

# 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 Meeting** at **1:30 p.m.** on **Monday, October 16**, in the **Atlantic Conference Room**, at the Ventura County Government Center, Hall of Administration, Main Level at **800 South Victoria Avenue, Ventura, California**.

## FCGMA OPERATIONS COMMITTEE MEETING AGENDA

October 16, 2017

**Members:** Chair Steve Bennett  
Co-Chair Robert Eranio

- A. Call to Order**
- B. Public Comments** – Audience members may speak about FCGMA-related matters not on today's Agenda.
- C. Approval of Minutes** – Consider approval of minutes from the September 14, 2017 Operations Committee meeting
- D. Agenda Review**
- E. Update on NRCS Grant and AMI Timeline**
- F. AMI Equipment Ownership Discussion**
- G. Draft AMI Ordinance**
- H. AMI Performance Specifications**
- I. 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.

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**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 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.

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**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.

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**Electronic Information and Updates:** Visit <http://www.fcgma.org> (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 **Thursday, September 14, 2017 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.

### **A. Call to Order**

Chair Bennett called the meeting to order at 1:00 p.m.

**B. Introductions** – In attendance were: (1) Steve Bennett, FCGMA Operations Committee Chair; (2) Robert Eranio, FCGMA Operations Committee Co-Chair; (3) Arne Anselm, WPD, Deputy Director; (4) Kim Loeb, WPD, Groundwater Manager; (5) Alma Quezada, Groundwater Specialist; (6) Keely Royas, FCGMA Clerk of the Board; (7) Andrew Gschwind, Assistant County Counsel; (8) Matthew Fienup, California Lutheran University (CLU); (9) Daniel Howe, Ranch Systems; (10) Carol Schoen, Zone Mutual Water Company; (11) E.J. Remson, The Nature Conservancy (TNC); (12) Mike Lowthorp, Cal-Coast Irrigation; (13) Sally Molenhouse, GMMA; (14) Mike Ellis, United Water Conservation District (UWCD).

### **C. Public Comments**

There were no comments made by the public.

### **D. Approval of Minutes**

Co-Chair Eranio made a motion to approve the minutes as written. Chair Bennett seconded the motion, and the motion passed unanimously.

### **E. Agenda Review**

No changes were made to the Agenda.

### **F. Update on NRCS Grant and AMI Timeline**

Mr. Anselm stated that once TNC approves the grant agreement with NRCS, TNC will draft a sub-grant agreement for review and approval with the Agency. He expects to bring an ordinance to the October 2017 FCGMA Board meeting for consideration.

### **G. AMI Equipment Ownership Discussion**

800 South Victoria Avenue, Ventura, CA 93009-1610  
(805) 654-2014 FAX: (805) 654-3350  
Website: [www.fcgma.org](http://www.fcgma.org)

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Mr. Anselm instructed everyone to view a handout listing the pros and cons of FCGMA ownership vs. well-owner ownership. The handout listed issues concerning the AMI equipment, and listed pros and cons under each issue when owned by the FCGMA or the well owner. Mr. Anselm went through the issues one by one and stated the pros and cons for both the FCGMA ownership and the well-owner ownership.

Mr. Loeb commented that there is a potential issue with ownership under the NRCS grant life-cycle. He stated that it is likely that the NRCS will own the equipment until the end of the grant agreement timeline. The Agency will know more once the grant agreement is finalized.

Public comments were made by Sally Molenhouse, GMMA; and Mike Ellis, UWCD.

There were questions of whether operators would be eligible to be reimbursed if they purchased the equipment prior to the grant and if mutual water districts would qualify under the grant.

Mr. Anselm stated that operators who purchased equipment prior to the grant would not be eligible for reimbursement and Mr. Loeb stated that if a mutual water district serves agricultural growers than they would most likely be eligible.

Chair Bennett stated that he was leaning towards operator ownership and Co-Chair Eranio stated that he was leaning towards GMA ownership as there would be less of a chance of the system to be gamed.

Co-Chair Eranio made a suggestion to hold a stakeholder workshop. Chair Bennett thought it would be better to bring to the whole Board for discussion and direction to provide staff.

