County of



Mark D. Black, Agricultural Commissioner
Sealer of Weights & Measures

Department of Agriculture

Jean S. Miller, Assistant Agricultural Commissioner Sealer of Weights & Measures

August 20, 2010

SENT VIA EMAIL

MBK Engineers Darren Cordova 1771 Tribute Road, Suite A Sacramento, CA 95815

Dear Mr. Cordova,

Thank you for submitting the Final Summary of 2009 Drought Water Bank Water Transfer Monitoring for Reclamation District No. 1004. We appreciate your willingness work cooperatively with Glenn County to provide the information as required by Glenn County Code 20.03. I have included the excerpt from Glenn County Code that is applicable to groundwater substitution and groundwater export programs.

20.03.110 Review of Technical Data:

E. The Water Advisory Committee shall collect the following data from any district (and) or person engaged in a groundwater substitution program or groundwater export program: the weekly amounts of groundwater extracted from each well, the precise location of the wells, all pumping and non-pumping groundwater level measurements made during the groundwater substitution period, the time periods during which the groundwater substitution program will occur, and all required environmental documentation. It shall be the responsibility of the district and (or) person involved in the groundwater substitution program to provide this information to the Water Advisory Committee including any monetary costs of providing such data.

Your report was very complete and in compliance with the guidelines set by the State and beyond what Glenn County Code requires. Only one minor issue stood out, your report provided monthly and average daily rates of extraction, but the ordinance requires weekly amounts of groundwater extracted from each well. I would like to remind you that it is important to provide all the required information as stated in the Code. If you have the opportunity to be involved in another export/substitution program, please be sure to include all data required by the ordinance. If you have any questions, call our office at (530) 934-6501.

Sincerely,

Lester Messina

Water Resources Coordinator

Cc:

Kelly Staton Kelly Boyd

720 N. Colusa Street P.O. Box 351 Willows, CA 95988 Phone: (530) 934-6501

Fax: (530) 934-6503

Email: agcommr@countyofglenn.net

SITES PROJECT AUTHORITY JOINT EXERCISE OF POWERS AGREEMENT

This Joint Powers Agreement ("Agreement") is made and entered into by and among Glenn Colusa Irrigation District (GCID), Reclamation District 108 (RD 108), the Tehama-Colusa Canal Authority (TCCA), Maxwell Irrigation District (Maxwell), County of Glenn (Glenn County), and County of Colusa (Colusa County) hereinafter "Members."

RECITALS

The Members are public entities located and operating in the Sacramento Valley, and are formed and operating under the laws of the State of California;

Congress and the State Legislature have declared that the Sacramento-San Joaquin Delta watershed and California's water infrastructure are in crisis and they have encouraged regional and local public agencies to form joint powers authorities to improve the operation of the state's water system;

Sites Reservoir (sometimes referred to as North of Delta Offstream Storage) has been identified by the State of California and the federal government as an important component of integrated water management in the Sacramento Valley that could advance the long-term co-equal objectives of improving water management and restoring ecological health for beneficial uses of the Sacramento-San Joaquin Delta and the Sacramento River watershed;

The principal purpose of this Agreement is to establish an independent special agency, known as the Sites Project Authority ("Authority"), that will have as its mission, to be a proponent and facilitator to design and potentially acquire, construct, manage, govern, and operate Sites Reservoir and related facilities; to improve the operation of the state's water system; and to provide a net improvement in ecosystem and water quality conditions in the Sacramento River system and the Delta;

Each Member is uniquely situated with respect to Sites Reservoir and the related facilities to help design, acquire, construct, manage, govern, and operate the project to provide local, regional, and statewide public benefits and improve the state's water system;

Certain Members executed the Memorandum of Understanding Between the Department of Water Resources, the United States Bureau of Reclamation, the Western Power Administration, the California Department of Fish and Game, the United States Fish and Wildlife Service, the Glenn-Colusa Irrigation District, the Tehama Colusa Canal Authority, and Other CalFed Agencies and Local Interests Pursuant to the Directive with Respect to Sites Reservoir Contained in the CalFed Bay-Delta Program Programmatic Record of Decision, August 28, 2000;

The Members believe that their actions to advance Sites Reservoir and related facilities can best be achieved through coordination and the cooperative action of the Members operating through a joint powers authority.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual promises, covenants, and conditions hereinafter set forth, it is agreed by and among the Members as follows:

PURPOSES AND POWERS

- 1.1. Creation: There is hereby created pursuant to the Joint Exercise of Powers Act ("Act"), California Government Code Section 6500 *et seq.*, a public entity to be known as the **Sites Project Authority** ("Authority"), which shall be an agency that is separate from its Members.
- 1.2. Purpose: The purpose of this Agreement is to establish an independent joint powers authority to exercise powers common to the Members to, among other things, effectively study, promote, develop, design, finance, acquire, construct, manage, and operate Sites Reservoir and related facilities such as recreation and power generation. The purposes of pursuing and developing Sites Reservoir are to: (1) increase surface water storage to enhance water management flexibility in the Sacramento Valley, (2) provide flood control benefits, (3) improve conditions for fish and wildlife in the Sacramento Valley, including anadromous fish in the Sacramento River, and (4) improve the operation of the state's water system to provide improvements in ecosystem and water quality conditions in the Bay-Delta while providing a more reliable water supply for the State of California.
- 1.3. Powers: The Authority shall have the power to pursue the purposes described above and to perform all acts necessary for the exercise of said powers, including, but not limited to, the ability to:
 - 1.3.1. make and enter into contracts necessary for the full exercise of its powers;
 - 1.3.2. perform studies, environmental review, engineering and design, and if appropriate, permitting, construction of water storage, and related conjunctive management;
 - 1.3.3. contract for the services of engineers, attorneys, scientists, planners, financial consultants, and separate and apart therefrom, to employ such persons as it deems necessary;
 - 1.3.4. hold or dispose of any property, including acquisition by eminent domain;
 - 1.3.5. apply for, accept, and receive permits, licenses, grants, loans, or other funding from any federal, state or local public agency;
 - 1.3.6. issue revenue bonds and other forms of indebtedness to the extent, and on the terms, provided by the Act;

