

**SACRAMENTO CENTRAL GROUNDWATER AUTHORITY
REGULAR MEETING OF THE BOARD OF DIRECTORS**

Wednesday, September 12, 2012; 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 May 9, 2012 Board meeting.
Action: Approve Consent Calendar items

4. GROUNDWATER BANKING PROJECTS

- Presentation on the Sacramento Regional County Sanitation District's South County Ag Recycled Water Program by David Richardson and Ali Taghavi of RMC.
Action: Information presentation.

5. EXECUTIVE DIRECTOR'S REPORT

- a) Local Groundwater Assistance (AB 303)
- b) Election of Chair and Vice Chair for 2013
- c) Nominations and Appointments to the SCGA Board

6. DIRECTORS' COMMENTS

ADJOURNMENT

Upcoming meetings –

Next SCGA Board of Directors Meeting – Wednesday, November 14, 2012, 9 am;
10060 Goethe Road, South Conference Room No. 1212 (Sunset Maple).

AGENDA ITEM 3: CONSENT CALENDER

BACKGROUND:

Minutes of the May 9, 2012 SCGA Board meeting.

STAFF RECOMMENDATION:

Action: Approve Consent Calendar items.

SACRAMENTO CENTRAL GROUNDWATER AUTHORITY (SCGA)
Governing Board Meeting
Draft Minutes
May 9, 2012

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

Chair Paul Schubert called the meeting to order at 9:00 a.m.

The following meeting participants were in attendance:

Board Members (Primary Rep):

Stuart Helfand, Agricultural Residential
Rick Bettis, Conservation Landowners
Ron Lowry, Omochumne-Hartnell Water District
Edwin Smith, Public Agencies Self-Supplied

Board Members (Alternate Rep):

Paul Schubert, Golden State Water Company
Jose Ramirez, Sacramento Regional County Sanitation District
Darren Wilson, City of Elk Grove
Todd Eising, City of Folsom
Elizabeth Sparkman, City of Rancho Cordova
Herb Niederberger, County of Sacramento

Staff Members:

Heather Peek, Clerk, SCGA
Ping Chen, SCGA
Ramon Roybal, SCGA

Others in Attendance:

Bruce Kamilos, Elk Grove Water District
Jim Blanke, RMC
Rodney Fricke, Aerojet Corp.
Mark Roberson, Water Forum
Rob Swartz, Sacramento Groundwater Authority
Walt Sadler, HydroScience Engineers Inc.

Member Agencies Absent

City of Sacramento
Agricultural Interests
Rancho Murieta Community Services District
California-American Water Company

2. PUBLIC COMMENT

None

3. CONSENT CALENDAR

The draft meeting minutes for the March 14, 2012 Board meeting and minutes from the April 26, 2012 Budget Subcommittee were reviewed for final approval.

Motion/Second/Carried – Mr. Smith moved, seconded by Mr. Lowry, the motion carried unanimously to approve the all items.

4. BUDGET SUBCOMMITTEE REPORT

Mr. Chen reported that the proposed 2012-2013 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, Administration support, Legal Counsel, Financial support, Contract services, and Travel/Conference expenses; consultant services (Consultant Expenses); and overhead costs (Office Expenses) 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 2012-2013 fiscal year budget. The following provides a summary of the attachments to the Board item.

- Attachment C – Funding
 - Funding is based on the provisions of the JPA [Section 8(d)].
 - Funding from all sources totals \$254,492.
- Attachment D – Provides a breakdown of the overall budget
 - Means of financing:
 - Prior year fund balance: \$704,421
 - Contributions: \$254,492
 - AB303 Grant \$250,000
 - Interest income: \$2,000
 - TOTAL: \$1,210,913

Proposed expenditures amount to \$513,989 with sufficient money in the fund balance to meet the 20 percent reserve requirement identified in the Authority's Policy and Procedures (see Board letter Attachment A – Fiscal Year 2012-2013 Authority's Budget).

