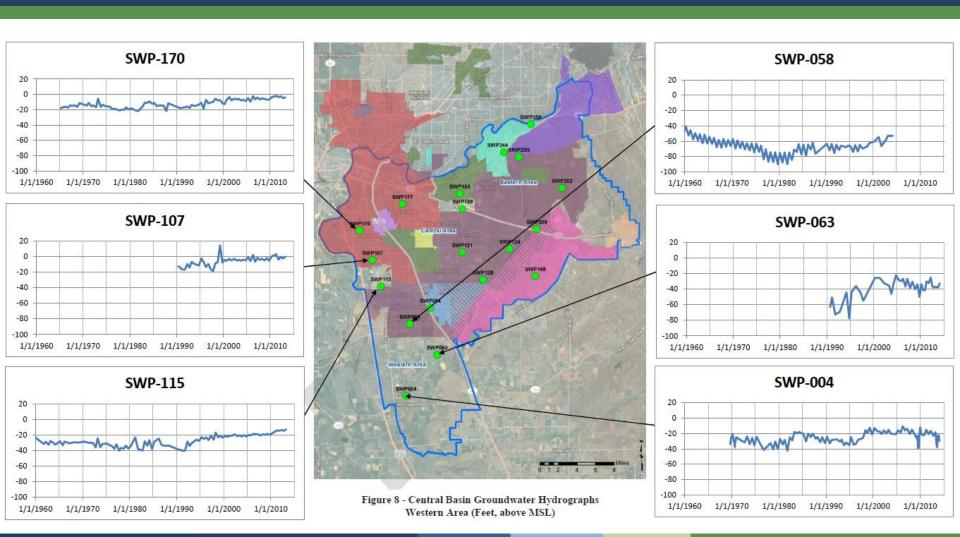


Spring 2012





Western Hydrographs

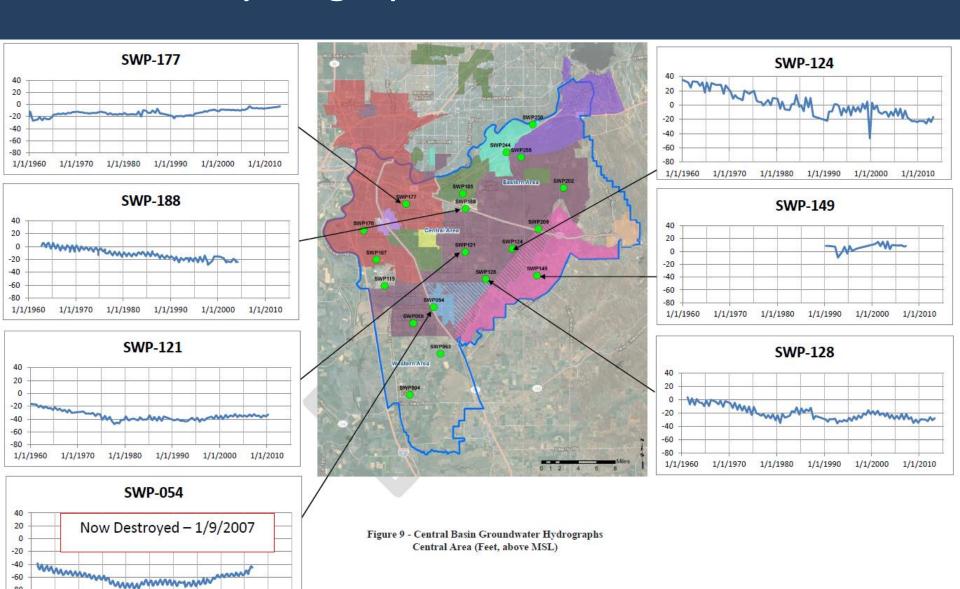




Central Hydrographs

1/1/2000

1/1/1980 1/1/1990



Eastern Hydrographs







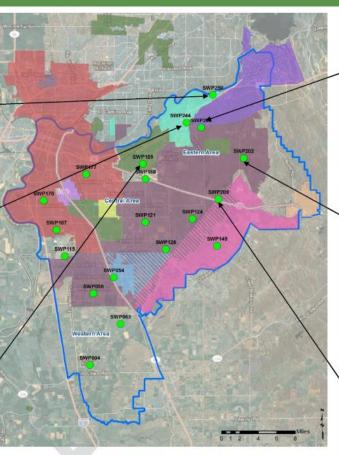


Figure 10 - Central Basin Groundwater Hydrographs Eastern Area (Feet, above MSL)









BMO 3: Subsidence

- "Protect against any potential inelastic land surface subsidence by limiting subsidence to no more than 0.007 feet per 1 foot of drawdown in the groundwater basin."
- No monitoring performed within SCGA during the reporting period
- SGA reported subsidence measurements northeast of McClellan
 - 0.3' of subsidence from 1947-1969
 - 1.9′ from 1969-1989
 - Associated with at least 68' of water level decline in area