- 1.3.7. incur debts, liabilities, and obligations;
- 1.3.8. adopt bylaws, rules, regulations, and procedures governing the operation of the Authority.
- 1.4. Supermajority Vote for Certain Obligations: The Authority shall not incur any obligation under Articles 1.3.5., 1.3.6. or 1.3.7. in excess of \$150,000, except upon an affirmative vote of at least seventy-five percent (75%) of the total number of the Members.
- 1.5. Manner of Exercise of Powers: To the extent not specifically provided for in this Agreement or the Act, the Authority shall exercise its powers subject to the restrictions upon the manner of exercising the powers under the laws applicable to Irrigation Districts (California Water Code section 20510 et seq.).
- 1.6. GCID and TCCA Operations: The Parties anticipate that the Sites Reservoir project will be within or adjacent to GCID and/or TCCA districts with at least a portion of the conveyance of water into the reservoir to be accomplished by wheeling water through GCID's Main Canal and/or the Tehama Colusa Canal. The Authority shall not have the power, except with the express written consent of GCID and/or TCCA, depending on which facilities are at issue, to enter into any agreements or otherwise take any action that will, directly or indirectly, decrease, restrict, or in any manner alter, modify or limit water rights, water supplies or contractual entitlements to water of GCID and/or TCCA (and, in the case of TCCA, the water agencies it serves) or the operations of their facilities or any facilities they operate under contract.
- **1.7.** Term: This Agreement shall be effective when signed by all Members and shall continue until terminated in accordance with Section 6.2.

II. AUTHORITY MEMBERSHIP

- 2.1. Generally: Authority membership is comprised of the public agencies (as defined in Section 6500 of the Act) that are authorized to be Members and are signatories to this Agreement.
- 2.2. DWR and Bureau of Reclamation: The Authority may enter into a contract or other arrangement with the California Department of Water Resources (DWR) and the Bureau of Reclamation to carry out the purposes of this Agreement. DWR, upon the approval of the Authority Board, may be a non-voting, ex-officio member of the Authority.
- 2.3. Addition of Members: Entities authorized by law to participate in a JPA may subsequently become Members upon an affirmative vote of at least seventy-five percent (75%) of the total number of the Members and the new Member's execution of this Agreement, as it may have been amended. Additional terms and conditions for new Member's participation in the Authority, if any, shall be set forth in an amendment to this

Agreement. Such terms and conditions shall be consistent with this Agreement and any contracts, resolutions, or indentures of the Authority then in effect.

2.4. Consultation Committee: A Consultation Committee will be formed to provide a forum in which non-Member public agencies and private entities provide input on matters affecting the Authority. The Consultation Committee will meet on a regular basis to exchange information and provide input concerning upcoming decisions expected to be made by the Authority. Consultation Committee Members will not have a seat on the Board and will not vote on matters before the Authority, but will have an opportunity to inquire about relevant matters, be apprised by the Authority of issues of interest, and make recommendations concerning pending decisions. The purpose of the Consultation Committee is to maximize transparency regarding the decision-making process and facilitate the exchange of information; provide opportunity for comment, input, and recommendations; and ensure meaningful discussions regarding the rationale for decisions and the outcomes that result.

III. GOVERNANCE AND INTERNAL ORGANIZATION

- **3.1. Board of Directors:** The governing body of the Authority shall be a Board of Directors (Board) that will conduct all business on behalf of the Authority consistent with this Agreement and applicable law. The Board will consist of one representative of each Member.
- **3.2.** Appointment: Each Director shall be appointed by and serve at the pleasure of the governing body of each respective Member.
- **3.3. Meetings:** The Board shall hold at least one regular meeting per year, and may hold regular or special meetings at more frequent intervals. All meetings of the Board shall be called, held, noticed, and conducted subject to the provisions of the Ralph M. Brown Act (Government Code Section 54950, *et seg.*).
- **3.4.** Quorum: A majority of the total number of Directors shall constitute a quorum.
- **3.5. Voting:** The Board shall take action only upon an affirmative vote of a majority of the total number of Directors, except where a supermajority is required by specific provisions herein. Each Board member shall have one vote.

3.6. Officers:

- 3.6.1. The Board shall select, from among the Directors, a Chair, who will be the presiding officer for all Board meetings, and a Vice-Chair, who will preside in the absence of the Chair.
- 3.6.2. The Board shall also select a Secretary, who shall be responsible for keeping the minutes of all meetings of the Board and all other official

records of the Authority, and a Treasurer, who shall be the depository and have custody of all money of the Authority and shall perform the duties specified in Government Code Section 6505.5. The Treasurer shall be bonded in accordance with Government Code Section 6505.1 and shall pay all demands against the Authority that have been approved by the Board. The Board may combine the positions of Secretary and Treasurer.

- 3.7. General Manager: The Board may appoint a General Manager or assign staff of one or more Members to conduct the business of the Authority in accordance with the policies of the Board; provided that no Member's staff will be so assigned without the consent of that Member. The General Manager serves at the pleasure of the Board and may be an employee or a contractor of the Authority.
- 3.8. Liability of Authority, Officers, and Employees: The Directors, officers, and any employees of the Authority shall use ordinary care and reasonable diligence in the exercise of their powers and in the performance of their duties pursuant to this Agreement. No Director, officer, employee or agent will be responsible for any act or omission by another board member, officer or employee. The Authority shall indemnify and hold harmless the individual board members, officers, employees, and agents of the Authority for any action taken lawfully and in good faith pursuant to this Agreement. Nothing in this section shall be construed to limit the defenses available under the law, to the Members, the Authority, or its Directors, officers, employees or agents.

