

FOX CANYON GROUNDWATER MANAGEMENT AGENCY

A STATE OF CALIFORNIA WATER AGENCY



BOARD OF DIRECTORS

Eugene F. West, **Chair**, Director, Camrosa Water District
David Borchard, **Vice Chair**, Farmer, Agricultural Representative
Steve Bennett, Supervisor, County of Ventura
Charlotte Craven, Councilperson, City of Camarillo
Robert Eranio, Director, United Water Conservation District

EXECUTIVE OFFICER

Jeff Pratt, P.E.

NOTICE OF MEETING

NOTICE IS HEREBY GIVEN that the Fox Canyon Groundwater Management Agency (FCGMA) will hold an **Operations Committee Special Meeting** at **8:00 a.m.** on **Wednesday, July 25, 2018** in the **Atlantic Conference Room**, at the Ventura County Government Center, Hall of Administration, at **800 South Victoria Avenue, Ventura, California.**

FCGMA OPERATIONS COMMITTEE SPECIAL MEETING AGENDA

July 25, 2018

Members: Chair Steve Bennett
Co-Chair Robert Eranio

A. Call to Order / Introductions

B. Public Comments – Audience members may speak about FCGMA-related matters not on today's Agenda.

C. Water Supply and Infrastructure Projects – Continued discussion from July 9, 2018, meeting regarding consideration of staff recommendations for selection of submitted projects for inclusion in the Groundwater Sustainability Plan model forecasting of sustainable yield.

D. Adjourn Operations Committee Meeting

NOTICES

The FCGMA Board strives to conduct accessible, orderly, and fair meetings where everyone can be heard on the issues. The Board Chair will conduct the meeting and establish appropriate rules and time limitations for each item. The Board can only act on items designated as Action Items. Action items on the agenda are staff proposals and may be modified by the Board as a result of public comment or Board member input. Additional information about Board meeting procedures is included after the last agenda item.

Administrative Record: Material presented as part of testimony will be made part of the Agency's record, and 10 copies should be left with the Board Clerk. This includes any photographs, slides, charts, diagrams, etc.

ADA Accommodations: Persons who require accommodation for any audio, visual, or other disability in order to review an agenda or to participate in the Board of Directors meeting per the Americans with Disabilities Act (ADA), may request such accommodation in writing addressed to the Clerk of the FCGMA Board, 800 South Victoria Avenue, Location #1610, Ventura, CA 93009-1610, or via telephone by calling (805) 654-2014. Any such request should be made at least 48 hours prior to the meeting so staff can make the necessary arrangements.

Availability of Complete Agenda Package: A copy of the complete agenda package is available for examination at the FCGMA office during regular working hours (8:00 a.m. to 5:00 p.m. Monday through Friday) beginning five days

FCGMA Operations Committee Special Meeting Agenda

July 25, 2018

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before the Board meeting. Agenda packet contents are also posted on the FCGMA website as soon as possible, and left there for archival retrieval in case reference is needed on previously considered matters. Questions about specific items on the agenda should be directed to the Agency's Executive Officer.

Continuance of Items: *The Board will endeavor to consider all matters listed on this agenda. However, time may not allow the Board to hear all matters listed. Matters not heard at this meeting may be carried over to the next Board meeting or to a future Board meeting. Participating individuals or parties will be notified of the rescheduling of their item prior to the meeting. Please contact the FCGMA staff to find out about rescheduled items.*

Electronic Information and Updates: *Visit (for home page information) or Facebook (for meeting updates). Information available online includes the Board's meeting schedule, a list of the Board members and staff, weather station data, general information, and various Agency forms. If you would like to speak to a staff member, please contact the Clerk of the Board at (805) 654-2014.*

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MINUTES

Minutes of the Fox Canyon Groundwater Management Agency's (FCGMA) Operations Committee meeting held **Monday, July 09, 2018 at 2:00 p.m.** in the Pacific Conference Room at the Ventura County Government Center, Hall of Justice, 800 South Victoria Avenue, Ventura California.

