



CALENDAR YEAR 2009

ANNUAL REPORT

FOX CANYON GROUNDWATER MANAGEMENT AGENCY

ANNUAL REPORT FOR CALENDAR YEAR 2009

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EXECUTIVE SUMMARY

The Fox Canyon Groundwater Management Agency (FCGMA) is a State Legislature-chartered public agency created to manage groundwater resources in the southwestern portion of Ventura County, California. The FCGMA boundary covers most lands overlying the Fox Canyon aquifer, primarily from the coast at the City of Port Hueneme to inland areas northeast of the City of Moorpark.

During calendar year 2009, the Agency completed several tasks begun in previous years, and accomplished several new ones. With California in the third year of a drought, California Department of Water Resources (DWR) officials announced some of the lowest allocation numbers to State Water Contract holders ever assigned in a given year. The initial DWR water contract allocations announced in December 2008 were only 15% (DWR Press Release 12-1-09), but were later increased by another 5% in March 2009. Reductions in Sacramento-San Joaquin Delta imported water to Ventura County translated into significant volume reductions and sharp price increases to end users of that imported water. To obtain less expensive or more available water, many users increased groundwater extractions.

Annual rainfall returned to near-normal levels, but many urban and agricultural users who rely on water imported into the Agency had to rely on wells for a majority of annual demand. Increased costs from water wholesalers and retailers led to increased interest in drilling new wells, especially in areas that have come to rely on imported water as the main supply source. The FCGMA Board adopted Emergency Ordinance D in February 2009 to restrict groundwater extractions in the East, West, and South Las Posas Groundwater Basins.

Nearly two-thirds (approximately 65%) of the water used in Ventura County is typically obtained from local groundwater sources, but that percentage rose in 2009. Well extractions within the Agency during the first half of the year (FCGMA Reporting Period 2009-01) were 61,741 acre-feet (AF), making this the third highest first half 6-month extraction volume since Ordinance 5 went into effect in 1991). Groundwater extractions during the second half of the year (FCGMA Reporting Period 2009-02) reached 80,551 AF. Total annual groundwater withdrawals in calendar year 2009 of 142,292 AF made this year the second highest total extraction year (second only to the base year of 1991 at 144,484 AF).

Many significant actions took place during 2009, and although these specific accomplishments have been listed in summary form, the body of this annual report along with the attached Tables and Figures provide a more detailed description of such activities.

Summary of Accomplishments and Significant Actions during 2009

- Revised Chapter 3 portion of Ordinance 8.1 to improve implementation of water flowmeter calibration testing and added language to allow for civil penalties for non-compliance and conducted a first reading of Ordinance 8.2.
- Adopted six Resolutions (see Appendix for full copies).
- Adopted Emergency Ordinance D to impose a temporary moratorium on new well drilling and an upper limit to efficiency allocations in the overdrafted Las Posas Valley basins to allow for development of a basin-specific management plan that would address local water resource issues.
- Strategic Advisory and Technical Advisory Groups (SAG & TAG) examined a revision of Irrigation Efficiency (I.E.) calculations and methodology; credit accumulation, credit use, and potential credit transfers, and Agency handling of well permits in relation to expansion of groundwater use.
- FCGMA continued participation in the Ventura County Association of Water Agencies (AWA) special Water Issues Committee, and acted as a charter member of their newly formed Recycled Water Subcommittee to promote and enhance the use, availability, and distribution of recycled water.
- Supported UWCD in efforts to preserve stream diversion volumes at the Vern Freeman Diversion structure on the Santa Clara River by providing a Declaration of Opposition to a plaintiff's motion (CalTrout) seeking a preliminary injunction in United States Central District Court.
- Held a special I.E. workshop to receive input and questions about the current system and any planned revisions.
- Approved a retroactive I.E. filing for years 2006, 2007, and 2008 upon payment of a \$500 late filing penalty to resolve more than \$13 million in outstanding surcharges and penalties.
- Continued Basic Work Tasks and Additional Work Tasks by focusing on specific priority issues. Settled a surcharge dispute; received additional input from the Las Posas Users Group (LPUG); and began drafting an Administrative Policies, Procedures, and Business Practices Manual to update and document Agency policies and procedures.
- Initiated a Semi-Annual public outreach newsletter to help educate, inform, and notify stakeholders about Agency actions, laws, and accomplishments.
- Supported the newly formed Oxnard Plain Users Group (OPUG) with FCGMA technical support and nominal funding.
- Began a complete revision and redesign of the FCGMA database to facilitate more automation of procedures and forms processing, and to help flag potential inaccuracies or unfilled extraction reports.
- Promoted public outreach by scheduling and holding four special offsite workshops (two in September and two in October) to present the history and future of the Agency, to receive input on Irrigation Efficiency, credits, etc., and to reach out to stakeholders as an informational State-of-the-Agency type presentation.

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1.0 AGENCY BACKGROUND

1.1 Introduction

The Fox Canyon Groundwater Management Agency (FCGMA) is a public agency tasked with managing groundwater resources in the southwestern portion of Ventura County, California (see Figure 1 – Fox Canyon Groundwater Management Agency Boundary). Main water resource management goals are controlling seawater intrusion, and helping to restore aquifers to a state of safe-yield. The FCGMA is an independent State “Special District”, separate from the County of Ventura or any city government, with jurisdiction over all lands lying above the Fox Canyon Aquifer. The Agency was created in 1982 by the California Legislature via the Fox Canyon Groundwater Management Agency Act [AB-2995] for the express purposes of regulating, conserving, managing, and controlling the use and extraction of groundwater to help preserve resources, and to counter seawater intrusion beneath the Oxnard Plain. Groundwater resources within the boundary of the FCGMA are used by the cities of Ventura, Oxnard, Port Hueneme, Camarillo, and Moorpark, along with the unincorporated communities of Saticoy, El Rio, Somis, Moorpark Home Acres, Nyeland Acres, and Montalvo. The FCGMA is funded solely by fees paid by those who extract groundwater within the Agency boundaries. These extraction fees are used by the Agency to administer and manage local groundwater resources within several aquifers beneath the Agency’s boundary.

1.2 Purpose of this Report

The purpose of this report is to briefly summarize the background and natural setting of the FCGMA, and to present a synopsis of the technical and administrative groundwater resource management activities for calendar year 2009. Since the Agency's fiscal year is not concurrent with the calendar year or technical reporting year, this report will not include a summary of financial activities. Fiscal data for the first reporting period(s) covering 2009 can be found under separate cover in the Agency's Bi-Annual Audit and/or the quarterly fiscal reports to the Board of Directors.

1.3 Origin and History of the Fox Canyon Groundwater Management Agency (FCGMA)

The unique geographic and geologic characteristics of Southern California have created a significant and valuable groundwater resource in the near-coastal and inland valley portions of Ventura County. Winter storms associated with the warm Mediterranean climate move inland from the Pacific Ocean and drop precipitation over the region, with greater amounts falling in the first quarter of the year (January-February-March) than the last quarter (October-November-December). The topography and geology of the area allow surface run-off and percolating groundwater to flow south and westward towards the coastal Oxnard Plain where such water can percolate into permeable sandy alluvial aquifers that are vertically bounded by impermeable clays or compacted silts. Groundwater beneath the Oxnard Plain is contained in several named aquifers that are primarily rimmed by upland and recharge areas to the north and east, the relatively impermeable rocks of the Santa Monica Mountains to the south and southeast, and the Pacific Ocean to the west and southwest.

Although the early indigenous people primarily relied on natural springs and available surface water, groundwater was recognized as a resource by European settlers beginning in the early to mid 1800's. Beginning with shallow hand-dug windmill wells, groundwater was soon developed to create one of the most prolific agricultural regions in California. In 2009, this water resource supported agricultural products valued at more than \$1.62 billion in Ventura County, which is up 0.7 percent or \$1,366,999 from the 2008 year figure (2009 Annual Crop Report, Ventura County Agricultural Commissioner's Office).

The FCGMA was created by the State of California (legislative branch) in response to local and persistent overuse of groundwater resources resulting in declining water quality (especially in the southern part of the Oxnard Plain) first recognized in the early 1940's (DWR, 1954). Prior to the creation of the FCGMA, the California State Water Resources Control Board (SWRCB), as a condition to a State grant for the Seawater Intrusion Abatement Project, directed the United Water Conservation District (UWCD) and Ventura County as grantees to develop a Groundwater Management Plan for the purpose of controlling extractions and balancing water supply and demand in both the Upper Aquifer System (UAS) and Lower Aquifer System (LAS). As a result of continuing overdraft by groundwater users and resulting seawater intrusion into aquifers beneath the Oxnard Plain, the Fox Canyon Groundwater Management Agency Act (AB-2995, Imbrecht) passed on September 13, 1982, and became effective January 1, 1983. The Act (enabling legislation) is now contained in the State Water Code Appendix, Chapter 121 et seq. As directed by Article 2, Section 202 of that enabling legislation, the boundary of the FCGMA was established by Resolution of the Ventura County Board of Supervisors (VCBOS, 1982) on December 21, 1982 and became effective by recordation in the Ventura County Office of the Recorder (VCOR) on January 1, 1983. The boundary has been revised and legally re-recorded in 1996 and again in 2002 to reflect updated knowledge of the aquifer both geographically and to reflect subsequent hydrologic findings. (VCOR, 1996)

1.4 Mission Statement of the Agency

The original State legislation created the FCGMA to manage groundwater within Ventura County, specifically the land overlying the Fox Canyon aquifer. The objectives of the Agency are to preserve groundwater resources for agricultural, municipal, and industrial uses in the best interests of the public and for the common benefit of all water users, however up until 2006, no formal mission statement had ever been adopted. The FCGMA formally adopted the following mission statement in 2006:

"The Fox Canyon Groundwater Management Agency (Agency), established by the State Legislature in 1982, is charged with the preservation and management of groundwater resources within the areas or lands overlying the Fox Canyon aquifer for the common benefit of the public and all agricultural, municipal and industrial users."

1.5 Agency Operations and Personnel

The FCGMA is directed by an elected five (5) member Board of Directors, and staffed by technical and administrative personnel provided by the Ventura County Watershed Protection District (Table 1 – Summary of FCGMA Personnel).

As required by its enabling legislation (the Fox Canyon Groundwater Management Agency Act of 1982 [AB-2995]), the Board of Directors for the FCGMA is composed of one member from each of the following four stakeholder groups:

- The Ventura County Board of Supervisors.
- The United Water Conservation District (UWCD) Board of Directors.
- The City Councils of the five incorporated cities that partially or totally overlie the FCGMA. These cities include Ventura, Oxnard, Camarillo, Port Hueneme, and Moorpark.

- The seven¹ existing mutual water companies and special districts within the FCGMA. They include the governing boards of the following mutual water companies and special districts not governed by the County of Board of Supervisors, which are engaged in water activities, and whose territory at least in part overlies the territory of the agency: (1) Alta Mutual Water Company, (2) Pleasant Valley County Water District, (3) Berylwood Mutual Water Company, (4) Calleguas Municipal Water District (CMWD), (5) Camrosa County Water District, (6) Zone Mutual Water Company, and (7) Del Norte Mutual Water Company.

These four stakeholder groups select the fifth Board Member from a list of at least five candidates nominated by the Ventura County Farm Bureau and Ventura County Agricultural Association acting jointly. This fifth member must reside in, and be “actively and primarily engaged in agriculture” within the territory of the Agency. The requirement “actively and primarily engaged in agriculture” means that farm members must derive at least seventy-five percent (75%) of their income from agriculture.

Five alternate Board members are selected according to the same criteria and serve in the absence of the primary Board members. All Board members serve for a two-year term, unless reappointed. There are no limits to the number of terms a member can serve. In 2007, the Board offset the terms of the City Council and the Agricultural representatives from the remaining three representatives by one year to ensure continuity of Agency operations and to prevent a complete turnover of all FCGMA Directors at the same time.

The Board normally conducts monthly public meetings with additional public input received through various stakeholder-based committees and advisory groups. Two committees formed in 2007 to help implement the revised Groundwater Management Plan (GMP) have continued throughout 2009 to function as the stakeholder policy arm (Strategic Advisory Group or SAG) and the more scientific arm (Technical Advisory Group or TAG).

In addition to providing personnel, the technical, financial, and legal needs of the FCGMA are provided under contract with the Ventura County Watershed Protection District and the Office of the County Counsel. The United Water Conservation District (UWCD) provides additional technical resources to the Agency as needed. UWCD is a public wholesale and retail water agency that also provides groundwater basin management activities in the Santa Clara River Valley and northern or central Oxnard Plain. In accordance with the enabling legislation, the FCGMA is not authorized to involve itself in activities normally undertaken by member agencies. Such activities include the construction, operation, and maintenance of capital facilities. Many facilities such as dams, spreading grounds, pipelines, flood control structures, and surface water diversions are operated by UWCD, CMWD, Camrosa, and other member agencies both inside and outside the FCGMA boundary.

2.0 GROUNDWATER RESOURCE MANAGEMENT

2.1 Location and Geographic Description of the FCGMA

The FCGMA is located in the southern portion of Ventura County in the southwest-coastal part of Southern California. At the time of its definition, the boundary of the Agency was defined as “all land overlying the Fox Canyon aquifer” (CWC Appendix, Chapter 121, Section 102.), however to account for

¹ An eighth mutual water company or special district, Anacapa Mutual Water Company, active at the passage of the enabling legislation (AB-2995), is no longer in existence.

overlying or adjacent jurisdictions and/or political reasons, not all areas above the aquifer were included within the original boundary adopted by the Ventura County Board of Supervisors. The Agency encompasses a northeast-southwest oriented, wedge-shaped area of 183.2 square miles that widens to the west and is bounded to the north by the Santa Clara River and South Mountain. To the east, the Agency boundary is defined by uplifted Tertiary and Quaternary-age consolidated rocks north and east of the City of Moorpark. The southern edge of the Agency is bounded by the Bailey Fault and the uplifted Santa Monica Mountains (Dibblee 1990). With the western and southwestern limits geographically limited by the Pacific Ocean coastline. The eastern portion of the FCGMA bifurcates into two separate lobes east of the City of Camarillo. The longer northern lobe, which includes the Las Posas Valley, terminates east of the City of Moorpark near the central portion of the Happy Camp Syncline (Dibblee 1992b and 1992c). The furthest eastern extent of the Agency terminates in the County's Happy Camp Canyon Regional Park northeast of the City of Moorpark. The shorter southern lobe, which includes the western portion of Pleasant Valley, terminates approximately one-third of the distance into the Santa Rosa Valley (on the west end) (Dibblee 1990). These two valleys widen to the west and merge near the city of Camarillo to encompass the broader Oxnard Plain where the majority of groundwater extractions occur within the Agency. The Santa Clara River Valley intersects with the northeastern portion of the Oxnard Plain near the unincorporated area of Saticoy. The northern boundary of the Agency turns west-southwest across from South Mountain just north of the Santa Clara River at Saticoy, then parallels the river's course westward all the way to the Pacific Ocean. This latter stage of Santa Clara River flow is determined by the Oak Ridge Fault System, which also constitutes much of the northern Agency boundary line. Southwest of the City of San Buenaventura, the boundary crosses back to the south bank of the river just east of the Pacific Ocean.

2.2 Geology and Hydrogeology of the FCGMA

The FCGMA is located near the western margin of the Transverse Ranges Geologic Province in Southern California. This geologic province is characterized by east-west oriented mountain ranges separated by valleys, faults, and basins. The east-west trending folds and faults are common throughout the province and their surface expression is evident at many locations within the FCGMA boundary (see Figure 2 – Major Hydrologic Features and Groundwater Basins within the FCGMA). The water-bearing sediments that comprise the valley fill and alluvial plains within the FCGMA consist of significantly deep unconsolidated and semi-consolidated sediments that range from Pliocene to Recent (Holocene) time in geologic age. The geologic formations from oldest to youngest include the Plio-Pleistocene-age Santa Barbara Formation (includes the Grimes Canyon Aquifer), the Pleistocene-age San Pedro Formation (contains the Fox Canyon Aquifer), and semi-consolidated and unconsolidated sediments of Upper-Pleistocene and Recent (Holocene) ages (Hueneme, Mugu, Oxnard, and Perched Aquifers). Local and regional unconformities (i.e. gaps in the geologic sedimentation record caused by uplift and subsequent erosion) occur between each of these formations (DWR, 1976).

The topography in the eastern portion of the FCGMA consists of narrow steep sided canyons that open into the broader east-west trending Las Posas Valley and Pleasant Valley areas. Moderate relief (typically 300 to 1,500 feet difference) between the bordering mountain highlands and the westward-sloping valley floors is typical of the area. The canyons and valley floors are partially filled by colluvium, unconsolidated fluvial sediments, and coalesced alluvial fans (also called a bajada or compound alluvial fan) comprised of material eroded from the surrounding uplifted Tertiary and Quaternary-aged sedimentary rocks. The alluvial deposits in the eastern portion of the Agency are typically less than 600 feet in thickness, and most such layers thin out in close proximity to surface exposures of bedrock. In the western portion of the FCGMA, the topography primarily consists of the broad, alluvial Oxnard Plain. The Oxnard Plain gently slopes to the southwest and continues on beneath the Pacific Ocean. All of the semi-consolidated rocks comprising the various freshwater aquifers outcrop beneath the ocean, and during periods of positive offshore pressure gradients, groundwater discharge has been documented in

this offshore area (Izbicki, 1996a, 1996b, 1992). The thickness of the collective usable aquifer zone alluvial layers beneath the Oxnard Plain is typically greater than 1,200 feet.