IV. FINANCIAL PROVISIONS

- **4.1. Fiscal Year:** The fiscal year shall run concurrent with the calendar year, unless the Directors decide otherwise.
- **4.2. Depositary:** All funds of the Authority shall be held in separate accounts in the name of the Authority and not commingled with the funds of any Member or any other person or entity. Regular reports shall be made as directed by the Board, but at least quarterly, to the Board of all receipts and disbursements. The books and records shall be open to inspection by the Board and individual Directors upon reasonable notice.
- **4.3. Budgets:** A draft budget will be prepared for the Members to review 45 days before the beginning of the fiscal year. The Board shall approve the budget no later than 15 days before the beginning of the fiscal year. The budget shall include:
 - 4.3.1. General and administrative costs include the general operation and administration of the Authority. These costs do not include any costs incurred by the Authority directly as a result of a specific Project Agreement as described in Article V.
 - 4.3.2. Project specific costs shall be fully described and specified in a Project Agreement.

The Board shall ensure that all costs incurred by the Authority directly relating to any specific project will be paid only by the parties to the Project Agreement and will not be paid for by the Authority as general and administrative costs.

4.4. Initial Contributions: Upon formation of the Authority, each Member shall contribute \$5,000 for the initial general and administrative costs and to begin developing and implementing Project Agreements.

4.5. Recovery of General and Administrative Costs:

- 4.5.1. The Board may assess each Member for the general and administrative costs to operate the Authority. Payments of public funds may be made to defray the costs incurred in carrying out such purposes, and advances of funds may be made for use in doing so, to be repaid as provided in this Agreement. Personnel, equipment or property of one or more of the Members may be used in lieu of other contributions or advances, upon Board approval, and will be treated as a contribution from that Member.
- 4.5.2. General and administrative costs incurred by the Authority in carrying out its purposes, as described in Section 4.3.1., shall be shared by the Parties as determined by the Board.
- 4.5.3. The Authority shall periodically, as necessary, issue an invoice to each Member reflecting the expenses attributable to that Member in accordance with this Agreement. The Authority must receive payment within 30 days of the date listed on the invoice. Delinquent sums shall bear interest at twelve percent (12%) per year.
- 4.5.4. Upon request of any Member, the Authority shall produce and allow the inspection of all documents relating to the computation of expenses attributable to the Members under this Agreement. If a Member does not agree with the amount listed on the invoice, it must make full payment and provide a cover letter accompanying payment to the Authority specifying the amount in dispute and providing a detailed explanation of the basis for the dispute. The Authority shall advise the disputing Member of the Authority's determination within 30 business days.
- 4.6. Auditor: An auditor shall be chosen annually by, and serve at the pleasure of, the Board. The auditor shall make an annual audit of the accounts and records of the Authority. A report shall be filed as a public record with the Auditor of the County where the Authority is domiciled, consistent with Section 6505 of the Act, and with each agency that is a Member or an advisory member. Such report shall also be filed with the California Secretary of State or State Controller within twelve months of the end of the fiscal year.
- **4.7. Bonds:** The Board shall, from time to time, designate the officers or other persons who have charge of, handle, or have access to any property of the Authority

and shall require such officers or persons to file an official bond, at the Authority's expense, in an amount to be fixed by the Board.

V. PROJECT AGREEMENTS

- **5.1. General:** The Authority intends to carry out the purposes of this Agreement through projects that are consistent with the joint exercise of powers described herein. Funding and participation in any project undertaken by the Authority shall be governed by a Project Agreement. The Authority may undertake all or any portion of each project on its own or it may enter into agreements with the State of California, the United States, or any other public or private entity.
- **5.2.** Parties to Agreement: Prior to undertaking a project, the Members electing to participate in the project shall enter into a Project Agreement. A Project Agreement may involve the Authority or one or more Members. No Member shall be required to be involved in a Project Agreement.
- 5.3. Project Agreement: Each Project Agreement shall provide the terms and conditions by which the Members will participate in the project. All assets, rights, benefits, and obligations attributable to the project shall be assets, rights, benefits, and obligations of those Members that have entered into the Project Agreement. Any debts, liabilities, obligations or indebtedness incurred by the Authority in regard to a particular project shall be the debts, liabilities obligations, and indebtedness of the Members who have executed the respective Project Agreement and shall not be the debts, liabilities, obligations or indebtedness of the Members that have not executed the Project Agreement, nor of the Authority, in the absence of the Authority's execution of the project Agreement. If a project is undertaken by less than all the Members, the Members to a Project Agreement shall appoint a representative to a Project Committee for that project. The Project Agreement may include entities that are not Members to this Agreement and may include advisory members or other public or private entities.

VI. WITHDRAWAL AND TERMINATION

6.1. Termination:

- 6.1.1. Mutual Termination. This Agreement may be terminated by the mutual agreement of at least seventy-five percent (75%) of all the Members in writing.
- 6.1.2. Termination of a Member by the Authority. This Agreement may be terminated with respect to any Member upon an affirmative vote of the Board of Directors consisting of at least seventy-five percent (75%) of all Members. Prior to any vote to terminate this Agreement with respect to a Member, written notice of the proposed termination and the reason(s) for

such termination shall be presented at a regular Board meeting with opportunity for discussion. The Member subject to possible termination shall have the opportunity at the next regular Board meeting to respond to any reasons and allegations that may be cited as a basis for termination prior to a vote. If a Member is terminated, that Member will be responsible for its share of any costs incurred by the Authority up to the date of termination.