Mr. Fienup had a question about who would own the data.

Mr. Loeb stated that a single data manager would be needed regardless of ownership. The draft ordinance states that the data would be confidential.

Mr. Gschwind stated that the GMA should have access to the data in case of a discrepancy.

Ms. Schoen asked who was going to pay for the data management. Mr. Loeb explained that the plan was for the GMA to pay for the monthly subscription. Anything above the basic subscription would be the well owner's responsibility.

## **H. AMI Performance Specifications**

Ms. Quezada presented the AMI performance specifications draft. Ms. Quezada pointed out the specific sections that she thought would be the most important for the AMI performance specifications. Those sections are 2.1, 2.14, 2.16, 3.14, 3.15, 5, 6, and 7.

Co-Chair Eranio made a suggestion to have sections 3.14 and 3.15 as part of the presentation brought to the Board. He also suggested having a legal statement from GMA Counsel concerning confidentiality of the extraction data.

Chair Bennett suggested to not over-commit confidentiality to owners as there may be instances of investigating for compliance.

Mr. Loeb stated that GMA Counsel will draft a memo with what information can be released and what information needs to remain confidential.

Mr. Anselm suggested that a minimum set of specifications needs to be established for existing meters in terms of tamper detection.

**I. Staff Policy Recommendations**

Mr. Anselm went through the policy matrix that identifies the issues and staff recommendations. The sections reviewed were Implementation, Equipment, Data management, and Compliance and Verification.

Under staff recommendations in Implementation the word "digital" was changed to "serial data".

Under staff recommendations in Data Management "or investigation" was added to the sentence "The FCGMA will have access to monthly totals except under non-compliance conditions". "In compliance with state law" was also added to the end of sub-section, Data confidentiality for extraction data. In sub-section Extraction data available to the FCGMA, "or investigation" was added after "non-compliance".

Under staff recommendations in Verification and Compliance, a 2029 timeline was added to the meter accuracy requirement. "Above ground appetencies" was added to the phrase in sub-section Equipment inspection personnel.

**J. Adjourn Operations Committee Meeting**

Chair Bennett adjourned the meeting at 3:00 p.m.

Submitted by:

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Keely Royas  
FCGMA Clerk of the Board

## ORDINANCE X

### **AN ORDINANCE TO REQUIRE ADVANCED METERING INFRASTRUCTURE (AMI) TELEMETRY ON EXTRACTION FACILITIES**

The Board of Directors of the Fox Canyon Groundwater Management Agency, State of California, hereby ordain as follows:

#### ARTICLE 1. Findings

The Board of Directors hereby finds that:

- A. The Agency has the authority to adopt ordinances to regulate, conserve, manage, and control the use and extraction of groundwater within its territory.
- B. Excessive groundwater extraction can cause overdraft, failed wells, deteriorated water quality, environmental damage, and irreversible land subsidence that damages infrastructure and diminishes an aquifer's capacity for groundwater storage.
- C. The Agency is developing a Groundwater Sustainability Plan in accordance with the Sustainable Groundwater Management Act of 2014 that will identify the means by which the Agency will achieve the sustainability goal for each of the groundwater basins within the Agency.
- D. Accurate and timely measurement and reporting of groundwater extraction data are essential elements to achieving effective and sustainable groundwater management of the basins underlying the Agency boundaries.
- E. The Agency may require that extraction facilities be equipped with waterflow measuring devices and advanced metering telemetry (AMI) to automatically report extractions on a semiannual or more frequent basis.
- F. AMI is a robust method to measure well activity and may be used as part of an asset management program to effectively monitor and manage groundwater extractions.
- G. Requiring the installation of AMI devices on extraction facilities will result in: (i) more comprehensive groundwater extraction data; (ii) timely reporting of groundwater extractions, (iii) improved groundwater management; (iv) reduced need for and reliance on manual reporting; and (v) more efficient groundwater use.
- H. The adoption of this Ordinance is exempt from the California Environmental Quality Act pursuant to CEQA Guidelines Sections 15061(b)(3), 15301, 15307, and 15308. These provisions exempt a project if there is no possibility the activity will have a significant effect on the environment, the activity consists of minor alteration of existing facilities, or the activity is taken to ensure the maintenance, restoration, or enhancement of natural resources or the environment. This Ordinance will conserve and improve the availability of Agency water resources, particularly within

the Basins, and will help ensure the maintenance and sustainability of certain local and imported water resources.