Two main drainages lie within or form boundaries to the FCGMA. The Santa Clara River originates in the San Gabriel Mountains several miles east of Ventura County (in central Los Angeles County) and flows westward through the still largely natural Santa Clara River Valley, which lies north and northeast of the FCGMA. The Santa Clara River intersects the northwestern boundary of the FCGMA near the unincorporated area of Saticoy. The Santa Clara River supplies recharge to FCGMA aquifers by direct infiltration through the streambed, and via a large man-made drop structure extending across the river operated by UWCD called the Vern Freeman Diversion. Diverted river water is channeled to off-stream percolation ponds owned and operated by UWCD in the porous Oxnard Forebay Groundwater Basin. Because of near constant flows from wastewater treatment plants, urban runoff, and periodic releases from UWCD's Lake Piru, the Santa Clara River is now a perennial stream. The majority of river flows however, occur during runoff periods associated with winter storms, and this muddy, turbid water is difficult to capture and too silt-laden to be of any practical use. Calleguas Creek lies near the southern and southeastern boundaries of the FCGMA and also carries water during high-runoff periods as well as nearly continuous discharge from upstream wastewater treatment plants in Simi Valley, Moorpark, Thousand Oaks, and Camarillo. Additional water is contributed to these streams by irrigation return flows and urban runoff. The Conejo Creek Diversion facility exists on a tributary to Calleguas Creek and surface water diverted from this location primarily supplements agricultural groundwater extractions in the Pleasant Valley area south of the City of Camarillo. Some Conejo Creek water also helps to add irrigation supply to the western end of the Santa Rosa Valley portion of eastern Camarillo. Although there are a number of small private reservoirs and County Watershed Protection District (WPD) stormwater retention basins, there are no major surface water bodies within the FCGMA boundary of any importance, and none used for water supply needs.

Seven distinct groundwater basins lie wholly or partially within the FCGMA. These include the Arroyo Santa Rosa Basin, East Las Posas Basin, West Las Posas Basin, South Las Posas Basin, Pleasant Valley Basin, Oxnard Forebay Basin, and the Oxnard Plain Pressure Basin². Each basin has significant groundwater resources with unique physical and water quality characteristics (Izbicki, 2005). The majority of groundwater extractions occur within the Oxnard Plain Pressure Basin. We have assembled the data in figures and tables, please see Figure 6 – Ratio of Reported Groundwater Extractions by Basin, Table 4 – 2009 FCGMA Allocations & Wells by Basin, Table – 6 Summary of Groundwater Extraction and Credits by Groundwater Basin for Calendar Year 2009, and Table 7 – Summary of Reported Groundwater Extractions and Well Use Type within the FCGMA for Calendar Year 2009 for more detailed information. The remaining five basins contain incomplete hydrostratigraphic sections and thinner, less extensive aquifers. Descriptions of the physical, hydrogeologic, and water quality characteristics of each of these groundwater basins are more extensively described in other documents.

Water-bearing strata (aquifers) occur within the geologic units described above (Section 2.2 on previous pages) and are identified based on their composition, stratigraphic location, and lateral continuity. Within the FCGMA boundary, there are six named aquifers, which include, from deepest depth of occurrence to shallowest, the Grimes Canyon Aquifer, the Fox Canyon Aquifer, the Hueneme Aquifer, the Mugu Aquifer, the Oxnard Aquifer, and the Perched or Semi-Perched Zone (DWR, 1976). These aquifers have been combined into two main groups: the Lower Aquifer System (LAS), which includes the Grimes

² Historic references have segregated the southeastern portion of the Oxnard Plain into a separate basin identified as the Mugu Forebay Basin. This Basin is not shown in Figure 2 because like the Agency's Groundwater Management Plan, this document considers these areas as a single groundwater basin. Data and discussions included in this annual report treat all rainfall, extraction, and credit information from both the Oxnard Plain Pressure Basin and the Mugu Forebay Basin as one single basin.

Canyon, Fox Canyon, and Hueneme Aquifers; and the Upper Aquifer System (UAS), which includes the Mugu and Oxnard Aquifers. The Semi-Perched zone is considered by some to be separate from the UAS because it is only locally extensive and of poorer quality than the deeper, more geographically extensive aquifers (Turner, 1975).

Faulting has significantly affected the local Tertiary and Quaternary-aged geologic formations, and the hydrogeology within the FCGMA reflects that fact in almost every instance and location. Significant faults that occur within or near the margins of the Agency include the Oak Ridge Fault, the Berylwood Fault, the Somis Fault, the Springville Fault, the Simi-Santa Rosa Fault Zones (includes Santa Rosa Fault, Northern Simi Fault, Southern Simi Fault), the Camarillo Fault, the Wright Road Fault, the Epworth Fault, and the Bailey Fault. Although the general groundwater flow direction in FCGMA aquifers is to the southwest, faults and other structural features may form partial or complete barriers to groundwater flow or cause local variability in flow direction. Studies conducted by the U.S.G.S. and UWCD have indicated anomalous groundwater elevations observed at wells screened in the Lower Aquifer System (LAS) of the Oxnard Plain suggesting a low-permeability feature (fault) that sub parallels the northeast extension of the Hueneme Canyon Fault (UWCD, 2004).

Some authors have suggested that the Hueneme Canyon Fault as the western extension of the more prominent Simi-Santa Rosa Fault system that enters the Oxnard Plain near the northeast corner of the Pleasant Valley Groundwater Basin. Geologically projecting the Simi-Santa Rosa Fault Zone beneath the alluvium of the Oxnard Plain may account for the subsurface division of the Oxnard Plain and Pleasant Valley Groundwater Basins. Existence of such a division is supported by varying groundwater levels on either side of the projected fault line. Groundwater elevations in LAS wells to the southeast of this extension are typically lower than those to the northwest supporting an inclined fault feature that restricts underflow from the northwestern part to the southeastern part of the Oxnard Plain. In all likelihood, another low-permeability feature separating the East and West Las Posas Groundwater Basins from north to south is simply a northern extension of the Bailey Fault, which separates the southeast Oxnard Plain from the adjacent uplifted Santa Monica Mountains. Similar anomalies exist elsewhere within the region, suggesting such geologic structures have a significant impact on subsurface groundwater flows. Ultimately, the effects these subsurface geologic structures have on groundwater flow can only be quantified through detailed hydrostratigraphic analysis, aquifer testing, and other methods such as geophysical reflection or refraction studies, etc. The Agency continues to work with its regional partners UWCD and CMWD to evaluate the impact of these features.

2.3 Groundwater Resource Management

The FCGMA's enabling legislation (now Appendix 121 of the California Water Code), established the ability of the FCGMA to perform groundwater management activities including, but not limited to, registration of extraction facilities (wells), control of groundwater extractions, regulation of extraction facility construction, prosecution of legal actions against unreasonable use of water resources, imposition of reasonable operating regulations, and collection of fees. Through this legislation and a series of ordinances the FCGMA has developed a groundwater management system (paper files and computer database) to record well facility owner/operator information; to collect and record extraction data; to regulate groundwater extraction through the application of an annual allocation system; to assign credits as an incentive for non-use of allocations and/or for direct replenishment actions; to collect civil penalties and surcharges for overuse of groundwater, and to collect management fees needed to sustain agency activities.

Data compiled by the Association of Water Agencies (AWA) based on 2007 information, revealed that overall Ventura County water needs were met by groundwater (approximately 60%) as the primary source, with local surface water (10%), reclaimed water from treatment plants or other recycle sources

(1%), and water imported from outside the County by pipeline from the California State Water Project (29%) (AWA, 2007). A query of the Agency database showed a more localized (FCGMA vs. entire County) subset of 2009 water supply sources: 67% groundwater, 7% surface water, 1% recycled water, and 25% imported water.

There are three specific groundwater allocation methods used by the FCGMA to control the allowed volume of groundwater each well operator may extract in a given year (see FCGMA Ordinance Code Sections 5.2 and 5.6 for additional information). Allocation types include Historical Allocation (HA), Baseline Allocation (BA), and Irrigation Efficiency (IE). Although many operators are limited to the use of one allocation method in any particular year, other operators may use a combination of allocation methods. The type of allocation available depends upon the intended use of the groundwater, the type of operator, the ownership of the extraction facility, the history of land and water use, and the size of acreage served by a particular well or wells. The allocation methods and their specific rules for qualification and application are detailed in the FCGMA Ordinance Code (available online at www.fcgma.org or in hard copy form at the FCGMA offices).

Within the FCGMA, groundwater users have been divided into three general water use categories: agricultural (AG), municipal/industrial (M & I), and domestic (DOM). The definitions of each type of user or user's facility as specified in the Ordinance Code are as follows:

- **Agricultural Facility:** *"a facility whose groundwater is used on lands in the production of plant crops or livestock for market, and uses incidental thereto".* Agricultural facilities may be entitled to HA, BA, or IE depending on the age of their wells and history of land ownership. Agricultural facilities may use HA, BA, or HA and BA together in a given year if they hold such allocations. They can also accumulate credits on any unused HA³ in a particular calendar year. If they choose to use the IE allocation method, they are not eligible to use either of the other allocation methods (HA or BA), or to accumulate groundwater extraction credits in that particular calendar year. In 2009, agricultural extraction facilities were responsible for approximately three fifths (about 57%) of the total groundwater extracted within the Agency (Table 4 and/or Table 7).
- **Municipal and Industrial User (M & I):** *"a person or other entity that used or uses water for any purpose other than agricultural irrigation".* An M & I Operator is defined as *"an owner or operator that supplied groundwater for M & I use during the historical allocation period (1985-1989 inclusive), and did not supply a significant amount for agricultural irrigation during the historic period."* An M & I Provider is defined as *"an entity or person which provides water for domestic, industrial, commercial, or fire protection purposes within the boundaries of the Agency."* M & I users may be entitled to HA, BA, or HA and BA together and can accumulate extraction credits for any unused HA in a particular year. M & I users are not eligible for IE. In 2009, M & I facilities were responsible for about two fifths (42%) of the total groundwater extracted within the Agency during any given calendar year.
- **Domestic User or Domestic Extraction Facility:** Not specifically defined in Ordinance No. 8.1; however, the Agency has used the extraction facility metering requirements as a substitution for this definition. According to FCGMA Ordinance No. 8.1, Sec. 3.1.1, *"a domestic extraction facility supplies a single family dwelling on one acre or less, with no income producing operations".*

³ Unused Historical Allocation (HA) refers to the difference between the total HA held by a registered extraction facility including any adjustments made by the Agency, minus the actual reported groundwater extraction reported by that facility in a particular year.

Typically, domestic users are responsible for a nominal pumping amount (less than 1%) of the total groundwater extracted within the Agency during any given calendar year.

Historically, the FCGMA has used various tools to facilitate groundwater management within its boundaries in accordance with its enabling legislation and established ordinances. Currently, the FCGMA uses a commercially available relational database program customized to suit the needs of the Agency. For all known groundwater extraction wells within its boundary, the Agency tracks groundwater use utilizing an operator-based system to record well identification (State Well Numbers or SWN's) and well location; the appropriate groundwater basin; applicable groundwater allocation methods; self-reported semi-annual extraction data; and, number of available groundwater extraction credits (if applicable).

As of year-end 2009, the FCGMA had a total of 1,276 State Well Numbers listed within its boundary: 683 wells were reported as active; 166 wells were listed as inactive; with 385 wells destroyed, and 42 additional well numbers assigned to permanent monitoring or cathodic protection wells. On an ongoing basis, FCGMA staff registers new wells permitted by the County of Ventura⁴ and also wells permitted by the City of Oxnard. Constant updates to the status of existing wells are done according to information self-reported by the well owners or operators. Staff also has an ongoing special investigation to identify previously unregistered wells using a combination of County well records review and cooperative documentation and enforcement efforts with the VCWPD and other agencies like UWCD, the City of Oxnard and various retail water suppliers.

All extraction facility (well) operators are required to report their groundwater extraction on a semi-annual basis using a staff-provided Semi-Annual Statement (SAS). The two six-calendar-month SAS reporting periods cover January 1 through June 30 (-01 Period), and July 1 through December 31 of each year (-02 Period). Each SAS summarizes a list of all wells under a particular operator code, any available allocations, the reported groundwater extraction (acre-feet) for each well, the application of any available credits, and the specific allocation method being used to calculate the permitted groundwater extraction (see description of available allocation methods in Section 2.3 above). Based on the groundwater extraction reported, each operator is required to calculate the management fees due, plus and any surcharges, interest, or late fees associated with their user account and then remit payment to the FCGMA along with the completed SAS form.

2.3.1 Current and Historic Groundwater Extraction in the FCGMA

For the calendar year 2009, a total of 142,292 acre-feet⁵ (AF) of groundwater extraction was reported to the FCGMA; with a significant 61,741 AF extracted during January 1 through June 30 (2009-01 period; which was the third highest since 1991). The last half of calendar year 2009 experienced 80,551 AF of groundwater extractions from July 1 through December 31 (significantly more than the latter half of 2008 also making this the third highest 2009-02 period since 1991). Extraction data is presented in Table 2 – Summary of Reported Extractions located near the end of this report. When compared to the historic range of reported groundwater extractions within the FCGMA, the total annual reported groundwater extraction for 2009 was 116% of the long-term average (up slightly from 2008 at 114% of the 1991-2009 average). Table 3 – Comparison of Year 2009 Groundwater Extractions to Historic Groundwater

⁴ Refers to wells permitted in accordance with the County of Ventura Ordinance No. 4184. All permitting in accordance with this ordinance is performed by the Ventura County Watershed Protection District. The City of Oxnard is the only other entity in Ventura County that issues well permits.

⁵ 1 acre-foot (AF) equals 325,851 U.S. gallons at Standard Temperature and Pressure (STP).

Extractions in the FCGMA provides more detail. The annual total extraction for 2009 was the second highest annual extraction observed since 1991 as shown in Table 2. The number of Irrigation Efficiency (I.E.) filings varies each year and the bar graph designated Figure 8 – Annual Irrigation Efficiency Filings provides a quick look at annual fluctuations in the use of I.E. application forms.

The continued lower than average precipitation recorded during 2009 (9.52 inches when all five FCGMA weather stations are referenced) may partially explain why there were increasing reports of falling groundwater levels in outlying bedrock area wells (see Table 2 for reference extractions). Significant variations in groundwater extraction have been observed when rainfall varies by more than 20% from the average annual rainfall amount (see Figure 4 – Rainfall and Reported Groundwater Extraction in the FCGMA for the -01 Reporting Period 1985-2009 and Figure 5 – Rainfall and Reported Groundwater Extraction in the FCGMA for the -02 Reporting Period 1985-2009). Since total rainfall within the FCGMA for 2009 was only 9.52 inches (67% of the Agency's 1985-2009 average of 14.18 inches), a higher variance in groundwater extraction was expected. Higher-than-average groundwater extractions (142,292 AF) during the 2009 reporting year (122,918 AF is the average extraction for years 1991-2009), especially the 61,741 AF pumped during the first half of the year (over 10,000 AF greater than normal for a first half) when most precipitation typically occurs, supports the long-term observation that groundwater extractions in any given calendar year are inversely proportional to rainfall (i.e., lower precipitation results in higher groundwater extractions and vice versa).

Many factors affect groundwater extraction within the Agency. Data from the FCGMA's weather stations (described more fully in Section 2.3.2 below) shows that lower-than-average rainfall equates to higher atmospheric temperatures and thus higher evapotranspiration values observed in 2009 vs. 2008 (47.77" average ETo in 2009 vs. 44.45" average Eto in 2008, or a 3.32" increase when all five FCGMA weather station annual totals are compared). Higher evapotranspiration means more water loss from crops and that leads to more groundwater extractions in an effort to make up for lost moisture in plant tissues. Higher volumes of groundwater extraction between 2008 and 2009 (approximately 3,237 AF more in 2009) are shown in Table 2 near the end of this report. Other factors that affect groundwater extraction include meteorological effects (i.e., wind speeds, solar radiation, cloud cover, etc.), along with availability of surface water and the delivery of imported water (both surface diversions and imported supply sources continued to be limited in 2009). Additional factors include changes in land use, variable water demand from non-agricultural water users, changes in crop-types and/or agricultural irrigation practices, costs, market conditions, variations in cost and availability of energy and State imported water, and supplies of recycled water or surface water (stream) diversions.