In response to questions raised at the March 14, 2012 Board meeting, the Budget Subcommittee also discussed the issue of declining revenues resulting from a reduction in groundwater pumping. As mentioned in the discussion of the above referenced Attachment C, funding or "contributions" for the operation of the Authority is specifically defined in Section 8(d) of the JPA; a major component of these contributions are based on the amount of groundwater pumped in the basin. A table identified as, SCGA Water Purveyor's Annual Groundwater Pumping and Contributions, provided specific details related to Annual Groundwater Pumping, 3-year Moving Average Pumping, and Annual Contributions. An examination of the Annual Groundwater Pumping section of the table indicated that reported groundwater pumping has been declining since 2008. As JPA contributions are based on the 3-year Moving Average Pumping, overall contributions to the Authority have declined \$14,000 annually based on the highest year – 2009. In discussing the reason for the reduction in pumping it is believed that part can be attributed to local hydrologic and economic conditions, but a significant component is believed to be the further implementation of the Sacramento County Water Agency's (SCWA) conjunctive use program, more specifically start-up of the Vineyard Surface Water Treatment Plant. It is further expected that operation of the Vineyard facility will result in an additional reduction in groundwater pumping and ultimately in contributions to the Authority. After discussing proposed Vineyard operations with SCWA, staff developed several graphs to estimate groundwater extraction over the next three years. According to this analysis overall groundwater extraction could go as low as 45,130 acre-feet annually by 2014. This would reduce annual contributions to the Authority to \$213,190; a reduction of \$55,473 from the 2009 peak. The Sacramento Groundwater Authority (SGA) has had a similar experience and has taken a number of measures that ensure a more stable level of annual contributions. Staff proposes to spend some time this fiscal year reviewing SGA's approach and determining what the "best fit" is for the Authority in addressing this situation. If an action is required, Section 8(c) of the JPA states, "Any change in annual contributions necessary to support the work of the Authority as set forth in subsection (d) below, shall require an affirmative vote of eleven of the sixteen members of the governing board that includes affirmative votes by all of the representatives of the Cities of Elk Grove, Folsom, Rancho Cordova and Sacramento and the County of Sacramento."

The proposed budget for SCGA and the WPP was presented, discussed and approval recommended by the SCGA Budget Subcommittee on April 26, 2012. Budget Committee members include Herb Niederberger, Jim Peifer, and Rick Bettis.

Staff recommends the Board approve the resolution adopting the fiscal year 2012-2013 budget recommendation for the Sacramento Central Groundwater Authority.

Mr. Schubert asked for motion on the budget. Motion was made by Mr. Niederberger and seconded by Mr. Bettis. All others then voted aye. Mr. Schubert then asked for discussion.

Mr. Helfand commented that he did not necessarily agree with the projected decrease in groundwater pumping based on his knowledge of future planned development projects by Teichert, Granite, Sacramento Rendering Company, and Angelo G. Tsakopoulos [*Note: These projects are located along the Jackson Highway corridor and are identified as Jackson West (Teichert and Granite), Jackson Township (Angelo G. Tsakopoulos), and Newbridge (Sacramento Rendering Company)*]. Mr. Helfand stated that it was his belief that groundwater usage will increase and that it was important to get a well insurance program instituted as the cost to run such a program will become more costly as time passes.

Mr. Schubert responded that he was aware of the development plans referenced by Mr. Helfand but stated that those plans were in the five to ten year timeframe and subject to uncertainty. Mr. Helfand acknowledged the validity of Mr. Schubert's comment but stated that there was a need to move a well insurance program forward in order to stay ahead of such development plans.