BMO 4: Surface Water

- "Protect against any adverse impacts to surface water flows in the American, Cosumnes, and Sacramento Rivers."
- Information on gages and streamflows compiled and updated in 2011 modeling document
- Upcoming AB303-funded water quality and isotope study will increase understanding



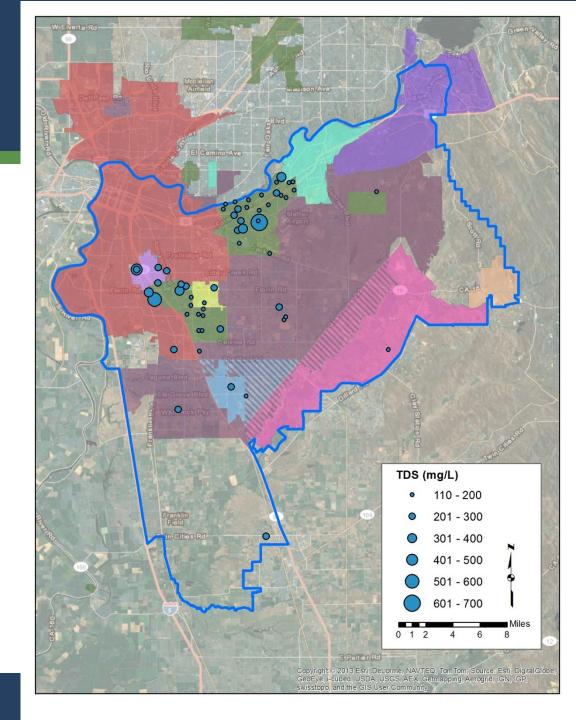
BMO 5: Water Quality Objectives

- Water quality summarized for
 - TDS
 - Iron
 - Manganese
 - Arsenic
 - Nitrate
 - Chromium 6
 - "Principal" Contaminant Plumes



TDS, 2012

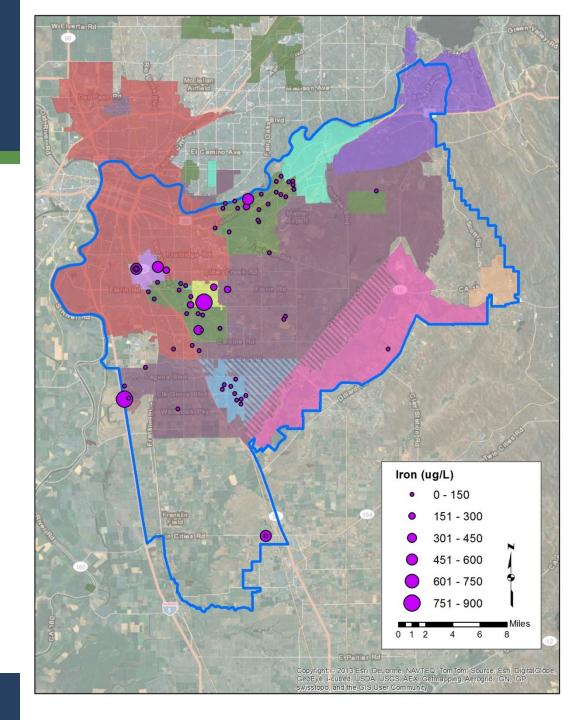
- SMCL
 - 500 mg/l
 - **1,000 mg/l**
 - **1,500 mg/l**