2.3.2 Rainfall and Evapotranspiration

In support of the FCGMA's overall groundwater management efforts, the Agency funds the operation and collection of meteorological data from five (5) weather stations. Information from an additional six (6) private weather stations within the FCGMA (available at no additional monthly cost) helps to supplement data postings on the Agency website. Each station captures meteorological data such as air temperature, rainfall, humidity, wind velocity, wind direction, dew point, and solar radiation at 30-minute intervals and calculates daily⁶ location-specific evapotranspiration (ETo)⁷ values according to a Modified

⁶ Currently data are collected at 30-minute intervals and daily ETo summary values are calculated based on some measurements being averaged over the midnight to midnight 24-hour period (e.g. wind speed), and others (rainfall, ETo) aggregated over the same time period.

⁷ Evapotranspiration (ET) is a term used to describe the sum of evaporation and plant transpiration from the earth's land surface to the surrounding atmosphere. Evaporation accounts for the movement of water to the air from sources such as the soil, the plant coverage, leaf canopy interception, and exposed (uncovered) water bodies. Transpiration accounts for the movement of water within a plant and the subsequent loss of water as vapor through stomata (tiny holes or pores) in its leaves.

Penman formula (Pruitt and Doorenbos, 1977). The main FCGMA-designated stations (Airport [Camarillo], Moorpark, Etting Road [Oxnard], Saticoy, and Somis) are operated and maintained by Investment Signals, LLC, of Atkinson, NH. Historically, the number of stations has varied due to Agency funding levels, and station locations have also varied due to changes in property ownership. Measured precipitation is detailed in Figure 3 – 2009 Annual Rainfall and Reported Groundwater Extractions in the FCGMA. Semi-Annual rainfall and Reported Extraction details can be found in Figures 4 & 5 covering the 1985 through 2009 period.

The meteorological data collected from the weather stations can be used for several purposes. Rainfall and weather station-derived evapotranspiration (ET_o) values are used by FCGMA staff and well operators in the calculation of the annual Irrigation Efficiency (or I.E.), and to establish extraction allocations for agricultural well operators as provided for in the FCGMA Ordinance Code. Weather station data can also be used to estimate the amount of water a particular crop will need so the proper volume of water can be applied during each irrigation cycle to save water and energy, and to enhance a crop's development as well as to control overall water and energy costs. The amount of allowed water varies by crop-type, acreage, and factors like observed rainfall that all equate to the ET_o number. Operators who do not meet the associated FCGMA specified irrigation efficiency standards may be subject to financial penalties (over-pumping surcharges) according to FCGMA Ordinance Code requirements. Weather data can also be used to help calculate regional or groundwater basin hydrologic budgets. Measured rainfall is considered a contributor to groundwater recharge and plant water needs, while ET_o represents water loss through plant uptake and evaporation.

As mentioned in Section 2.3.1 above, data collected at FCGMA weather stations showed rainfall for calendar year 2009 (January 1 through December 31) was 33% below the average observed from 1985 through 2009. The annual rainfall observed at each of the stations ranged from a high of 11.53 inches at the Saticoy station to a low of 8.07 inches at the Somis station, with an overall average of 9.52 inches for the values observed at the five stations (Table 4). This average value from the five FCGMA weather stations was only 67% of the average annual rainfall of 14.18 inches observed during the FCGMA timeline between 1985 and 2009.

Data collected at the FCGMA weather stations also indicates that the average five-station evapotranspiration (ET_o) value of 47.77 inches for calendar year 2009 (January 1 through December 31) was above the average of 44.63 inches observed from 1993 through 2009. Annual ET_o observed at each of the stations during 2009 ranged from a high of 53.10 inches at the Moorpark station to a low of 44.13 inches at the Camarillo Airport station. This all adds up to a total average annual ET_o value for 2009 that was approximately 7% above the 44.63 inch average annual value observed from 1993 through 2009.

2.3.3 Credits for Non-Use of Groundwater Resources

Well owners or operators with a Historical Allocation can take advantage of a credit system for non-use of the groundwater resources within the FCGMA. Since 1998⁸ credits have been automatically granted to operators that extract less groundwater in a calendar year than the allowed historical allocation available to their well grouping (called conservation credits to designate how they were earned). Operators that recharge aquifers within the FCGMA boundary through direct injection of "foreign water" as defined in the Agency's Ordinance Code, earn injection credits. In summary, credits are granted on an AF basis and are meant to be used in future years to offset use of the groundwater resource in excess of

⁸ Prior to 1998, operators were required to request credits from the FCGMA Board. The policy change resulted from the passage of FCGMA Ordinance 5.7 in 1998.

the adjusted historical extraction allocation. In addition, one AF of credit is granted for each one AF of water injected into FCGMA aquifers per calendar year⁹. Conservation and Injection Credits can be traded for imported water, thereby converting them into In-Lieu Credits. When previously earned credits are transferred to UWCD to offset excess groundwater extractions, they are called Supplemental Credits.

For 2009, a net total of 11,612 AF of credits were earned by operators within the Agency (see Table 5-Summary of Groundwater Extraction Credits Accumulated in the FCGMA since 1991). This figure is 63,811 AF less than what was earned in 2008 and 25,640 AF less than what was earned in 2007. At the end of 2009, an aggregate total of 672,324 AF of credits were available to operators in the FCGMA. Redemption of earned credits to avoid surcharge penalties reflects the significant increase in additional groundwater extractions that occurred during 2009. Table 5 details the historical growth of accumulated credits since the initiation of the FCGMA credit system in 1991, and Figure 7 Accumulation of FCGMA Credits graphically shows the exponential growth resulting from annual accumulations of banked credit balances. The accumulation of credits represents a long-term resource management challenge for the Agency and its stakeholders. Should there be an extended period with limited groundwater recharge and high groundwater demands, a significant number of credits could be used that have the potential to over stress aquifer resources. Some institutional controls exist for credit transfers however. Thus, although the credit system represents additional groundwater allocation to assist individual operators during extended dry periods, it also represents a potential cumulative threat to the regional groundwater resource depending on certain factors.

The effect of any large-scale credit use would be significant. For example, even a modest 5% use of the total amount of credits currently available in year 2010 could easily result in a 33,616 AF increase in extraction in any given year. Given the average annual groundwater extraction observed from 2000 through 2009 (approximately 124,140 AF), this additional 33,616 AF extraction based on credit usage would represent a net 21.3% increase in annual extractions. One documented consequence of groundwater over-extraction, is groundwater basin overdraft in both the UAS and LAS groundwater elevations (UWCD, 2004), land subsidence (Hanson, 1992), and seawater intrusion (Izbicki, 1996 a, b; 1992; UWCD, 2004; and others). One of the goals of the Agency's 2007 Groundwater Management Plan is to assist FCGMA stakeholders in developing new groundwater management strategies, groundwater replenishment/replacement programs, conservation incentive programs, and stakeholder education that will increase their water-use efficiency and decrease overuse of the resource.

2.3.4 Extractions and Credits by Groundwater Basins within the Agency

In 2009, the Oxnard Plain Pressure Basin had the greatest single basin share of reported extractions (38%) within the Agency, and the most gross credits earned (63.8%). Well operator accounts in that basin collectively hold the largest net accumulated credit balance of 348,402 AF (see Table 6 for basin comparisons). The Oxnard Forebay Basin, East Las Posas Basin, Pleasant Valley Basin, and West Las Posas Basin as a group account for nearly all of the remaining extraction within the Agency. The collective extraction in these four basins accounted for 59% of the total Agency extraction and 34.4% of the gross credits earned in 2009. Individually, the Pleasant Valley Basin reported 10% of the 2009 total extraction, the Oxnard Forebay Basin 19%, the East Las Posas Basin 21%, and the West Las Posas Basin 9%. The South Las Posas Basin and Arroyo Santa Rosa Basin each accounted for approximately 1% of the total 2009 extraction, and less than 2% of the gross credits earned in 2009.

⁹ Credits are granted to well operator accounts on a per acre-foot or part thereof basis to a resolution of 0.001 acre-feet.

2.3.5 **Groundwater Use in the FCGMA**

Ventura County relies on groundwater as the primary source for its water needs with lesser amounts derived from surface water, reclaimed water from wastewater treatment plants, and water imported from outside the County via the California State Water Project. Although it is impossible to precisely quantify the demand for groundwater in the FCGMA, it is possible to examine the agency-wide use of groundwater by volume extracted for each type of operator (see Table 4). Within the FCGMA, groundwater users have been divided into three general categories: agricultural, municipal, and industrial (M&I), and domestic wells.

FCGMA 2009 data (see Table 7) indicates there were 582 wells registered as agricultural facilities, 226 wells registered by M&I users, and 93 wells listed as domestic users. For 2009, agricultural operators collectively reported 81,173 AF of extractions (down from 85,028 AF in 2008 and 88,656 AF in 2007). M & I operators reported 60,208 AF of extractions (up more than 7,006 AF from 53,202 AF in 2008 and up more than 13,892 AF from the 46,316 AF of M & I extractions reported in 2007). The reported annual extraction by domestic well operators was approximately 911 AF compared to the 636 AF in 2008, and the 766 AF of domestic extraction reported in 2007. Domestic well owners are not required to use flowmeters (even though many do) to report groundwater extraction; however, their total annual extractions are not considered to be a significant percentage (0.6%) in the annual groundwater total use within the Agency. On occasion, a water consumption per capita estimate is used based on the number of people known to reside in a residence supported by a domestic well. The FCGMA has always used a value of 0.2 AF per person per year, or 1.0 AF per dwelling per 6-month period¹⁰ when estimates of groundwater consumption are required.

The FCGMA extraction data can also be used to reflect groundwater use in each basin (Table 7). The basins have been divided into three classifications based on groundwater use during 2009. These primary classifications are described as follows:

- **Agricultural-Use Basins:** The primarily agricultural-use basins include the Arroyo Santa Rosa, East Las Posas, South Las Posas, and West Las Posas Basins. These basins have the vast majority of groundwater extraction by agricultural operators, minimal domestic extractions, and only limited M&I extractions. As a group, the total extractions in these four basins accounted for approximately 32.5% of the total Agency extraction (all use types), 22.5% of the total Agency agricultural extractions, 9.9% of the total Agency M&I extractions, and less than 1% of the total Agency domestic extractions in 2009.
- **Mixed-Use Basins:** The larger mixed-use basins include the Oxnard Plain Basin and the Pleasant Valley Basin. These two basins have significant groundwater extraction by both agricultural and M&I operators in roughly similar amounts and relatively little domestic extraction. As a group, the total extraction in these two basins in 2009 accounted for 48.6% of the total Agency extractions (all use types), 29.5% of the total Agency agricultural extractions, 18.5% of the total Agency M&I extractions, and 0.6% of the total Agency domestic extractions. In the Pleasant Valley Basin, the amount of agricultural extractions are nearly twice the M&I extractions. In the Oxnard Plain Basin, the agricultural extractions are greater than the M&I extractions; however, the M&I portion did account for 14.5% of the total Agency extractions (i.e., all use types) and over 34% of the total Agency M & I extractions.

¹⁰ Per dwelling water use estimates are based on four people residing within each single-family residence

- **M & I-Use Basin:** The Oxnard Forebay Basin yields the majority of its groundwater to M&I operators, a lesser amount to agricultural extraction, and only nominal volumes to domestic demands. In 2009, Forebay M&I extractions were more than twice that of agricultural extractions. This basin accounted for approximately 19% of the total estimated Agency groundwater extractions in 2009 (from all uses), 5.1% of the total Agency agricultural extractions, 13.8% of the Agency M&I extractions, and less than 1% of the total Agency domestic extractions for the calendar year.

3.0 ADMINISTRATIVE ACTIONS FOR CALENDAR YEAR 2009

3.1 Significant Administrative Actions

3.1.1 Adopted Resolutions

The FCGMA Board of Directors formally adopted six Resolutions during calendar year 2009, all of which are attached in the **Appendix** and summarized as follows:

- Resolution No. 2009-01: Honored FCGMA Director and Agency founder John K. Flynn for more than 24 years of service to the Agency.
- Resolution No. 2009-02: Established and authorized a three-tiered penalty civil penalty system for violation of flowmeter calibration requirements. Each tier added \$600 after 60-day time increments to provide for penalties of \$1,100, \$1,700 and \$2,300 for continued non-compliance.
- Resolution No. 2009-03: Established a set of Enforcement Guiding Principles to ensure fair, consistent, and firm application of laws, regulations, and policies. Specified an open and public process for all enforcement matters.
- Resolution No. 2009-04: Resolved a civil penalty appeal by Strickland Mutual Water Company by requiring upgrades to the Strickland water infrastructure. Stipulated that Strickland's customers would use flowmeters instead of a flat rate use system, that a leak detection survey would be documented, and that the Strickland billing system would be revised to ensure sufficient future financial resources.
- Resolution No. 2009-05: Adjusted the Groundwater Extraction Surcharge rate to a higher fixed amount of \$1,150 per acre-foot. Proposed Resolution No. 2009-06: Proposed to update and alter the Agency boundary in the Oxnard Plain Forebay Basin, however Resolution No. 2009-06 was never adopted.
- Resolution No. 2009-07: Allowed the use of "Good Deed Trust Account" credits to facilitate UWCD's purchase of the Vulcan Materials Company "Ferro Pit" property. This action helped prevent the former sand and gravel mine from being used for agricultural purposes that could have added to the nitrate problem in the already-impacted Forebay groundwater basin. FCGMA stipulated that no credits could be earned, and that all previously earned credits earned by the onsite wells would be retired to reduce the total FCGMA credit balance. Full copies of FCGMA Resolutions approved during 2009 are in the Appendix.

Full copies of FCGMA Resolutions approved during 2009 are located in the Appendix of this report.

3.1.2 Strategic and Technical Advisory Groups (SAG & TAG)

Adoption of an update (FCGMA, 2007) to the original Groundwater Management Plan (GMP) (FCGMA, 1985) in mid 2007 led to creation of specialized SAG and TAG committees (see Section 1.5 for previous mention of SAG and TAG). SAG and TAG groups allow public participation while helping to implement the many ambitious strategies needed to improve groundwater quality and quantity that are listed in the GMP. The TAG members are charged with evaluating and examining the technical details of each specific strategy listed in the GMP. Completed TAG projects are sent to SAG whose activities focus on policy decisions and review. It is the SAG's responsibility to recommend finalized strategies for evaluation, adoption, or funding to the FCGMA Board of Directors.

3.2 FCGMA Board Members and Staff

Notable personnel changes that occurred during 2009, included the following:

- Management Assistant II Miranda Nobriga assumed the Deputy Clerk of the Board position in February, and later moved up to the Clerk of the Board position at the June meeting. Bryan Bondy was brought aboard in February 2009 as a joint UWCD-FCGMA employee. The only changes to the Board or Board Alternate members were the replacement of County Supervisor John Flynn by County Supervisor Steve Bennett. The new County Supervisor John Zaragoza joined the FCGMA as the Board Alternate.

3.3 Project Reviews Performed in 2009

In 2009, the Groundwater Section of the Ventura County Watershed Protection District performed approximately 90 reviews of proposed development projects as part of the County Planning Division's implementation of the General Plan and Zoning Ordinance. Of these projects, 30 involved proposed or active projects within the FCGMA boundary. Typically, these projects are reviewed to identify the following groundwater-related issues: changes to the well ownership/operator, property-use changes that may affect or impact FCGMA extraction allocations, changes to land or crops, potential short or long-term impacts to water quality and/or water quantity, alterations or modifications in well status, changes to water distribution systems, and construction of structures that might impair infiltration of water to FCGMA aquifers. Ultimately, these projects are approved with no further action needed, denied, or approved with conditions and/or modifications based in part on potential impacts to the FCGMA groundwater resources.

3.4 Permitting and Registration of Wells

Agency staff assists VCWPD in groundwater management within the larger scope of the county, with the review of installation plans for new wells, and with abandonment permits for old wells within the FCGMA boundary. New wells are required to meet the State of California Well Standards (DWR, 1991) and Ventura County Well Ordinance No. 4184 (BOS, 1999). FCGMA Ordinance No. 8.1 also requires the registration of all groundwater extraction facilities in addition to semi-annual reporting of extraction volumes and payment of extraction fees. During 2009, a total of 162 Ventura County well permits were issued. Of that number, 41 permits were issued within the FCGMA (relatively similar activity as 2007 and 2008): Almost half of those permits (12) were for new well installations, two were for repairs to existing wells, and 12 permits were issued for well destructions within the Agency boundary. Note - Despite the continuation of a moratorium on installation of new wells in the Las Posas Valley imposed by FCGMA's Emergency Ordinance "D", well permit activity changed only slightly from previous years.

3.5 Other Activities Performed in 2009

The FCGMA performed a number of other administrative activities during 2009. These included the following:

- Reinitiated the second to last scheduled 5% reduction to Historical Allocations (original HA minus 20%) on January 1, 2009 that had been postponed by the Board of Directors from the planned date of January 1, 2005.
- Completed the 2008 FCGMA Annual Report.
- Scheduled, heard, and received Board rulings on appeals from well operators who were assessed surcharges or penalties for Ordinance Code violations.
- Initiated Basin Specific Management Planning for the West, South, and East Las Posas Groundwater Basins.