Mr. Niederberger said that he agreed with Mr. Schubert regarding the development timeframe. In reference to the well protection program, Mr. Niederberger suggested that the Board members may want to reintroduce the program to their constituencies' with the intent to continue program development so that it would be ready to implement when development picks up again. Mr. Niederberger added that the projections showing a decline in groundwater pumping was completed by SCWA staff and that it accurately reflects a hardening of current demand and that water agencies all over the state were seeing a similar trend. Mr. Niederberger continued by stating that with SCWA's expanding operation of the Vineyard Surface Water Treatment Plant, he would expect a continued decline in groundwater pumping. Mr. Niederberger finished his statement by indicating that the purpose of the groundwater pumping projections provided by staff was to alert the Board of current trends and to encourage an examination of methodologies that the Board could implement that would allow the Authority to sustain its revenue stream in order to continue implementation of the Groundwater Management Plan's objectives.

Motion/Second/Carried – Mr. Niederberger moved, seconded by Mr. Bettis, the motion carried unanimously to approve the resolution adopting the fiscal year 2012-2013 budget recommendation for the Sacramento Central Groundwater Authority.

5. GROUNDWATER BANKING PROJECTS

Mr. Chen reported that at the March 14, 2012 Board meeting Mary Lou Cotton from Kennedy/Jenks discussed groundwater banking in California, cited specific examples

considered in the development of the Water Accounting Framework (Framework) for the North Basin, and provided a brief update on more recent activities involving groundwater banking statewide. Ms. Cotton's presentation provided a general picture of groundwater banking and illustrated the diversity of approach and application taken by various agencies and interests in addressing the specific needs of their stakeholders, community, and customers. Today's presentation is much more focused in that it addresses both the specific need and process used in developing the Framework for the Sacramento Groundwater Authority's North Basin.

The purpose of these two presentations is to provide a point of beginning for a process to develop a Framework in the Central Basin. As was apparent in Ms. Cotton's presentation, while there are similarities between the various groundwater banking programs described there are also significant differences. It is important that the Board understand what these differences are so that a Framework can be developed for the Central Basin that addresses our distinctive needs. To date, the following agencies and/or programs have proposed groundwater banking operations within or in close proximity to the Central Basin that could have an impact on basin management and operations. These agencies/programs include:

- Sacramento Regional County Sanitation District (component of the South County Agriculture Irrigation project);
- Rancho Murieta Community Services District/Omochumne-Hartnell Water District (project currently funded by a Proposition 84 grant);
- Sacramento County Water Agency (Zone 40 conjunctive use program);
- City of Folsom (Water System Optimization Review (SOR) Program);
- East Bay Municipal Utility District (2040 Water Plan); and
- South Basin Groundwater Management Plan

Because these proposed programs could have a significant influence on the Authority's future Framework, representatives of these agencies/programs will be asked to provide an overview of their respective proposals during upcoming Board meetings.

Making today's presentation is Rob Swartz, Senior Project Manager, for the Sacramento Groundwater Authority.

Mr. Swartz first provided an overview of the similarities and differences between Sacramento Groundwater Authority (SGA) and the Authority. He then described the approach taken by SGA in the development of their Framework and the general principles that were developed as part of the effort. The fundamental guidelines used by SGA in the development of their Framework was protection of the long-term sustainable yield of the North Basin and facilitated implementation of appropriate conjunctive use programs by water purveyors. Mr. Swartz also commented that the need for a Framework was obvious once you looked at a groundwater contour map of the basin. There is a significant cone of depression in the middle of the North Basin that could be used for storage; the Central Basin also has a similar cone of depression.

Historically, the Framework has its roots in the Water Forum agreement which has two coequal objectives: to provide reliable water supply through the year 2030 and to protect the lower American River. Within the agreement there were provisions for increased surface water diversions from the American River to support new growth. However, with these increased diversions came requirements to reduce diversions during dry and multiple dry hydrologic years. In 1995, surface water diversions from the American River totaled 190,000 acre-feet. With the Water Forum agreement it was agreed that wet year diversions could increase up to 450,000 acre feet by 2030. Effectively, wet year diversions could more than double to meet regional water demands. Conversely, diversions in dry years would be cut back to 1995 levels. In order to meet these changes in water availability it was recognized that a robust conjunctive use program must be put into place. (*Note: The Water Forum defines conjunctive use as, “the planned joint use of surface and groundwater to improve overall water supply reliability.”*) This requires a water purveyor to have groundwater supply wells to make up for the loss in surface water availability.