Iron, 2012

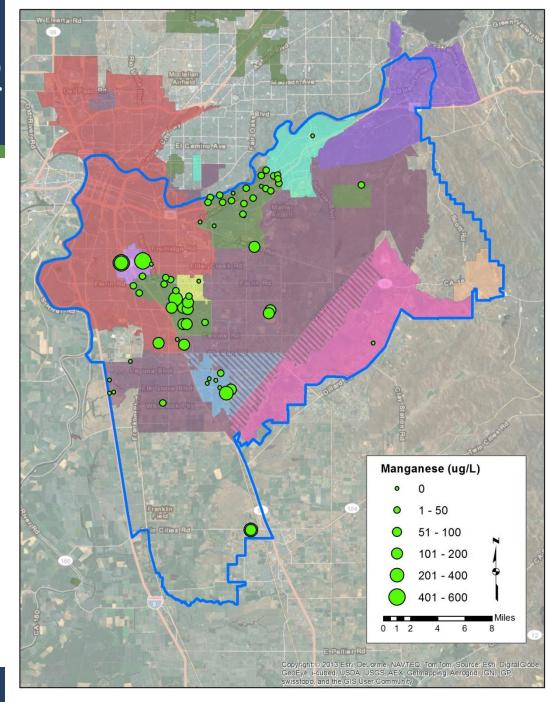
SMCL 300 mg/l





Manganese, 2012

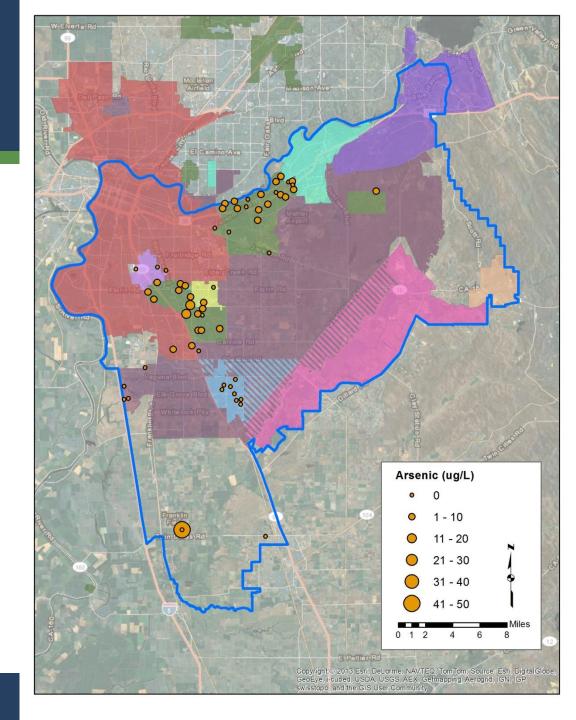
SMCL 50 mg/l





Arsenic, 2012

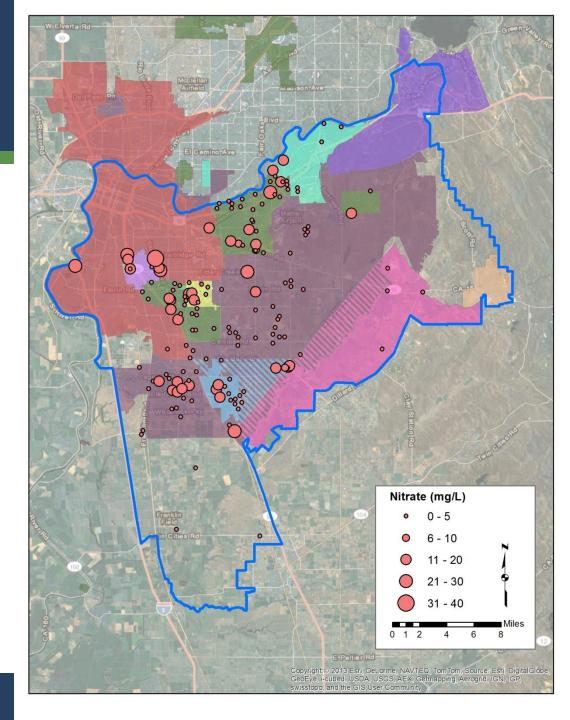
MCL 10 mg/l





Nitrate, 2012

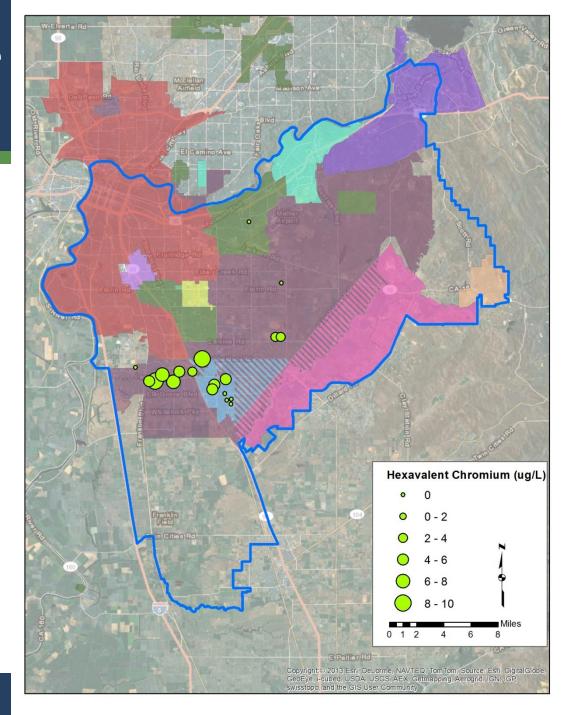
MCL 45 mg/l





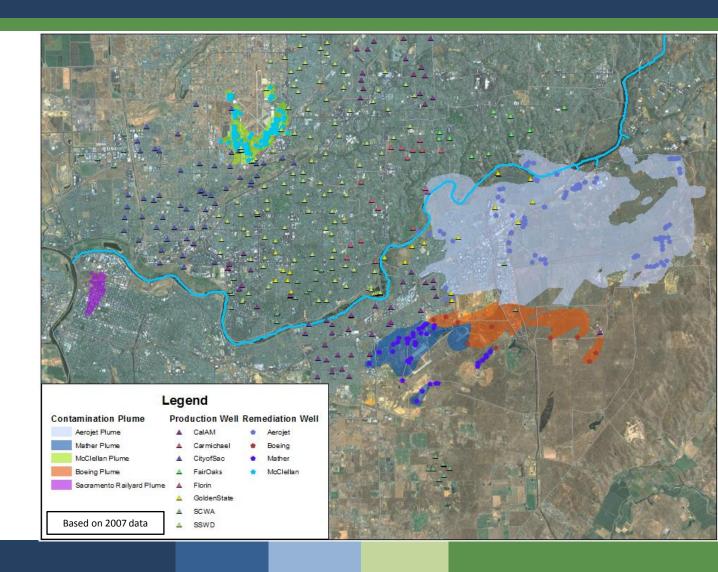
Hexavalent Chrome 2012

Proposed MCL10 μg/l





"Principal" Contaminant Plumes, 2007





Activities

- Public Outreach
- HydroDMS
- Well Protection Plan
- Agriculture/Agriculture Residential Water Conservation
- Control of the Migration and Remediation of Contaminated Water
- CASGEM



Recommendations

- Develop Groundwater Accounting Program
- Maintain and Update HydroDMS and groundwater model
- Update the GMP
- Update Monitoring Program



Thank You

Jim Blanke (916) 999-8762 jblanke@rmcwater.com



Sacramento Central Groundwater Authority Board Meeting May 14, 2014

AGENDA ITEM 7: EXECUTIVE DIRECTOR'S REPORT

- a) CASGEM
- b) Legislation
- c) WELL Project Progress Report

TO: SACRAMENTO CENTRAL GROUNDWATER AUTHORITY BOARD

FROM: DARRELL ECK

RE: EXECUTIVE DIRECTOR'S REPORT

- a) **CASGEM** On April 30, 2014 the State Department of Water Resources released the *Public Update for Drought Response Groundwater Basins with Potential Water Shortages and Gaps in Groundwater Monitoring* report. CASGEM monitoring data collected by the Groundwater Authority and other similar agencies across the state was utilized to produce this report. While there are many significant issues identified relative to groundwater throughout the state, those most important to our region include:
 - All groundwater basins within Sacramento County are not monitored under CASGEM.
 - All areas within Sacramento County are not covered by a current groundwater management plan that addresses all related requirements of the California Water Code.
- b) **Legislation** There are currently two bills in the legislature related to groundwater management plans.
 - SB 1168 (Pavley)
 - o Requires all basins/subbasins to have a groundwater management plan
 - o Basin must be managed "sustainably"
 - o Authorizes state to take certain actions in the event the basin is not properly managed.

ACWA indicates that this bill should be amended soon to incorporate concepts advanced by the California Water Foundation.

- AB 1739 (Dickinson)
 - o Requires by January 1, 2020 that a "sustainable" groundwater management plan be adopted in each priority basin with management plan being updated every 5 years. In addition, plans will require:
 - Sustainable groundwater management objectives;
 - An analysis of demonstrating how the objectives will achieve sustainable groundwater management within 20 years of plan implementation; and

- Identification of parties responsible for achieving objectives.
- o A minimum 50-year planning and implementation horizon
- Annual submission of performance reports
- o Regular submission of monitoring data to CASGEM and locally to stakeholders.
- o Empowers a groundwater management authority to (highlights):
 - Regulate the pumping of groundwater;
 - Establish, assume, or cooperatively manage well permitting programs;
 - Enforce the groundwater management agency's sustainable groundwater management plan;
 - Prohibits new extractions from the groundwater... unless the groundwater basin has a sustainable groundwater management plan;
 - Requires cities and counties, upon the adoption or revision of a general plan, to utilize groundwater management plans and sustainable groundwater management plans as source documents.

ACWA indicates that this is "a work in progress" and does not have a position on it yet.

c) **WELL Project – Progress Report** – The Resource Conservation Districts have provided a progress report (attached) on the implementation of their WELL Project. This project provides outreach to the ag-res community on water efficiency for large landscapes.

Senate Appropriations Committee Fiscal Summary Senator Kevin de León, Chair

SB 1168 (Pavley) – Groundwater management.

Amended: April 23, 2014 Policy Vote: NR&W 7-2

Urgency: No Mandate: No

Hearing Date: May 5, 2014 **Consultant:** Marie Liu

This bill meets the criteria for referral to the Suspense File.

Bill Summary: SB 1168 would provide a very broad outline for the development of sustainable groundwater management plans and makes a number of definitions.

Fiscal Impact: Unknown, at least in the mid-hundreds of thousands to millions of dollars annually, from the General Fund for the state's oversight of groundwater management.

Background: Existing law allows certain existing local agencies to develop groundwater management plans (Water Code §10750 et seq.), which are commonly referred to as AB 3030 plans. These plans must be developed with public hearings and only if less than half of the landowners in the proposed district do not protest the development of the plan. However, there is no mandatory statewide system of groundwater management.