3.6 Progress of Groundwater Metering Program

The FCGMA Ordinance Code requires the use of flowmeters for all extraction facilities except inactive wells and facilities supplying a single-family dwelling on one acre or less providing that property has no income producing operations (domestic wells). The use of accurate flowmeters for reporting groundwater extractions is critical to the FCGMA for a number of reasons. First, it provides a relatively uniform method of reporting for all stakeholders. Second, it increases the efficiency of data management. Third, it allows FCGMA staff to analyze the extraction and use of the groundwater resources to help make meaningful recommendations to the Board regarding its use. Fourth, it is the most effective way to link extraction data to management fees.

Officially launched via a revision of Chapter 3.0 in Ordinance 8.1 (July 2005), and the initial passage of Resolution No. 2006-01 (adopted in March 2006), the water flowmeter calibration program continued into 2009. Staff activities continued throughout the year collecting passing calibration test results and re-mailing notices to those who had failed to comply. Resolution No. 2008-04 (adopted May 2008) replaced the original Resolution No. 2006-01 to clarify the methods and rules governing the meter program: Resolution No. 2008-04 was again revised at the September 24, 2008 Board meeting, however was not superseded or renumbered. By the end of calendar year 2009, only 17 uncalibrated flowmeters remained from the original list of 1,056 potential wells requiring flowmeters. Meter use has been summarized in Table 8 – Summary of Extraction Reporting Methods Used During 2009.

The status of wells using meters or reporting groundwater extractions using recognized measurement methods is summarized in Table 8. This data indicates approximately 849 (about 66%) of the 1,276 State Well Numbers listed in the FCGMA database were actively being used in 2009. In the past, well extractions were reported using water flowmeters, electrical power meters, or a consumptive-use method that estimated annual water use volume for domestic or farm use based on number of people in a home, or to help gauge water use by comparing the acres irrigated times average water use for a specific crop. Because of a concerted effort by the FCGMA, the only known wells within the Agency that still use consumptive use methods to report extractions are a couple of dozen domestic wells. In order to increase the effectiveness of the metering program, the FCGMA took the following actions in 2009 which helped achieve a 99% calibrated compliance rate for Agricultural wells and a 100% compliance rate for M&I wells that were required to have meters per the Ordinance Code:

- Assessed penalties for those well operators who had not responded at all to the meter calibration program, or who had not complied with the requirements to show proof of a calibrated flowmeter by the designated due date(s).
- Focused on those operators who had never reported extractions, or who had inconsistent reporting over the last several years to ensure these wells had been properly metered, that the well operator was reading and interpreting the meter totalizer values correctly, and that Semi-Annual Groundwater Extraction Statements were submitted for all missing or incorrect 6-month periods.
- Staff field verification of well status, proper meter install, and correct well identification to clear up any possible confusion if accounts had more than one well. Failing meter calibration tests required more staff follow-up and additional notifications to repair/replace and retest these out-of-tolerance meters. By the end of 2009, only seventeen wells remained that had not confirmed meter accuracy out of the 1,276 State Well Numbers originally examined from the Agency database.

3.7 FCGMA Groundwater Management Plan

Upon passage in 1982, the enabling legislation for the FCGMA (AB-2995, Imbrecht, 1982) required the Agency develop a Groundwater Management Plan (GMP) to control extractions from the Oxnard and Mugu aquifers within three years. In addition, the Agency was required to develop a plan to manage future groundwater extraction from the lower aquifer system (LAS). In 1985, the Agency completed its first GMP. By 2004, significant regional land use changes, the need for additional water supply, emerging water quality and quantity challenges, and developing stakeholder groundwater utilization projects caused the Agency to evaluate the need for an update to its original GMP. The goal of the GMP evaluation/update was to develop new groundwater strategies and to amend previously existing strategies with recent data and more rigorous groundwater flow model information to better assist the Agency in bringing the groundwater basins into balance by year 2010. In June 2005, the Board set aside funds for UWCD staff (primarily Dr. Steve Bachman) to revise the regional groundwater model and allotted time for Agency staff to work with UWCD, CMWD, and the FCGMA stakeholders to develop a comprehensive document that incorporated the model results and the proposed strategies.

In June 2006, the first draft of the GMP was completed and presented for public review and comment. The FCGMA held three public workshops by year-end to solicit and address public comments. The final working draft was available by February 2007. The Board held a special meeting on March 9, 2007 where final Board and public comments on proposed strategies were heard. A completely revised and updated FCGMA Groundwater Management Plan (GMP) was formally adopted by the Board on May 23, 2007.

The GMP contains a background of the FCGMA, a brief overview of the regional hydrogeology, and summarizes the groundwater quality and quantity issues currently facing the Agency. The main components of the GMP include:

- Presentation of Basin Management Objectives (quantitative groundwater quality and quantity targets used to measure and evaluate the "health" of the basins and the potential effectiveness of various groundwater management strategies);
- An estimate of groundwater yield from basins within the FCGMA;
- A description of historic and current groundwater management strategies;

- Brief summary of six groundwater management strategies currently under development;
- Summary of strategies that could potentially be developed and/or implemented in the future;
- A listing of Best Management Practices (BMP's) as recommendations to well operators;
- Overview of an action plan to attain Basin Management Objectives; and
- Appendices containing plots of the estimated progress of seawater intrusion beneath the South Oxnard Plain, discussion of estimates and results of the quantitative groundwater modeling efforts (Ventura Regional Groundwater Model [VRGM]), and a proposed management plan for the East Las Posas Basin, in addition to many maps, tables, and graphs.

The GMP identifies a series of short-term and long-term groundwater management projects and strategies designed to address the current imbalance between water supply and demand. Most activity involved ranking of strategies via a custom matrix process by the TAG, and discussion of costs and importance of such strategies by the SAG committees.

During 2009, the focus was on getting the FCGMA stakeholders to implement some of the top priority or higher ranked management strategies. Feedback from these well operators revealed that financial help was the most important aspect needed to begin work on effective management ideas evaluated in the GMP. To facilitate funding assistance, the FCGMA began to formulate ideas that would help lead toward channeling penalty or surcharge funds collected by the Agency into viable projects built and run by the individual FCGMA stakeholders.

3.8 Financial Status of the Agency for 2009

The FCGMA's fiscal year begins July 1st and ends on June 30th of the next calendar year. Accordingly, the financial status information contained in this 2009 Annual Report covers the Fiscal Year period beginning July 2008 and ending on June 30, 2009. Fiscal administration and oversight of the Agency's financial transactions is performed by Agency management in consultation with the Fiscal Services Section Central Services Department within the Ventura County Public Works Agency pursuant to an existing and ongoing contractual arrangement between the Agency and the County of Ventura.

Quarterly and year-end budget to actual performance reports are presented to the FCGMA Board of Directors for their information, review, and where necessary, adjustments. The information below highlights key fiscal performance metrics reported by Agency management during the 2008-09 Fiscal Year period.

Fiscal Year Ended June 30, 2009

- FCGMA revenues received in 2008-09 totaled \$1,991,143. An amount that reflected a \$943,289 or 90% *increase* above 2007-08 actual revenues received.
- FCGMA expenditures incurred in 2008-09 totaled \$593,866. An amount that reflected a \$104,816, or 21% *increase* above 2007-08 actual expenditures incurred by the Agency.
- FCGMA *operating gain/(loss)* on June 30, 2009 totaled \$394,356. An amount that was \$164,448 lower than the \$558,804 operating gain figure experienced on June 30, 2008.
- FCGMA *net assets* at June 30, 2009 totaled \$2,814,893 [\$2,896,361 in total assets minus \$81,468 in liabilities]. Of the net asset amount, \$208,609 reflected the GEMES Fund portion [the proceeds of which are *restricted* for extraordinary groundwater enforcement activities

authorized solely by the Board of Directors]. In addition, \$2,606,284 reflected the *unrestricted and undesignated* portion of the Agency's net assets that were available for *subsequent year financing* of Agency operations.

3.9 Financial Audits

Pursuant to the Section 26909, the audit requirements applicable to FCGMA are found in the Minimum Audit Requirements and Reporting Guidelines for California Special Districts, as published by the Division of Accounting and Reporting, Office of the State Controller. Essentially, the minimum requirements reflect Generally Accepted Auditing Standards (GAAS), as described in the American Institute of Certified Public Accountants publication, Audits of State and Local Governmental Units.

Under GASS, the FCGMA, which is a special purpose government engaged in the preservation and management groundwater resources for the common benefit within its boundary, is required to prepare its financial statements in an enterprise format. The FCGMA is funded primarily through user extraction charges (set at \$4.00 per acre-foot throughout the duration of the audit), and is operated on a cash-accounting basis. The only other income to the Agency is from surcharge fees, civil penalties, and accumulated interest earnings on Agency funds on deposit with the County Treasurer's Pooled Investment Fund.

Poindexter and Company, Certified Public Accountants, were selected by the County Auditor-Controller's Office to complete the Agency's current biennial audit reports. The independent auditors found that Agency's financial statements presented fairly, *in all material respects*, the financial position of the FCGMA as of June 30, 2009 and June 30, 2010. Further, the auditors found that the respective changes in financial position and cash flows as presented in the financial statements for the above referenced two fiscal years *were in conformity with generally accepted accounting principles*. Copies of the Agency's biennial audit reports are available upon request.

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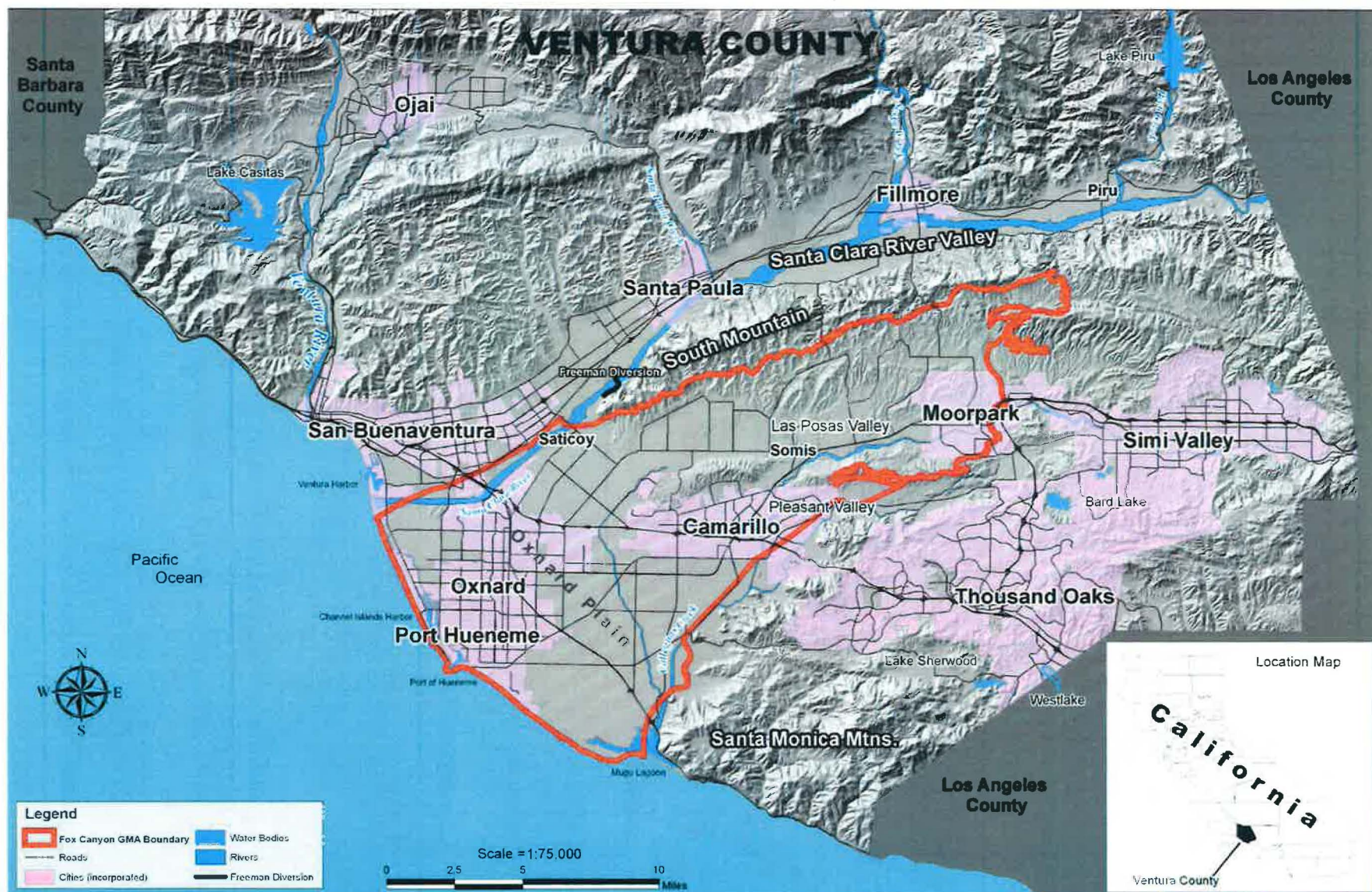
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FOX CANYON GROUNDWATER MANAGEMENT AGENCY (A State Of California Water Agency)

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Prepared By: JPD January, 2007
Reviewed By: JPD January, 2009
Reviewed By: DJP
Date Prepared: January, 2009

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1. City limits: Ventura County Geographic Information Systems, 2007
2. FCGMA Boundary VCBOS, 1992; Revised 1996.

Figure 1: Fox Canyon Groundwater Management Agency Boundary



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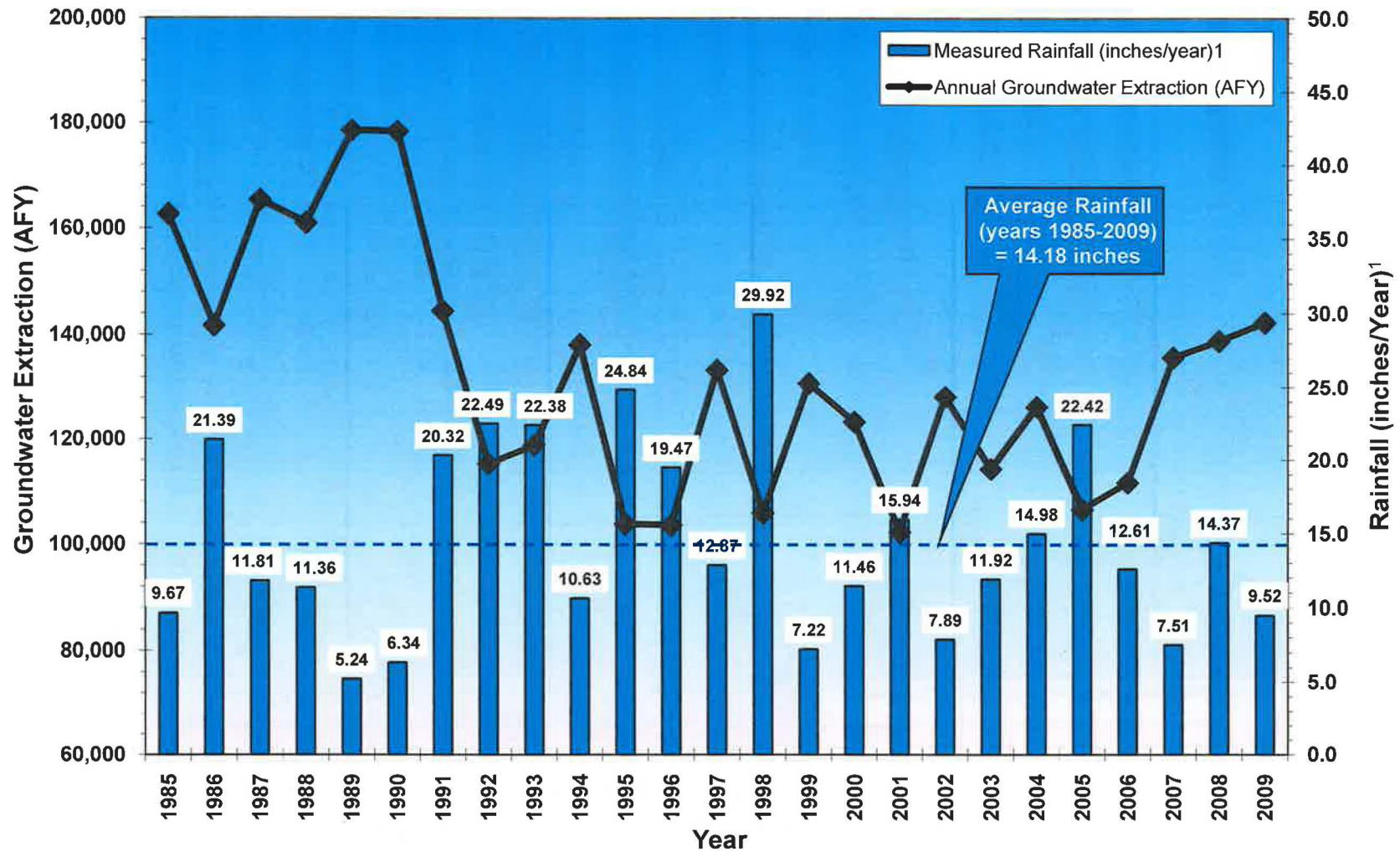
Prepared By: JPD
Reviewed By: LIP
Date Prepared: January 2011
Date Reviewed: January 2011