- Member Withdrawal from Authority: Any Member may withdraw from this Agreement by giving at least 30 days written notice of its election to do so, which notice shall be given to the Authority and each Member to this Agreement; provided, that such withdrawal does not in any way impair any contracts or obligations of the Authority then in effect. Prior to withdrawal or as soon as an accounting can be completed, the withdrawing Member shall pay its share of General and Administrative Costs, described in Section 4.5; provided, however, the withdrawing Member shall only be liable for expenses incurred through the date of withdrawal. The withdrawing Member shall also be responsible for any claims, demands, damages, or liability arising from this Agreement through the date of withdrawal. With respect to a particular project, and subject to the terms of the applicable Project Agreement, the withdrawing Member shall be responsible for its share of all costs, expenses, advances, contractual obligations, and other obligations, including bonds, notes or other indebtedness issued by the Authority while such withdrawing entity was a party to a Project Agreement. The remaining parties to a Project Agreement shall have the option of discontinuing a project and/or acquiring the interests of the withdrawing party. If the remaining Members to a Project Agreement in Article V decide to terminate the Project Agreement, any remaining funds will be allocated pursuant to the terms of the agreement and the costs will be allocated to all the parties as described in the Project Agreement, including the withdrawing party.
- 6.3. Disposition of Assets upon Termination: Upon termination of this Agreement, any surplus money or assets in the possession of the Authority for use under this Agreement, after payment of liabilities, costs, expenses and charges incurred under this Agreement, shall be returned to the then-existing Members in proportion to the contributions made by each. Unless otherwise agreed, all other property, works, rights and interests of the Authority shall be allocated to the then-existing Members in the same manner upon termination. Notwithstanding the foregoing, at the time of termination of this Agreement, upon a vote of the Board of Directors consisting of no less than a majority of the voting shares of all then existing members of the Board to sell the property, works, rights and interests of the Authority to a public utility, governmental agency, or other entity or entities for good and adequate consideration, the Authority shall have the power to consummate such a sale and the net proceeds from the sale shall be distributed in the same manner as set forth above.

VII. DEFINITIONS

As used in this Agreement, the meaning of the terms used hereafter shall be as follows:

- **7.1.** Agreement: This Joint Exercise of Powers Agreement as it currently exists or as it may be amended or revised from time to time.
 - 7.2. Authority: The Sites Project Authority as organized by this Agreement.
- **7.3. Board of Directors or Board:** the governing body of the Authority as established in Article III of this Agreement.
- **7.4. Member:** the signatories to this Agreement, and any additional Member added pursuant to Section 2.3.

VIII. MISCELLANEOUS PROVISIONS

- **8.1.** Amendment of Agreement: This Agreement may be amended only by an affirmative vote of at least seventy-five percent (75%) of the total number of Members. The Authority shall provide notice to all Members of amendments to this Agreement, including the effective date of such amendments.
- 8.2. Assignment: Except as otherwise expressed in this Agreement, the rights and duties of the Members may not be assigned or delegated without the advance written consent of all the other Members, and any attempt to assign or delegate such rights or duties in contravention of this section shall be null and void. This Agreement shall inure to the benefit of, and be binding upon, the successors and assigns of the Members. This section does not prohibit a Member from entering into an independent agreement with another agency, person or entity regarding the funding or financing of that Member's contributions to the Authority, or the disposition of the proceeds which that Member receives under this Agreement, so long as the independent agreement does not affect or purport to affect, the rights and duties of the Authority or the Members under this Agreement. Assignment of interests under a Project Agreement shall be governed by that Agreement and consistent with the provisions herein.
- **8.3.** Severability: If one or more clauses, sentences, paragraphs or provisions of this Agreement shall be held to be unlawful, invalid or unenforceable, it is hereby agreed by the Members that the remainder of the Agreement shall not be affected thereby. Such clauses, sentences, paragraphs or provisions shall be deemed reformed so as to be lawful, valid and enforced to the maximum extent possible.
- 8.4. Execution by Counterparts: This Agreement may be executed in any number of counterparts and upon execution by all Members, each executed counterpart shall have the same force and effect as an original instrument and as if all Members had signed the same instrument. Any signature page of this Agreement may be detached from any counterpart of this Agreement without impairing the legal effect of any signatures thereon, and may be attached to another counterpart of this Agreement identical in form hereto but having attached to it one or more signature pages.

8.5. Members to be Served Notice: Any notice authorized or required to be given pursuant to this Agreement shall be validly given if served in writing either personally, by facsimile, by deposit in the United States mail, first class postage prepaid with return receipt requested, or by a recognized courier service. Notices given (i) personally or by courier service shall be conclusively deemed received at the time of delivery and receipt; (ii) by mail shall be conclusively deemed given 48 hours after the deposit thereof if the sender returns the receipt; and (iii) by facsimile, upon receipt by sender of an acknowledgment or transmission report generated by the machine from which the facsimile was sent indicating that the facsimile was sent in its entirety and received at the recipient's facsimile number. All Notices shall be addressed to:

Glenn Colusa Irrigation District General Manager 344 E. Laurel Street Willows, CA 95988

Reclamation District 108 General Manager P.O. Box 50 Grimes, CA 95950

Tehama Colusa Canal Authority General Manager 5513 Highway 162 P.O. Box 1025 Willows, CA 95988

Maxwell Irrigation District General Manager P. O. Box 217 Maxwell, CA 95955

County of Glenn Chair of the Board of Supervisors 525 West Sycamore Street Willows, CA 95988

