

# CALENDAR YEAR 2007 ANNUAL REPORT

## FOX CANYON GROUNDWATER MANAGEMENT AGENCY ANNUAL REPORT FOR CALENDAR YEAR 2007

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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 agency was established by California Assembly Bill AB-2995 in 1982 to preserve and manage groundwater resources for the common benefit of agricultural, municipal, and industrial uses by the public within its territory – an established boundary encompassing lands above the Fox Canyon aquifer. This report summarizes the technical, administrative and groundwater resource management activities of the FCGMA for calendar year 2007, and the financial activities for fiscal years 2006-2007<sup>1</sup> and 2007-2008<sup>2</sup>. The Agency performed many significant actions during calendar year 2007 including:

- The total self-reported groundwater extractions in 2007 were 135,738 acre-feet.
- Set up and approved staggered terms for the City and Farmer Board representatives to avoid a
  potential replacement of the entire Board in any given election year;
- Approved a revised contract for weather station services at a reduced annual cost from prior years and an expanded network of weather collection data locations within the FCGMA boundary;
- Authorized the hiring of an independent law firm experienced in water issues to provide asneeded legal review;
- Initiated the first phase of an Agency-wide water flowmeter calibration program to help ensure more accurate water resource use and preservation;
- Approved an independent financial audit report for fiscal 2005-2006 and 2006-2007 then adopted an expanded Agency budget for fiscal 2007-2008;
- Finalized and adopted a completely revised update to the original 1985 Groundwater Management Plan (GMP), including a formal Resolution (2007-01), and creation of Strategic and Technical Advisory Groups (SAG & TAG) to allow public participation and input to help implement the ambitious strategies needed to improve groundwater quality and quantity;
- Maintained and/or initiated participation in various water-interest stakeholder groups or water planning committees representing local and regional resource goals, and contributed in obtaining a State grant award (to the WCVC) of \$12 million dollars in grant funding for local water improvement projects, and applied for DWR Local Groundwater Assistance Program (LGAP) grant funds in an effort (Resolution 2007-02) to convert well use reporting to an automated meter reading (AMR) system;
- Created cooperative relationships with the USGS GAMA groundwater quality group to help track
  and verify water supplies, the Ventura County Regional Energy Alliance (VCREA) to assist in
  water/energy savings, and supported the joint County-RWQCB effort to decommission septic
  systems in the unincorporated community of El Rio;
- Enacted several Ordinance enforcement actions to curb or control improper groundwater use, and stepped up regulation of activities; and
- Adopted a formal staff Workplan for fiscal 2007-2008, and completed a professional update and revision of the FCGMA website to create a more modern and functional interface.

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<sup>&</sup>lt;sup>1</sup> Fiscal Year 2006-2007 financial activities refers to the time period beginning on July 1, 2006 and ending on June 30, 2007.

<sup>&</sup>lt;sup>2</sup> Fiscal Year 2007-2008 financial activities refers to the time period beginning on July 1, 2007 and ending on June 30, 2008.

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#### 1.0 AGENCY BACKGROUND

#### 1.1 Introduction

The Fox Canyon Groundwater Management Agency (FCGMA) is a public agency responsible for management of groundwater resources in the southwestern portion of Ventura County, California (Figure 1). The FCGMA is classified as an independent State "special district", separate from the County of Ventura or any city government. It was created in 1982 by the California Legislature through 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 serious seawater intrusion beneath the Oxnard Plain. Groundwater resources within the boundary of the FCGMA account for approximately half the water needs for over 700,000 residents in the cities of Ventura, Oxnard, Port Hueneme, Camarillo, and Moorpark, plus the unincorporated communities of Saticoy, El Rio, Somis, Moorpark Home Acres, Nyeland Acres, Leisure Village, Point Mugu 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 2007. Since the Agency's fiscal year is not concurrent with the calendar year or technical reporting year, this report has included a summary of financial activities for two fiscal years. Specifically, it summarizes financial activities beginning on July 1, 2006 and ending on June 30, 2008. Technical data for the first reporting period of 2008 is included where available.

#### 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 mountain ranges in the northern and eastern portion of the County. The topography and geology of the area allow surface runoff 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. Groundwater beneath the Oxnard Plain is contained in several named aquifers that are primarily bounded 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 2007, this water resource supported agricultural products valued at more than \$1.55 billion in Ventura County (Crop Report, 2007), which is up \$41,000,000 from the 2006 figure.

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, ordered 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 Aguifer System (LAS). As a result of continuing overdraft by groundwater users and resulting seawater intrusion into aguifers 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 the 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 was revised and legally re-recorded in 1991 to reflect updated knowledge of the extent of the aguifer 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. 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. A list of the Agency's Board Members for 2007 and the designated FCGMA technical and administrative staff are provided in **Table 1** at the end of this report.

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 cities that partially or totally overlie the FCGMA. These cities include Ventura, Oxnard, Camarillo, Port Hueneme, and Moorpark;

• The seven existing mutual water companies and special districts<sup>3</sup> 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 this member 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 representative from the remaining three representatives by one year to ensure continuity of Agency operations.

The Board normally conducts monthly public meetings with additional public input received through various stakeholder-based committees and advisory groups. In 2007, two new committees were formed to help implement the revised Groundwater Management Plan or GMP. The senior and more policy oriented of these two was designated the Strategic Advisory Group (SAG), and the more scientific set of members were given the Technical Advisory Group (or TAG) designation. An ongoing but periodic Meter Committee made final recommendations associated with implementation of the new FCGMA calibration test requirements emplaced to assure the best possible accuracy of all privately-owned groundwater flow-metering equipment.

In addition to personnel, the technical, financial, and legal needs and services for 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) of Santa Paula, California 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, which include the construction, operation, and maintenance of capital facilities. Many of these facilities such as dams, spreading grounds, pipelines, flood control structures, and water distribution facilities are operated by UWCD and other member agencies both within and outside the FCGMA boundary.

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<sup>&</sup>lt;sup>3</sup> 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.

#### 2.0 GROUNDWATER RESOURCE MANAGEMENT

#### 2.1 Location and Geographic Description of the FCGMA

The FCGMA is located in the southwestern portion of Ventura County in Southern California (see map Figure 1 at the end of this report). At the time of its definition, the boundary of the Agency was defined by "all land overlying the Fox Canyon aquifer" (CWC Ch. 1023, Art. 2), however to account for overlying or adjacent jurisdictions and/or political reasons, not all areas were included per se. The Agency encompasses a northeast-southwest oriented, wedge-shaped area that widens to the west and is bounded to the north by the Santa Clara River and South Mountain; to the east by uplifted Tertiary and Quaternary-age consolidated rocks north and east of the City of Moorpark; to the south by the Bailey Fault and the Santa Monica Mountains; and to the west and southwest by the Pacific Ocean. The eastern portion of the FCGMA bifurcates into two separate lobes east of the City of Camarillo. The northern lobe, which includes the Las Posas Valley, terminates east of the City of Moorpark. The southern lobe, which includes the western portions of Pleasant Valley and Santa Rosa Valley, terminates south of Moorpark. These two valleys widen to the west and merge near the city of Camarillo to encompass the broader Oxnard Plain. 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 is just north of the Santa Clara River at Saticoy, and parallels its course westward all the way to the Pacific Ocean. 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 (Figure 2). 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 solid and dashed lines in Figure 2). The water-bearing sediments that comprise the valley fill and alluvial plains within the FCGMA consist of very deep (up to 40,000 feet) unconsolidated and semi-consolidated sediments that range from Pliocene to Recent (Holocene) time in geologic age (see Figure 3 table and/or Figure 7 map). The named formations from oldest to youngest include the Plio-Pleistocene-age Santa Barbara Formation, the Pleistocene-age San Pedro Formation, and semi-consolidated and unconsolidated sediments of Upper-Pleistocene and Recent (Holocene) ages. 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), and some evidence exists from deep oil well logs that more fresh water may occur beneath the typical known formations.

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 (sometimes 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 (Figures 1 and 2). The Santa Clara River originates in the San Gabriel Mountains several miles east of Ventura 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 man-made structure known as the Freeman Diversion and many rather extensive associated off-stream percolation ponds owned and operated by UWCD. Because of near constant flows from wastewater treatment plants, urban runoff, and periodic releases from Lake Piru, the Santa Clara River is a perennial stream; however, the majority of water flow occurs during runoff periods associated with winter storms. 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 wastewater treatment plants in Simi Valley, Moorpark, Thousand Oaks, and Camarillo. Additional water is contributed to these streams by irrigation return flow and urban runoff. Another diversion facility exists on a tributary to Calleguas Creek known as Conejo Creek. Surface water diverted from this location supplements agricultural groundwater extractions in the Pleasant Valley area south of the City of Camarillo, and 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 reservoirs and retention basins, there are no other major surface water bodies within the FCGMA boundary of any import.

Seven distinct groundwater basins lie wholly or partially within the FCGMA (<u>Figure 2</u>). These include the Arroyo Santa Rosa Basin, the East Las Posas Basin, the West Las Posas Basin, the South Las Posas Basin, the Pleasant Valley Basin, the Oxnard Forebay Basin, and the Oxnard Plain Pressure Basin<sup>4</sup>. Each basin has significant groundwater resources with unique physical and water quality characteristics. The majority of the groundwater extraction occurs in the Oxnard Plain Pressure Basin, which contains a complete set of the six previously identified aquifers. 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 extensively described in other documents.

Named water-bearing strata, or aquifers, occur within these geologic units and are identified on the basis of their composition, stratigraphic location, and lateral continuity. Within the FCGMA boundary, there are six named aquifers, which include, from deepest depth of occurrence to the 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 Canyon, Fox Canyon, and Hueneme Aquifers; and the Upper Aquifer System (UAS), which includes the Mugu and Oxnard Aquifers (Figure 3). 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). A hydrostratigraphic column showing the named geologic units and the corresponding aquifers is presented in Figure 3.

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

<sup>&</sup>lt;sup>4</sup> Historic references have segregated the southeastern portion of the Oxnard Plain into a separate basin identified as the Mugu Forebay Basin. This Basin is shown in Figures 1 and 2 for reference only. This document considers these areas as a single groundwater basin and includes all rainfall, extraction, and credit values from both the Oxnard Plain Pressure Basin and the Mugu Forebay Basin.

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, (Figure 2). Although the general groundwater flow direction in FCGMA aguifers 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. UWCD has demonstrated anomalous groundwater elevations observed at wells screened in the Lower Aguifer System (LAS) of the Oxnard Plain, suggesting a low-permeability feature that subparallels the northeast extension of the Hueneme Canyon Fault (UWCD, 2004). Geologically projecting the Simi-Santa Rosa Fault Zone may account for this subsurface feature and subsequent hydrologic interaction. Groundwater elevations in LAS wells to the southeast of this extension are typically lower than those to the northwest suggesting a fault, fold or other structural feature may restrict underflow from the northwestern part to the southeastern part of the Oxnard Plain. Similar anomalies exist elsewhere within the region, suggesting that geologic structure has a significant impact on groundwater flow. Ultimately, the effects geologic structures have on groundwater flow can only be quantified through detailed hydrostratigraphic analysis, aguifer testing, and other methods. 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 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 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 for direct replenishment actions; to collect fees for overuse of groundwater (surcharges), and to collect management fees needed to sustain agency activities.

Ventura County relies on groundwater as the primary source for its water needs, with lesser amounts derived from surface water, reclaimed water from treatment plants, and water imported from outside the County by pipeline from the California State Water Project. There are three specific allocation methods used by the FCGMA to control the allowed volume of water each operator may extract in a given year. 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 depending on the intended use of the groundwater they extract, the type of operator, the ownership of the extraction facility, the history of land use on a particular land parcel where a well resides, and acreage served by groundwater extracted from a particular well. The allocation methods and their specific rules for qualification and application are detailed in FCGMA Ordinance No. 8.1 (included as **Appendix B** of this report) and include Historical Allocation (HA), Baseline Allocation (BA), and Irrigation Efficiency (IE).