In January, the Governor released the California Water Action Plan which includes a call to improve sustainable groundwater management.

Proposed Law: This bill would establish the Sustainable Groundwater Management Act which declares the Legislature's intent to have all groundwater basins and subbasins managed by local entities pursuant to an adopted sustainable groundwater management plan.

This bill makes numerous definitions and provides a very approximate outline of requirements for local groundwater management plans and the local agencies which create the plans. This bill also would allow the state to take action to cause a plan to be developed, adopted, and implemented.

Related Legislation: AB 1739 (Dickenson) would require the development of sustainable a groundwater management plan for each groundwater basin in the state. AB 1739 is currently in Assembly Appropriations.

Staff Comments: This bill does not include any detail on the state's oversight responsibilities in local groundwater management planning, including which department would be responsible for these activities. Therefore, costs are unknown. However, staff believes that it is reasonable to assume that the state will need several positions for basic oversight functions, for a minimum annual cost in the mid-hundreds of thousands of dollars, though a more comprehensive program will likely cost millions of dollars.

Date of Hearing: April 29, 2014

ASSEMBLY COMMITTEE ON WATER, PARKS AND WILDLIFE Anthony Rendon, Chair

AB 1739 (Dickinson) - As Amended: April 22, 2014

SUBJECT: Groundwater management

<u>SUMMARY</u>: Requires sustainable groundwater management in all groundwater subbasins determined by the Department of Water Resources (DWR) to be at medium to high risk of significant economic, social and environmental impacts due to an unsustainable and chronic pattern of groundwater extractions exceeding the ability of the surface water supplies to replenish the subbasin. Specifically, <u>this bill</u>:

- 1) Adds groundwater sustainability to the Water Code and applies that section, by definition, to those groundwater basins (which include both basins and subbasins) that are identified by DWR as high or medium priority (Priority Basins).
- 2) Requires, by January 1, 2020, that a sustainable groundwater management plan (SGMP) be adopted in each Priority Basin by an overlying groundwater management agency (GMA) and updated every five years thereafter and that such plans meet, in addition to the minimum current components for groundwater management plans (GMPs), the following requirements:
 - a) Sustainable groundwater management objectives, an analysis of demonstrating how the objectives will achieve sustainable groundwater management within 20 years of the implementation of the plan, and an identification of the parties responsible for achieving the objectives;
 - b) A minimum 50 year planning and implementation horizon;
 - c) Annual submission of performance reports;
 - d) Regular submission of monitoring data to DWR for the California Statewide Groundwater Elevation Monitoring Program (CASGEM) and locally to stakeholders.
- 3) Exempts from SGMP requirements any groundwater basin, or portion of a groundwater basin, that is subject to groundwater management pursuant to other provisions of law or a court order, judgment, or decree.
- 4) Requires SGMPs covering different portions of a groundwater basin not to conflict or impede each other.
- 5) Empowers a GMA to:
 - a) Incorporate other areas overlying the groundwater basin that are not covered by another SGMP;
 - b) Request an adjustment of a groundwater basin boundary to address hydrologic conditions and other features and other features based upon a technical analysis;
 - c) Enter into different types of legal agreements to facilitate participation among entities;
 - d) Raise funds for the purposes of sustainable groundwater management;
 - e) Regulate the pumping of groundwater;
 - f) Establish, assume, or cooperatively manage well permitting programs;
 - g) Enforce the GMA's SGMP.

- 6) Prohibits new extractions from the groundwater as of a not-yet-specified date, or the date adopted by the GMA, whichever is earlier, unless the groundwater basin has an SGMP. Excludes single-family domestic wells from that prohibition.
- 7) Allows money in the existing Local Groundwater Assistance Fund, which is used for planning and implementation of GMPs to also be used for SGMP planning and implementation.
- 8) Allows Local Agency Formation Commissions to provide special technical assistance and an expedited timeline to facilitation the formation of local and regional GMAs.
- 9) Requires cities and counties, upon the adoption or revision of a general plan, to utilize GMPs and SGMPs as source documents.

EXISTING LAW:

- 1) Provides the State Water Resources Control Board (State Water Board) with broad powers to regulate the waste and unreasonable use of water, including groundwater.
- 2) Categorizes groundwater as either a subterranean stream flowing through a known and definite channel or percolating groundwater. Groundwater that is a subterranean stream is subject to the same State Water Board water right permitting requirements as surface water. There is no statewide permitting requirement for percolating groundwater, which is the majority of groundwater.
- 3) Encourages local agencies to work cooperatively to manage groundwater resources within their jurisdictions and, if not otherwise required by law, to voluntarily adopt GMPs.
- 4) Requires that a GMP contain components related to funding, management, and monitoring in order for a local agency to be eligible for groundwater project funds administered by DWR.
- 5) Allows a GMP to voluntarily contain additional listed components.
- 6) Requires all of the groundwater basins identified in DWR's Groundwater Report, Bulletin 118, to be regularly and systematically monitored locally and the information to be readily and widely available.
- 7) Requires DWR to perform the groundwater elevation monitoring function if no local entity will do so but then bars the county and other entities eligible to monitor that basin from receiving state water grants or loans.
- 8) Requires DWR to prioritize groundwater basins based on multiple factors including, but not limited to, the level of population and irrigated acreage relying on the groundwater basin as a primary source of water and the current impacts on the groundwater basin from overdraft, subsidence, saline intrusion and other water quality degradation.