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1. City limits: Ventura County Geographic Information Systems, 2007
2. FCGMA Boundary VCBOS, 1992; Revised 1996.
3. Faults & Folds compiled from multiple sources including Dibblee, 1990; 1992a; 1992b; 1992c; USGS - various sources

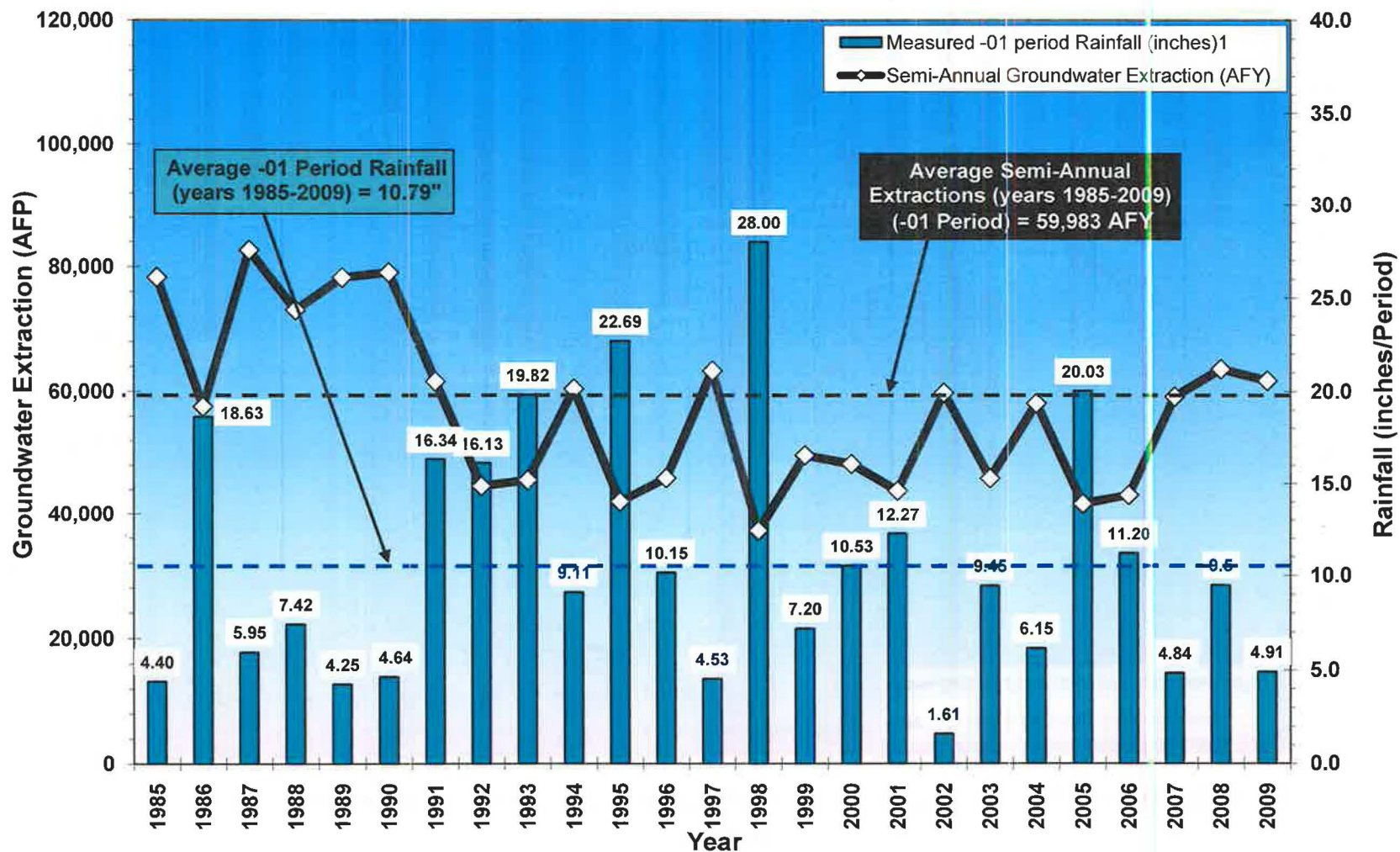
Figure 2: Major Hydrogeologic Features and Groundwater Basins Within the FCGMA

FIGURE 3
2009 Annual Rainfall and Reported Groundwater Extractions in the FCGMA



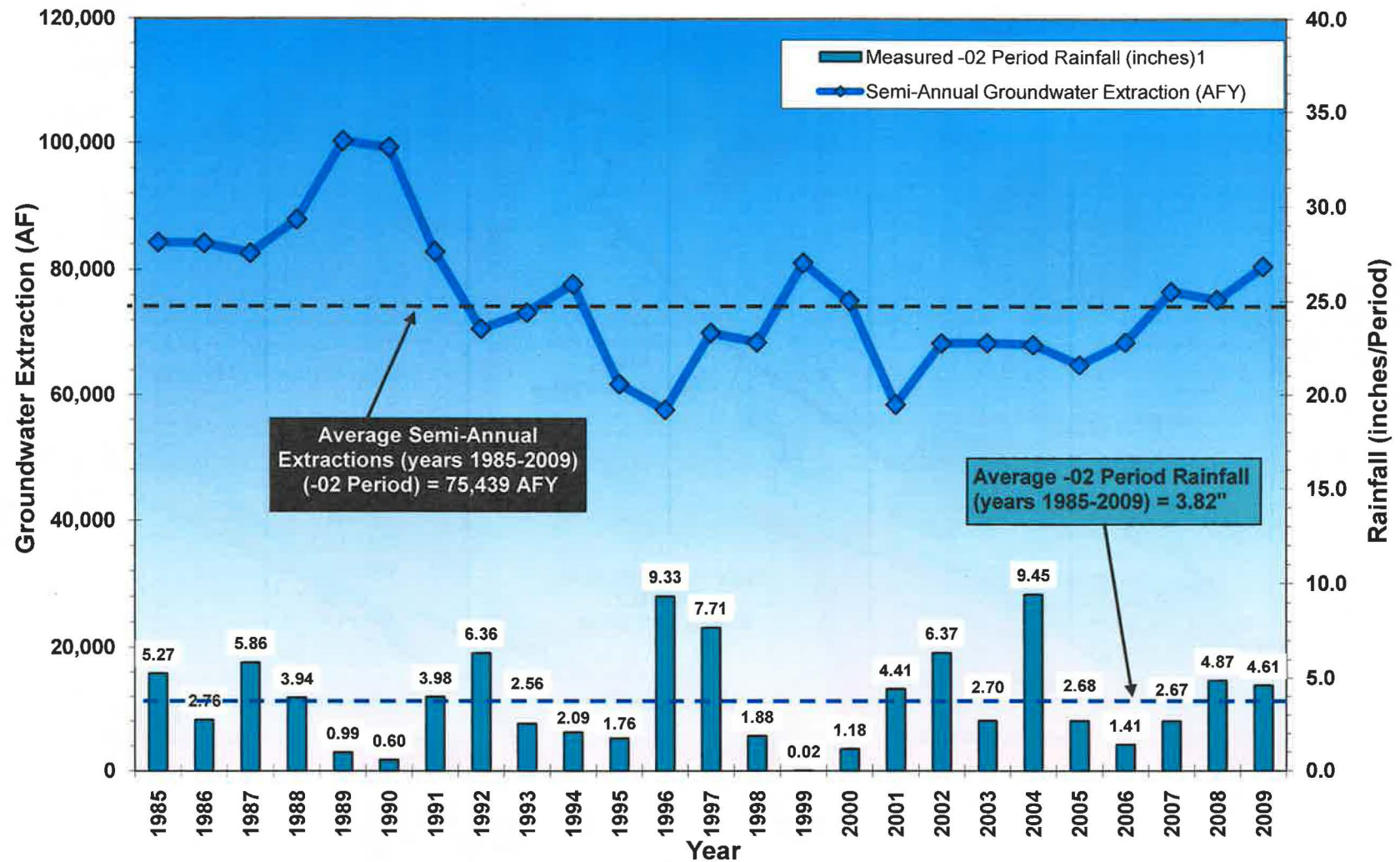
¹ Rainfall data is a mean derived from five main FCGMA weather stations for the period covered.

FIGURE 4
Rainfall and Reported Groundwater Extraction in the FCGMA
for the -01 (January 1 to June 30) Reporting Periods 1985-2009

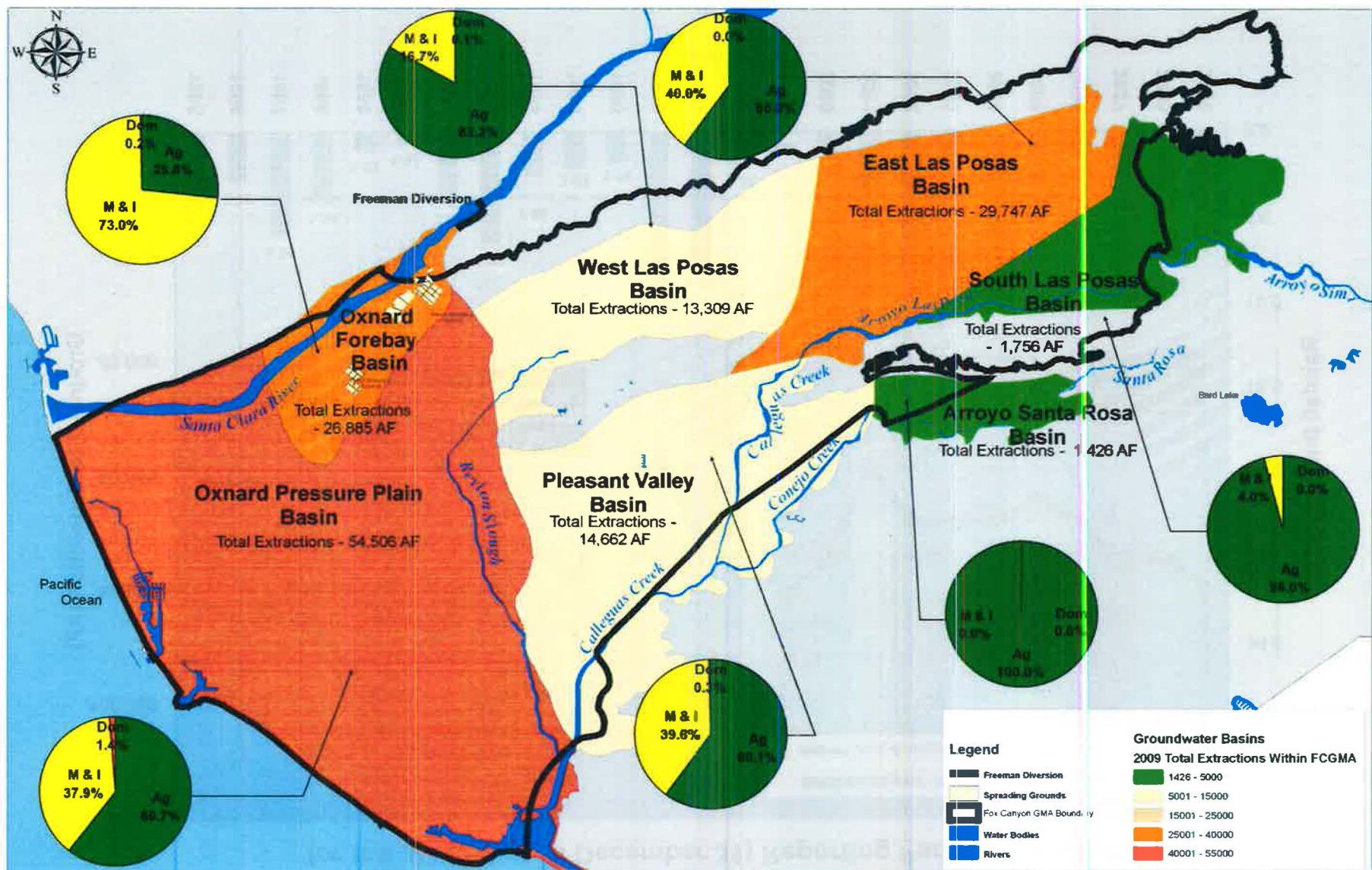


¹ Rainfall data is a mean derived from five main FCGMA weather stations for the period covered.

FIGURE 5
Rainfall and Reported Groundwater Extraction in the FCGMA
for the -02 (July 1 to December 31) Reporting Periods 1985-2009



¹ Rainfall data is a mean derived from five main FCGMA weather stations for the period covered.



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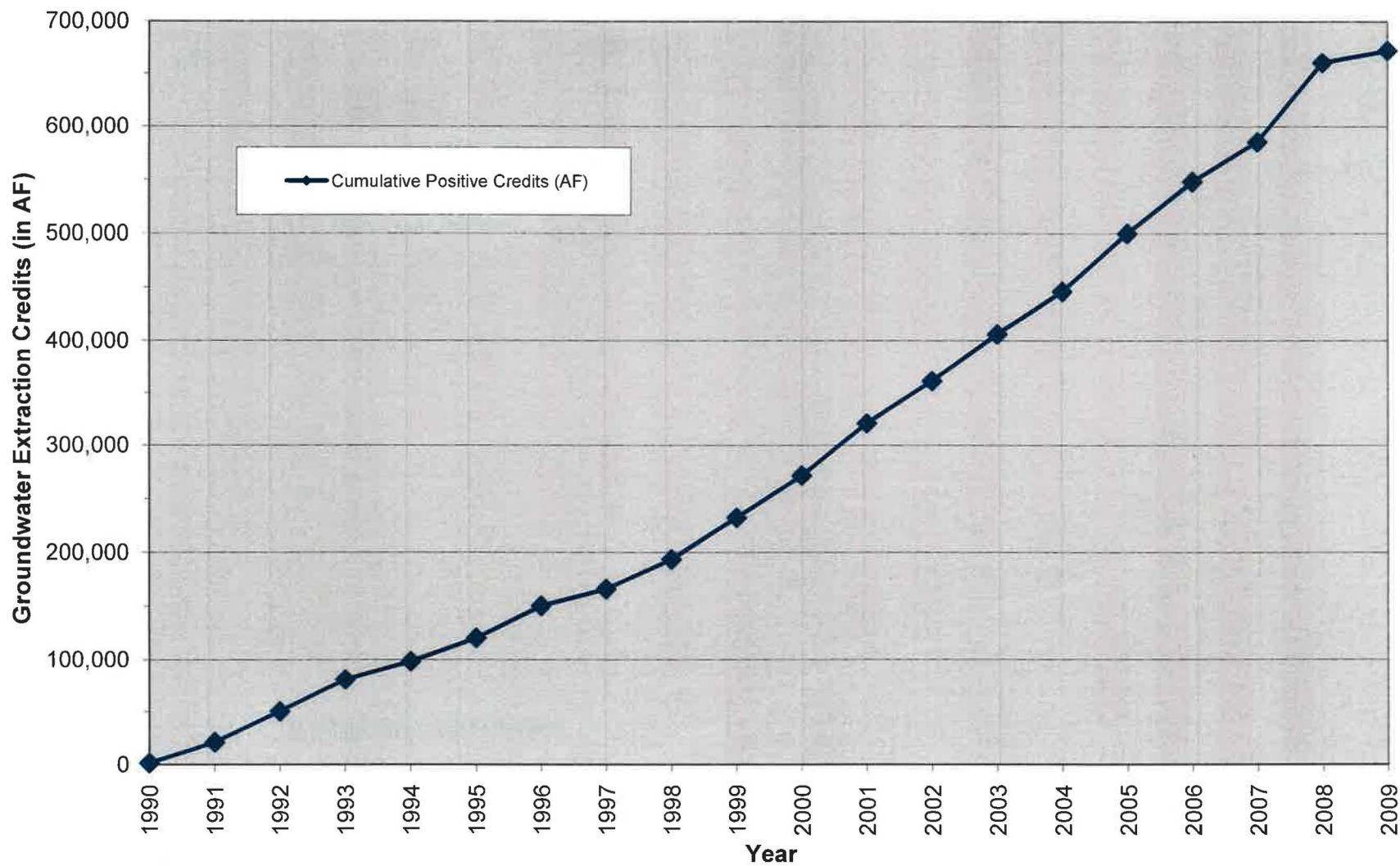
Prepared By: JPD
Reviewed By: DJP
Date Prepared: December 2010
Date Reviewed: December 2010

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Scale = 1:42,000
0 1.25 2.5 5 Miles