Within the FCGMA, groundwater users have been divided into three general categories: agricultural (AG), municipal and industrial (M & I), and domestic (DOM). The definitions of each type of user or user's facility as specified in Ordinance No. 8.1 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 HA<sup>5</sup> 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 or accumulate groundwater extraction credits in that particular calendar year. Typically, agricultural facilities are responsible for approximately two-thirds (about 65%) of the total groundwater extracted within the Agency during any given calendar year.

- 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 of 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. Typically, M & I facilities are responsible for about one-third (30%) of the total groundwater extracted within the Agency during any given calendar year.
- <u>Domestic User or Domestic Extraction Facility:</u> 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". 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 ownership and/or legally identified operators; well identification and location; groundwater basin location; applicable groundwater allocation methods; self-reported semi-annual extraction data; and, number of available groundwater extraction credits.

As of year-end 2007, the FCGMA had a total of 1,214 known wells within its boundary: 765 wells reported as active; 131 wells listed as inactive; and, 318 wells had been destroyed. On an ongoing basis, FCGMA staff registers new wells permitted by the County of Ventura<sup>6</sup>, and on an occasional basis 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 and 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

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<sup>&</sup>lt;sup>5</sup> Unused HA refers to the difference between the total HA held by a registered facility including any adjustments made by the Agency, minus the actual reported groundwater extraction reported by that facility in a particular year.

<sup>&</sup>lt;sup>6</sup> 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.

reporting periods cover January 1 through June 30 (-01 Period), and July 1 through December 31 of each year (-02 Period). Each SAS summarizes any available allocation, the reported groundwater extraction (in acre-feet) by well, the application of any available credits, and the specific allocation method being used to calculate the permitted groundwater extraction. 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 remits 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 2007, a total of 135,737 acre-feet<sup>7</sup> (AF) of groundwater extraction was reported to the FCGMA; with approximately 59,184 AF extracted for January 1 through June 30 (2007-01), and approximately 76,554 AF extracted for July 1 through December 31 (2007-02) (see extractions as presented in **Table 2** near the end of this report). When compared to the historic range of reported groundwater extraction within the FCGMA, the total annual reported groundwater extraction for 2007 was 113% of the mean reported annual extraction from 1991 through 2005 (120,133 AF) and 103% of the mean reported extraction from 1985 through 2005, (131,881 AF); (see **Table 3** for more details). The annual extraction for 2007 was the 3rd highest annual extraction observed since 1991 (**Table 3**).

For reporting period 2007-01, the reported groundwater extraction of 59,184 AF is 118% of the mean extraction observed for the -01 semi-annual periods from 1991 through 2005, (49,951 AF), and 105% of the mean extraction observed from 1985 through 2005, (56,430 AF) (see <u>Table 3</u>). The reported 2007-01 extraction was the 5<sup>th</sup> highest -01 semi-annual period extraction observed since 1991 (see <u>Table 3</u>).

For reporting period 2007-02, the reported groundwater extraction of 76,554 AF was 109% of the mean for the -02 semi-annual periods from 1991 through 2005, (70,182 AF), and 101% of the mean for the -02 semi-annual periods from 1985 through 2005, (75,451 AF). The reported 2007-02 extraction is the 4<sup>th</sup> highest -02 semi-annual period extraction value observed since 1991 (**Table 3**).

The abnormally low precipitation during 2007 (7.51 inches annual median) may partially explain the higher extraction volumes for the year (**Figure 4**). Significant variations in groundwater extraction (more than 20% variance from the per-period average) have mostly been observed when rainfall varies more than 50% of the average value annual rainfall amount. Since rainfall within the FCGMA for 2007 was only 44.6% of the Agency's lifetime 1983-2007 average, a higher variance in groundwater extraction is to be expected. The higher than normal groundwater extractions during the 2007 reporting year supports the Staff's long-term observations that groundwater extractions in any given calendar year are inversely proportional to rainfall (i.e. lower precipitation results in higher groundwater extractions).

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 2007 vs. 2006. Higher evapotranspiration means more water loss from crops and that leads to more groundwater extractions in an effort to make up for the lost moisture in the plant tissues. Higher volumes of groundwater extraction between 2006 and 2007 are shown in <u>Table 2</u> near the end of this report. Other factors that effect groundwater extraction include meteorological effects (i.e. wind speeds, cloud cover, etc.), availability of surface water, and the delivery of imported water. Additional

 $<sup>^{7}</sup>$  1 acre-foot (AF) equals 325,851 U.S. gallons at Standard Temperature and Pressure (STP).

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 the availability 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 daily<sup>8</sup> location-specific evapotranspiration (ETo)<sup>9</sup> values according to a Modified 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.

The meteorological data collected from the weather stations is used for several purposes. Rainfall and weather station-derived evapotranspiration (ETo) values are used in the calculation of the annual Irrigation Efficiency (or I.E.) Extraction Allocation for agricultural well operators as provided for in FCGMA Ordinance No. 8.1. Weather station data can also be used to estimate the amount of water a farm 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. The amount of allowed water varies by croptype, acreage, and factors like observed rainfall that all equate to the ETo number. Operators who do not meet the associated FCGMA specified irrigation efficiency standards may be subject to financial penalties according to FCGMA Ordinance No. 8.1. 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 ETo generally represents water loss through plant uptake and evaporation.

Data collected at FCGMA weather stations indicated that rainfall for calendar year 2007 (January 1 through December 31) was significantly below the average observed from 1993 through 2007. The annual rainfall observed at each of the stations ranged from a high of 8.66 inches at the Somis station to a low of 6.80 inches at the Moorpark station, with the median of 7.51 inches for the values observed at the five stations (**Table 4**). This median value from the five FCGMA weather stations is only 49% (less than half of normal) of the average annual median rainfall of 15.46 inches observed during the FCGMA timeline between 1993 and 2007.

Data collected at the FCGMA weather stations also indicates that evapotranspiration (ETo) for calendar year 2007 (January 1 through December 31) was above the average observed from 1993 through 2007. Annual ETo observed at each of the stations during 2007 ranged from a high of 46.81 inches at the Moorpark station to a low of 39.09 inches at the Etting Road station with the median of 43.64 inches for the annual total values observed at all five stations (**Table 4**). This value is approximately 108% of

<sup>&</sup>lt;sup>8</sup> 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.

<sup>&</sup>lt;sup>9</sup> 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.

the average annual median value of 53.15 inches observed from 1993 through 2007. The evapotranspiration data was not evaluated on semi-annual basis for this report.

#### 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 created as a reward for non-use of the groundwater resources within the FCGMA. Credits, in the form of groundwater extraction volumes (acre-feet) credit can be used to extract groundwater without the required payment of a surcharge. Since 1998, 10 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. Operators that recharge aquifers within the FCGMA boundary through direct injection, and special cases where water is provided to pre-approved water purveyors can also result in credit accumulation. Credits are granted on an AF basis and are meant to be used in future years to offset overuse of the groundwater resource (i.e., one AF of credit is granted for each one AF of available groundwater not extracted by the end of the calendar year (called a Conservation Credit). In addition, one AF of credit is granted for each one AF of water injected into FCGMA aquifers per calendar year (called an Injection Credit). Conservation and Injection Credits can be traded for imported water, thereby converting into In-Lieu Credits. Credits earned by diverting surface streams for use in direct groundwater replacement are called Supplemental Credits.

For 2007, a net total of 37,252 AF of credits were earned by operators within the Agency (<u>Table 5</u>). This figure is 10,900 AF less than what was earned in 2006. At the end of 2007, an aggregate total of approximately 585,288 AF of unused credits were still held by operators in the FCGMA. This accumulated total is actually almost 37,250 AF more than the total amount of credits available at the end of 2006. Redemption of earned credits to avoid surcharge penalties reflects the additional groundwater extractions that occurred during 2007. <u>Table 5</u> shows the historical growth of accumulated credits since the initiation of the current groundwater resource allocation methodology in 1991. 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 a significant number of credits could be used in a short period of time overstressing the groundwater resource. Thus, although the credit system represents a low-cost groundwater-use option that can assist *individual* operators during extended dry periods, it also represents a potential threat to the regional groundwater resource.

The effect of any large-scale use credits would be significant. For example, even a modest 5% use of the total amount of credits currently available could easily result in a nearly 26,930 AF increase in extraction in any given year. Given the mean annual groundwater extraction observed from 2000 through 2007 (approximately 118,500 AF), this additional 26,930 AF extraction based on credit usage would represent a net 22.7% 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 recently approved Groundwater Management Plan is to assist the 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.

<sup>10</sup> Prior to 1998, operators were required to request credits from the FCGMA Board. The policy change resulted with the passage of FCGMA Ordinance 5.7 in 1998.

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<sup>&</sup>lt;sup>11</sup> Credits are granted per acre-foot or part thereof to a resolution of 0.001 acre-feet.

#### <u>2.3.4</u> Extractions and Credits by Groundwater Basins within the Agency

FCGMA data indicates the Oxnard Plain Pressure Basin had the greatest amount of extraction, net positive credits earned in 2007, and total accumulated credits through the end of calendar year 2007 (**Table 6**). The extractions in this basin accounted for approximately 39% of total Agency extractions and 69.7% of the net credits earned in 2007. 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. As a group, the extraction in these four basins account for 58% of the extraction and 29.2% of the net credits earned in 2007. Individually, these four basins reported similar extraction values ranging from 10% (PV) to 23% (Forebay) of the total Agency extraction. The range of net credits earned is somewhat wider and ranges from 2.3% to 10.5% of the Agency total for 2007. The South Las Posas Basin and Arroyo Santa Rosa Basin accounted for approximately 3% of the total extraction and about 1.1% of the net credits earned 2007.

#### 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 by pipeline from 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 agencywide use of groundwater by volume extracted for each type of operator. Within the FCGMA, groundwater users have been divided into three general categories: agricultural, municipal and industrial (M&I). Domestic wells are considered part of the M&I grouping in most cases.

FCGMA 2007 data indicates there were 587 wells registered as agricultural facilities, 194 wells registered by M&I users, and 104 wells listed as domestic users. For 2007, agricultural operators collectively reported 88,656 AF of extractions, which represents approximately 65% of the total reported groundwater extractions. M & I operators reported 46,316 AF of extractions or approximately 34% of the total groundwater extraction. The estimated extraction by domestic operators was approximately 766 AF or 0.6% of the total groundwater extractions for the year. Domestic well owners are not required to use flowmeters to report groundwater extraction; however, their total annual extractions are not believed to be a significant percentage. 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 period when estimates of groundwater consumption are required.

The FCGMA extraction data can also be used to reflect groundwater use in each basin (<u>Table 7</u>). The basins have been divided into three classifications based on groundwater use during 2007. These primary classifications are described as follows:

• Agricultural-Use Basins: The 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 extraction in these four basins accounted for approximately 28.3% of the total Agency extraction (all use types), 24.0% of the total Agency agricultural extractions, 4.2% of the total Agency M&I extractions, and less than 1% of the total Agency domestic extractions in 2007.