FISCAL EFFECT: Unknown

<u>COMMENTS</u>: California uses more groundwater than any other State yet there are no statewide standards for groundwater management. Groundwater provides, on average, 40% of California's water supply and that usage can increase to 60% or greater in dry years. For some communities groundwater is 100% of their local supplies. Yet groundwater is perhaps our most mysterious and least understood water source. Groundwater refers to water located beneath the surface in soil pore spaces and in the fractures of rock formations. It does not exist as one

continuous homogenous bathtub-like water body, but can be almost like a layer cake with different levels of varying depths that extend to large areas or are confined to small disconnected pockets.

On March 11, 2014 the Assembly Water, Parks & Wildlife Committee held an informational hearing on *Management of California's Groundwater Resources*. The purpose of the hearing was to add to the growing and collaborative conversation about groundwater management in California – a conversation that was made more urgent by the Governor's declaration on January 17, 2014 of a drought state of emergency in California.

The Governor's declaration came on the heels of three dry years in a row and was the second time in five years that a California Governor had declared a drought state of emergency. Testimony at the hearing referenced the data from the National Aeronautics and Space Administration (NASA)/German Aerospace Center Gravity Recovery and Climate Experiment (GRACE) satellites, which reveals that between 2003 and 2009 the groundwater aquifers for the Central Valley and its major mountain water source, the Sierra Nevadas, had lost almost 26 million acre-feet of water (an acre-foot is a standard measurement of water – enough water to flood an acre of land a foot deep – and equates to about 326,000 gallons). That is nearly enough water combined to fill Lake Mead, America's largest reservoir. The findings reflected the effects of California's extended drought and the resulting increased rates of groundwater being pumped for human uses, such as irrigation.

Overdraft in California today is estimated to occur in parts of the Central Valley, especially the Tulare Lake Basin, but also in some coastal and southern California basins with limited surface water supplies and intensive agriculture. While some overdraft reverses temporarily during wet periods, DWR estimates that California is overdrafting its groundwater at a rate of 1.5 million acre-feet per year. However, NASA estimates groundwater overdraft in California may be close to 4.4 million acre-feet per year statewide.

Current Groundwater Management and Monitoring of Supply

There are three basic methods available for managing groundwater resources in California: management by local agencies under authority granted in the California Water Code or other applicable State statutes; local government groundwater ordinances or joint powers agreements; and, court adjudications.

AB 3030 (Costa), the California Groundwater Management Act, was passed by the Legislature in 1992. It was a significant addition to the groundwater management authorities granted under the Water Code in that it greatly increased the number of local agencies authorized to develop GWMPs and set forth a common framework for management by local agencies throughout California. Adoption of a GMP was encouraged under AB 3030 but not required. SB 1938 (Machado/2002) took a further step when it set out certain specified components for GMPs and required any local agency seeking state funds administered by DWR to meet those requirements. Subsequent bond initiatives have also made an adopted GMP an eligibility criterion for receiving groundwater project and program funds. Since its passage, 149 agencies have adopted GMPs in accordance with AB 3030. Other agencies have begun the process. As mentioned above, in some basins, groundwater is managed under other statutory or judicial authority.

The California Groundwater Management Act, as amended, provides a systematic procedure to develop a GMP and requires the inclusion of certain minimum components. These include basin management objectives and monitoring and management of groundwater levels, inelastic surface subsidence, and changes in surface flow and surface quality that directly affect groundwater levels or quality or are caused by groundwater pumping. The Act also requires a description of how recharge areas identified in the plan substantially contribute to the replenishment of the groundwater basin. In addition, suggested optional components that might be relevant for a particular groundwater basin are listed.

In 2009 groundwater monitoring took another step forward in the historic five-bill package of water legislation adopted during the Seventh Extraordinary Session on water in 2009. That package included SBX7 6 (Steinberg). SBX7 6 recognized that the statewide collection and evaluation of seasonal and long-term trends in groundwater elevations in California's groundwater basins is an important fundamental step toward improving management of California's groundwater resources. To achieve that goal, SBX7 6 incentivizes local monitoring entities to collect groundwater elevation data by mandating that, as a default, it will be done by DWR and if DWR was required to step in then those entities are ineligible for state funding for their groundwater projects and programs. In accordance with SBX7 6, DWR developed the California Statewide Groundwater Elevation Monitoring (CASGEM) program.