Members: Chair Steve Bennett
Vice Chair Robert Eranio

A. Call to Order

Chair Bennett called the meeting to order at 2:05 p.m.

In attendance were: (1) Steve Bennett, Operations Committee Chair; (2) Robert Eranio, Operations Committee Vice Chair; (3) Arne Anselm, Ventura County Watershed Protection District (WPD), Deputy Director; (4) Kim Loeb, Groundwater Manager; (5) Kathleen Riedel, Groundwater Specialist.

Comments were made by:

(6) Susan Pan, Ventura County Water Works District (VCWWD); (7) Matthew Fienup, California Lutheran University (CLU); (8) Bryan Bondy, Calleguas Municipal Water District (CMWD); (9) John Lindquist, United Water Conservation District (UWCD); (10) Curtis Hopkins, Hopkins Groundwater Consultants (HGC).

B. Public Comments

There were no public comments.

C. Approval of Minutes

Vice Chair Eranio made a motion to approve the minutes. Chair Bennett seconded the motion, and the motion was approved.

D. Agenda Review

There were no changes made to the agenda.

E. NRCS Grant Implementation Update

Arne Anselm gave a quick update. He said that the workshop held last month was well attended with over 50 attendees. He said that a mailer went out and that the applications submitted were up to about 275 with 240 eligible. He said about 100 of those indicated that they were interested in the water market.

Mr. Anselm said that the number of applications is plateauing and that the number of active agricultural wells that were eligible for the grant is not as high as originally thought, so that there is over 50% saturation at this point.

Matthew Fienup stated that it would be nice to have an update on installations. Mr. Anselm said that they have taken possession of the 300 units ordered and they are able to install 10-15 per week, but he didn't have a current number that have already been installed.

F. Water Supply and Infrastructure Projects

Kim Loeb presented a PowerPoint presentation that identified the projects for the Groundwater Sustainability plans. He went over the criteria for the projects.

Mr. Loeb said that they received 19 project submittals. He said that they went before the Technical Advisory Group for technical review last week.

Mr. Loeb presented a review of all the projects one-by-one.

The Committee discussed the different components of the projects including the increase of sustainable yield and the funding mechanism.

Mr. Lindquist stated that UWCD would be willing to present the Freeman Expansion Project to the Board.

Mr. Loeb said that he would take the provided feedback and simplify the chart presented with what needs to be done for the projects and que up the policy discussion.

Chair Bennett suggested taking another look at it before it goes before the whole Board.

A special Operations Committee meeting was scheduled for July 25, 2020.

H. Adjourn Operations Committee Meeting

Chair Bennett adjourned the Operations Committee meeting at 3:43 p.m.

Future GSP Projects

General Policy Issues

Replenishment Fee

Should the GSPs include projects that rely on replenishment fees? If so, how much replenishment fee funds should be budgeted per basin?

- Many of the proposed projects rely upon a potential future FCGMA replenishment fee.
- The GSP regulations require a “description of how the Agency plans to meet those costs” which would allow projection of a future replenishment fee.
- Inclusion of the projects in the GSP would not be a commitment to fund those projects with a replenishment fee, the project mix could be updated in a GSP update once replenishment fees are enacted.

Recommendation: Include projects that rely on replenishment fees if they meet all other requirements. Base total amount of replenishment fee per basin on Board assumption of a per-AF fee.

Allocation Purchases

Should the GSPs include projects where the FCGMA makes short- and long-term purchases of pumping allocation?

- Several projects propose short- and long-term purchases of pumping allocation.
- These include purchase of imported water for in-lieu deliveries to pumpers and temporary land fallowing.

Recommendation: Consider purchases of pumping allocation in strategic areas such as the seawater intrusion area to reduce demand / increase basin sustainable yield. Temporary land fallowing and imported water purchases are each considered below.