County of Colusa Chair of the Board of Supervisors 547 Market Street, Suite 108 Colusa, CA 95932

IN WITNESS WHEREOF, the Members hereto, pursuant to resolutions duly and regularly adopted by their respective governing bodies, have caused their names to be affixed by their proper and respective officers on the date shown below:

GLENN COLUSA IRRIGATION DISTRICT
By: President
President
Date:
RECLAMATION DISTRICT 108
By: President
Date:
TEHAMA COLUSA CANAL AUTHORITY
Dva.
By: President
Date:
MAXWELL IRRIGATION DISTRICT
By:
President
Date:
COUNTY OF GLENN
By: Chair of the Board of Supervisors
Date:
COUNTY OF COLUSA
OCCUPATION COLOGA
Ву:
By: Chair of the Board of Supervisors
Date:

DEPARTMENT OF WATER RESOURCES

SUMMER GROUNDWATER ELEVATION MEASUREMENTS

NORTHERN SACRAMENTO VALLEY & REDDING BASINS, CALIFORNIA

CHANGE IN GROUNDWATER ELEVATION BY WELL USE

SUMMER 2009 to SUMMER 2010

		Well Use				
	All Well Uses	Domestic	Irrigation	Observation	Other	
BUTTE						
Maximum Increase in GWE* (ft)	18.4	9.8	18.4	11.2	4.1	
Maximum Decrease in GWE (ft)	-12	-12	-8.5	-0.9	0	
Average GWL Change (ft)	2	1.5	1.6	2.6	2.1	
Number of Wells	97	21	26	40	10	
COLUSA			Add to the			
Maximum Increase in GWE* (ft)	12.9	8.9	12.9	5.3	4	
Maximum Decrease in GWE (ft)	-9.5	-7.3	-9.5	-4	0	
Average GWL Change (ft)	1.3	0.4	1.2	1.9	1.7	
Number of Wells	48	15	8	22	3	
GLENN						
Maximum Increase in GWE* (ft)	31.9	8.4	31.9	24.1	18.3	
Maximum Decrease in GWE (ft)	-11.5	-6.2	-3.2	-11.5	-1.6	
Average GWL Change (ft)	4	1.6	5.8	4.2	5.6	
Number of Wells	118	23	16	73	6	
TEHAMA				55/53/55/54/68/54/6		
Maximum Increase in GWE* (ft)	9.4	4.7	9.4	7.6	5.6	
Maximum Decrease in GWE (ft)	-6.3	-6.3	-2.7	-1.9	0	
Average GWL Change (ft)	1.5	0.8	2	1.7	1.5	
Number of Wells	104	33	36	30	5	
SHASTA COUNTY						
Maximum Increase in GWE* (ft)	9.8	4.4	5.5	3.4	9.8	
Maximum Decrease in GWE (ft)	-2.1	-0.5	-1.2	0	-2.1	
Average GWL Change (ft)	1.6	1.5	1.1	1.8	1.8	
Number of Wells	44	10	5	23	6	
TOTAL						
Maximum Increase in GWE* (ft)	31.9	9.8	31.9	24.1	18.3	
Maximum Decrease in GWE (ft)	-12	-12	-9.5	-11.5	-2.1	
Average GWL Change (ft)	2.3	1.1	2.4	2.9	2.6	
Number of Wells	411	102	91	188	30	

Note: A positive number indicates that groundwater levels were higher in 2010 than in 2009; a negative number indicates that groundwater levels were lower in 2010 than in 2009.