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<sup>&</sup>lt;sup>12</sup> Per dwelling water use estimates are based on four people residing within each single-family residence

- Mixed-Use Basins: The mixed-use basins include the Oxnard Plain Basin and the Pleasant Valley Basin. These 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 accounted for 48.8% of the total Agency extractions (all use types), 36.1% of the total Agency agricultural extractions, 12.2% of the total Agency M&I extractions, and 0.5% of the total Agency domestic extractions for 2007. 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 does account for 8% of the total Agency extractions (i.e., all use types) and over 36% of the total Agency M & I extractions.
- 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 2007, Forebay M&I extractions were more than twice that of agricultural extractions. This basin accounted for approximately 23% of the total estimated Agency groundwater extractions in 2007 (from all uses), 5.2% of the total Agency agricultural extractions, 17.7% 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 2007

#### 3.1 Significant Administrative Actions

#### 3.1.1 Adopted Resolutions

The FCGMA Board of Directors formally adopted only two Resolutions during calendar year 2007 (**Appendix A**) as follows:

- Resolution No. 2007-01: Formally adopted and enacted the revised or updated FCGMA Groundwater Management Plan (GMP).
- Resolution No. 2007-02: Authorized an Agency application for, and acceptance of, potential grant funds from the California Department of Water Resources (DWR) Local Groundwater Assistance Program (LGAP).<sup>13</sup>

Copies of the FCGMA Resolutions approved during 2007 are provided for reference in Appendix A.

Although this FCGMA grant application initially scored too low for qualification of funds, the State later decided to revise their criteria, and the FCGMA was informally notified in December 2008 that more than \$250,000 in grant funds would be awarded in mid 2009.

#### 3.1.2 Staggered Terms for FCGMA Board Members

To avoid possible replacement of the entire Board during any given election cycle, the Farmer and City position appointment schedules were offset in 2007 from odd to even-numbered years. This was accomplished by having the two selected Board Members serve a one-year term followed by the normal 2-year term, thus leaving the other three Board seats intact with two-year duration odd-numbered year turnover dates.

#### 3.1.3 Flowmeter Calibration Program Initiated

Begun formally back in late 2005, the idea of instituting a water flowmeter calibration program was finally set into motion during the first quarter of 2007. Based on approved guidelines, Ordinance changes (Chapter 3.0 – Installation and Use of Metering Equipment), and a specific Resolution (No. 2006-01) to help ensure more accurate water resource use and preservation, the first mailing of 220 letters was sent to well operators in April 2007. Meter calibration notices provided 120 days to either get a meter tested by an approved technician, or to have the old meter replaced with a new meter. Because this was a new program, second notices granting an additional 60 days were mailed after the initial period had expired to those well operators who had not complied. Although compliance was not as high as hoped for, data indicate many meters were out of calibration (defined as +/- 5%).

#### 3.1.4 Strategic and Technical Advisory Groups (SAG & TAG)

Adoption of an update to the Groundwater Management Plan (GMP) led to creation of specialized SAG and TAG committees. 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 details of each specific strategy listed in the GMP. Completed TAG projects then are referred to the SAG members 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

Some notable staff changes occurred during 2007, including the following:

- The partial reassignment and training of VCWPD Administrative Assistant Cheryl Serr (replacing former Deputy Clerk of the Board Kathy Miller) as backup for FCGMA Board Clerk Tammy Butterworth.
- Alternate Board Member David Schwabauer replaced Mike Conroy in the Farmer position.
- Water District representative Board member Al Fox (from Camrosa Water District) announced his retirement and was replaced by Dr. Michael Kelley (from Zone Mutual).
- Staff Geologist Chris Laber left the FCGMA and moved to the private sector.
- County Groundwater Manager David Panaro was returned to the Staff Geologist position.
- Recruitment for a new permanent Groundwater Manager was initiated by the County, while Deputy Director Hubner filled in as interim manager.

#### 3.3 Project Reviews Performed during 2007

In 2007, the Groundwater Section of the Ventura County Watershed Protection District performed approximately 182 reviews of proposed development projects as part of the County Planning Division's implementation of the General Plan and Zoning Ordinance. Of these projects, 44 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 effect 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 Facilities

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 2007, a total of 237 well permits were issued and of that number, 43 permits were within the FCGMA. Of those 43 permits, 13 new wells were installed and 28 wells were destroyed within the Agency boundary. This increase from 10 new wells and 16 destructions during calendar year 2006 can be partially attributed to an ongoing drought for the new well increase, and increased enforcement regarding abandoned wells by both the County and FCGMA for the increase in destructions.

#### 3.5 Other Administrative Activities Performed in 2007

The FCGMA performed a number of other administrative activities during 2007. These included the following:

- Contributed funding and staff time toward implementation of the Integrated Regional Watershed Management Plan (currently identified as the Watershed Coalition of Ventura County or WCVC) by attending meetings, helping to develop specific projects that needed water improvement funding, and by providing maps, charts, graphs, and various bits of groundwater data, geologic information, or pumping volumes.
- Assisted with groundwater quality improvements in response to high nitrate levels caused by septic systems in the Oxnard Forebay Basin primarily within the unincorporated community of El Rio and northern portion of the City of Oxnard by monitoring vicinity groundwater quality, helping pay for and conduct resident surveys to determine income, ability of landowners to pay a portion of the conversion to sewers, and by working with the County Water and Sanitation Department to develop long-term monitoring in response to grant effectiveness and reporting requirements.
- Negotiated a final settlement with Thornhill Mutual Water Company regarding violations of the FCGMA Ordinance Code which resulted in a series of annual payments to the Agency, limits on agricultural plantings, and restrictions on further use of their new well;

• Initiated enforcement actions to gain more operator compliance with Ordinance 8.1.

#### 3.6 Progress of Groundwater Metering Program

FCGMA Ordinance No. 8.1 requires the use of flowmeters for all extraction facilities except backup or standby 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 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 and make meaningful recommendations to the Board regarding its use. Fourth, it is the most effective way to link extraction data to management fees.

The status of wells using meters or reporting groundwater extractions using recognized methods is summarized in <u>Table 9</u>. This data indicates approximately 932 or 92% of the 1,010 known active or inactive wells report extraction data using water flowmeters, electrical power meters, or via what is called the consumptive-use method used to estimate annual domestic water use volumes (per-capita water and sewer use figures from water suppliers, along with independent or university studies are typically applied to get average home water demand or "consumptive-use"). The remaining 78 wells or approximately 8% of the total possible wells have not reported their meter type to the FCGMA, do not use metered measurements, or do not use consumptive use methods to report extraction. In order to increase the effectiveness of the metering program, the FCGMA took the following actions in 2007:

- Initiated the first of three intended group mailings to well owners/operators (in Zone 1) containing notification that calibration tests were required within a specified 120-day time period beginning in April 2007;
- Sent out a 60-day extension to those well owners/operators who failed to comply with the first notification (second notices went out in October 2007); and
- Began compiling and processing detailed well meter information into the larger FCGMA database. Every test was verified as being within the allowable tolerance range of plus or minus 5-percent accuracy, and if not, meter repair is required, followed by retesting. In addition, data fields common to the VCWPD and FCGMA databases were added during the meter calibration data entry process to further better communication between the two agencies. Commonalities between electronic data should lead to better data set resolution.

#### 3.7 FCGMA Groundwater Management Plan

Upon its 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 was to develop new groundwater strategies or to amend previously-existing strategies with more recent data and a more rigorous groundwater flow model (modeling was done by humans and hand calculations back in the late 1980's) to better assist the Agency with 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 made available to the public for review and comment. Over the proceeding six months, the FCGMA held three public workshops to receive and address public comments, perform and present supplemental modeling efforts, review updates and revisions to the Plan, and incorporate new or revised groundwater management strategies. The final working draft was made available to the public in February 2007 and presented to the Board at a special meeting on March 9, 2007. At that time, staff received final Board and public comments and presented a proposed implementation approach for some of the groundwater management strategies. The 2007 Update to the FCGMA Groundwater Management Plan 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 faced by 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);
- Estimate of groundwater yield from basins within the FCGMA;
- 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;
- 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 effort (Ventura Regional Groundwater Model [VRGM]), and a proposed management plan for the East Las Posas Basin.

The Plan identifies a series of short-term and long-term groundwater management projects and strategies, which are designed to address the current imbalance between supply and demand.

#### 3.8 Integrated Regional Water Management Plan

The Agency's effort to update its GMP coincided with preparation of the Integrated Regional Water Management Plan (IRWMP) for the Ventura County Region. The IRWMP is a comprehensive water management plan that integrates project planning and implementation, and facilitates regional cooperation with the goals of improving water supply reliability, water recycling, water conservation, recreation and access, flood control, wetlands enhancement and creation, and environmental habitat protection. In 2006, the Watersheds Coalition of Ventura County (WCVC) was formed to oversee development and implementation of the IRWMP, and its completion is the result of a collaborative effort by many public water and non-water agencies and several private organizations. Funding for the development of the IRWMP came from local agency contributions, including approximately \$7,000 from the FCGMA, and a \$220,000 State Proposition 50 Planning Grant awarded to the County in 2006 by the California Department of Water Resources (DWR). Essentially, the IRWMP is a larger version of the FCGMA's GMP, but it covers the entire County and not just the lands within the FCGMA boundary.

The Ventura County Board of Supervisors and the FCGMA adopted the IRWMP in December 2006. By the end of December 2006, the FCGMA and 32 other local public and private organizations had also adopted this plan, which was included as part of a Proposal and Solicitation package submitted to the California Department of Water Resources (DWR) for implementation grant funding under State Proposition 50.

In January 2007, the WCVC was informed that it had successfully secured \$25 million in project implementation funding. The IRWMP provides guidance and prioritization of projects eligible for funding under Proposition 50, Chapter 8 funding and other sources such as Proposition 84. Although the FCGMA does not have any specific projects involved in the IRWMP funding process, it supports their efforts since parts of what they are accomplishing will assist the FCGMA in its basic GMP goals and also our overall chartered mandates of countering seawater intrusion, bring the groundwater basins into a safe-yield mode, and preserving or improving water quality.

#### 4.0 FINANCIAL STATUS OF THE AGENCY FOR 2007

The FCGMA's fiscal year begins July 1<sup>st</sup> and ends on June 30<sup>th</sup> of the next calendar year. Fiscal administration and oversight of the Agency's financial transactions is performed by Agency management in consultation with the Fiscal Services Section of the 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 budget comparisons to actual performance reports are presented to the FCGMA Board of Directors for their information, review, and where necessary, adjustments. Quarterly summaries of the Agency's financial transactions for FY 2006-2007 were provided to the Board of Directors during the following regular meetings: 1<sup>st</sup> Quarter on December 6, 2006, Mid-Year on March 28, 2007, 3<sup>rd</sup> Quarter on May 23, 2007 and Year End Actuals on October 24, 2007 respectively. Similarly, for FY 2007-08, quarterly summaries of the Agency's financial transactions were provided to the Board of Directors during the following regular meetings: 1<sup>st</sup> Quarter on December 5, 2007, Mid-Year on February 28, 2008, 3<sup>rd</sup> Quarter on April 23, 2008 and Year End Actuals on September 24, 2008.

This report summarizes the Agency's financial transactions for the last two fiscal years. Specifically, it covers the financial status of the Agency for the fiscal period beginning July 1, 2006 and ending June 30, 2007 (FY 2006-2007) and the period beginning July 1, 2007, and ending June 30, 2008 (FY 2007-2008). The financial transaction figures from the Fiscal Year 2007-08 reporting period contained in this report reflect *unaudited* information. Accordingly, Fiscal Year 2007-08 figures will be subject to potential accounting adjustments resulting from a regular final audit to be conducted by an independent Certified Public Accounting firm under future contract with the Agency.

<u>Table 10</u> provides a summary of the financial status of the Agency at the end of FY 2006-2007 and FY 2007-2008. Revenues for both FY 2006-2007 and FY 2007-2008 were generated through the payment of pump charges (i.e. charges for extraction of groundwater from wells within the FCGMA boundary), surcharges, and/or late payment penalties for extraction of groundwater beyond the FCGMA-established allocation (where applicable), and interest earnings. Expenditures are also summarized in <u>Table 10</u> and included, but were not limited to, Public Works Agency Charges (salaries and benefits) insurance, operational expenses, contracted weather station and database services, computers and field equipment, professional audit, and legal counsel fees.