State Water Resources Control Board Groundwater Workplan Concept Paper

On October 4, 2013 the State Water Board's release of a *Discussion Draft Groundwater Workplan Concept Paper* advanced the groundwater conversation even further. That paper called for the implementation of five key elements – "whether at the local, regional, or state level" – in order to effectively manage groundwater. The five elements are:

- "1. **Sustainable thresholds** for water level drawdown and water quality for impacted, vulnerable, and high-use basins;
- 2. Water quality and water level **monitoring and assessment**, and data management systems, capable of determining if thresholds are being met and evaluating trends;
- 3. Governance structures with the management mechanisms needed to prevent impacts before they occur, clean up contamination where it has occurred, provide adequate treatment of contaminated drinking water sources, and ensure that meeting groundwater level and quality thresholds are managed over the long term;
- 4. **Funding** to support monitoring and governance/management actions; and
- 5. **Oversight and enforcement** in basins where ongoing management efforts are not protecting groundwater.

The Groundwater Workplan Concept Paper also advised that the Water Board would be focusing "attention and assistance on high-use basins where thresholds are being exceeded." Following release of that Concept Paper the State Water Board engaged in stakeholder discussion to receive feedback and held several highly-attended all day public workshops.

January 22, 2014 also saw the release of the final version of the Governor's California Water Action Plan. Responding to "one of the driest winters on record," the Governor tasked the California Natural Resources Agency, the California Environmental Protection Agency, and the California Department of Food and Agriculture in late 2013 to work together on a plan that would guide state efforts to enhance water supply reliability, restore damaged and destroyed ecosystems, and improve the resilience of our infrastructure over the next five years. The Plan focuses on eight "challenges for managing California's water supplies," which are: uncertain water supplies; water scarcity/drought; declining groundwater supplies; poor water quality; declining native fish species and loss of wildlife habitat; floods; supply disruptions; and, population growth and climate change further increasing the severity of risks.

Regarding declining groundwater supplies, the Action Plan acknowledges that some of California's groundwater basins are sustainably managed, but unfortunately, many are not. The report finds that "inconsistent and inadequate tools, resources and authorities make managing groundwater difficult in California and impede our ability to address problems such as overdraft, seawater intrusion, land subsidence, and water quality degradation." But it also acknowledged that, conversely, properly managed groundwater resources could "help protect communities, farms and the environment against the impacts of prolonged dry periods and climate change" and that the "strategies identified in this action plan will move California toward more sustainable management of our groundwater resources."

With respect to expanding water storage capacity and improving groundwater management, the Action Plan focuses on the increased flexibility that could be created in California's water management system if some increment of flows in high water years could be banked for later in surface water reservoirs and groundwater basins. The Action Plan also acknowledged the need to "better manage our groundwater basins to reverse alarming declines in groundwater levels" and that continued "declines in groundwater levels could lead to irreversible land subsidence, poor water quality, reduced surface flows, ecosystem impacts, and the permanent loss of capacity to store water as groundwater." Among the programs identified for support to achieve the Action Plan goals were CASGEMS and GAMA. The Action Plan also called for an update of Bulletin 118 and efforts to improve sustainable groundwater management, support distributed groundwater storage, increase statewide groundwater recharge, and accelerate cleanup of contaminated groundwater and prevent future contamination.

On January 9, 2014, the Governor proposed his 2014-15 budget, which included \$619 million to advance the Action Plan. The budget took bold steps on groundwater under the title "Expand Water Storage Capacity" by providing \$1.9 million to the State Water Board for "10 positions to act as a backstop when local or regional agencies are unable or unwilling to sustainably manage groundwater basins." The proposed budget advises that the State Water Board "will protect groundwater basins at risk of permanent damage until local or regional agencies are able to do so." In addition to funds for the State Water Board groundwater management backstop, the budget included \$3 million for continued support of GAMA's priority basin project and \$2.9 million to DWR to continue CASGEM with an additional directive for "more effective and timely access to hydrogeologic and well construction data." On March 1, 2014 the Governor signed two bipartisan urgency measures SB 103 and SB 104 (Committee on Budget and Fiscal Review) that accelerated some funding proposed in the budget in order to more quickly address drought-related impacts. Some groundwater management funds were included in that action.

Governor's Office Draft Framework for Soliciting Stakeholder Input on Groundwater Management

On March 7, 2014 the Governor's Office released a draft framework for "soliciting input on actions that can be taken to assure that local groundwater managers have the tools and authority to sustainably manage groundwater consistent with the California Water Action Plan." In particular the Draft Framework advises that in developing ideas it may be helpful to consider whether local agencies need enhanced local agency authority and how the State should structure state backstop authority when local action has not occurred or has been insufficient.