*GWE=Groundwater Elevation

DEPARTMENT OF WATER RESOURCES

SUMMER GROUNDWATER ELEVATION MEASUREMENTS

NORTHERN SACRAMENTO VALLEY & REDDING BASINS, CALIFORNIA

CHANGE IN GROUNDWATER ELEVATION BY WELL DEPTH

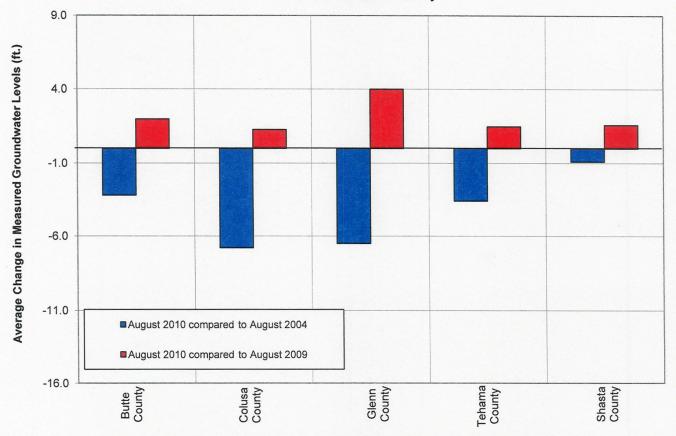
SUMMER 2009 to SUMMER 2010

			Depth		
	All Well Depths	0 to 200	201 to 600	601 to 1,500	Unknown
		ft-bgs	ft-bgs	ft-bgs	
BUTTE			The state of the s		
Maximum Increase in GWE* (ft)	18.4	7.1	11.4	18.4	4.1
Maximum Decrease in GWE (ft)	-12	-12	-4	-8.5	0
Average GWL Change (ft)	2	1.3	2.4	3.2	2.7
Number of Wells	97	43	36	15	3
COLUSA			"我们"。 第二人,我们是国	135 H.Z. 1 650	有一个人
Maximum Increase in GWE* (ft)	12.9	12.9	8.9	5.3	
Maximum Decrease in GWE (ft)	-9.5	-7.3	-1.7	-9.5	$\mu = \pm i \eta$
Average GWL Change (ft)	1.3	0	2.3	1.6	
Number of Wells	48	18	21	9	0
GLENN		Control of the Control	e i successible en estado de la compansión		Alexandre Comme
Maximum Increase in GWE* (ft)	31.9	18.3	21.9	31.9	9
Maximum Decrease in GWE (ft)	-11.5	-11.5	-1.6	-4.9	0
Average GWL Change (ft)	4	2.5	4.2	7.6	3.9
Number of Wells	118	51	43	20	4
TEHAMA					
Maximum Increase in GWE* (ft)	9.4	9.4	7.6	3.4	5
Maximum Decrease in GWE (ft)	-6.3	-6.3	-4.7	-1.9	-2.6
Average GWL Change (ft)	1.5	1.5	1.9	0.8	0.7
Number of Wells	104	51	33	14	6
SHASTA COUNTY					
Maximum Increase in GWE* (ft)	9.8	4.4	9.8	3.2	
Maximum Decrease in GWE (ft)	-2.1	-0.8	-2.1	0	——————————————————————————————————————
Average GWL Change (ft)	1.6	1.6	1.6	2	<u> </u>
Number of Wells	44	19	20	5	0
	.7	10	- -0	9	•
TOTAL					
Maximum Increase in GWE* (ft)	31.9	18.3	21.9	31.9	9
Maximum Decrease in GWE (ft)	-12.0	-12.0	-4.7	-9.5	-2.6
Average GWL Change (ft)	2.3	1.6	2.7	3.7	2.1
Number of Wells	411	182	153	63	13

Note: A positive number indicates that groundwater levels were higher in 2010 than in 2009; a negative number indicates that groundwater levels were lower in 2010 than in 2009.

*GWE=Groundwater Elevation

Average Change in Summer Groundwater Levels in the Northern Sacramento Valley



Areas with Currently Available Groundwater Level Data for August 2010

California's Groundwater Basins



Are Groundwater Elevations Now Monitored in California?

The Department of Water Resources' four region offices monitor groundwater elevations and report the data on DWR's Water Data Library (www.water.ca.gov/waterdatalibrary); however, those data are limited in some areas. Other agencies also collect groundwater elevation data, but are not required to make that data available to DWR for public use.

Implementation of the CASGEM Program will establish a statewide monitoring network for all of California's groundwater basins, and will allow that data to be used to plan for future water supply demands.

Contact Us About CASGEM

Headquarters Office

Mary Scruggs

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Timeline

95691

Preparing to Implement CASGEM: Summer 2010. Public Workshops Fall 2010.

- Develop, solicit public comments, and finalize program guidelines
- Develop online monitoring entity notification and data submittal system
- Local agencies work together to identify prospective monitoring entity for their basin/ subbasin

Late Fall 2010.

- Online system ready for submission of monitoring entity notifications
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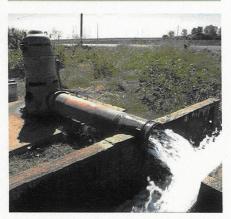
January 1, 2011. Notifications due to DWR Spring and Summer 2011. Designated monitoring entities submit monitoring network plan to DWR January 1, 2012.

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California Statewide **Groundwater Elevation** Monitoring Program

CASGEM Program

Why Is CASGEM Important?



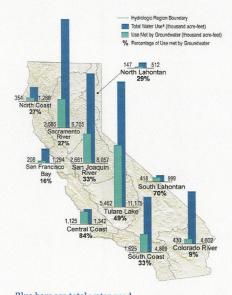


Department of Water Resources (DWR) California Natural Resources Agency State of California

Why Is CASGEM Important for Management of California's Groundwater?

Why Is Groundwater Important To California's Water Supply?

Groundwater accounts for about 30 percent of California's total water supply. In dry years, this increases to over 40 percent. Some coastal basins, cities, and rural areas are entirely dependent upon groundwater for their water supply. With a projected population of 46 million by the year 2020, California will need to rely on groundwater even more.



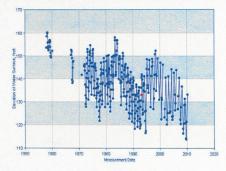
Blue bars are total water used Green bars are the percentage of total water used that was groundwater

How Will CASGEM Program Help With Groundwater Management?

CASGEM (pronounced KASjem) provides a mechanism for local entities to be active in groundwater monitoring in their basins. It expands the current groundwater elevation monitoring to all 515 of California's groundwater basins. This monitoring allows interested parties to evaluate groundwater conditions and identify areas where there are problems, such as overdraft, occurring within a groundwater basin.

Even if there are no problems currently occurring within a basin, the baseline data that will be collected as part of this program can help to detect future problems before there is damage, such as subsidence, in a groundwater basin.

The data will be compiled in a statewide database that is available to the public. The goal is to determine seasonal and long-term trends in groundwater elevations within the basins. DWR will produce a summary report to the Governor and the Legislature in 2012 and 2015, and every 5 years thereafter.



Hydrographs depict groundwater elevations in a well or wells over the measurement period.



Groundwater elevation contour maps depict groundwater elevations and flow directions.

What Will CASGEM Data Tell Us About Groundwater Conditions?

Groundwater elevation measurements can be used in many ways to evaluate groundwater conditions within a basin. Two of the most common ways are to use the data to create hydrographs and groundwater elevation contour maps.

Full details on CASGEM Program are available online: www.water.ca.gov/groundwater/casgem

California's Groundwater Basins



Are Groundwater Elevations Now Monitored in California?

The Department of Water Resources' four region offices monitor groundwater elevations and report the data on DWR's Water Data Library (www.water.ca.gov/waterdatalibrary); however, those data are limited in some areas. Other agencies also collect groundwater elevation data, but are not required to make that data available to DWR for public use.