#### 4.1 Financial Status

The FCGMA began FY 2006-2007 with a fund balance of \$449,419 available for funding Agency expenditures. During Fiscal Year 2006-07 the Agency experienced:

- Receipt of \$649,805 in operating revenues obtained through payment of pump charges, surcharges, and interest earnings. This operating revenue, combined with the \$449,419 yearend fund balance carried forward from fiscal year 2005-2006, provided a total of \$1,099,224 in total funding resources available for financing Fiscal Year 2006-07 expenses; and
- Incurred expenses totaling \$545,498 during Fiscal Year 2006-2007.

After deducting total expenses incurred from available funding resources, the resultant year-end fund balance on June 30, 2007 was \$553,727. This figure was \$144,711, or approximately 32%, greater than the initial projected year-end target figure of \$409,016 contained in the Fiscal Year 2006-07 adopted budget.

A total of \$447,447 or 78% of the \$553,727 Fiscal Year 2006-07 year-end fund balance figure was available for subsequent year financing purposes. The remaining \$106,280 reflected the set-aside amount in the Groundwater Extraction Management Enforcement Surcharge (GEMES) Litigation Fund reserve as of June 30, 2007.

The FCGMA began FY 2007-2008 with a fund balance of \$553,727. During Fiscal Year 2007-08, the Agency experienced:

- Receipt of \$1,035,052 in operating revenues obtained through payment of pump charges, surcharges, and interest earnings. This operating revenue, combined with the \$553,727 in year-end fund balance carried forward from fiscal year 2006-2007, provided a total of \$1,588,779 in total funding resources available for financing Fiscal Year 2007-08 expenses; and
- Incurred expenses totaling \$508,765 during fiscal year 2007-2008.

After deducting total expenses incurred from available funding resources, the resultant year-end fund balance on June 30, 2008 was \$1,080,014. This figure was \$445,937, or approximately 70% greater than the initial projected year-end target figure of \$634,077 contained in the Fiscal Year 2007-08 adopted budget.

A total of \$543,755 or 50% of the \$1,080,014 Fiscal Year 2007-08 year-end fund balance figure was available for subsequent year financing purposes. The remaining \$536,259 included \$376,259 in the GEMES Fund Litigation Reserve, plus an additional \$160,000 from two years (2007-08 and 2008-09) of \$80,000 annual payments to the Agency pursuant to the Thornhill-Miller Settlement Agreement.

#### 4.2 Status of GEMES Funds

#### 4.2.1 Background of the GEMES Fund:

Beginning in 2004, the Agency identified a growing trend of increased groundwater extractions from wells located within its boundary to parcels outside of that boundary. Unless pre-existing and approved through a grandfather allowance, groundwater exports are in violation of the FCGMA Ordinance and, if left unchecked, could have a significant likelihood of permanently impairing groundwater resources.

The FCGMA Board of Directors maintained that such an adverse consequence was not an acceptable policy option for the Agency. Agency staff estimated the time, efforts, and expenses needed to develop effective ordinance enforcement compliance were beyond the Agency's current fiscal resources. It was soon decided an additional and separate fund would be needed to cover anticipated legal and enforcement fees. At their April 26, 2006 regular meeting, the Board adopted Resolution No. 2006-02, establishing the Groundwater Extraction Management Enforcement Surcharge (GEMES).

This GEMES surcharge increased the Agency's groundwater extraction charges by \$2.00 per acre-foot on all groundwater extractions within the Agency's boundary.

Resolution No. 2006-02 specified that revenues derived from the GEMES would be used solely to fund Board-approved groundwater extraction management enforcement activities above and beyond the normal operating costs of the Agency. Through the adoption of Resolution No. 2006-04, the Board further specified and restricted the uses of GEMES funds as follows:

Agency expenditures that may be eligible for GEMES funding may include, but are not limited to:

- a. Agency staff time directly attributable to enforcement activities.
- b. Specialized engineering and technical studies or surveys required in support of enforcement activities.
- c. Legal fees (both Agency Counsel and outside specialized counsel costs) required in support of enforcement activities.
- d. Enforcement activity costs, including litigation or court fees.

#### 4.2.2 GEMES Fund Accounting and Current Status:

The GEMES fee was first collected for groundwater extractions that occurred on or after July 1, 2006. In accordance with FCGMA Resolution No. 2006-02, the GEMES charges were set to "Sunset" automatically on July 1, 2009, and were to be applied only to groundwater extracted through June 30, 2009.

The GEMES fee was billed and collected in the same manner as the Agency's existing groundwater extraction charges. At the time of implementation, Agency staff estimated that the GEMES surcharge would generate approximately \$210,000 each fiscal year, with an estimated total of about \$450,000 collected by June 30, 2009.

During their February 28, 2008 regular meeting, the Board adopted a REVISED Resolution 2008-02, which terminated the GEMES Fund effective December 31, 2007. Further, since the Board felt that a sufficient fund balance had been gathered in the fund by that date, it "capped" the amount that should be reserved in the GEMES fund at the \$200,000 limit, plus earned interest.

Despite termination, the Board agreed that the obligation to pay all amounts due under the GEMES Fund through December 31, 2007 should remain in effect until all fees due were collected. Subsequent to receipt of all payments from the 2007-02 Semi-Annual Statement (SAS) billing period, the Board directed Agency staff to return with options regarding the disposition of amounts then in the GEMES Fund above the \$200,000 cap established by the Board.

During the May 28, 2008 regular meeting, based on the above policy actions, and forensic confirmation of a "net" total of \$375,178 in the GEMES Fund as of March 30, 2008, (i.e. \$405,363 actually collected LESS \$30,185 in extraordinary expense payments authorized by the Board) Agency staff presented the Board of Directors with the following options regarding disposition of the \$175,178 excess in the GEMES Fund above the \$200,000 cap:

1. Proportional cash refunds to all pumpers who paid the GEMES fee.

- 2. Proportional cash credits applied towards their next pump charge payment (SAS 2008-01).
- 3. Retention of this \$175,178 "overage" amount to fund specific groundwater extraction management enforcement actions authorized by the Board.

Subsequent to considering the Agency staff's report, and hearing comments from Agency stakeholders, the Board of Directors voted to direct Agency staff to implement Option No. 2 above. Accordingly, a \$175,178 credit refund was applied against the amount of groundwater extraction charges due by well owners who had paid these special fees in their previous payment submittals.

#### 4.3 Financial Audits

In accordance with California Government Code Section 26909, the FCGMA submits financial records to an independent contract auditor on a biennial basis. The FCGMA is considered a special purpose government, engaged in the management of groundwater extracted within its boundary, and operates on a cash-accounting basis.

Pursuant to applicable provisions of the Governmental Accounting Standards Board Statement 34 (GASB 34), Agency management provides financial statements in an enterprise format to the auditors who perform standard audit verification assurances that the statements are free of material misstatements. The financial audit completed during 2007 reflected financial transaction information for fiscal years 2004-2005 (ending June 30, 2005) and 2005-2006 (ending June 30, 2006). The firm of Lutz, Law and Erlbaum, CPA, of Camarillo, California, performed the analysis of the Agency's statement of financial transactions for the above reporting periods.

The next independent fiscal audit will be conducted during calendar year 2009, and will cover both the 2006-2007 and 2007-2008 fiscal year periods. Rivera and Company, Certified Public Accountants, was chosen by the County Auditor-Controller's Office to perform an independent audit of the Agency's financial statements as of June 30, 2007 and 2008, and the related statements of revenues, expenses and changes in net assets and cash flows for the years then ended. Work on this 2006-07 and 2007-08 audit is currently nearing completion and it is expected that the results of the biennial audit for the above two fiscal years will be presented to the Board of Directors for their receipt and filing during the February 25, 2009 regular meeting.

#### 5.0 PLANNED ACTIVITIES FOR 2008

The FCGMA set multiple goals for 2008, several were initiated in 2007. In addition to previously mentioned projects or activities that may carry-over to the next near, the long-term administrative tasks of managing, recording, and reporting groundwater extractions will continue. Priority goals for 2008 include the following:

- Implementation of specific long-term strategies to better manage FCGMA aquifers;
- Examination of the Irrigation Efficiency (I.E.) Extraction Allocation parameters;
- Further development and completion of the first meter-calibration program effort;
- Increase enforcement activities to better administer provisions of Ordinance No. 8.1;
- Maintain budget performance levels;
- Improve cooperation with sister agencies (VCREA, WCVC, AWA, UWCD, etc.) for better resource management and conservation.
- Evaluation of the Extraction and Conservation Credit Program.

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#### **TABLES**

#### TABLE 1 SUMMARY OF FCGMA PERSONNEL FOR CALENDAR YEAR 2007

NAMES	AFFILIATION	CONTACT NUMBER			
DIRECTORS 1					
Lynn Maulhardt (Chair)	Representing the United Water Conservation District	(805) 485-5728			
David Borchard	Representing the Farming Interests	(805) 485-3525			
Charlotte Craven (Vice Chair)	Representing the Five Cities within the Agency	(805) 482-4730			
John Flynn	Representing the Ventura County Board of Supervisors	(805) 487-6331			
Dr. Michael Kelley	Representing the Small Water Districts within the Agency	(805) 890-6095			
ALTERNATE DIRECTORS 1					
Steve Bennett	Ventura County Board of Supervisors	(805) 654-2703			
David Schwabauer	Farmers	(805) 388-2727			
Sam McIntyre	Small Water Districts	(805) 484-1779			
Daniel Naumann	United Water Conservation District	(805) 488-1424			
Murray Rosenbluth	Cities	(805) 985-7588			
STAFF					
Alberto Boada	Agency Legal Counsel	(805) 654-2578			
Tammy Butterworth	Agency Clerk of the Board	(805) 654-2002			
Gerhardt Hubner, P. G. <sup>2</sup>	Deputy Director, WPD, Water & Environmental Resources	(805) 654-5051			
Gerard Kapuscik	Special Projects Program Manager	(805) 648-9284			
Christian Laber, P.G.	Agency Staff Geologist	(805) 650-4083			
Sheila Lopez	Agency Engineering Technician	(805) 645-1372			
Kathy Miller <sup>3</sup>	Agency Deputy Clerk of the Board	(805) 654-2088			
David Panaro, P.G.	Manager, WPD, Water Resources Division	(805) 654-2327			
Jeff Pratt, P.E.	Agency Executive Officer	(805) 654-2040			

#### Notes:

- 1. Table lists active Board Members and Alternate Board Members at the end of 2007. The current two-year term of office for the Farmer and City Board Members and Alternates were offset in 2007 from odd to even-numbered years.
- 2. Gerhardt Hubner was not attached to FCGMA tasks until last quarter of year 2007.
- 3. Kathy Miller served as Deputy Clerk of the Board: January April 2007.