## ARTICLE 2. Purpose

The purpose and intent of this ordinance is to: a) provide for broader and consistent measurement and reporting of groundwater extractions; b) improve the Agency's ability to monitor and manage groundwater use; c) facilitate implementation of a Groundwater Sustainability Plan; and d) promote sustainable groundwater management within the Agency.

## ARTICLE 3. Definitions

- 3.1 "Accuracy" means the degree to which the result of a measurement conforms to the correct value or a standard.
- 3.2 "Advanced Metering Infrastructure (AMI)" means a fully automated infrastructure consisting of various technologies integrated into new and existing flowmeters that enables communication between a groundwater extraction facility and a central database via cellular, radio, or satellite communication systems to acquire real-time or near real-time groundwater-extraction data. An AMI system typically includes all field hardware, transmission towers, central database and user interfaces.
- 3.3 "Agency" means the Fox Canyon Groundwater Management Agency.
- 3.4 "Board" means the Board of Directors of the Fox Canyon Groundwater Management Agency.
- 3.5 "Central Database" is a database that is located in a single location and hosted and maintained by a third party vendor. The database will be Agency funded and owned. Users can access user-specific stored data in the central database through a computer network.
- 3.6 "Executive Officer" means the individual appointed by the Board to administer Agency functions or his/her designee.
- 3.7 "Extraction facility" means any device or method (e.g. water well) for extraction of groundwater within a groundwater basin or aquifer.
- 3.8 "Inactive Well" An inactive well is a well that conforms to the County of Ventura Ordinance Code requirements for an active well, but is being held in an idle status in case of future need. Pumping to meet Ventura County Ordinance Code requirements shall not exceed 12 hours in a 12 month period. Meters shall be installed on inactive wells and the well shall revert to a groundwater extraction facility if the requirement exists to pump the well for more than 12 hours in any 12 month period. The pumping to meet Ventura County Ordinance Code requirements shall be for beneficial use. The application of an inactive well status implies that there is a minimum of one additional source of water to serve as a primary supply.
- 3.9 "Metering Equipment" or "Meters" means a manufactured instrument for

accurately measuring and recording the flow of water in a pipeline.

3.10 “Operator” means a person who operates an extraction facility. In the event the Agency is unable to determine who operates a particular extraction facility, the “operator” shall mean the person to whom the extraction facility is assessed by the County Assessor, or, if not separately assessed, the person who owns the land upon which the extraction facility is located.

3.11 “Resolution” means a formal statement of a decision adopted by the Board.

#### ARTICLE 4. Flowmeter Accuracy and AMI Requirement

4.1. By January 31, 2019, and except as otherwise provided herein, all active Agricultural, Municipal & Industrial, and domestic large capacity extraction facilities (ones that produce greater than 50 gallons per minute [gpm]), shall be equipped with a flowmeter with AMI and report extractions to the Agency’s Central Database.

4.2. By January 31, 2020 extraction facilities, including inactive wells as defined in this Ordinance Code, classified as large capacity extraction facilities (ones that produce greater than 50 gallons per minute [gpm]), and *State Small Water System*<sup>1</sup> within the Agency shall be equipped with Metering Equipment with AMI and report extractions to the Agency’s Central Database.

4.3. By January 31, 2022 all small capacity wells that produce less than 50 gpm, excluding single-family residences on one acre or less with no agricultural income producing operations, within the Agency shall be equipped with Metering Equipment and AMI and report extractions to the Agency’s Central Database..

4.4. After January 31, 2029, all extraction facilities, excluding single-family residences on one acre or less with no agricultural income producing operations, will be required to have Metering Equipment with digital output capability or equivalent, and an accuracy range not to exceed +/- 2%. Technical specifications and standards for the installation, operation, and maintenance of the device shall be set forth in a Resolution.