Implementation of the CASGEM Program will establish a statewide monitoring network for all of California's groundwater basins, and will allow that data to be used to plan for future water supply demands.

Contact Us About CASGEM

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<u>Ca</u>lifornia <u>S</u>tatewide <u>G</u>roundwater <u>E</u>levation <u>M</u>onitoring Program

CASGEM Program

What Is My Role as a Well Owner?





Department of Water Resources (DWR)

California Natural Resources Agency

State of California

What Is My Role as a Well Owner?

What Is the CASGEM Program?

CASGEM (pronounced *KASJem*) is short for California Statewide Groundwater Elevation Monitoring.

The program was created by SBx7 6, Ground-water Monitoring, a part of the 2009 Comprehensive Water Package. By passing the bill, the Legislature established for the first time a statewide program to collect groundwater elevations, facilitate collaboration between local monitoring entities and the Department of Water Resources, and to report this information to the public.

What Does CASGEM Require?

Participation in the program is voluntary for both local agencies acting as Monitoring Entities and well owners.

The CASGEM Program provides a mechanism for local agencies to take an active role in groundwater monitoring in their groundwater basin. Local agencies with jurisdiction over groundwater management in a basin may apply to be designated the groundwater Monitoring Entity for their area.

Monitoring Entities are responsible for generating a monitoring network plan, compiling groundwater elevation data, and submitting that data to the Department of Water Resources.



More Questions and Answers

Can anyone monitor my well without my permission?

No. Neither the Department of Water Resources nor any other agency has authority as part of the CASGEM Program to enter private property without the consent of the landowner.

Is my well going to be metered by the state?

No. Well-metering is not part of CASGEM.

Will CASGEM cost me money?

No. There is no cost to the well owner.

As a well owner, do I have to monitor the groundwater elevations in my well and send the data to the State?

No. If you choose to have your well monitored as part of the CASGEM Program, the local Monitoring Entity will be responsible for coordinating collection and reporting of groundwater elevations.

How Can I Participate?

If you want your well included in the groundwater elevation monitoring network, please contact DWR region staff to identify the potential monitoring entity in your area. During development of the monitoring network plan, determination of the need for specific wells will be made.

How Will the Groundwater Elevation Data Be Used?

The data will be compiled in a statewide database made available to the public. Local, state, federal, and all interested parties can use the data to evaluate and monitor groundwater conditions in California's groundwater basins and subbasins. The goal of the CASGEM Program is to determine seasonal and long-term trends in groundwater levels within the basins.

How Long Will CASGEM Last?

CASGEM a long-term program that requires the Department of Water Resources to produce a summary report to the Governor and Legislature in years 2012 and 2015, and every 5 years thereafter.

CASGEM Program guidelines will be available in fall 2010. The document will include full details on reporting requirements and measurement procedures.

Full details on CASGEM Program are available online: www.water.ca.gov/groundwater/casgem

California's Groundwater Basins



How Will the Groundwater Elevation Data Be Used?

The data will be compiled in a statewide database that is available to the public. Local, state, federal, and all interested parties can use the data to evaluate and monitor groundwater conditions in California's groundwater basins and subbasins. The goal of CASGEM is to determine seasonal and long-term trends in groundwater levels within the basins.

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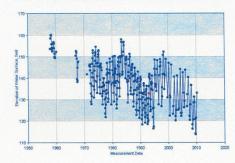
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CASGEM Program

What Is CASGEM?



On or before January 1, 2012, local groundwater Monitoring Entities will regularly and systematically monitor groundwater elevations in California's alluvial basins and subbasins in order to determine seasonal and long-term trends, and this information will be made readily and widely available to the public



Department of Water Resources (DWR)
California Natural Resources Agency
State of California

What Is the CASGEM Program?

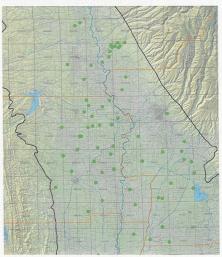
CASGEM (pronounced *KASJem*) is short for California Statewide Groundwater Elevation Monitoring.

The program was created by SBx7 6, Ground-water Monitoring, a part of the 2009 Comprehensive Water Package. By passing the bill, the Legislature established for the first time a statewide program to collect groundwater elevations, facilitate collaboration between local monitoring entities and the Department of Water Resources, and to report this information to the public.

Why Is Groundwater Important?

In California, groundwater accounts for about 30 percent of the total water supply. During dry years, it is at least 40 percent of the supply. With a projected population of 46 million by the year 2020, California's reliance upon groundwater will increase significantly.

In order to protect and sustain the state's precious groundwater supply, proper management of this limited resource is imperative. Monitoring groundwater elevations in the state's 515 alluvial groundwater basins and subbasins is a fundamental component of successful groundwater management.



Observation well locations, Northern Sacramento Valley

Are Groundwater Elevations Now Monitored in California?

The Department of Water Resources' four region offices monitor groundwater elevations and report the data on DWR's Water Data Library (www.water.ca.gov/waterdatalibrary); however, those data are limited in some areas. Other agencies also collect groundwater elevation data, but are not required to make that data available to DWR for public use.

Implementation of the CASGEM Program will establish a statewide monitoring network for all of California's groundwater basins, and will allow that data to be used to plan for future water supply demands.

How Does CASGEM Work?

A local agency that has jurisdiction over groundwater management in an area, as defined in the law, notifies the Department of Water Resources by January 1, 2011, that it wishes to be the designated Monitoring Entity for all or part of a groundwater basin. The Monitoring Entity defines and submits a groundwater monitoring plan to DWR that can be used to determine seasonal and long-term groundwater elevation trends in the monitoring area.