## TABLE 2 SUMMARY OF REPORTED GROUNDWATER EXTRACTION WITHIN THE FCGMA SINCE 1983

Calendar Year	-01 Period [in AFY] <sup>1,2,3</sup>	-02 Period [in AFY] <sup>1,2,3</sup>	Annual [in AFY] <sup>1,2,3</sup>	Amount of Reduced Historical Allocation per FCGMA Ordinance <sup>4</sup>
2007	59,183.960	76,553.596	135,737.556	15%
2006	43,119.274	68,784.384	111,903.658	15%
2005	41,716.031	64,902.243	106,618.274	15%
2004	58,882.867	70,350.707	129,233.575	15%
2003	45,975.123	69,050.331	115,025.454	15%
2002	60,247.020	71,491.375	131,738.395	15%
2001	43,802.842	58,455.525	102,258.367	15%
2000	48,209.938	75,112.593	123,322.532	15%
1999	49,657.594	81,092.536	130,750.130	10%
1998	37,287.729	68,508.523	105,796.252	10%
1997	63,312.804	70,012.886	133,325.690	10%
1996	45,911.758	57,628.106	103,539.864	10%
1995	42,022.732	61,732.585	103,755.317	10%
1994	60,433.397	77,708.809	138,142.206	5%
1993	45,576.099	73,234.733	118,810.832	5%
1992	44,587.924	70,634.614	115,222.538	5%
1991	61,637.338	82,811.625	144,448.963	0%
1990	79,074.061	99,262.177	178,336.238	0%
1989	78,300.327	100,250.311	178,550.638	NA
1988	73,100.775	87,907.534	161,008.309	NA
1987	82,681.249	82,585.087	165,266.336	NA
1986	57,583.663	84,136.050	141,719.713	NA
1985	78,338.718	84,279.825	162,618.543	NA
1984	36,376.903	35,506.032	71,882.935	NA
1983	284.820	28,984.417	29,269.237	NA

#### 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 CURRENT YEAR (2007)
TO HISTORIC GROUNDWATER EXTRACTION IN THE FCGMA

	Extraction for -01 Periods (AF/Period) <sup>2</sup>	Extraction for -02 Periods (AF/Period) <sup>2</sup>	Annual Extraction (AF/Year) <sup>2</sup>
Current Year (2007)	59,183.960	76,553.596	135,737.556
Managed Extraction Mean <sup>3</sup> (1991 - 2005)	49,950.746	70,181.813	120,132.559
Comparison of Current Year (2007) to Managed Extraction Mean <sup>3</sup> (reported as %)	118%	109%	113%
Rank of Current Year Extraction to Annual Extraction <sup>4</sup> (1991-2005)	5	4	3
Long Term Mean <sup>5</sup> (1985 - 2005)	56,430	75,451	131,881
Comparison of Current Year (2007) to Long Term Mean <sup>5</sup> (reported as %)	105%	101%	103%

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

- 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. Reporting Periods are: (-01) Jan. 1 June 30; (-02) July1 Dec. 31 of each Calendar Year.
- 3. **Managed Extraction Mean** refers to mean average of the reported Agency-wide groundwater extraction per period or year from 1991 through 2005. Groundwater extraction management program (i.e. groundwater management extraction based on an allocation basis) was initated 1991. Analysis compares current year to historical period of managed groundwater extraction.
- 4. Rank (from highest to lowest) of the current year's reported annual extraction to the annual extraction reported from 1991-2005; For this analysis the highest extaction value for the time period is 1.
- 5. **Long Term Mean** refers to mean Agency-wide groundwater extraction per period or year from 1985 through 2005. Groundwater extraction data for 1983-1 through 1984-2 determined to be incomplete and not included in this analysis.

TABLE 4
SUMMARY OF RAINFALL AND EVAPORATION OBSERVED AT FCGMA WEATHER STATIONS (1993 - 2007)

	ANNUAL RAINFALL (in inches)															
Station	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Mean Annual Station Values 1993-2007
Camarillo	23.68	7.41	19.26	21.76	14.13	22.36	5.85	10.68	15.94	5.47	11.92	13.68	21.78	13.26	Discontinued	14.92
Camarillo Airport	22.98	10.97	25.70	15.76	11.98	28.51	5.59	11.46	15.00	7.53	11.62	12.88	16.31	11.33	6.81	14.30
Etting_Rd	19.98	11.36	25.48	17.57	12.28	ND	ND	ND	ND	8.25	13.21	15.50	21.59	11.59	7.38	14.93
Moorpark	21.67	10.29	23.00	19.34	15.74	33.03	7.50	10.92	15.90	6.75	9.74	16.89	30.92	13.22	6.80	16.11
Saticoy	23.95	13.74	26.92	21.34	13.46	31.01	7.22	12.13	23.50	8.47	14.62	14.46	23.06	9.09	7.90	16.72
Somis	21.78	9.68	24.20	19.61	10.32	29.92	7.39	12.08	20.03	9.84	11.92	20.26	33.52	17.14	8.66	17.09
Annual Maximum	23.95	13.74	26.92	21.76	15.74	33.03	7.50	12.13	23.50	9.84	14.62	20.26	33.52	17.14	7.90	18.77
Annual Median	22.38	10.63	24.84	19.48	12.87	29.92	7.22	11.46	15.94	7.89	11.92	14.98	22.42	12.41	7.51	15.46
Annual Minimum	19.98	7.41	19.26	15.76	10.32	22.36	5.59	10.68	15.00	5.47	9.74	12.88	16.31	9.09	6.80	12.44

	ANNUAL EVAPOTRANSPIRATION (in inches)															
Station	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Mean Annual Station Values 1993-2007
Camarillo	57.49	54.95	52.86	54.22	53.28	54.14	65.96	58.22	55.7	59.97	49.23	50.79	46.86	44.92	Discontinued	54.19
Camarillo Airport	55.22	48.02	51.46	54.08	53.89	54.86	66.96	66.91	62.36	67.01	48.56	49.08	42.24	41.60	43.79	53.74
Etting_Rd	42.53	36.41	ND	45.76	43.44	ND	ND	ND	ND	52.5	39.72	48.33	41.96	39.80	39.09	42.95
Moorpark	51.49	49.09	50.58	53.60	56.68	50.14	58.79	55.31	63.92	65.75	50.27	51.49	45.66	43.97	46.81	52.90
Saticoy	54.65	52.31	57.86	56.52	52.78	56.4	65.94	64.32	59.58	64.54	47.35	55.70	44.88	43.20	42.68	54.58
Somis	52.46	51.08	49.18	52.64	52.70	57.31	62.75	60.22	54.89	61.47	49.67	52.26	44.21	43.82	45.83	52.70
Annual Maximum	57.49	54.95	57.86	56.52	56.68	57.31	66.96	66.91	63.92	67.01	50.27	55.7	46.86	44.92	46.81	56.68
Annual Median	53.56	50.09	51.46	53.84	53.03	54.86	65.94	60.22	59.58	63.01	48.90	51.14	44.55	43.51	43.64	53.15
Annual Minimum	42.53	36.41	49.18	45.76	43.44	50.14	58.79	55.31	54.89	52.5	39.72	48.33	41.96	39.80	39.09	46.52

ND - No data available.

- 1. Annual summary values are a compilation of observed or supplemental data for a particular year. For each station, annual values represent the sum of daily observed data or supplemental data for each year.
- 2. Historically, each station had missing data each year, typically amounting to 5-10 days on average. Data gaps were replaced with supplemental data (See Notes #3-4). Equipment malfunctions or breakdown was cause for missing data in most cases.
- 3. **Supplemental Data:** Data derived from geographically nearest FCGMA weather station or calculated from multiple nearby FCGMA stations to replace lack of observed data. In the case of 1 nearby station, supplemental data replaces "no data" at FCGMA station. In the case of multiple nearby stations, a median of multiple station observations is used unless two of those observation values are zero. In that case, the highest value is used.
- 4. Supplemental Data Process: Where practical, missing data from FCGMA weather stations was replaced with data from geographically closest VCWPD weather stations including 17C, 17B, 223A, 177, 49A, 141, 190, 259, 261, and 263.
- 5. Etting Road station not in operation 1998-2001. Rain data from 9/28/1997- 12/31/1997 derived from median of VCWPD weather stations (17C, 223A, and 177).
- 6. No supplemental data used for Etting Road 1998-2001 since no original data exists. For these years, Agency Annual Median, Annual Maximum, and Annual Minimum represent summaries of data from five other stations with observed data.

TABLE 5
SUMMARY OF GROUNDWATER EXTRACTION CREDITS
ACCUMULATED IN THE FCGMA SINCE 1990<sup>1</sup>

Year	Net Annual Credits Granted/Earned <sup>2</sup> (AF)	Agency Aggregate Total Positive Credit Balance <sup>3</sup> (+ AF)
2007	37,251.679	585,288.457
2006	48,165.561	548,036.778
2005	53,828.887	499,871.217
2004	39,892.891	446,042.330
2003	44,763.244	406,149.439
2002	40,396.206	361,386.195
2001	49,355.372	320,989.989
2000	39,132.304	271,634.617
1999	39,177.999	232,502.313
1998	27,631.673	193,324.314
1997	15,464.384	165,692.641
1996	29,902.543	150,228.257
1995	22,035.727	120,325.714
1994	17,282.942	98,289.987
1993	30,592.751	81,007.045
1992	29,069.656	50,414.294
1991	19,865.970	21,344.638
1990	1,478.668	1,478.668
1989	0.000	0.000
1988	0.000	0.000
1987	0.000	0.000
1986	0.000	0.000
1985	0.000	0.000
1984	0.000	0.000
1983	0.000	0.000

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

- 1. Credit Program Initiated in 1991. Initial credits were granted for 1990 extraction of less than available annual Historical allocation.
- 2. Net Annual Credits Granted/Earned = Net credits earned/granted each year after application to any reported overpumping that year. Prior to 1998, operators were required to apply for credits. For 1999-2007 (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 and historic credits for all FCGMA Operator accounts with positive credit balance at the end of 2007.

TABLE 6
SUMMARY OF GROUNDWATER EXTRACTION AND
ESTIMATED CREDITS BY GROUNDWATER BASIN FOR CALENDAR YEAR 2007

Basin	2007 Total Reported Groundwater Extraction (in AF/Year) <sup>1</sup>	% of Total Agency Extraction	2007 Estimated Net Credits Earned (in AF) <sup>2,4</sup>	% of Net Credits Earned in 2007	Approximate Aggregate Positive Credit Balance by Basin (in AF) <sup>3</sup>
Oxnard Plain Pressure Basin	53,118.195	39%	30,718.792	69.7%	286,866.371
Oxnard Plain Forebay Basin	31,212.544	23%	4,620.554	10.5%	101,940.123
East Las Posas Basin	18,152.915	13%	3,646.395	8.3%	87,684.046
Pleasant Valley Basin	13,057.313	10%	3,608.563	8.2%	75,808.048
West Las Posas Basin	15,867.320	12%	1,000.906	2.3%	27,112.034
South Las Posas Basin	2,665.068	2%	316.865	0.7%	4,181.829
Arroyo Santa Rosa Basin	1,664.201	1%	174.651	0.4%	1,696.006
2007 Cumulative <sup>4</sup>	135,737.556	100%	44,086.726	100%	585,288.457

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

- 1. Sums 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. Estimates all FCGMA Operator Credit Accounts for Calendar Year 2007 that have net positive credit balance after considering 2007 extractions by groundwater basin.
- 3. Sums current and historic credits by groundwater basin for all FCGMA Operator Accounts that have a positive credit balance at the end of Calendar Year 2007. 2007 Agency Aggregate Total Positive Credit Balance in Table 5 more representative of credits available for future extraction.
- 4. 2007 Estimated Net Credits Earned value varies slightly from 2007 Net Annual Credits Granted in Table 5 due to some accounts operating facilities in multiple basins. 2007 Net Annual Credits Granted in Table 5 are more representative of credits earned in 2007.