The Draft Framework emphasizes that local agencies are the most familiar with the condition of their groundwater basins and are in the best position to manage those resources locally. But it acknowledges that local agencies may need new or modified statutory authorities to manage groundwater more effectively. The framework submits for consideration whether such tools would need to address:

- allocation of groundwater
- ability to control pumping
- ability to assess fees for replenishment or other groundwater activities
- groundwater measurement and reporting

Additional questions regarding local authority include, but are not limited to whether existing GMPs should play a role and, if so, whether their content needs to change and whether there are existing barriers to adequately funding groundwater management efforts.

Current Groundwater Legislation

This bill is one of two current legislative efforts to address better groundwater management. The other bill is SB 1168 (Pavley) which was heard in Senate Natural Resources and Water Committee on April 22, 2014. Both bills represent initial groundwater management concepts developed after extensive stakeholder processes.

Supporting arguments: The author states that in many areas, including parts of the San Joaquin Valley, overdraft of groundwater has become a serious problem and while a number of groundwater basins and subbasins are under sound local and regional management, others are not. The author adds that while existing authorities and requirements for managing groundwater provide a strong foundation, managing to a sustainable level of groundwater requires additional tools that build upon that foundation. The author advises that this bill seeks to address several critical policy objectives that are central to improving local and regional groundwater management efforts and achieving sustainable groundwater levels, especially in high and medium risk overdraft basins and subbasins.

REGISTERED SUPPORT / OPPOSITION:

Support Opposition
None on file None on file

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Progress Report

W.E.L.L Project

Water Efficiency for Large Landscapes

California Association of Resource Conservation Districts

Reporting Dates: 1/1/2014-3/31/2014 **Date Submitted:** 4/22/2014

Accomplishments:

- ✓ Planning for future workshops has been very successful this quarter. Workshop planning for April 5th has already filled completely with 135 people registered. Created flier for this workshop which has been featured in newspapers and newsletters. Two additional grey water workshops have been planned for June.
- ✓ As of the end of March we have 50 people who have filled out the survey expressing interest in the program. Starting in May applications will be contacted and home audits will be conducted.
- ✓ Began planning with SoilBorn Farms for May 18th Farm Day, giving two 45 minutes presentations of greywater and rainwater harvesting. Planning has also begun on doing two separate hands-on installation workshops at SoilBorn Farms. One installation workshop would teach participated to install a Laundry to landscape system and the second would install a "Blue Barrel" rainwater harvest system.
- ✓ Began planning with Mike (West Sacramento Master Gardener) and West Sacramento to do additional workshops and a rainwater harvesting workshop.
- ✓ Continued research of permitting needs for 'rain water harvest systems' and 'greywater systems' in jurisdictions that fall within the project area.
- ✓ Continues work with the NRCS and the Sloughhouse Resource Conservation District (RCD) to develop outreach efforts for south Sacramento County rural residents. Met with Elisa Noble from Placer Resource Conservation District, discussed and planned an Irrigation Workshop in Placer County for April 10th.

Meetings Attended:

- ✓ January 6th 2014 EGGG Event Meeting
- ✓ January 17th 2014 EGGG Event Meeting
- ✓ January 22nd 2014 Greener Gardeners Training
- ✓ January 29th 2014 Greener Gardeners Training

- ✓ February 1st 2014 EcoLandscape Conference
- ✓ February 5th 2014 Laguna Sunrise Rotary Presentation
- √ February 1st 2014 Greener Garden Training
- √ February 7st 2014 EGGG Event Meeting
- ✓ February 12th 2014 Greener Gardens Training
- ✓ February 13th 2014 Regional Creeks Organization formation meeting
- ✓ February 21st 2014 EGGG Event Meeting
- ✓ March 5th 2014 EGGG Event Meeting
- ✓ March 6th 2014 Greywater Workshop Training
- ✓ March 7th 2014 EGGG Event Meeting
- ✓ March 19th 2014 Greener Gardens Training
- ✓ March 24th 2014 Meeting with mike to discuss Greywater workshop and possible program in West Sacramento

Difficulties/Plans for next Quarter

Through working with homeowners and contact with prospective clients of this program it has become clear that many agricultural and rural homeowners do not necessarily use groundwater and personal wells. There are pockets of areas in the region that relay entirely on groundwater (south county Sacramento) but many rural and agricultural-residential areas relay on municipalities as a water source. As identified in the project work plan these rural and agricultural-residential residents need assistance in water conservation that may differ from residual communities. Because of this realization it has become necessary to reevaluate and change the requirements for clients to participate in the program. The new requirements will not require clients to use groundwater as a water source.

Several workshops are planned for the future:

- ✓ April 5th Greywater Workshop in Sacramento
- ✓ April 9th Elk Grove Grange Meeting
- ✓ April 10th Placer RCD Irrigation Workshop
- ✓ April 26th Elk Grove Greener Gardens Hands-On Expo
- ✓ May 18th Soil Born Farm Day- Two 45 minute presentations
- ✓ June 7th Greywater Workshop in Grizzly Flats and Open House
- ✓ June 21st Greywater Workshop in West Sacramento