The Monitoring Entity can measure groundwater elevations or compile data from other agencies to fulfill the monitoring plan. The Monitoring Entity is also responsible for submitting that data to DWR.

DWR will continue its current monitoring program, provided funding is available.

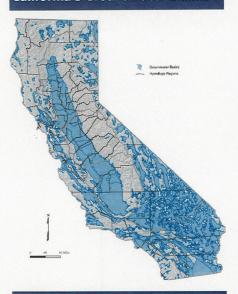
Is My Participation Required?

No. However, if no prospective Monitoring Entity comes forward, then DWR will assume the monitoring in the basin. Nonparticipating agencies risk losing eligibility for state water grants.

CASGEM Program guidelines will be available in fall 2010. The document will include full details on reporting requirements and measurement procedures.

Full details on CASGEM Program are available online: www.water.ca.gov/groundwater/casgem

California's Groundwater Basins



What Is the CASGEM Program?

CASGEM (pronounced KASJem) is short for California Statewide Groundwater Elevation Monitoring. The Legislature established the program in November 2009 to collect groundwater elevations, facilitate collaboration between local monitoring entities and the Department of Water Resources, and report this information to the public.

How Do I Get More Details?

Implementation procedures and details for the CASGEM Program are being compiled. A public review draft will be available fall 2010. The draft as well as final guidelines will be posted on the CASGEM website or can be obtained by contacting a DWR representative.

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<u>California Statewide</u> <u>Groundwater Elevation</u> <u>Monitoring Program</u>

CASGEM Program

What is a Monitoring Entity?





Department of Water Resources (DWR)
California Natural Resources Agency
State of California

CASGEM Monitoring Entity

What Is a Monitoring Entity?

A Monitoring Entity is a local agency or group that voluntarily takes responsibility for coordinating groundwater level monitoring and data reporting for all or part of a groundwater basin. A Monitoring Entity may measure groundwater levels itself or compile data for other agencies. A Monitoring Entity is also responsible for submitting the data to the Department of Water Resources so that it can be made available to the public.

Who Is Authorized To Be a Monitoring Entity?

- Watermasters or court-appointed water management engineers
- Groundwater management agencies with statutory authority who were monitoring groundwater elevations prior to January 1, 2010
- Water replenishment districts
- Local agencies that manage all or part of the groundwater basin who were monitoring groundwater elevations prior to January 1, 2010
- Local agencies implementing an Integrated Regional Water Management Plan
- Counties
- Voluntary groundwater associations

If no monitoring entity comes forward, then DWR will assume monitoring in the basin. Nonparticipating agencies risk losing eligibility for State water grants.

How Does an Agency Become a Monitoring Entity?

DWR is developing an online system for submitting Monitoring Entity notifications. To be considered for designation as a Monitoring Entity, a local agency must notify DWR prior to **January 1, 2011**. Notification must include:

- The prospective Monitoring Entity's identity and contact information
- The specific authority described in SBx7 6 that qualifies the applicant to become a designated Monitoring Entity
- A map of the Monitoring Entity's jurisdiction, the groundwater basin, and the proposed monitoring area
- A statement that the entity will comply with the requirements of CASGEM
- Additional requirements depending upon the applicant's qualifying authority



CASGEM Program guidelines will be available in fall 2010. The document will include full details on reporting requirements and measurement procedures.

What Additional Groundwater Information Is Needed?

For groundwater elevation data to be useful, additional data are needed and will be requested by DWR. This information may include:

- Monitoring well information, such as:
 - Location coordinates
 - Ground surface and reference point elevation
 - Well owner and well type
 - Well construction details
- Information about the groundwater elevation monitoring network
 - Map showing hydrologic and political boundaries, locations of monitoring wells, and other pertinent features
 - Rationale for design of groundwater monitoring network
 - Rationale for how the groundwater monitoring plan meets the goals of determining seasonal and long-term trends
- Information about the groundwater basin, its aquifers, and the conditions of the aquifers
- Whether multiple agencies currently monitor groundwater levels in the basin
- Any cooperators that will collect groundwater elevations

Full details on CASGEM Program are available online: www.water.ca.gov/groundwater/casgem



July 29, 2010

Via Electronic and Hand Delivered

Jeanine Townsend
Clerk to the Board
State Water Resources Control Board
P.O. Box 100
Sacramento, California 95812-0100

Re: Comment Letter – Draft Delta Flow Criteria Report

Dear Ms. Townsend:

The Glenn-Colusa Irrigation District ("GCID") reviewed the State Water Resource Control Board's ("SWRCB") draft report entitled "Development of Flow Criteria for the Sacramento-San Joaquin Delta Ecosystem" ("Draft Report"), dated July 20, 2010, and provides the following comments:

- The Draft Report inappropriately looks to flows to solve the Delta's problems. While the Draft Report suggests that the flow criteria are supported by the "best available scientific information submitted into the record," it is abundantly clear that the "best scientific evidence" demonstrates that flows alone cannot solve the complex problems of the Delta. Indeed, the scientific consensus is that flows alone are not the answer. The flow criteria proposed are therefore, at best, an attempt to solve, with water, environmental degradation resulting from other activities.
- Because of the many causes of the Delta's current problems, and the apparent attempt of the Draft Report to remedy of these problems through flows, the flow targets proposed in the Draft Report cannot be said to be "necessary" to protect public trust resources in the Delta.
- The Draft Report fails to provide a "volume" of water necessary to protect
 public trust resources. (See Wat. Code, § 85085(c)(1) [requiring the volume,
 quality, and timing of water necessary].) The only way the public will fully
 understand the import of the Draft Report, and its impact on statewide water

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