TABLE 7
SUMMARY OF REPORTED GROUNDWATER EXTRACTION AND USE-TYPE WITHIN THE FCGMA FOR CALENDAR YEAR 2007

Basin Type	Groundwater Basin	Groundwater Use-Type	Total Reported Groundwater Extraction for 2007 (in AF/Year)	% of Individual Groundwater Basin Extraction	% of Total Agency-wide Groundwater Extraction	Total # of Wells <sup>6</sup>	Total # of Active Wells <sup>7</sup>
	Arroyo Santa						
	Rosa	Basin Total	1,664.201		1.2%	15	9
		Agricultural	1,664.201	100.0%	1.2%	15	9
		Domestic	0.000	0.0%	0.0%	0	0
		M & I	0.000	0.0%	0.0%	0	0
	East Las Posas	Basin Total	18,152.915		13.4%	146	121
		Agricultural	14,745.274	81.2%	10.9%	107	86
Agricultural-		Domestic	5.745	0.0%	0.0%	10	10
Use		M & I	3,401.896	18.7%	2.5%	29	25
Basins	South Las Posas	Basin Total	2,665.068		2.0%	24	19
		Agricultural	2,584.166	97%	1.9%	19	16
		Domestic	0.000	0%	0.0%	1	1
		M & I	80.902	3%	0.1%	4	2
	West Las Posas	Basin Total	15,867.320	<u></u>	11.7%	74	59
		Agricultural	13,610.733	86%	10.0%	55	43
		Domestic	12.682	0%	0.0%	5	4
		M & I	2,243.905	14%	1.7%	14	12
	Oxnard Plain <sup>3</sup>	Basin Total	53,118.195		39.1%	424	316
		Agricultural	41,550.996	78.2%	30.6%	276	208
		Domestic	641.772	1.2%	0.5%	61	54
Mixed-Use		M & I	10,925.427	20.6%	8.0%	87	54
Basins	Pleasant Valley	Basin Total	13,057.313		9.6%	94	72
		Agricultural	7,440.942	57%	5.5%	65	46
		Domestic	45.307	0%	0.0%	19	17
		M & I	5,571.064	43%	4.1%	10	9
M & I-Use	Oxnard Plain Forebay	Basin Total	31,212.544		23.0%	108	72
		Agricultural	7,059.336	22.6%	5.2%	50	36
Basin		Domestic	60.098	0.2%	0.0%	8	5
		M & I	24,093.110	77.2%	17.7%	50	31
		2007 Cumulative	135,737.556		100.0%	885	668

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. Agency-wide totals by use type: Agricultural 88,655.648 AF (65.3%); Domestic 765.604 AF (0.6%); M & I 46,316.304 AF (34.1%).
- 5. Extraction data current as of 01/13/2009.
- 6. Total number of wells for operators reporting for 2007.
- 7. Considers wells reporting extraction greater equal to or greater than 0.000 AF for 2007.

**TABLE 8** 

# Fox Canyon Groundwater Management Agency 2007 Eto, Effective Rainfall & Allowed Water for Various Crops

(All values in Inches or Feet, unless otherwise noted)

				Total Effective Rain				Total Allowed Water (Acre-Inches or Acre-Feet)				re- Feet)
Station	Total Eto	Total Rain	Avocados	Lemons	Oranges	Straw/Sod /Celery	Veges	Avocados	Lemons	Oranges	Straw/Sod /Celery	Veges
Moorpark Total	46.81	6.80	6.80	6.80	6.80	4.61	5.11	40.00" <i>or</i> 3.333'	40.00" <i>or</i> 3.333'	40.00" <i>or</i> 3.333'	42.20" <i>or</i> 3.517'	41.70" <i>or</i> 3.475'
Somis Total	45.83	8.66	8.66	8.66	8.66	5.08	5.61	37.17" <i>or</i> 3.098'	37.17" <i>or</i> 3.098'	37.17" <i>or</i> 3.098'	40.75" <i>or</i> 3.396'	40.22" <i>or</i> 3.352'
Saticoy Total	42.68	7.90	7.90	7.90	7.90	4.57	5.32	34.78" <i>or</i> 2.898'	34.78" <i>or</i> 2.898'	34.78" <i>or</i> 2.898'	38.11" <i>or</i> 3.176'	37.36" <i>or</i> 3.113'
Etting Rd Total	39.09	7.38	7.38	7.38	7.38	4.51	5.26	31.71" <i>or</i> 2.643'	31.71" <i>or</i> 2.643'	31.71" <i>or</i> 2.643'	34.58" <i>or</i> 2.882'	33.83" <i>or</i> 2.819'
Camarillo Airport Total	43.79	6.81	6.81	6.81	6.81	3.91	4.59	36.98" <i>or</i> 3.082'	36.98" <i>or</i> 3.082'	36.98" <i>or</i> 3.082'	39.88" <i>or</i> 3.323'	39.20" <i>or</i> 3.267'

Irrigation Efficiency =  $\frac{\text{(Allowed Water**) x (No. of Acres Irrigated)}}{\text{Water Applied}} x 100$ 

<sup>\*\*</sup> The allowed water for a particular crop is the total Eto for 2007 times a coefficient (Kc) of 1.0 less adjustments for effective rainfall Note: Differences in Total Allowed Water values are due to negative allowed water in rainy periods.

#### TABLE 9

#### SUMMARY OF METERING STATUS FOR ACTIVE OR INACTIVE WELLS IN THE FCGMA FOR CALENDAR YEAR 2007

Meter Type	Number of Wells	% of Total Wells
Water <sup>1</sup>	762	75%
Power <sup>2</sup>	62	6%
Other (not specified)	4	0%
Consumptive Use <sup>3</sup>	104	10%
Total Metered Wells	932	92%
Unmetered <sup>4,5</sup>	78	8%
Total Active & Inactive Wells		
Registered in FCGMA	1010	100%

#### Notes:

- 1. Directly measures extraction in AF, gallons, cubic feet, miners inches, or similar units.
- 2. Indirectly estimates groundwater extraction; Measures pump operation in kilowatt hours (KWh); Converts kWh to AF of water extracted based on pump/motor efficiency tests.
- 3. Typically means calculation of domestic or business water use based on persons in household or building and the average water use per person per year in that setting.
- 4. Includes backup or standby wells that are not required to have a flow meter including domstic wells, new wells not yet in service, or abandoned wells.
- 5. Crop Factor Method = a calculation of water use based on acreage planted times average water use per acre per year for the particular crop (used only when a flowmeter or direct reading is not available).

A standard 1 acre-foot (or AF) water volume measurement unit = 325,851 gallons

CU = Consumptive Use (annual water volume based on the number of people per household or business times average water use per day obtained from local water provider, national or State averages, or other available studies)

## TABLE 10 FCGMA MULTI-YEAR BUDGET PERFORMANCE SHEET

BUDGET LINE ITEMS	FY 2004-2005 Year End Actuals <sup>(17)</sup>	FY2005-2006 Year End Actuals <sup>(18)</sup>	FY 2006-2007 Year End Actuals <sup>(19)</sup>	FY 2007-2008 Year End Actuals <sup>(20)</sup>	FY 2008-09 Adopted Adjusted Budget <sup>(21)</sup>		
AGENCY GENERAL FUND							
PUMPING FEES - \$ Per Acre-Feet (Note 1)	\$3.00/\$4.00	\$4.00	\$4.00/\$2.00	\$4.00/\$2.00	\$4.00		
JULY 1ST BEGINNING YEAR CASH BALANCE. (Note 2)					,		
JULY 1ST BEGINNING YEAR CASH BALANCE. (1988 2)	\$464,168	\$439,739	\$449,419	\$553,727	\$1,080,014		
FUNDING RESOURCES							
PUMP CHARGES (Note 3)	\$379,058	\$426,833	\$467,024	\$555,744	\$335,222		
INTEREST EARNINGS	\$9,066	\$14,548	\$21,783	\$34,900	\$30,000		
SURCHARGES/PENALTIES/INTEREST (Note 4)	\$59,964	\$66,841	\$11,927	\$174,439	\$130,000		
STATE GRANT FUNDS		\$0	\$0	\$0	\$0		
GEMES REVENUES (Note 5)			\$136,465	\$269,969			
MISCELLANEOUS REVENUES			\$12,606	\$0	\$0		
TOTAL FUNDING RESOURCES AVAILABLE	\$912,256	\$947,961	\$1,099,224	\$1,588,779	\$1,575,236		
EXPENDITURES INCURRED							
BOARD MEMBERS INSURANCE	\$5,493	\$5,537	\$5,616	\$5,788	\$5,750		
OTHER EQUIPMENT MAINTENANCE	\$0	\$0	\$0	\$264	\$100		
MEMBERSHIPS AND SUBSCRIPTIONS	\$100	\$500	\$0	\$150	\$200		
LAFCO Funding	\$302	\$238	\$487	\$535	\$427		
MISCELLANEOUS PAYMENTS	\$356	\$270	\$100	\$68	\$230		
PRINTING & BINDING	\$331	\$167	\$499	\$0	\$370		
OFFICE EQUIPMENT/SUPPLIES	\$328	\$39	\$130	\$829	\$520		
SPECIAL OFFICE EXPENSE	\$0	\$178	\$337	\$0	\$200		
POSTAGE	\$699	\$225	\$381	\$473	\$500		
GSA SPACE RENTAL/PURCHASING ISF	\$925	\$39	\$19	\$30	\$250		
GSA GRAPHICS/MAILING CHARGES ISF	\$0	\$2,351	\$2,758	\$2,055	\$1,800		
SOFTWARE	\$440	\$0	\$0	\$412	\$350		
LEGAL FEES (Note 6)	\$22,669	\$25,733	\$43,747	\$24,552	\$25,000		
AUDIT FEES	\$0	\$2,900	\$0	\$3,000	\$3,000		
PUBLIC NOTICES	\$1,667	\$3,883	\$0	\$0	\$1,500		
COMPUTER EQUIPMENT	\$2,091	\$0	\$1,586	-\$117	\$1,500		
AWA DUES & SYMPOSIUM	\$1,140	\$1,075	\$1,720	\$1,300	\$1,500		
FEDERAL/STATE PERMITS & FEES (Note 7)				\$34	\$100		
CONFERENCES /SEMINARS	\$1,700	\$66	\$1,679	\$4	\$2,000		
INTERNET/WEBSITE SERVICES	\$0	\$0	\$0	\$7,273	\$2,500		
VEHICLE MILEAGE/TRANSPORTATION	\$425	\$0	\$236	\$0	\$200		
DATA BASE CONTRACT	\$0	\$0	\$1,500	\$1,500	\$10,000		
GIS	\$4,093	\$13,198	\$0	\$0	\$5,000		
AERIAL PHOTOS	\$0	\$5,965	\$0	\$0	\$2,500		
Et DATA CONTRACT (Note 8)	\$37,500	\$42,100	\$43,200	\$32,190	\$30,000		
OTHER PROF SERVICES	\$3,000		\$0	\$0	\$1,000		
CONSULTANT CONTRACTS (Note 9)	\$0	\$2,242	\$0	\$0	\$5,000		
MANAGEMENT PLAN	\$0	\$21,309	\$0	\$0	\$5,000		
WCVC-IRWMP CONTRIBUTIONS (Note 10)	·	\$600		\$6,420	\$6,420		
SERVICES AND SUPPLY EXPENSES SUB-TOTAL	\$83,260	\$128,615	\$103,995	\$86,760	\$112,917		
PUBLIC WORKS AGENCY CHARGES (Note 11)	\$389,257	\$369,927	\$441,503	\$422,005	\$600,000		
OPERATING CONTINGENCY ACCOUNT (Note 12)	,		,	,	\$100,000		
TOTAL OPERATING EXPENDITURES (Note 13)	\$472,517	\$498,542	\$545,498	\$508,765	\$812,917		
AGENCY GENERAL FUND		6440 440	¢FF0 700	64 000 044	<b>6760 040</b>		
YEAR END FUND BALANCE (YEFB) (Note 14)		\$449,419	\$553,726	\$1,080,014	\$762,319		
CASH RESERVE FOR WORKING CAPITAL NEEDS  YEFB EXCESS/(DEFICIT) OF	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000		
WORKING CAPITAL NEEDS (Note 15)	\$339,739	\$349,419	\$453,726	\$980,014	\$662,319		