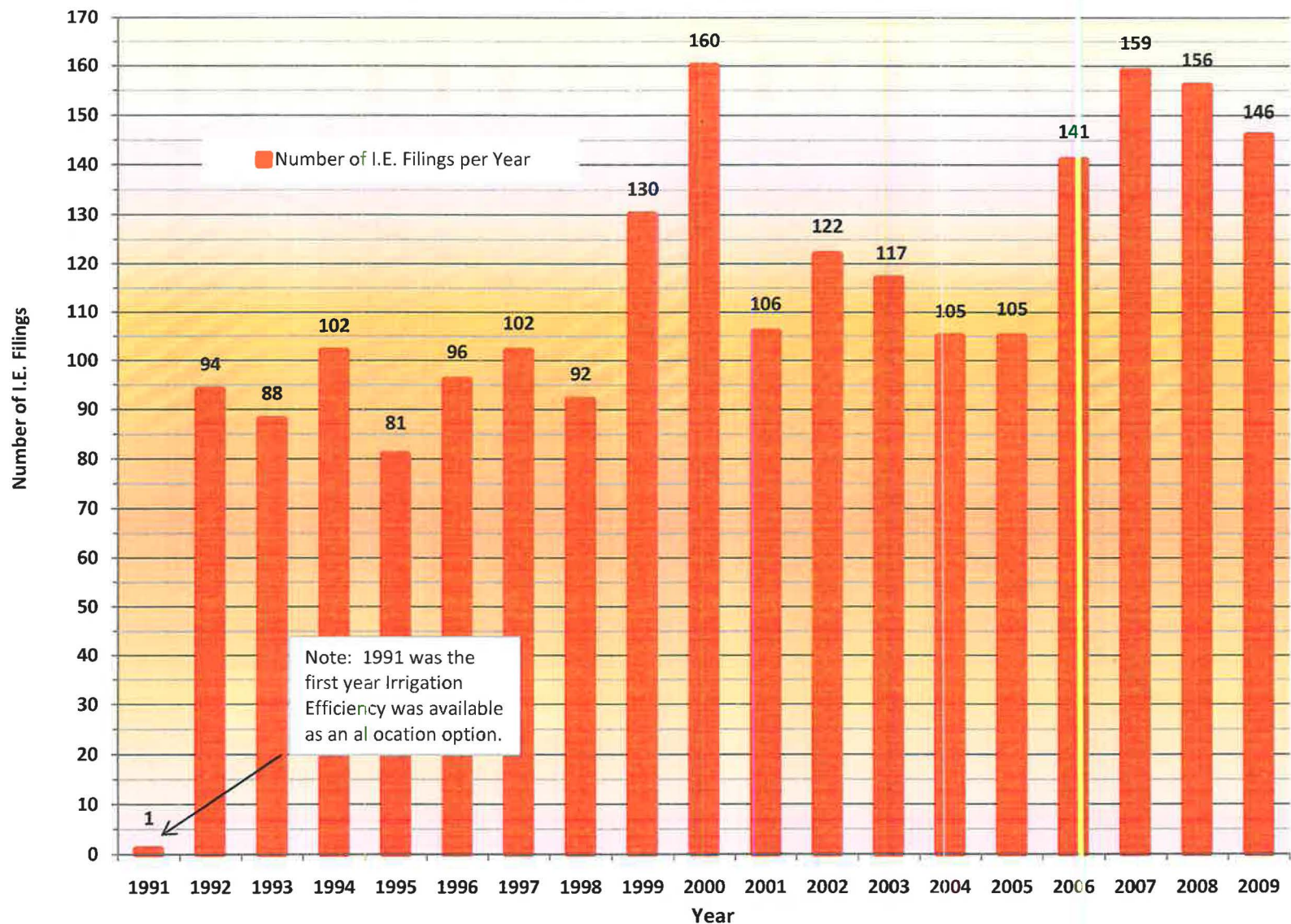
Figure 6: Ratio of Reported Groundwater Extractions By Basin 2009

FIGURE 7
Accumulation of FCGMA Credits¹



¹ FCGMA database statistics for year end credit totals in each category.

FIGURE 8
FCGMA ANNUAL IRRIGATION EFFICIENCY FILINGS¹



¹ Years with a higher number of I.E. filings are typically also below normal rainfall years.

TABLE 1
SUMMARY OF FCGMA PERSONNEL
FOR CALENDAR YEAR 2009

NAMES	AFFILIATION	CONTACT NUMBER
DIRECTORS		
Steve Bennett ¹	Representing the Ventura County Board of Supervisors	(805) 654-2226
David Borchard	Representing the Farming Interests	(805) 485-3525
Charlotte Craven (Vice Chair)	Representing the Five Cities within the Agency	(805) 482-4730
Dr. Michael Kelley ¹	Representing the Small Water Districts within the Agency	(805) 890-6095
Lynn Maulhardt (Chair) ¹	Representing the United Water Conservation District	(805) 485-5728
ALTERNATE DIRECTORS		
John Zaragosa ¹	Representing the Ventura County Board of Supervisors	(805) 654-2613
David Schwabauer	Representing the Farming Interests	(805) 432-9375
Neil Andrews	Representing the Five Cities within the Agency	(805) 654-7827
Sam McIntyre ¹	Representing the Small Water Districts within the Agency	(805) 484-1779
Daniel Naumann ¹	Representing the United Water Conservation District	(805) 488-1424
STAFF		
Alberto Boada	Agency Legal Counsel	(805) 654-2578
Bryan Bondy, CHG. ²	UWCD-FCGMA Associate Hydrogeologist	(805) 658-4373
Tammy Butterworth	Agency Clerk of the Board	(805) 654-2002
Gerhardt Hubner, P. G.	Deputy Director, WPD, Water & Environmental Resources	(805) 654-5051
Gerard Kapuscik	Special Projects Manager	(805) 648-9284
Sheila Lopez	Agency Engineering Technician	(805) 645-1372
Miranda Nobriga ²	Agency Deputy Clerk of the Board	(805) 654-2014
David Panaro, P.G.	Agency Staff Geologist	(805) 654-2327
Jeff Pratt, P.E.	Agency Executive Officer	(805) 654-2040
Rick Viergutz, C.E.G.	County Groundwater Manager	(805) 650-4083

Notes:

1. Table lists active Board Members and Alternate Board Members at the end of 2009. Since terms are staggered, the UWCD, County, and Small Water District seats were up for renewal in 2009. County Supervisor John Flynn was unseated by John Zaragosa in the November 2008 elections, after which Steve Bennett moved from Alternate to fill the active Board member seat and Supervisor Zaragosa was appointed to the Alternate seat. The UWCD and Small Water District members remained unchanged and were re-appointed by their respective Boards to serve as FCGMA representatives.
2. Bryan Bondy started in February 2009 as a joint half-time FCGMA/UWCD employee (with duties assigned by Gerhardt Hubner) to facilitate updates to the Agency Groundwater Management Plan along with modeling and special project duties. Miranda Nobriga was also hired in February 2009 to act as Deputy Clerk of the Board on a part-time basis for the Agency.

TABLE 2

**SUMMARY OF REPORTED GROUNDWATER EXTRACTIONS
WITHIN THE FCGMA SINCE 1983**

Calendar Year	-01 Period Extractions [in AFY]^{1,2,3}	-02 Period Extractions [in AFY]^{1,2,3}	Total Annual Extractions [in AFY]^{1,2,3}	Historical Allocation Reduction Percent⁴
2009	61,741	80,551	142,292	20%
2008	63,695	75,360	139,055	15%
2007	59,604	77,337	136,941	15%
2006	43,655	69,457	113,113	15%
2005	41,692	64,906	106,597	15%
2004	59,357	70,805	130,161	15%
2003	46,122	69,540	115,662	15%
2002	61,642	70,515	132,158	15%
2001	43,703	58,497	102,200	15%
2000	48,203	75,022	123,225	15%
1999	49,659	81,130	130,788	10%
1998	37,316	68,530	105,846	10%
1997	63,322	70,014	133,335	10%
1996	45,907	57,636	103,543	10%
1995	42,028	61,738	103,766	10%
1994	60,484	77,720	138,205	5%
1993	45,574	73,274	118,849	5%
1992	44,589	70,636	115,225	5%
1991	61,638	82,843	144,481	0%
1990	79,074	99,262	178,336	0%
1989	78,301	100,251	178,553	NA
1988	73,102	87,909	161,010	NA
1987	82,682	82,586	165,268	NA
1986	57,585	84,137	141,722	NA
1985	78,339	84,281	162,620	NA
1984	36,377	35,506	71,883	NA
1983	285	28,984	29,269	NA
Totals =	1,465,675	1,958,428	3,424,103	

Notes:

AF = Acre-feet; 1 acre-foot equals 325,851 gallons

AFY = Acre-feet per year

1. Table summarizes groundwater extraction reported to FCGMA. Other groundwater extraction may exist (i.e. groundwater extraction that occurred within the boundary of the FCGMA, but was not reported to the FCGMA).

2. FCGMA Reporting Periods are: (1) Jan. 1 - June 30; (2) July 1 - Dec. 31 of each Calendar Year; Annual refers to extraction occurring from January 1 through December 31 of each calendar year.

3. Data for reporting periods 1983-1, 1983-2, 1984-1, and 1984-2 provided by UWCD. Data determined to be incomplete based on low extraction values and low number of registered operators compared to proceeding years.

4. Historical Allocation (HA) is one of three methods employed by the FCGMA to allocate groundwater extraction (1990-present) (See text Section 2.3). Reductions stipulated by FCGMA Ordinance and Resolutions. 1985-1989: Historical Allocation Determination Period.

TABLE 3
COMPARISON OF YEAR 2009 GROUNDWATER EXTRACTIONS
TO HISTORIC GROUNDWATER EXTRACTIONS IN THE FCGMA¹

	Extraction for -01 Periods (AF/Period)²	Extraction for -02 Periods (AF/Period)²	Annual Extraction (AF/Year)²
Current Year (2009) Extractions	61,741	80,551	142,292
Average Extractions³ (1991 - 2009)	51,575	71,343	122,918
Comparison of Current Year (2009) Extractions to Average Extractions (1991- 2009)³ (reported as %)	120%	113%	116%
Rank of Current Year (2009) Extractions to Average Extractions⁴ (1991-2009)	3	3	2

Notes:

AF = acre-feet; (1 acre-foot equals 325,851 gallons)

1. **Table** summarizes groundwater extractions reported to FCGMA. Other groundwater extractions may exist (i.e., groundwater extraction that occurred within the boundary of the FCGMA, but was not reported to the FCGMA).

2. **Reporting Periods** are: (-01) January 1 - June 30; and (-02) July 1 - December 31 of each Calendar Year.

3. **Average** reported Agency-wide groundwater extractions per period and year from 1991 through 2009. Prior to 1991 there were no credits, scheduled reductions to Historical Allocations, Baseline Allocations, etc. Such focused groundwater management actions were detailed in Ordinance 5.0 (adopted by the FCGMA Board of Directors on August 24, 1990), which became effective on January 1, 1991.

4. **Priority Ranking** from largest to smallest (in acre-feet) when 2009 reported annual extractions are compared to the annual extractions reported from 1991-2009; For this analysis the largest extraction value for the 1991-2009 time period is 1.

TABLE 4
2009 FCGMA ALLOCATIONS vs. EXTRACTIONS by WELL TYPE

Groundwater Basin	2009 Historical Allocations in acre-feet (AF) <i>(for all wells in each basin)¹</i>	Well Use Type ²	(HA) Historical Allocation by Well Type (AF)	(AHA) Adjusted Historical Allocation ³ (AF)	(BA) Assigned Baseline Allocations (AF)	(AHA + BA) 2009 Total Available Allocation ⁴ (AF)	2009 Reported Extractions by Type per Groundwater Basin (AF) ⁵
Arroyo Santa Rosa (ASR)	846	AG	846	677	0	677	1,427
		DOM	0	0	0	0	0
		M&I	0	0	0	0	0
Oxnard Plain Forebay (FOR)	29,661	AG	9,490	7,592	137	7,729	7,202
		DOM	552	442	50	492	55
		M&I	19,635	15,708	3,146	18,854	19,628
Oxnard Plain Pressure Basin (OXP)	76,220	AG	60,082	48,066	1,967	50,033	33,139
		DOM	2,957	2,366	127	2,493	787
		M&I	13,364	10,691	28,553	39,244	20,577
Pleasant Valley (PV)	21,955	AG	16,156	12,925	18	12,943	8,808
		DOM	540	432	30	462	49
		M&I	5,240	4,192	4,215	8,407	5,808
East Las Posas (ELP)	17,877	AG	15,039	12,031	608	12,639	17,839
		DOM	128	102	35	137	9
		M&I	3,306	2,645	277	2,922	11,899
West Las Posas (WLP)	13,703	AG	11,296	9,037	51	9,088	11,074
		DOM	12	10	14	24	11
		M&I	1,580	1,264	1,028	2,292	2,224
South Las Posas (SLP)	2,065	AG	1,563	1,250	22	1,272	1,685
		DOM	0	0	0	0	0
		M&I	541	433	56	489	71
Totals	162,327		162,327	129,862	40,334	170,196	142,292

NOTES: (totals or subtotals may not be exact due to rounding)

1) Year-end 2009 total includes Historical Allocation (HA) as averaged after the 1985-1989 FCGMA Base Period along with any adjustments that may have applied through 2009.

2) Although many wells serve as both domestic and agricultural sources, or municipal and agricultural sources, etc., only the main use of each well has determined the category here.

3) Effective 01-01-2009 the Scheduled Reduction Rate was 80% of original Historical.

4) The Historical Allocation minus scheduled reductions, plus any Baseline Allocation, equals Total Available Allocation for year 2009 (does not include Irrigation Efficiency).

5) Reported groundwater extractions may be higher or lower than total available allocations due to use of Credits or an Irrigation Efficiency (I.E.) allowance.

TABLE 5
SUMMARY OF GROUNDWATER EXTRACTION CREDITS
ACCUMULATED IN THE FCGMA SINCE 1991¹

Year	Net Annual Credits^{2, 4} (AF)	Agency Aggregate Total Positive Credit Balance³ (+ AF)
2009	11,612	672,324
2008	75,423	660,712
2007	37,252	585,288
2006	48,166	548,037
2005	53,829	499,871
2004	39,893	446,042
2003	44,763	406,149
2002	40,396	361,386
2001	49,355	320,990
2000	39,132	271,635
1999	39,178	232,502
1998	27,632	193,324
1997	15,464	165,693
1996	29,903	150,228
1995	22,036	120,326
1994	17,283	98,290
1993	30,593	81,007
1992	50,414	50,414
1991	21,345	21,345
1990	0	0

Notes:

AF = acre feet of water; 1 Acre-foot = 325,851 US gallons of water @ STP

1. Credit Program initiated in 1991. Credits are granted for difference between yearly extractions and available annual Historical Allocation if extractions are less than available Historical.

2. Net Annual Credits Earned = Net credits earned each year after application to any reported overpumping that year. Prior to 1998, operators were required to apply for credits. For 1999-2009 (present), credits are automatically earned for groundwater use of less than available Historical allocation or for groundwater injected. Credits did not exist prior to 1990.

3. Aggregate Total Positive Credit Balance: Sums current year (2009) and previous historic credits (1991-2008) for all FCGMA Operator accounts with positive credit balance at the end of 2009.

4. Net Credits Earned value is substantially greater for 2008 than 2007 due to reconciliation of Calleguas Municipal Water District's FCGMA account. 2009 value is smaller than most prior years because it reflects less credits earned during a high extraction year, and also the credits redeemed (subtracted) to offset potential surcharges.

TABLE 6
SUMMARY OF GROUNDWATER EXTRACTION AND
CREDITS BY GROUNDWATER BASIN FOR CALENDAR YEAR 2009

Groundwater Basin	2009 Total Reported Groundwater Extraction (AF/Year) ¹	2009 Basin Share of Total Agency Extraction (%)	2009 Gross Credits Earned (AF) ²	Basin Share of Total Credits Earned in 2009 (%)	Credits Redeemed in 2009 per Basin (AF) ³	2009 Net Basin Credit Balance (AF) ⁴
Oxnard Plain Pressure Basin	54,506	38%	17,619	63.8%	-7,850	348,402
Oxnard Plain Forebay Basin	26,885	19%	1,614	5.8%	-2,753	100,952
Pleasant Valley Basin	14,662	10%	3,977	14.4%	-1,116	82,743
West Las Posas Basin	13,309	9%	547	2.0%	-379	29,140
East Las Posas Basin	29,747	21%	3,382	12.2%	-12,956	104,394
South Las Posas Basin	1,756	1%	287	1.0%	0	4,469
Arroyo Santa Rosa Basin	1,427	1%	210	0.8%	93	2,224
Totals	142,292	100%	27,636	100%	-25,647	672,324

Notes:

AF = Acre-feet; 1 acre-foot equals 325,851 gallons

1. Groundwater extractions reported to FCGMA. Other groundwater extraction may exist (i.e. groundwater extraction that occurred within the boundary of the FCGMA, but was not reported to the FCGMA).
2. FCGMA Operator total available Historical Allocation minus Reported Extraction equal Gross Credits Earned (Note: Extraction greater than Historical Allocation, or Credit Transfers can equate to credits redeemed).
3. FCGMA credits redeemed to avoid a financial surcharge that would have otherwise been assessed for extraction exceeding an available Historical Allocation.
4. Sums current and historic credits by groundwater basin for all FCGMA Operator Accounts to get a cumulative credit balance at the end of Calendar Year 2009.