Temporary Land Fallowing

Should the GSPs include projects where the FCGMA purchases allocation on a temporary basis to fallow land and reduce pumping? If so:

- Where should land be fallowed?
- How long should land be fallowed?
- How much land should be fallowed?

Recommendation: Consider temporary land fallowing in targeted areas and aquifer systems based on reducing undesirable results. Consider 1- to 3-year agreements with requirement to maintain a low-water use cover crop to minimize dust.

Imported Water Purchases

Should the GSPs include projects where the FCGMA enters into agreements to purchase imported water to be delivered to specific pumpers in lieu of pumping? If so:

- Where should imported water be delivered (within Calleguas MWD service area)?
- How much imported water/allocation should be purchased?
- How long should the agreements be?

Recommendation: Consider targeted areas based on undesirable results and aquifer system.

Arroyo Las Posas Water Purchase

Should the GSP include a project in which the FCGMA enters into a long-term agreement with the City of Simi to assure continued discharge of WWTP effluent into the Arroyo Las Posas to recharge the East Las Posas Valley Management Area?

Recommendation: Consider purchasing treated water with water quality that meets RWQCB Basin Plan Objectives.

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Policy Issues

Staff evaluation of impact on Sustainability Indicators / Undesirable Results

Projects by Basin	Sponsoring Agency	In lieu to specific areas focused on aquifers/pumpers vs. recharge	Water Purchases/ Imported	Allocation Purchases - Following vs in-lieu water purchase	Type of Project	Water Supply Source	Annual Increase in Sustainable Yield (AFY)	Proposed Project Groundwater Extractions (AFY)	Project Yield (AFY) (per submittal)	Replaces import water	Associated with credit program to pump groundwater	Total Capital Cost/ Project Cost to Pump On Line	Annual Operations and Maintenance Cost	Funding Source(s)	Chronic Lowering of Groundwater Levels	Reduction of Groundwater	Seawater Intrusion	Degraded Water Quality	Land Subsidence	Depletions of Interconnected Surface Water	Notes: (Combination of submitter, TAG and staff notes)	
Las Posas Valley Basin																						
Purchase of Imported Water from Calleguas Municipal Water District (CMWD) for Basin Replenishment	CMWD	In-lieu	Import	In-lieu	WS	Imported Water	No limit most years	No limit most years			Part of CMWD rate	Depends on quantity (\$1,528 per AF (2018))	Replenishment Fee		+	+	NA	= / + ?	+	+	Only available to big water systems / suppliers within CMWD annex area. Tier 2 rate will apply if Tier 1 volume is exceeded.	
Arroyo Las Posas Arundo Removal	The Nature Conservancy (TNC)	Recharge			WS	Avoided Evapotranspiration (ET)	Up to 2,680 AFY	up to 2,680			\$7.4 million (\$300 per AF over 25 yrs)	approx. \$200 per AF	FCGMA and Habitat Grants		+	+	NA	+	+	+	Estimates of arundo evapotranspiration rates vary widely.	