#### ARTICLE 5. Compliance and Inspection

5.1. The device required by Article 4 shall be installed in a manner that makes it reasonably accessible for inspection and testing.

5.2. The Agency with concurrence of the well owner/operator may inspect at any reasonable time for the purpose of making inspections to the AMI system, flowmeter, and any attached above-ground appurtenances. Should a well owner/operator decline a request by the Agency for inspection within 72 hours two consecutive times, the Agency may obtain a warrant to enter the property for the purpose of inspections to the AMI system, flowmeter and any attached above-ground appurtenances. Inspections may be performed by a certified third party.

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<sup>1</sup> State Small Water Systems are water systems that provide piped water to the public for human consumption that serves at least five, but not more than 14 service connections and does not regularly serve more than an average 25 individuals for more than 60 days of the year.



## ARTICLE 6. Compliance with Existing Reporting Requirements

Nothing in this ordinance is intended to rescind, repeal, modify, or adjust any other reporting requirements set forth in the Agency Ordinance Code.

## ARTICLE 7. Alternative Reporting

In areas where it is demonstrated that compliance with the requirements of article 4 is impossible or impractical, an operator shall report extractions on a monthly basis. Extraction reports shall contain information set forth in a Resolution, along with photographs of the meter totalizer reading. The report shall be filed no later than the 15<sup>th</sup> day of each month following the month in which the extraction facility is operated. The monthly report required by this article shall be in addition to any reporting requirements set forth in the Agency Ordinance Code. Failure to file the monthly report when due is a violation of this ordinance. An operator who violates this provision more than three (3) times within any 12-month period shall be subject to monthly site visits from Agency staff to manually read the meter. An operator who becomes subject to monthly inspections under this article shall be responsible for all costs incurred by the Agency, including legal fees, in enforcing the provisions on this ordinance.

## ARTICLE 8. Request for Additional Time

An operator may submit a request for additional time, not to exceed six months, to comply with the provisions of this ordinance. The Executive Officer may grant such requests upon a showing of good cause. For purposes of this article 8, good cause includes, but is not limited to, proof that compliance with this Ordinance will cause undue financial hardship or that the required equipment could not be installed by the compliance date in article 4 due to a factor beyond the operator's control.

## ARTICLE 9. Enforcement

Failure to comply with any provision of this ordinance is a violation subject to a civil penalty of up to one thousand dollars (\$1,000) per day. In addition, the Agency may petition the superior court for a temporary restraining order, preliminary or permanent injunction prohibiting operation of the extraction facility, or such other equitable relief as may be appropriate. Extractions from extraction facilities not in compliance with the AMI requirements shall be subject to extraction surcharges.

## ARTICLE 10. Effective Date

This ordinance shall take effect and be operative 30 days after its adoption.

PASSED AND ADOPTED this day of \_\_\_\_\_, 2017, by the following vote:

AYES: \_\_\_\_\_

NOES: \_\_\_\_\_

ABSENT: \_\_\_\_\_

\_\_\_\_\_  
Chair, Board of Directors  
Fox Canyon Groundwater Management  
Agency

ATTEST:

By: \_\_\_\_\_  
Clerk of the Board

DRAFT

## AMI Policy Matrix

Category	Policy Issue	Staff Recommendations	Reference
Implementation	AMI requirement Agency-wide	AMI will be required unless there is some technical infeasibility for that location.	Ordinance Articles 4 and 7
	Redefine the type of well to require a flowmeter. Currently only active wells and some domestic wells are required to have meter. Ordinance to define meter and AMI requirements for wells.	All <u>active</u> Agricultural and M&I wells without SCADA or AMI. <ul style="list-style-type: none"> <li>AMI telemetry by January 31, 2019</li> </ul>	Ordinance Article 4.1
		<u>Inactive</u> wells of large capacity capable of producing 50 gpm or greater and M&I users classified as a <i>State Small Water System</i> . Well Owner to purchase meter and AMI equipment. <ul style="list-style-type: none"> <li>Meter &amp; AMI by Jan 31, 2020.</li> </ul>	Ordinance Article 4.2
		All small capacity wells that produce less than 50 gpm, <u>excluding</u> single-family residences on one acre or less with no agricultural income producing operations <ul style="list-style-type: none"> <li>Meter &amp; AMI by January 31, 2022</li> </ul>	Ordinance Article 4.3
		<u>All</u> wells requiring meters within the FCGMA shall be equipped with a digital output flowmeter with calibration accuracy range not to exceed +/- 2%. <ul style="list-style-type: none"> <li>January 31, 2029</li> </ul>	Ordinance Article 4.4
	Effective date for implementation after Ordinance adoption.	Ordinance effective 30 days after ordinance adoption with phased installation approach as above.	Ordinance Article 10
Equipment	Ownership, maintenance and replacement responsibility	See <i>AMI Ownership Evaluation</i> matrix	TBD
	Vendor selection approach: single vendor vs. multi-vendor approach.	Recommend single vendor approach under NRCS grant program. FCGMA to provide performance specifications for single vendor procurement through an RFQ process.	N/A
	Meter specifications: there are currently 22 different meter brands in use within the FCGMA.	Require all meters be capable of accepting AMI telemetry (smart meters) within ten years. Exception where technically infeasible with Executive Officer approval.	Ordinance Article 4.4, and 7.

## AMI Policy Matrix

Category	Policy Issue	Staff Recommendations	Reference
Data Management	Vendor selection for central database.	<ol style="list-style-type: none"> <li>1. FCGMA to contract one vendor through RFQ process. Well Owners will have access to their data through a browser-based login. The FCGMA will have access to monthly totals except under non-compliance conditions.</li> <li>2. FCGMA to own data management system.</li> <li>3. Must be able to accept data from multiple AMI device manufactures.</li> </ol>	N/A
	Recurring annual communication costs	<p>FCGMA to pay for communication cost of extraction data to (1) secure volume discount pricing, (2) ensure continuous data collection, (3) avoid collection of small monies from various parties (4) use designated surcharge account after Grant funds exhausted.</p> <p>Well Owner/Operator responsible for other data costs beyond basic extraction data in a separate contract with the Vendor.</p>	Data Management Resolution needed
	New database to replace the FCGMA Online database.	<p>This database is separate and in addition to the central database that will collect all AMI generated data.</p> <p>FCGMA to contract one vendor by RFQ process. This database is needed to generate billing and track extractions and allocations.</p>	N/A
	Data confidentiality for extraction data.	<p>Well Owner name, address, and contact information remains confidential per State regulations. Extraction data will be available to the public as a total monthly volume per basin (or aquifer) and without any identifying information such as CombCode or state well number.</p> <p>Well Owners will have access to user defined data generated by AMI</p>	Data Management Resolution needed
	Extraction data available to the FCGMA.	<p>Monthly totals from individual Well Owners/Operators available to the FCGMA. All other data is proprietary to the Well Owner/Operator.</p> <p>In situations of non-compliance, the FCGMA reserves the right to obtain more granular extraction data.</p>	Data Management Resolution needed

## AMI Policy Matrix

Category	Policy Issue	Staff Recommendations	Reference
Verification & Compliance	Meter accuracy requirements are currently +/- 5% and have remained unchanged since 1987.	Revise meter accuracy requirement to the meter industry standard of +/-2%. If one or more component is installed in the field, then the accuracy requirement is +/-5%.	Ordinance Article 4.4
	Tamper detection and alert notifications	Require tamper detection devices on flowmeter and AMI equipment. Specify action alerts to be sent to the Well Owner and FCGMA. Establish procedures to validate volumes.	Performance Specifications 2.2.1, 2.3
	Access and inspection: define "reasonable notice" for equipment inspections	Provide Well Owners with a minimum of three days advance notice; obtain a warrant after a Well Owners declines two requests to have equipment inspected.	Ordinance Article 5.2
	Equipment inspection personnel	Agency or Agency approved vendor for all inspections.	Ordinance Article 5.2
	Penalties	Set penalties at a rate that discourages tampering, non-reporting and non-compliance.	Ordinance Article 9