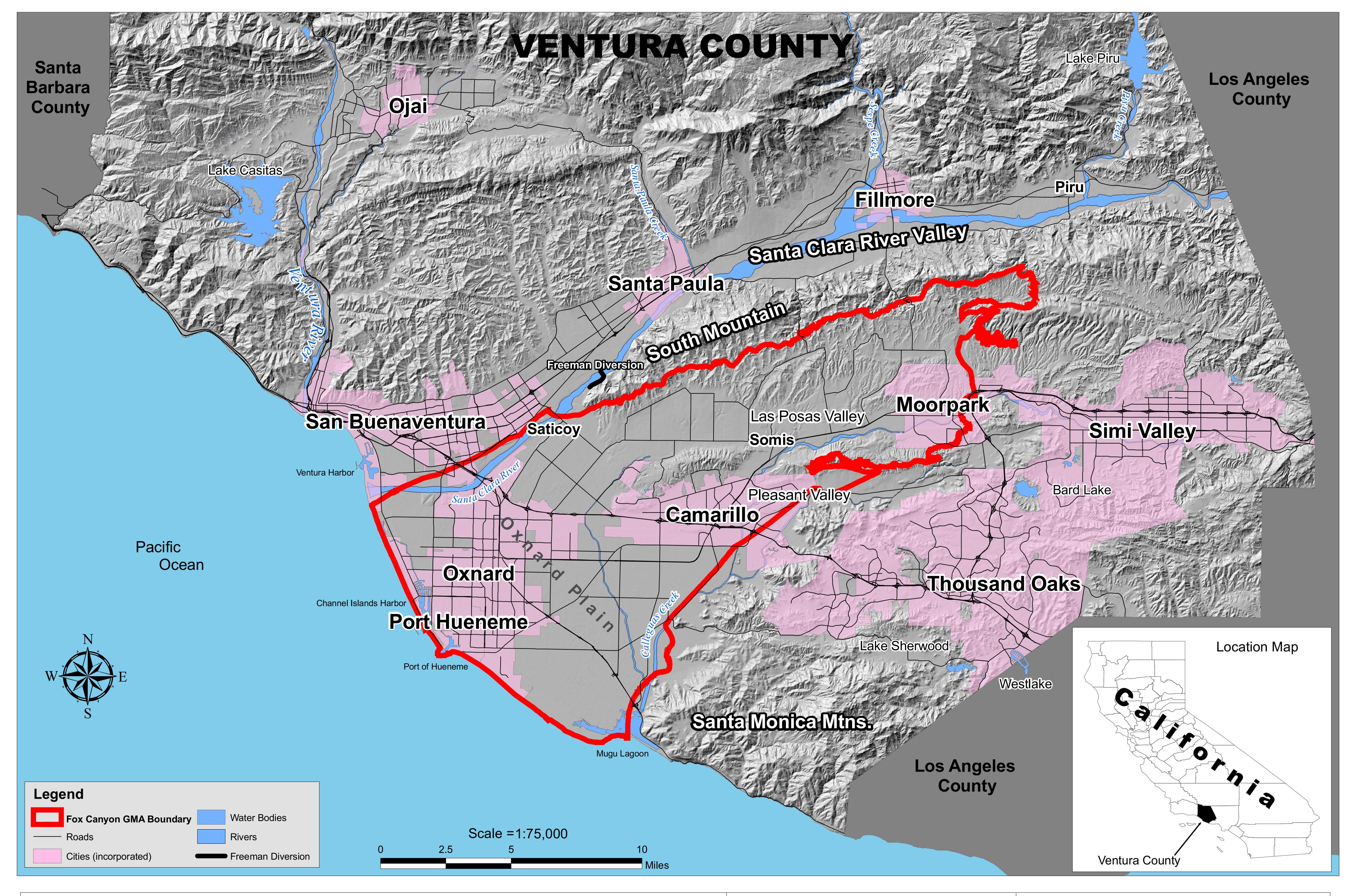
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AGENCY GEMES FUND					
BEGINNING FUND BALANCE				\$106,280	\$200,000
REVENUES REALIZED			\$136,465	\$269,969	\$5,000
EXTRAORDINARY GEMES FUND					
EXPENSES INCURRED			\$30,185	\$0	\$0
GEMES FUND					
YEFB EXCESS/(DEFICIT) (Note 16)			\$106,280	\$376,249	\$205,000

#### Notes

- (1) Pump Fees: 07-08 = **\$6.00/AF** (**\$4.00/AF** for General Fund *plus* **\$2.00/AF** for GEMES Fund). The Board of Directors *terminated* the GEMES Fund effective December 31, 2007.
- (2) The \$449,419 BYCB on July 1, 2006 was totally available for funding Fiscal Year 2006-07 Agency expenses. However, on July 1, 2007 \$106,280 of the \$553,727 BYCB reflected the amount then in the GEMES Fund litigation reserve. Pursuant to applicable provisions of Resolution No. 2006-02 and 2006-04, that amount was restricted for Board authorized extraordinary groundwater extraction management enforcement expenses.
- (3) The following volumes of "self-reported" groundwater extractions were reported to the FCGMA and served as the basis of the pump charge revenue figures (i.e. **116,756 acre-feet** during FY 2006-07, and **133,763 acre-feet** in Fiscal Year 2007-08).
- (4) \$160,000 of the \$174.439 Surcharge/Penalty revenues received during Fiscal Year 2007-08 reflected the first two years of \$80,000 annual payments per the Thornhill-Miller Settlement Agreement approved in September of 2007.
- (5) A total of \$406,434 in GEMES payments were received during the last two years. (i.e. \$136,435 in Fiscal Year 2006-07, and \$269,969 in Fiscal Year 2007-08).
- (6) Legal fees incurred by the Agency totaled **\$43,747** in Fiscal Year 2006-7 and **\$24,552** in Fiscal Year 2007-08.
- (7) Agency staff has created a new expenditure line item account for payments of Federal/State regulatory permits in the 2007-08 budget of which \$34 was expended during that fiscal year.
- (8) Payments made to the Weather Station Contractor totaled **\$43,200** during Fiscal Year 2006-07 and **\$32,190** during Fiscal Year 2007-08. The Board of Directors approved a *new, lower-cost contract* with Investment Signals LLC during their January 24, 2007 meeting.
- (9) During Fiscal Years 2006-07 and 2007-08, there were **no occasions** were the EO felt it was necessary to enter into any consulting services contracts in-between scheduled board meetings pursuant to the Board's **\$5,000 maximum** approval *delegation authority* for such contracts.
- (10) **\$6,420** from the UAPYEFB reserved for expenditure contingency usage was *allocated* to fund the VCIRWMP contribution per the policy decision reached during the Board's October 24, 2007 meeting.
- (11) Public Works Charges totaled \$441,503 during Fiscal Year 2006-07 and \$422,005 during Fiscal Year 2007-08.
- (12) Actual contingency reserve utilization for unbudgeted operating expenses during Fiscal Year 2006-07 amounted to \$64,527 (or 11% of the total budget). And during Fiscal Year 2007-08 amounted to \$6,420 (or 1% of the total budget) in Fiscal Year 2007-08. At the end of the fiscal year, any unexpended amounts remaining in the operating contingency account automatically increases the actual year end fund balance for that fiscal year, which in turn adds to the YEFB then available for subsequent year funding.
- (13) The **top five operating expenses** during both fiscal years included, *in descending order:* Public Works Agency Charges, Et Data Contract payments, Legal Counsel fees, VCIRWMP contributions, and Board Member Insurance payments.
- (14) Year End Fund Balance = Total Funding Resources available **LESS** Total Operating Expenses incurred during that fiscal year.
- (15) Year End Excess/(Deficit) of Funding Resources **LESS** Total Operating Expenses (including **\$100K** cash reserved for working capital needs.
- (16) GEMES Fund YEFB = Total amount of GEMES payments received **LESS** any Board authorized extraordinary enforcement expenses incurred during that fiscal year.
- (17) Fiscal Year 2004-05 year end actuals budget performance report delivered to the Board of Directors during their **September 28, 2005** regular meeting
- (18) Fiscal Year 2005-06 year end actuals budget performance report delivered to the Board of Directors during their **September 27, 2006** regular meeting
- (19) Fiscal Year 2006-07 year end actuals budget performance report delivered to the Board of Directors during their **October 24, 2007** regular meeting
- (20) Fiscal Year 2007-08 year end actuals budget performance report delivered to the Board of Directors during their **September 24, 2008** regular meeting
- (21) The Recommended Final Fiscal Year 2008-09 Budget was *adopted* by the Board of Directors during their **June 25, 2008** meeting. As reported to the Board of Directors during their **September 24, 2008** regular meeting, the Fiscal Year 2008-09 Adopted *Adjusted* Budget *reflects post year-end actual upward increases* to the Fiscal Year 2007-08 year end fund balance figure that was included in Recommended Final Fiscal Year 2008-09 budget adopted in June.

### **FIGURES**





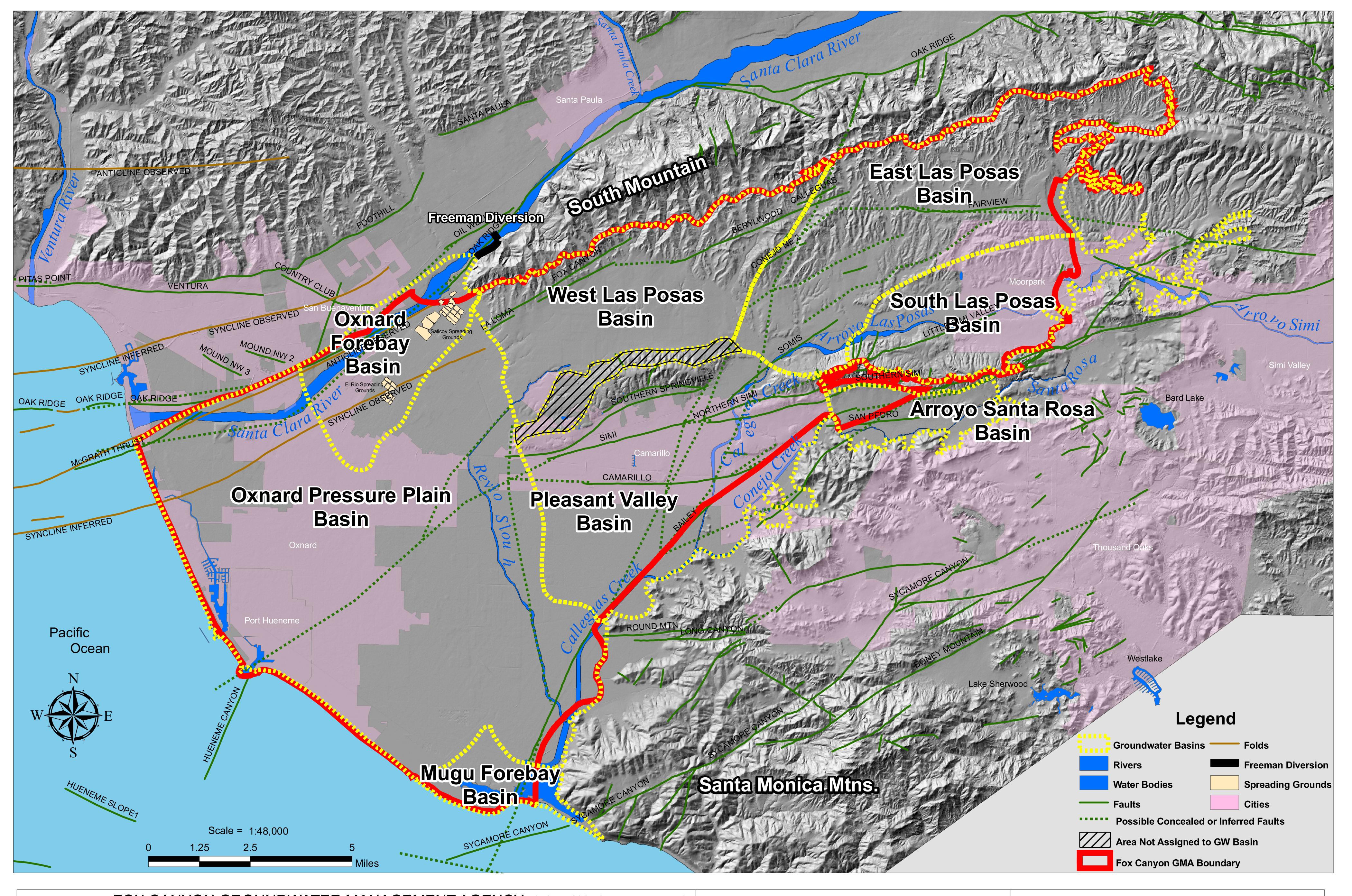
# FOX CANYON GROUNDWATER MANAGEMENT AGENCY (A State Of California Water Agency)

800 S. Victoria Avenue
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www.foxcanyongma.org
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Prepared By: JPD January, 2007 Revised By: JPD January, 2009 Reviewed By: DJP Date Prepared: January, 2009 DISCLAIMER: The information contained herein was created by the Fox Canyon Groundwater Management Agency solely for its own use. The FCGMA assumes no liability for damages incurred directly or indirectly as a result of errors, omissions or discrepancies.