Arroyo Las Posas Water Acquisition	The Nature Conservancy ("May be more appropriate to co-sponsor with the FCGMA")	Recharge	Surface water/ Imported		WS	Avoid loss of inflow to basin	Approx. 500 to 2,000 AFY (3,000 AFY minus 1,000 to 2,500 AFY of ET losses)	approx. 8,000			\$0	To be negotiated	FCGMA and Habitat Grants		+	+	NA	-	+	+	Simi has a minimum discharge requirement. Volumes are based on water in excess of minimum required discharge. Care must be taken not to double count minimum required discharge when evaluating Sustainable Yield.	
Oxnard Subbasin																						
Projects related to the GREAT Program																						
GREAT Program Advanced Water Purification Facility (AWPF)	City of Oxnard	In-lieu and/ or recharge	Advanced treated water	In-lieu	WS	New recycled water	4,600 AFY current facility and an additional 6,000 AFY for facility expansion. Increase in SY is that volume used to recharge the groundwater basin including replaced groundwater usage which did not exceed allocation and pumpback credits were not issued.	4,600 available for SY	Yes ¹	Yes	\$90 to \$100 million	\$8 million (\$300 per AF)	City Bonds /Federal Grants		+	+	+	+	+	+	NA	Treated wastewater for irrigation. Agricultural users that receive treated water and document that it replaced groundwater extraction generate credits for the City to pump groundwater to replace water delivered.
GREAT Program AWPF Expansion	City of Oxnard	In-lieu	Advanced treated water	In-lieu	WS	New recycled water	[This volume is included in AWPF annual increase to SY]	6,000 available for SY	Yes ¹	?	TBD	TBD	TBD		+	+	+	+	+	+	NA	
Riverpark-Saticoy GRRP Recycled Water Project	United Water Conservation District (UWCD)	Recharge	Advanced treated water		Infrastruc. & WS	New recycled water	[This volume is included in AWPF annual increase to SY]	5,000+ from AWPF			\$6.4 million (approx. \$30 per AF)	\$5 to 7.5 million (approx. \$1,000 to 1,500 per AF)	UWCD Zone B or FCGMA		+	+	+	+	+	+	NA	Recharge City of Oxnard's recycled AWPF water in UWCD's Saticoy basins
Other Projects																						
Freeman Expansion Project	UWCD	In-lieu and/ or recharge	Surface water	In-lieu	WS	Santa Clara River ²	2,000 to 3,000 AFY (not an increase - avoided loss of diversion capacity)	7,400			\$31 million (\$4189 per AFY)	\$700,000 (\$95 per AF)	Rate Payers, Grants		+	+	+	+	+	+	NA	Avoid loss of water supply.
Temporary Agricultural Land Fallowing Project	Oxnard/ PV Ag Owners, Inc.	Recharge	Allocation	Fallowing	MA	Avoid pumping	[Management action to decrease pumping relative to current conditions]	TBD-modeling needed			\$0	\$1,200 to \$1,800 per AF	Replenishment Fee		+	+	+	=	+	+	NA	Demand Reduction. Project parameters need to be identified for modeling.
Pleasant Valley Basin																						
Temporary Agricultural Land Fallowing Project	Oxnard/ PV Ag Owners, Inc.	Recharge	Allocation	Fallowing	MA	Avoid pumping	[Management action to decrease pumping relative to current conditions]	TBD-modeling needed			\$0	\$1,200 to \$1,800 per AF	Replenishment Fee		+	+	NA	=	+	+	NA	Demand Reduction. Project parameters need to be identified for modeling.