In the mid 1990’s, Sacramento Suburban Water District (SSWD), entered into a contract to take surface water from the San Juan Water District when it was available in wet years; as a result of that decision more than 20,000 acre-feet of additional surface water is being brought into the North Basin. This water is conveyed through a pipeline similar to the pipeline built by the Freeport Regional Water Agency. This has resulted in an overall decrease in groundwater pumping in the North Basin.

Mr. Swartz then asked, “Why do we still need a Framework?” For the most part, it was a commitment (and investment) on the part of SSWD that made the North Basin pipeline project a reality, however, there was also a belief that other agencies would be participating in the costs of that project. With the pipeline project now operational, SSWD asked SGA how the project could be an effective conjunctive use program and help the basin with such limited participation. SGA recognized that a solution was available for a broader conjunctive use program in the North Basin and that a way needed to be found to institutionalize the responsibilities to make it happen. To begin, SGA was divided into three areas: eastern, central and west. In examining the central area it was determined that there was about a foot and a half of draw down that could be worked with; this looked promising so SGA decided to focus on the central area to develop the solution.

There are eight agencies within central area that historically rely on groundwater; SGA then asked, “How could they be integrated into the solution developed by SSWD?” SGA began by determining a sustainable level of groundwater pumping from the central area of the basin. According to Mr. Swartz, “SGA wanted to focus on the pumpers there and what they were doing and what the basin was doing in response to their pumping.” A series of hydrographs for each of the agencies was developed and analyzed to determine their pumping from the basin. SGA looked at changes in average groundwater elevation versus groundwater extractions. From the hydrographs it was determined that average groundwater extractions by the eight agencies during the period of investigation was 101,784 acre-feet. A target of 90,000 acre-feet of groundwater pumping was then set for the central area. In order to reach that goal pumping needed to be reduced by 11,784 acre-feet. Groundwater pumping targets were developed for each agency and SGA asked that they individually try to hit that

target. With that goal set, SGA moved forward in developing certain elements of the Framework.

First, a model groundwater banking program was developed to allow groundwater banking exchanges. In 2009 and 2010, SSWD actually sold water to the state and represented a sort of revenue to get that recovery. What SGA wanted to have in place was a model banking program that provided a set of ground rules in the event SSWD or any other agency within the basin wanted to do banking exchanges. There was also a need to find out how other entities were operating within the state. Part of the process also involved coordination with state and federal agencies. If an agency wants to do banking exchanges on a state wide basis then you will need to coordinate with one of those bigger outside operations and you are going to have to play by their rules. The second element that was dealt with was how to determine losses of banked water. Groundwater flows downhill and eventually out of the basin; it doesn't stop at jurisdictional boundaries. Basically, if you put a volume of water in the ground what does it do over time? SGZ queried other banks on how they determined loss. Some use groundwater models; others take 15-percent off the top...if we bank water on your behalf you're only going to take out 85-percent of what you put in. SGA determined that losses of banked water in the North Basin were around 2-percent. Finally, SGA had to determine the volume of "banked groundwater" that was available for exchange. This determination had everything to do with timing...how far back do you go? How much can I claim is in the bank? These were some of the concerns that needed to be addressed and were ultimately used to develop a set of principles and a sustainability goal. Currently only the central area has a sustainability goal in place while the western and eastern areas have provisional sustainability goals in place in the event that either of those areas begin utilizing groundwater.

SGA created and actively tracks, two separate balances for its water accounting framework. The first is the basin sustainability goal which calls for a reduction in the demand for groundwater within the basin. The second accounts for exchangeable water which is defined as imported surface water in excess of that needed to meet the basin sustainability goal.