TABLE 7
SUMMARY OF REPORTED GROUNDWATER EXTRACTIONS AND
WELL USE-TYPE WITHIN THE FCGMA FOR CALENDAR YEAR 2009¹

Groundwater Basin	Groundwater Use-Type	Total Reported Groundwater Extractions for 2009 (AF/Year) ²	Percent of Individual Groundwater Basin Extractions	Percent of 2009 Total Agency-Wide Groundwater Extractions (%)	Total Number of FCGMA Wells ⁴	Active Wells in Basin ⁵ (by use type)	Active Wells in Basin by Use (%)
Arroyo Santa Rosa	Basin Total	1,426	100%	1.0%	17	9	52.9%
	Agricultural	1,426	100.0%	1.0%	16	9	52.9%
	Domestic	0	0.0%	0.0%	1	0	0.0%
	M & I	0	0.0%	0.0%	0	0	0.0%
East Las Posas	Basin Total	29,747	100%	20.9%	163	127	77.9%
	Agricultural	17,839	60.0%	12.5%	112	83	50.9%
	Domestic	9	0.0%	0.0%	8	7	4.3%
	M & I	11,899	40.0%	8.4%	43	37	22.7%
South Las Posas	Basin Total	1,756	100%	1.2%	26	16	61.5%
	Agricultural	1,685	96.0%	1.2%	21	15	57.7%
	Domestic	0	0.0%	0.0%	1	0	0.0%
	M & I	71	4.0%	0.0%	4	1	3.8%
West Las Posas	Basin Total	13,309	100%	9.4%	75	55	73.3%
	Agricultural	11,074	83.2%	7.8%	57	41	54.7%
	Domestic	11	0.1%	0.0%	4	4	5.3%
	M & I	2,224	16.7%	1.6%	14	10	13.3%
Oxnard Plain ³	Basin Total	54,507	100%	38.3%	406	280	69.0%
	Agricultural	33,139	60.8%	23.3%	261	187	46.1%
	Domestic	787	1.4%	0.6%	55	43	10.6%
	M & I	20,581	37.8%	14.5%	90	50	12.3%
Pleasant Valley	Basin Total	14,662	100%	10.3%	95	59	62.1%
	Agricultural	8,808	60.1%	6.2%	60	38	40.0%
	Domestic	49	0.3%	0.0%	18	14	14.7%
	M & I	5,805	39.6%	4.1%	17	7	7.4%
Oxnard Plain Forebay	Basin Total	26,885	100%	18.9%	119	81	68.1%
	Agricultural	7,202	26.8%	5.1%	55	40	33.6%
	Domestic	55	0.2%	0.0%	6	4	3.4%
	M & I	19,628	73.0%	13.8%	58	37	31.1%
2009 Totals		142,292		100%	901	627	70%

Notes:

AF = Acre-feet; 1 acre-foot equals 325,851 gallons

M & I - Municipal and Industrial

1. Table summarizes groundwater extraction reported to FCGMA. Other undocumented groundwater extraction may exist.

2. Reporting Periods are: (1) Jan. 1 - June 30; (2) July 1 - Dec. 31 of each Calendar Year.

3. Oxnard Plain Basin includes area formerly identified as Mugu Forebay Groundwater Basin.

4. Total number of wells within each basin (includes wells that may have become inactive or destroyed, but does not include permanent monitoring wells or anode-cathode wells).

5. Wells reported as being used in each basin during 2009.

TABLE 8
SUMMARY OF EXTRACTION REPORTING METHODS USED DURING 2009

Main Well Use ¹	Well Status ²	No. of Wells by Category	No. of Wells with Meters	Calibrated Meters ³ (%)	Calibrated Flowmeter Required
Agricultural	Active	428	427	99.8	Yes
	Inactive	112	77	68.8	No
Domestic	Active	117	55	47.0	No
	Inactive	12	7	58.3	No
Municipal-Industrial	Active	138	138	100.0	Yes
	Inactive	42	34	81.0	No
Totals		849	738	86.9	

Notes:

- 1) Some wells may serve more than one purpose, however only the main use for each well was used to determine the listed category.
- 2) Well status as listed in FCGMA database on December 31, 2009. Does not include wells that may have been destroyed, wells not yet in service, monitoring wells, or anode-cathode wells.
- 3) Percent of water flowmeters in compliance with the FCGMA meter calibration program even where a meter may not currently be required.

EMERGENCY ORDINANCE - D

AN EMERGENCY ORDINANCE TO IMPOSE A TEMPORARY MORATORIUM ON CONSTRUCTION OF NEW WELLS AND TO PROVIDE AN UPPER LIMITATION TO EFFICIENCY EXTRACTION ALLOCATION WITHIN THE WEST, EAST, AND SOUTH LAS POSAS GROUNDWATER BASINS PENDING DEVELOPMENT OF A BASIN-SPECIFIC MANAGEMENT PLAN

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. There is a serious water resource problem that constitutes a very real and immediate threat to groundwater quality and quantity to the West, East, and South Las Posas Basins ("Basins") and to any and all basins tributary to it.
- B. The Fox Canyon Groundwater Management Agency's ("Agency") adopted 2007 Update to the Fox Canyon Groundwater Management Agency Groundwater Management Plan ("Management Plan") documents unique characteristics of the Basins which include:
- Rising groundwater coincident with increasing salinity in the unconfined aquifers affected by surface water in the Arroyo Las Posas;
 - Expanding degradation of groundwater quality (salinity) in those areas of the Basin under the influence of the Arroyo Las Posas.
 - Continuing overdraft in the confined aquifers of the Basins;
 - Masking of East Las Posas Basin overdraft conditions as a result of the temporary storage of State Project Water ("SWP") in Calleguas Municipal Water District's ("Calleguas") aquifer storage and recovery facility ("ASR Project"); and
 - Developing a customized management plan, distinct from the management of the remainder of the basins within the Agency jurisdiction, is an appropriate strategy to implement an approach that preserves the long-term integrity of the water resources in the Basins for all reasonable and beneficial uses.
- C. Continued drought conditions and restrictions on pumping from the Sacramento – San Joaquin River Delta have reduced SWP supplies available to the region. As a result, Metropolitan Water District of Southern California ("MWD") terminated its Interim Agricultural Water Program, which had provided supplemental water for agricultural irrigation in the Basins.
- D. As a further response to statewide drought conditions, MWD has requested withdrawal of water from the ASR Project.
- E. Degrading groundwater quality continues to migrate into the East Las Posas Basin threatening the water quality of water stored in the ASR Project and limiting the suitability of groundwater for agricultural irrigation. The Agency has an approved agreement with Calleguas confirming the importance of the ASR Project and guaranteeing Calleguas' right to recapture water stored through the ASR Project.

F. In response to the U.S. Environmental Protection Agency's (EPA) finding that surface waters in the Calleguas Creek watershed (including the Arroyo Las Posas) were impaired for salts, the California Regional Water Quality Control Board adopted Basin Plan Amendment Resolution R4-2007-016 ("Resolution R4-2007-016"). Resolution R4-2007-016 imposes Total Maximum Daily Loads limits for Boron, Chloride, Sulfate, and TDS (salts) in the Calleguas Creek Watershed. With State Water Resources Control Board and EPA approval of Resolution R4-2007-016, watershed stakeholders must develop a work plan to manage salts by June 2009. Due to the surface water influence on groundwater quality, any successful work plan must include groundwater management as an element of the plan.

G. The Agency has the authority to adopt ordinances to regulate, conserve, manage, and control the use and extraction of groundwater within its territory. The Board has previously adopted emergency ordinances in an attempt to limit groundwater extractions within the Basins:

- On January 26, 1990, the Board adopted Emergency Ordinance "A," which prohibited the drilling of new water wells for use on undeveloped property during the six-month period between the Ordinance's adoption and July 26, 1990;
- On July 20, 1990, the Board adopted Emergency Ordinance "B," which replaced Emergency Ordinance "A" and extended the prohibition against new water wells for use on undeveloped property for an additional six-month period through January 20, 1991; and
- On March 24, 1999, the Board adopted Emergency Ordinance "C," which instituted a moratorium on the construction of new wells within the East Las Posas Groundwater Basin as a temporary hold on groundwater extractions and a means of preventing further degradation of water quality and quantity. Emergency Ordinance "C" was in effect through September 30, 1999.

H. Pursuant to Section 4.2.1.1 of Ordinance 8.1, to protect the water resources in the Basins, a permit must be obtained from the Agency prior to initiating any new or increased use of groundwater in the Expansion Area or prior to constructing a new or replacement extraction facility in the Basins.

I. Prohibition on the construction of new water wells, the replacement of existing wells with wells of greater capacity, and the prohibition of increased groundwater extractions, as hereafter provided, is necessary to immediately (i) protect the public health, safety, and welfare of those reliant on these water resources, (ii) prevent a worsening of the existing conditions in the Basins; and (iii) allow time to implement a definite and long-term solution to improve conditions in the Basins to ensure their long-term reliability as renewable resources.

J. The adoption of this Emergency Ordinance is exempt from the California Environmental Quality Act pursuant to CEQA Guidelines Sections 15307 and 15308. These provisions exempt a project if the activity is taken "to ensure the maintenance, restoration, or enhancement of natural resources or the environment." This Emergency 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

A. The purpose and intent of this emergency ordinance is to: a) prevent a worsening of the groundwater overdraft in the aquifer systems within the Basins; b) facilitate the development of a basin-specific management plan for the Basins; and c) bring groundwater extractions within the Basins into balance with recharge. This ordinance is only one means by which this goal will be met.

ARTICLE 3. Prohibition

A. Pursuant to the California Water Code Appendix, Chapter 121, Sections 403 and 701, the Board hereby prohibits the issuance of any permit, pursuant to Section 4.2.1 of Ordinance 8.1, allowing the initiation of any new or increased use of groundwater within the Expansion Area or the construction of any new well or replacement well of greater capacity in the Basins. However, an individual may seek approval for such a permit pursuant to Section 4.2.1 of Ordinance 8.1, by applying for a variance permit.

B. The issuance of a variance permit hereunder shall be deemed a discretionary, act and issuance shall be at the sole discretion of the Agency per Section 4.2.1 of the Ordinance Code. In approving discretionary permits, the Agency's Executive Officer or his or her designee is hereby authorized to impose any reasonable conditions, modifications, or limitations in granting a permit variance which are deemed necessary to eliminate or substantially mitigate any material adverse impact on the environment, particularly including the Basin's groundwater resources, and otherwise carry out the purpose and goals of this Ordinance.

C. Notwithstanding Section 5.6.1.2 of Ordinance Code 8.1 concerning Annual Efficiency Extraction Allocations, groundwater use, obtained from within the Basins and applied under the referenced Annual Efficiency Extraction Allocation in excess of 4.0 acre-feet per acre per year for the period from January 1, 2009 to December 31, 2009 shall be subject to the extraction surcharge established by the Agency pursuant to Section 5.8 of Ordinance Code 8.1. The adoption of this 4.0 acre-feet per acre limitation is acknowledged as an interim measure to set a maximum limit on water use and does not represent an action that will adequately restore sustainable use of the Basins, or substitute for the development of a comprehensive basin-specific management plan.

ARTICLE 4. Duration

A. The duration of this Emergency Ordinance "D" shall be from the date of adoption until January 1, 2010. It shall remain in force until the stated date of expiration, unless the effective period is extended by action of the Agency Board of Directors.

ARTICLE 5. Effective Date

A. This ordinance shall become effective on the date of adoption and shall automatically expire on January 1, 2010. PASSED AND ADOPTED this 25th day of February 2009 by the following vote:

AYES: 5
NOES: 0
ABSENT: 0

By:


Lynn Maulhardt, Chair, Board of Directors
Fox Canyon Groundwater Management Agency

ATTEST: I hereby certify that the above is a true and correct copy of Emergency Ordinance D

By:


Tammy Butterworth, Clerk of the Board

Resolution 2009-01
of the
Fox Canyon Groundwater Management Agency
Honoring

John K. Flynn
on his Retirement from Public Service

WHEREAS, County Supervisor and FCGMA Director John K. Flynn was one of the founding fathers of the fledgling agency that came to be known as the Fox Canyon Groundwater Management Agency (FCGMA) and served that agency faithfully and with passion; and

WHEREAS, Director Flynn has filled the roles of FCGMA Board Member and served at various times in the positions of Chair and Vice Chair for more than 24 years, and during his tenure, has been a key proponent of the FCGMA while donating his time, experience, and knowledge of water issues in order to contribute to the success and accomplishments of the Agency; and

WHEREAS, not only the original, but all subsequent Fox Canyon Groundwater Management Agency ordinances, resolutions, agreements, contracts, and policies have received valuable and insightful input from Director Flynn by drawing on his background knowledge and experience in public policy and knowledge of water resources; and

WHEREAS, lending his extensive political acumen, multitudes of personal and professional contacts, and the support of the County have all contributed significantly to the successful development of the FCGMA; and

WHEREAS, in his capacity as a longtime FCGMA Director and County Supervisor, Mr. Flynn has been a key participant in drafting State Assembly Bill 2995 (AB-2995, Imbrecht, 1982), the Fox Canyon Groundwater Management Agency Act; and

THEREFORE, IT IS HEREBY ORDAINED that the Board of Directors of the Fox Canyon Groundwater Management Agency take great and sincere pleasure in recognizing his accomplishments by honoring Director John Flynn for his contributions to the protection and preservation of groundwater within the Agency.

On motion by Director Craven, and seconded by Director Kelley, the foregoing resolution was passed and adopted at the regular FCGMA Board meeting on January 28, 2009.


Lynn Maulhardt, Chair


Steve Bennett


Charlotte Craven


Dr. Michael Kelley


David Borchard

Resolution 2009-02
of the
Fox Canyon Groundwater Management Agency

**A RESOLUTION AUTHORIZING THE IMPOSITION OF CIVIL PENALTIES AGAINST THOSE
OPERATORS WHO ARE IN VIOLATION OF THE FLOWMETER CALIBRATION
REQUIREMENTS OF ORDINANCE NO. 8.1**

WHEREAS, the Fox Canyon Groundwater Management Agency Ordinance No. 8.1 requires all water flow meters to be tested for accuracy; and

WHEREAS, the Fox Canyon Groundwater Management Agency (Agency) Board of Directors on March 22, 2006 adopted Resolution No. 2006-1 establishing the methods and procedures for accuracy testing of water flowmeters; and

WHEREAS, on September 24, 2008 the Agency adopted Amended Resolution No. 2008-04 adopting revised policies and procedures for requiring and implementing accuracy testing of water flowmeters; and

WHEREAS, despite Agency efforts, some operators have not demonstrated compliance with flowmeter calibration requirements; and

WHEREAS, a March 2009 Notice of Violation sent by the Agency informed the non-complying operators that they are subject to civil penalties for violation of Ordinance No. 8.1; and

WHEREAS, the Board made a previous finding that operators with a pump motor greater than 10 horsepower and that extract more than 10 acre feet of groundwater each year have the ability to pay the cost of compliance with the flowmeter calibration requirement; and

WHEREAS, the accurate measurement of groundwater extractions is critical to achieving the Agency's statutory mandate to bring the groundwater basins underlying the Agency boundaries to safe yield; and

WHEREAS, the Fox Canyon Groundwater Management Agency Act and Ordinance No. 8.1 authorize the imposition of a civil penalty up to one thousand dollars (\$1,000) per day for statutory and ordinance violations; and

WHEREAS, Section 3.4 of Ordinance No. 8.1 provides that non-compliance with any provision of the meter calibration requirements will subject the owner to civil penalties; and

WHEREAS, a recurring civil penalty equal to the average avoided cost of compliance with the flowmeter calibration requirement is reasonable, taking into consideration appropriate factors, including the seriousness of the violation and the length of time the operator has had to demonstrate compliance but failed to do so; and

NOW, THEREFORE, IT IS HEREBY RESOLVED AND ORDERED, that pursuant to the statutory authority granted by the Fox Canyon Groundwater Management Agency Act Section 405 and Section 807, and Chapter 3.0 of Ordinance No. 8.1, the following civil penalties shall be imposed on any operator who was sent a Notice of Violation on March 3 and/or March 5, 2009 and who has not yet submitted proof of flowmeter calibration:

1. Effective June 30, 2009, the operator shall be liable to the Agency for a civil penalty in the amount of \$1,100.00;
2. Effective August 31, 2009, the operator shall be liable to the Agency for a civil penalty in the amount of \$1,700.00.
3. Effective October 31, 2009, the operator shall be liable to the Agency for a civil penalty in the amount of \$2,300.00.

On motion of Director Craven, and seconded by Director Bennett, the foregoing Resolution was passed and adopted on this 27th day of May 2009.



Lynn E. Maulhardt, Chair, Board of Directors
Fox Canyon Groundwater Management Agency

ATTEST: I hereby certify that the above is a true and correct copy of Resolution No. 2009-02.