Notes:
 1. Amount available to non-City users is to be determined.
 2. Avoided loss of Santa Clara River diversion capacity.

Technical Advisory Group and staff analysis
 TBD = To be determined
 NA = Not Applicable
 WQ= Water Quality
 WS= Water Supply
 Infrastruc.= Infrastructure
 MA= Management Action

+ Positive Impact
 - Negative Impact
 + / - ? Possible positive or negative impact. To be determined
 ? Insufficient information. Impact not determined
 = No Impact
 NA Not Applicable

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Issues

Staff evaluation of impact on Sustainability Indicators / Undesirable Results

Projects by Basin	Sufficient information for evaluation & modeling? Increases basin sustainable yield?	Sponsoring Agency	Type of Project	Water Supply Source	Annual Increase in Sustainable Yield (AFY)	Proposed Project Groundwater Extractions (AFY)	Project Yield (AFY) (per submittal)	Replaces import water	Associated with credit program to pump groundwater	Total Capital Cost/ Project Cost to Bring On Line	Annual Operations and Maintenance Cost	Funding Source(s)	Chronic Lowering of Groundwater Levels	Reduction of Storage	Seawater Intrusion	Degraded Water Quality	Land Subsidence	Depletions of Interconnected Surface Water	Notes: (Combination of submitter, TAG and staff notes)
Las Posas Valley Basin																			
VCWWD No. 1 Moorpark Desalter, Storm Water Capture, and Groundwater Recharge Project	No	VCWWD No. 1	WQ	Groundwater and Storm Water	No net increase in Sustainable Yield is proposed.	Max. 3,000	Max. 2,500	Yes ¹	Pumping allocation for storm water recharge	\$40 million (\$1,500 per AFY)	\$2.5 million (\$1,000 per AF)	District capital project fund	= / - ?	= / - ?	NA	+	+ / - ?	-	Lower groundwater table to provide space for storm water recharge to divert 1,000 to 3,000 AF/yr storm water from Arroyo Las Posas to percolation ponds for recharge. District will extract brackish water for treatment in an amount equivalent to recharge of storm water. Estimated to produce as much as 2,500 AFY of treated water which is to replace imported water.
Oxnard Subbasin																			
Projects related to the GREAT Program																			
Aquifer Storage and Recovery (ASR)	No	City of Oxnard	Infrastruc.	New recycled water	[Serves as a temporary storage facility]		1,500			NA	TBD	in construction	=	=	=	=	=	NA	Demonstration well /Water storage project. Currently in construction.
AWPF Source Water Evaluation - Stormwater Capture	No	City of Oxnard	WS	Storm water	[proposed investigation to evaluate feasibility]		1,000 to 2,000			TBD	TBD	TBD	Study					Proposal to investigate use of dry weather and wet weather stormwater as a source water for recycling.	
Evaluation Desalter for Semi-Perched Aquifer	No	?	City of Oxnard	WQ	Groundwater	[proposed investigation to evaluate feasibility]	?	TBD		TBD	TBD	TBD	Study					Proposal to investigate capture, treatment and use in the Semi-Perched Aquifer	
East Recycled Water Distribution System - Hueneme Road Recycled Water Pipeline Extension	No	City of Oxnard	Infrastruc.	New recycled water	[Pipeline to transport water]		NA			\$14 million	NA	Funding secured	=	=	=	=	=	NA	Water transport.
Other Projects																			
Anacapa Project	No	UWCD	WS	Groundwater	0 to 3,000 AFY	Approx. 3,000 wet years only	Approx. 3,000 wet years only			TBD	TBD	FCGMA or enterprise	+	+	+	+	+	NA	Key is determining criteria for classification as "excess". Extract groundwater near coast and recharge up gradient.
Brackish Water Treatment, Southern Oxnard Plain	No	?	UWCD	WQ	Groundwater	[to serve as a pumping barrier against sea water intrusion.]	?	TBD-modeling needed		\$85 to \$148 million (\$397 to 457 per AFY)	\$4.47 to \$7.77 million (\$730 to \$820 per AF)	Replenishment Fee	Study					Under study.	
Alternative Supply Alliance Pipeline	No	UWCD	Infrastruc. & WS	State Water / Imported Water	TBD		TBD			\$10 to \$20 million	TBD	TBD	Study					Infrastructure to transport imported water. Under study.	
Purchase of State Water Project (SWP) Imports combined with State Water Interconnection Pipeline ²	No	UWCD / City of Ventura / CMWD	Infrastruc. & WS	State Water / Imported Water	5,000+ AFY		5,000+			\$2.5 million (\$230 per AFY)	approx. \$3.61 million (approx. \$1,988 per AF)	UWCD Zone B or FCGMA	+	+	+	+	+	NA	Import State Water Project water.
Pleasant Valley Basin																			

Notes:

- 1. Amount available to non-district users is to be determined.
- 2. Two submitted projects combined as requested by UWCD TAG representative.

To be determined
 Not Applicable
 Water Quality
 Water Supply
 Infrastructure
 Management Action

Technical Advisory Group and staff analysis

+	Positive Impact
-	Negative Impact
+ / - ?	Possible positive or negative impact. To be determined
?	Insufficient information. Impact not determined
=	No Impact
NA	Not Applicable