Additional principles of the framework include:

- 1) Waiting two years after adoption of the framework before implementation of the water accounting and tracking of data. Collection of data will not take place until early 2013.
- 2) The ability to reach the sustainability goal by simply pumping less than the assigned target.
- 3) All agencies will start with a zero balance yet negative sustainability balances can accumulate through time though there is no penalty or charge at this point for a negative balance.
- 4) Basin sustainability balances will not be transferable.
- 5) Exchangeable water balances may be transferred to meet sustainability balances.
- 6) Surface water deliveries in excess of sustainability goal after 1998 are credited to exchangeable water.
- 7) Must have sustainability balance to transfer exchangeable water outside of the basin.

- 8) 5% loss factor applies to exchanges outside of basin.
- 9) Framework to be revisited every five years.

Mr. Lowry asked how independent pumpers were accounted for in the framework. Mr. Swartz responded that in the North Basin, independent pumpers represented only about ten percent of pumping and so it was fortunate that those pumpers did not represent a significant usage. Mr. Swartz added that most of the independent pumpers such as schools and golf courses did not have an interest in changing their pumping behavior or participating in a water accounting framework. Mr. Swartz finally added that agricultural users also represented a relatively small demand in the North Basin and that tracking their exact usage for a framework's purpose would be difficult given the lack of a requirement for those users to report their pumping totals. Mr. Lowry then asked how the SGA came up with a five percent loss factor. Mr. Swartz responded that the modeling that was done showed a two percent loss factor for their basin so they added a buffer to account for potential error in the modeling results. Mr. Swartz added that SGA kept it at five percent instead of being more conservative and charging a ten percent loss factor as other water banks in the state have done in order to make the SGA bank more attractive to potential partners.

Mr. Bettis asked for an explanation of the rationale for starting at a zero water sustainability balance for all participants in the framework. Mr. Swartz replied that that decision was made based on the fact that all pumping in the basin was at or below sustainable levels at that time and to avoid penalizing pumpers for past behavior. Mr. Swartz added that there was also no concern about any user suddenly transferring water out of the basin at a rate greater than their sustainability limit because of practical reasons and institutional controls built into the framework and from the larger region such as Sacramento County's purview over the exchange of water out of its boundary.

Mr. Ramirez asked how the project was funded and about the project cost. Mr. Swartz replied that it was partially funded through a Prop. 50 grant and by an AB 303 grant and directly through SGA. Mr. Swartz stated that the direct cost was roughly \$250,000 but that it is actually difficult to place a cost on seven years worth of negotiations and technical investigations.

6. EXECUTIVE DIRECTOR'S REPORT

Local Groundwater Assistance (AB 303) – On May 2, 2012 the State Department of Water Resources (DWR) announced the release of the Local Groundwater Assistance (LGA) Grant Program Guidelines and Proposal Solicitation Package (PSP). There will be a local workshop held June 5, 2012 at 10 am at the CalEPA Building. The due date for applications is July 13, 2012 at 5 pm.

South Area Water Council – A working group met on May 1, 2012 to discuss development of a revised JPA for the South Basin Groundwater Management Plan. When completed, the JPA will provide both financial and governance direction for implementation of the plan. A

copy of the South Area Water Council’s draft groundwater management plan can be found at <http://www.ohwd.org/southgmp.html>.

HydroDMS – Data in the HydroDMS, for the most part, is through 2008 but there are some instances in which the data is older. As part of the on-going maintenance of the Hydro DMS, present day and “historic” data (pre 2008 – from specific agencies) are necessary to more accurately characterize the basin. The specific data needs have been identified by agency. These agencies will be contacted via e-mail by Authority staff with the specific information request.

7. DIRECTORS’ COMMENTS

Mr. Lowry announced that the Southeast Sacramento County Agricultural Water Authority (SSCAWA) had decided that it would have a board of six representative agencies. In addition to the representatives there would be committees to represent other specific interests. Mr. Lowry then explained that the next steps for the group would be to develop a budget and a Joint Powers Agreement.

Mr. Schubert announced a pre-bid meeting to drill a new well to replace two other wells that are being destroyed out of a total of three that will ultimately be destroyed in Golden State’s service area.