By: 

Miranda Nobriga, Clerk of the Board

Resolution 2009-03
of the
Fox Canyon Groundwater Management Agency

A RESOLUTION ADOPTING ENFORCEMENT GUIDING PRINCIPLES

WHEREAS, the Fox Canyon Groundwater Management Agency, established by the State Legislature in 1982, is charged with the preservation and management of groundwater resources within the areas or lands overlying the Fox Canyon aquifer for the common benefit of the public and all agricultural, municipal and industrial users; and

WHEREAS, timely and consistent application of the Agency's Ordinance is critical to the success of the Agency; and

WHEREAS, enforcement is a critical ingredient in creating the deterrence needed to encourage the regulated community to anticipate, identify, and correct violations. Appropriate penalties and other consequences for violations offer some assurance of equity between those who choose to comply with requirements and those who violate them; and

WHEREAS, a strong enforcement program improves public confidence when the Agency is ready, willing, and able to back up its requirements with action and consequences; and

WHEREAS, without a strong enforcement program to back up the Agency's historically cooperative approach, the Agency's regulatory framework and Ordinance may be in jeopardy; and

WHEREAS, at the April 22, 2009 Board meeting, the Board discussed and directed staff to come back at a future meeting to propose draft enforcement guiding principles; and

WHEREAS, Agency staff has researched other agency and department enforcement policies, procedures, and principles in considering and drafting the proposed Agency's principles; and

WHEREAS, at the May 27, 2009 Board meeting Draft Enforcement Guidelines were presented and discussed, and Board directed staff, after receiving any comments to come at a subsequent meeting for adoption; and

WHEREAS, the proposed guiding enforcement principles address the enforcement component of the Agency's 2007 Groundwater Management Plan; and

WHEREAS, in consideration of adopting enforcement guiding principles, the Agency would provide guidance in line with the Agency's mission enabling Agency staff to expend their limited resources in ways that openly address the Agency's greatest needs, deter harmful conduct, protect the aquifers, and achieve maximum benefit for the people and groundwater resources under its jurisdiction.

NOW, THEREFORE, IT IS HEREBY RESOLVED AND ORDERED, that the Fox Canyon Groundwater Management Agency Board of Directors adopts the following Enforcement Guidelines:

- Fair, Firm, and Consistent Regulation and Enforcement - The Agency will promote and establish fair, firm, and consistent requirements in law, regulations, and policies regarding the enforcement of its Ordinance. This includes timely enforcement of its Ordinance. Agency staff may determine compliance through a variety of means, including complaint and site investigations.
- Public Participation – The Agency will provide meaningful public participation in enforcement matters.
- Environmental Justice – The Agency shall promote enforcement of its Ordinance in a manner that ensures the fair treatment of people of all races, cultures, and income levels, including minority populations and low-income populations.
- Data Collection & Availability of Violation and Enforcement Information – The Agency will collect and record enforcement data and communicate this enforcement information to the public and the regulated community.
- Enforcement Priorities/Progressive Enforcement – The Agency will establish a process for ranking enforcement priorities based on the actual or potential threat to the Agency's groundwater resources in terms of beneficial uses and will establish and use a progressive level of enforcement, as necessary, to achieve compliance.
- Administrative Civil Liability Penalties – The Agency will establish an administrative civil liability penalty process to create a fair and consistent approach to liability assessment.

On motion of Director Kelley, and seconded by Director Bennett, the foregoing Resolution was passed and adopted on this 24th day of June 2009.


Lynn E. Maulhardt, Chair, Board of Directors
Fox Canyon Groundwater Management Agency

ATTEST: I hereby certify that the above is a true and correct copy of Resolution No. 2009-03.

By: 
Miranda Nobriga, Clerk of the Board

Resolution 2009-04
of the
Fox Canyon Groundwater Management Agency

**A RESOLUTION APPROVING PAYMENT OF GROUNDWATER EXTRACTION CHARGES AND
SUSPENSION AND POTENTIAL WAIVER OF INTEREST AND PENALTIES THEREON TO
RESOLVE AN APPEAL BY STRICKLAND MUTUAL WATER COMPANY**

WHEREAS, the Fox Canyon Groundwater Management Agency, established by the State Legislature in 1982, is charged with the preservation and management of groundwater resources within the areas or lands overlying the Fox Canyon aquifer for the common benefit of the public and all agricultural, municipal and industrial users; and

WHEREAS, on May 26, 2009, Agency staff prepared and sent Strickland Mutual Water Company a request for payment of \$28,627.89 for outstanding principal, penalties and interest owed the Agency for groundwater extracted; and

WHEREAS, Strickland Mutual Water Company on May 30, 2009 submitted a timely appeal requesting relief from the fees and penalties as calculated in the Agency's letter dated May 26, 2009; and

WHEREAS, on June 30, 2009, Agency staff and Strickland Mutual Water Company representatives met and discussed the District's proposed solution to their outstanding amount owed to this Agency; and

WHEREAS, the Strickland Mutual Water Company serves a low income community; and

WHEREAS, the Strickland Mutual Water Company has proposed compliance projects to: 1) install water meters in the Strickland Acre tract, and 2) conduct an initial sonic leak detection evaluation will serve the Agency's long term interests by providing water conservation and water saving for this community resulting in benefit to the underlying aquifers; and

WHEREAS, timely and consistent application of the Agency's Ordinance is critical to the success of the Agency; and

WHEREAS, enforcement is a critical ingredient in creating the deterrence needed to encourage the regulated community to anticipate, identify, and correct violations. Appropriate penalties and other consequences for violations offer some assurance of equity between those who choose to comply with requirements and those who violate them; and

WHEREAS, at the June 24, 2009 FCGMA Board meeting, the Board adopted Guiding Principles for Enforcement; and

WHEREAS, adoption of this Resolution is in line with those Principles, including the provisions for Fair, Firm, and Consistent Regulation and Enforcement, Public Participation, and Environmental Justice.

NOW, THEREFORE, IT IS HEREBY RESOLVED AND ORDERED, that the Fox Canyon Groundwater Management Agency Board of Directors adopts the following:

Strickland Mutual Water Company shall be assessed the full amount owed to the Agency of \$28,627.89 (includes principal, penalty and interest) for groundwater extracted. However, \$25,618.05 of the penalty and interest portion of the total amount shall be suspended, and shall be deemed waived if Strickland Mutual Water District completes the following:

1. Submit payment for the outstanding principal balance of \$3,009.84 (due September 22, 2009);
2. Provide proof of installation of 124 water meters (completion report due July 22, 2010); and
3. Provide results from initial water main leak detection evaluation (due July 22, 2010).

On motion of Director Zaragoza, and seconded by Director Kelley, the foregoing Resolution was passed and adopted on this 22nd day of July 2009.



Charlotte Craven, Vice Chair, Board of Directors
Fox Canyon Groundwater Management Agency

ATTEST: I hereby certify that the above is a true and correct copy of Resolution No. 2009-04.

By: 
Miranda Nobriga, Clerk of the Board

Resolution 2009-05
of the
Fox Canyon Groundwater Management Agency

**A RESOLUTION ADJUSTING THE GROUNDWATER EXTRACTION SURCHARGE RATE
PURSUANT TO CHAPTER 5.8 OF ORDINANCE NO. 8.1**

WHEREAS, the mission of the Fox Canyon Groundwater Management Agency (Agency) includes the protection and preservation of groundwater resources within the boundary of the Agency; and

WHEREAS, the Fox Canyon Groundwater Management Agency is charged with bringing the groundwater basins within its jurisdiction into safe yield; and

WHEREAS, the groundwater basins within the Agency continue to be in overdraft condition; and

WHEREAS, the existing groundwater surcharge rates are not sufficient to deter over pumping or excessive groundwater extractions when compared to the ability an operator or well owner has to purchase alternative retail or imported water; and

WHEREAS, an economic disincentive is deemed the best means to discourage over extraction or over pumping of groundwater; and

WHEREAS, Ordinance No. 8.1 provides for setting groundwater extraction surcharge rates by Resolution.

NOW, THEREFORE, IT IS HEREBY RESOLVED AND ORDERED THAT:

A groundwater extraction surcharge rate shall be fixed at \$1150.00 on all groundwater extractions in excess of the combined allocation for all water wells within the Agency.

This groundwater extraction surcharge shall become effective on January 1, 2010 and will remain in force until changed by the Agency's Board of Directors, or by a change to the Agency's Ordinance Code.

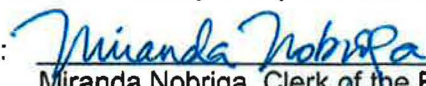
On a motion by Director Craven and seconded by Director Kelley, the foregoing Resolution was duly passed and adopted by the Board of Directors at a regularly scheduled meeting of the Board held on this 28th day of October 2009 in Ventura, California.

By: _____


Lynn Maulhardt, Chair, Board of Directors
Fox Canyon Groundwater Management Agency

ATTEST: I hereby certify that the above is a true and correct copy of Resolution No. 2009-05.

By: _____


Miranda Nobriga, Clerk of the Board

Resolution 2009-07
of the
Fox Canyon Groundwater Management Agency

**A RESOLUTION CONCERNING ALLOCATION TRANSFER AND USE OF GOOD DEED
CREDIT TRUST ACCOUNT IN CONJUNCTION WITH UNITED WATER CONSERVATION
DISTRICT'S ACQUISITION OF VULCAN MATERIALS COMPANY'S FERRO PROPERTY**

WHEREAS, the Fox Canyon Groundwater Management Agency ("Agency") was established to preserve the integrity of the quality and quantity of groundwater resources within its boundaries; and

WHEREAS, the Agency exercises its regulatory authority through ordinances, resolutions, and implementation of its adopted groundwater management plan; and

WHEREAS, the current groundwater management plan ("Management Plan") was updated and adopted in May 2007; and

WHEREAS, The Management Plan provides an extensive evaluation of the varying conditions in aquifers within the Agency, and an assessment of the water management strategies that various entities propose for implementation within the Agency; and

WHEREAS, the Management Plan finds that the Oxnard Plain Forebay Basin ("Forebay") is impaired by nitrate contamination from agricultural operations and septic sources, and concludes that preventing further nitrate contamination in the Forebay from potential agricultural activities within reclaimed gravel pits should be a high priority for the Agency; and

WHEREAS, the Management Plan identifies groundwater management strategies that are focused on increasing recharge into the Forebay so that additional water can be delivered to overdrafted areas within the Agency, and concludes that additional spreading facilities in the Forebay may be needed to implement such strategies; and

WHEREAS, United Water Conservation District ("UWCD") proposes to purchase from Calmat Co. doing business as Vulcan Materials Company ("Vulcan") the Ferro Property consisting of approximately 231 acres located above the Forebay which involves reclaimed gravel pits and agricultural land; and

WHEREAS, ultimate purchase of the Ferro Property by UWCD will benefit the Forebay by: (1) limiting the long-term expansion of groundwater use, (2) limiting water quality degradation associated with the expansion of agricultural activities, and (3) providing a potential for increased groundwater recharge from surface and/or recycled water; and

WHEREAS, UWCD currently holds 10,949 AF of storage credits from the use of State Water Project water to recharge the Forebay and will earn additional storage credits for the importation of State Water in 2007 and 2008; and

WHEREAS, UWCD and Vulcan propose the transfer of 867 acre-feet of historical allocation from Vulcan's wells located on its recycle plant site to the wells located at the Ferro Property for use by UWCD; and

WHEREAS, UWCD proposes as a funding source the delivery of 19,000 AF of supplemental groundwater extracted from the Forebay or transfer of allocation or credits to the City of Oxnard ("City") over a ten-year period. UWCD will receive payment for this supplemental water that can be used by UWCD to pay financial obligations, including purchase of the Ferro Property. UWCD further proposes to avoid the assessment of surcharges on these extractions through the transfer of allocation to the wells located at the Ferro Property and the redemption of storage credits; and

WHEREAS, UWCD's proposal will contribute to the resolution of a unique groundwater issue of concern to both agencies by limiting the long-term expansion of groundwater use, limiting water quality degradation from agricultural activities, and by providing a future potential opportunity to increase recharge into the Forebay;

NOW, THEREFORE, IT IS HEREBY PROCLAIMED AND RESOLVED AS FOLLOWS:

1. The Agency approves the transfer of 867 AF of historical allocation from Vulcan's recycle plant wells to the Ferro Property wells, subject to the conditions and contingencies set forth in this Resolution.

2. UWCD's proposed use of the Good Deed Credit Trust represents a unique, non-precedent setting use of credits to promote a program to improve water quality and water supply conditions in the Forebay. The Agency will approve the redemption of 11,000 AF from the Good Deed Credit Trust, subject to the conditions described below. The Agency will grant this approval at such time as UWCD and/or the City, as lead agency for compliance with the California Environmental Quality Act ("CEQA") approves the sale of groundwater extracted from the Forebay, transfer of credits from the Good Deed Credit Trust Account, or transfer of allocation to the City, any required mitigation and monitoring and, subject to a finding by the Agency that the proposed use will result in "no net detriment" to any basin, sub-basin, or aquifer within the Agency's boundaries. The conclusion of "no net detriment" will be based on the results of the technical analyses described in this Resolution and comply with the terms and conditions herein.

3. Notwithstanding the support granted herein, the Agency and the UWCD acknowledge that: a) the UWCD and/or the City is the lead agency for compliance with CEQA; and b) approval of any future projects that may be proposed for the Ferro Property is subject to compliance with CEQA, and any required mitigation and monitoring. Nothing in this resolution is intended to limit the Agency's rights under CEQA as a responsible agency to participate in the CEQA compliance process for any future projects.

4. UWCD shall obtain Agency staff approval of a monitoring and contingency plan for the proposed pumping under this Resolution. The plan shall be submitted no later than 120 days after adoption of this Resolution. The plan shall include the following items:

- a. Description of the proposed extraction locations and anticipated pumping schedules.
- b. Description of potential impacts that may result from the proposed pumping, particularly during 2010 and 2011.

- c. Analysis of potential impacts, including, but not limited to:
 - i. Quantify the increase in the areal extent and magnitude of the cone of depression in the vicinity of the proposed pumping locations
 - ii. Analysis of the potential change in elevations and groundwater gradient in the Oxnard Pressure Plain Basin as it relates to potential sea water intrusion.
- d. Proposed groundwater monitoring program consisting of water level and water quality monitoring that is designed to detect the potential impacts identified in the plan. The monitoring program shall also be designed to collect data that may be used to assess the calibration of the Ventura Regional Groundwater Model. This may include monitoring at previously unmonitored locations and/or more frequent monitoring at currently monitored locations.
- e. Proposed contingency plan that identifies monitoring triggers and actions that will be taken to address or mitigate potential impacts.
- f. The plan shall be signed by a State of California Licensed Professional Geologist or Engineer.

5. UWCD shall provide to the Agency semi-annual reports during 2010 and 2011 for the reporting periods are January 1 through June 30 and July 1 through December 31. Beginning in 2011, UWCD shall provide an annual report for each year during which pumping under the Program exceeds 1,000 acre-feet. The reports are due 45 days following the reporting period, and shall include the following information:

- a. Summary of groundwater extractions made under the Program during the preceding reporting period;
- b. Summary and analysis of water level and water quality conditions in the Forebay and Oxnard Pressure Plain Basin;
- c. Description of any contingency actions taken during the reporting period;
- d. Estimate of the planned pumping for subsequent reporting periods; and
- e. All data collected during the reporting period, in electronic format.

6. Groundwater shall be extracted from registered UWCD extraction facilities located within the Forebay or the City may use its registered extraction facilities in the "near-Forebay" portion of the Oxnard Pressure Plain Basin to pump groundwater under this program, as identified in the Monitoring and Contingency Plan. UWCD and the City shall submit supplemental information to the Agency with each semiannual statement that identifies the quantity of groundwater pumped from each extraction facility under this Program.

7. Use of the Good Deed Credit Trust Account shall be limited to 11,000 credits for the purposes set forth in this Resolution but do not limit use of the Good Deed Trust Credits for any other approved purpose. Use of historical allocations previously held by Vulcan shall be limited to 8,000 acre-feet. No more than 5,500 AF of groundwater shall be extracted per year under this program, unless approved by the Agency Board.

8. If UWCD elects to transfer any portion of the 11,000 Good Deed Trust Account credits authorized by this resolution to the City, the City must use the Good Deed credits prior to using any other credits.

9. The Good Deed Credit Trust Account and historical allocations previously held by Vulcan shall not be used for any purposes other than to provide water to the City of Oxnard under this Program.

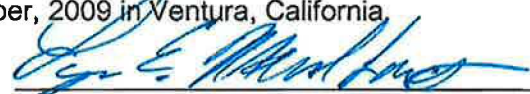
10. The Program shall be completed on or before December 31, 2019 at which time the Agency will retire the 1,464 acre-feet of historical allocation formerly held by Vulcan. Yearly extensions may be granted subject to Agency Board approval.

11. Neither UWCD nor the City shall earn conservation credits against any historical allocations previously held by Vulcan.

12. All conservation credits held by Vulcan, including any that may be earned during the 2009 calendar year are hereby retired by adoption of this resolution upon recordation of the transfer deed for real property from Vulcan to UWCD.

On motion by Director Craven, seconded by Director Bennett, the foregoing resolution was passed and adopted on this 28th day of October, 2009 in Ventura, California.

By:



Lynn Maulhardt, Chair, Board of Directors
Fox Canyon Groundwater Management Agency

ATTEST: I hereby certify that the above is a true and correct copy of Resolution 2009- 07

By:



Miranda Nobriga, Clerk of the Board