Mr. Niederberger announced that SCWA would be destroying six wells in the Mather Main Base and Sunrise Douglas area due to perchlorate contamination.

Mr. Wilson announced the May 1st opening of the City of Elk Grove’s Rain Garden Plaza which represents the region’s most comprehensive presentation of low impact development and river friendly landscaping. It is located at the south end of the Elk Grove City Hall campus on Laguna Springs Drive.

ADJOURNMENT

Upcoming Meetings –

Next SCGA Board of Directors Meeting – Wednesday, July 11th, 2012. 10060 Goethe Road, Sacramento, CA; SASD South Conference Room 1212 (Sunset Maple).

By:

Chairperson

Date

Date

AGENDA ITEM 4: GROUNDWATER BANKING PROJECTS

BACKGROUND:

At the March 14, 2012 Board meeting Mary Lou Cotton from Kennedy/Jenks discussed groundwater banking in California, cited specific examples considered in the development of the Water Accounting Framework for the North Basin, and provided a brief update on more recent activities involving groundwater banking statewide. Ms. Cotton's presentation provided a general picture of groundwater banking and illustrated the diversity of approach and application taken by various agencies and interests in addressing the specific needs of their stakeholders, community, and customers. At the May 19, 2012 Board meeting Rob Swartz presented the factors considered and the process used in developing the Water Accounting Framework for the Sacramento Groundwater Authority's North Basin.

Today's presentation is the first in a series of presentations focused on groundwater banking projects contemplated for the Central Basin. The Sacramento Regional County Sanitation District's will be making a presentation on the South County Ag Recycled Water Program. This program proposes a groundwater banking component of which an overview will be provided.

Making today's presentation will be Dave Richardson and Ali Taghavi of RMC.

STAFF RECOMMENDATION:

Action: Information presentation.

AGENDA ITEM 5: EXECUTIVE DIRECTOR'S REPORT

- a) Local Groundwater Assistance (AB 303)
- b) Election of Chair and Vice Chair for 2013
- c) Nominations and Appointments to the SCGA Board

September 12, 2012

TO: SACRAMENTO CENTRAL GROUNDWATER AUTHORITY BOARD

FROM: DARRELL ECK

RE: EXECUTIVE DIRECTOR'S REPORT

- a) **Local Groundwater Assistance (AB 303)** – On July 13, 2012 the State Department of Water Resources (DWR) notified the Authority that the grant application for the upcoming Local Groundwater Assistance (LGA) Grant had been successfully submitted. The schedule for the grant is as follows:
 - Review and preliminary ranking by DWR – November 2012
 - Technical Advisory Panel Public Meeting – December 2012
 - DWR approve grant awards – January 2013

- b) **Election of Chair and Vice Chair for 2013** – As a reminder, in accordance with Section 3.06(a) of the Rules of Procedure elections for the Chair and Vice Chair of the Board of Directors of the Sacramento Central Groundwater Authority for calendar year 2013 will take place at the November 14, 2012 Board meeting.

- c) **Nominations and Appointments to the SCGA Board** – The following is a status report on nominations and appointments to the Board.
 - Nominations and/or appointments that are complete:
 - Appointments – Expiring August 21, 2016
 - Sacramento County
 - Don Nottoli, Board Member
 - Forrest Williams, Alternate
 - Nominations (Appointment scheduled for September 25, 2012)
 - Conservation Land Owners
 - Rick Bettis, Board Member
 - Public Agencies Self-Supplied
 - Edwin Smith, Board Member
 - Ward Winchell, Alternate
 - Rancho Murieta CSD
 - Ed Crouse, Board Member
 - Gerald Pasek, Alternate
 - Sacramento Regional County Sanitation District
 - Dave Ocenosak
 - Jose Ramirez

- Pending nominations (Current appointment expires September 30, 2012)
 - Cal-Am Water Company
 - Agriculture
 - Omochumnes-Hartnell Water District
 - Ag-Res

Those who have not submitted nomination letters are encouraged to do so as soon as possible.