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

Figure 1: Fox Canyon
Groundwater Management
Agency Boundary





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

FIGURE 3
Generalized Stratigraphy and Aquifers in the FCGMA

GEOLOGIC AGE	GEOLOGIC FORMATION	MAXIMUM THICKNESS	ROCK/SEDIMENT TYPES	AQUIFER	AQUIFER SYSTEM
Recent (Holocene)	Unnamed Alluvium, Colluvium, Fluvial, and Deltaic Deposits (Qa, Qoa, and Qg after Dibblee, 1992a; Qls and Qc after Dibblee, 1990a)	260 feet	Gravel, Sand, Silt, Clay	Semi-Perched Oxnard	Not Assigned
Upper Pleistocene	Unconformity Unnamed Terrace and Flood Plain Deposits (Qoa after Dibblee, 1992) Unconformity	300 feet	Gravel, Sand, Silt, Clay	Mugu	Upper Aquifer System (UAS)
Lower Pleistocene	San Pedro Formation (QTs after Dibblee, 1992b)	1,300 feet	Gravel, Sand, Silt, Clay	Hueneme Fox Canyon	
Pliocene	Local Unconformity Santa Barbara Formation	1,600 feet	Gravel, Sand, Silt, Clay	Grimes Canyon	Lower Aquifer System (LAS)

#### NOTES:

1. Stratigraphy and aquifer designation adapted from DWR, 1976.

FIGURE 4
Annual Rainfall and Reported Groundwater Extractions in the FCGMA

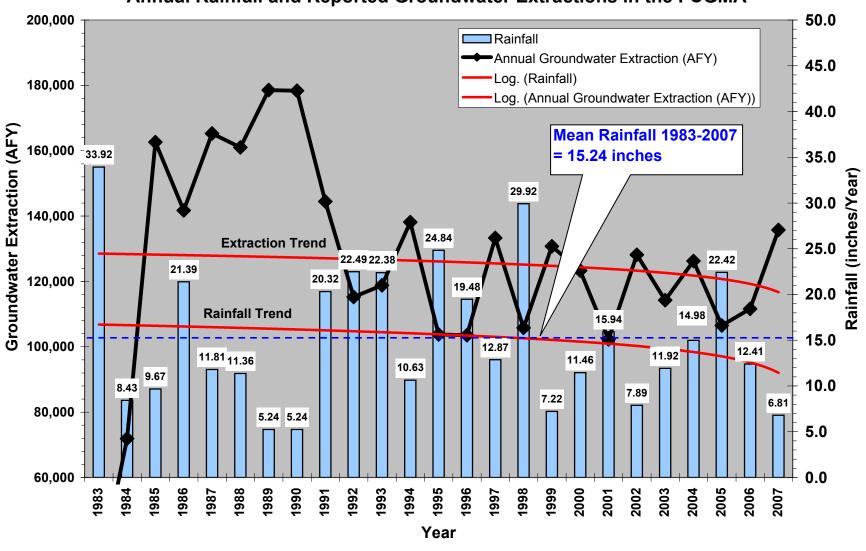


FIGURE 5
Rainfall vs. Extraction for -01 Periods (1984 - 2007)

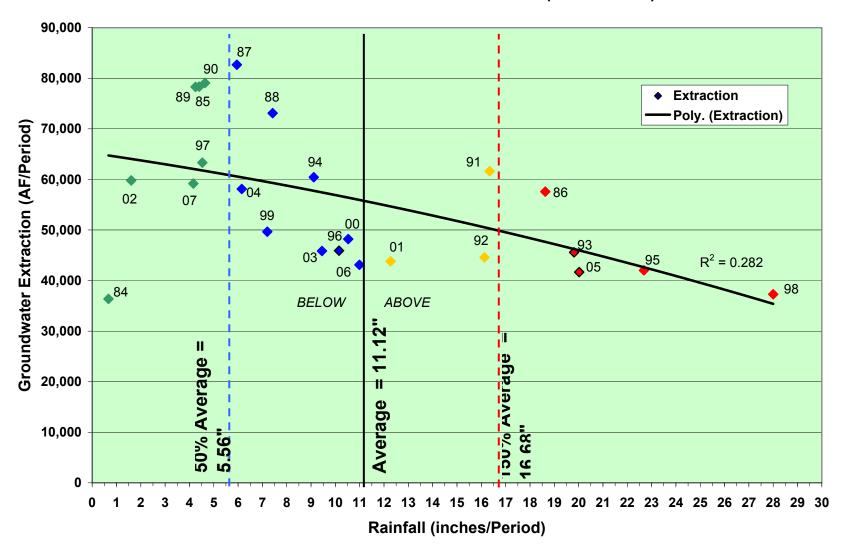
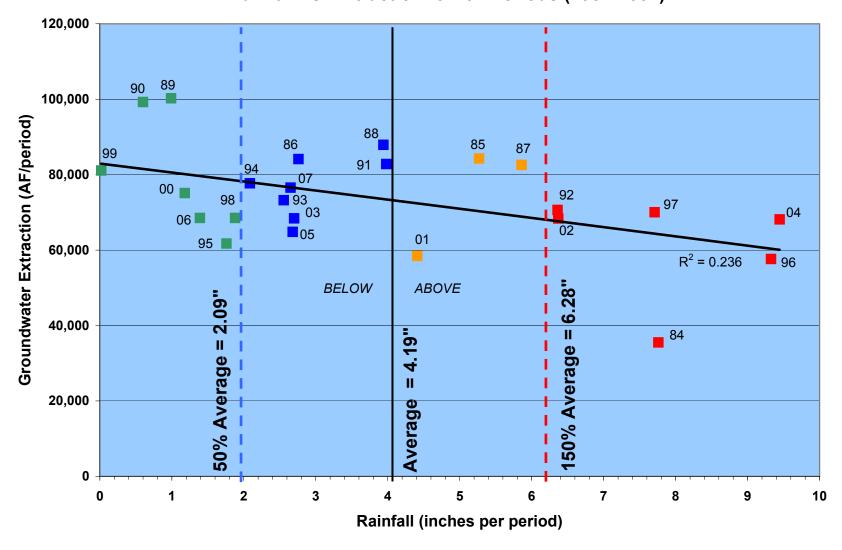
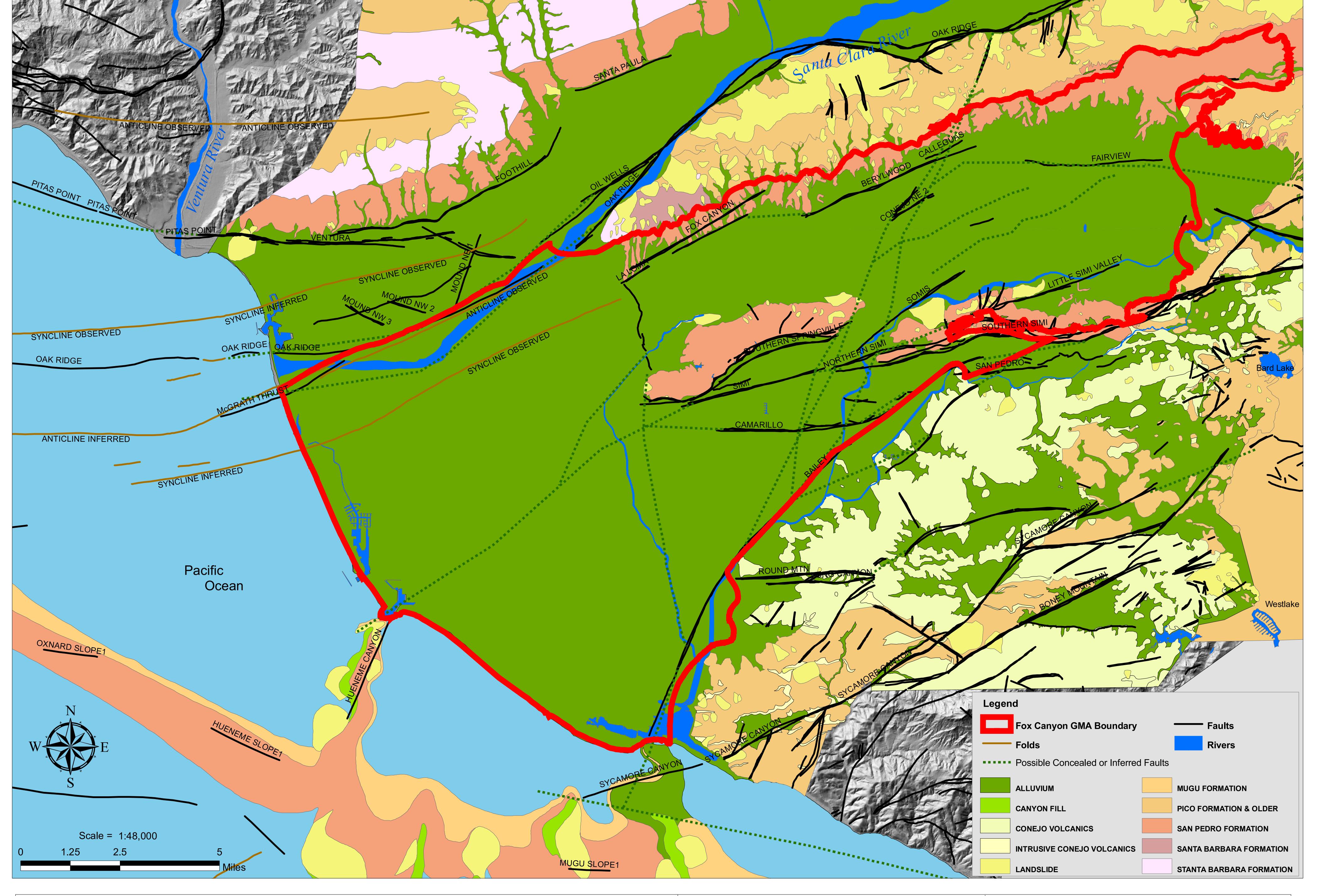


FIGURE 6
Rainfall vs. Extraction for -02 Periods (1984-2007)







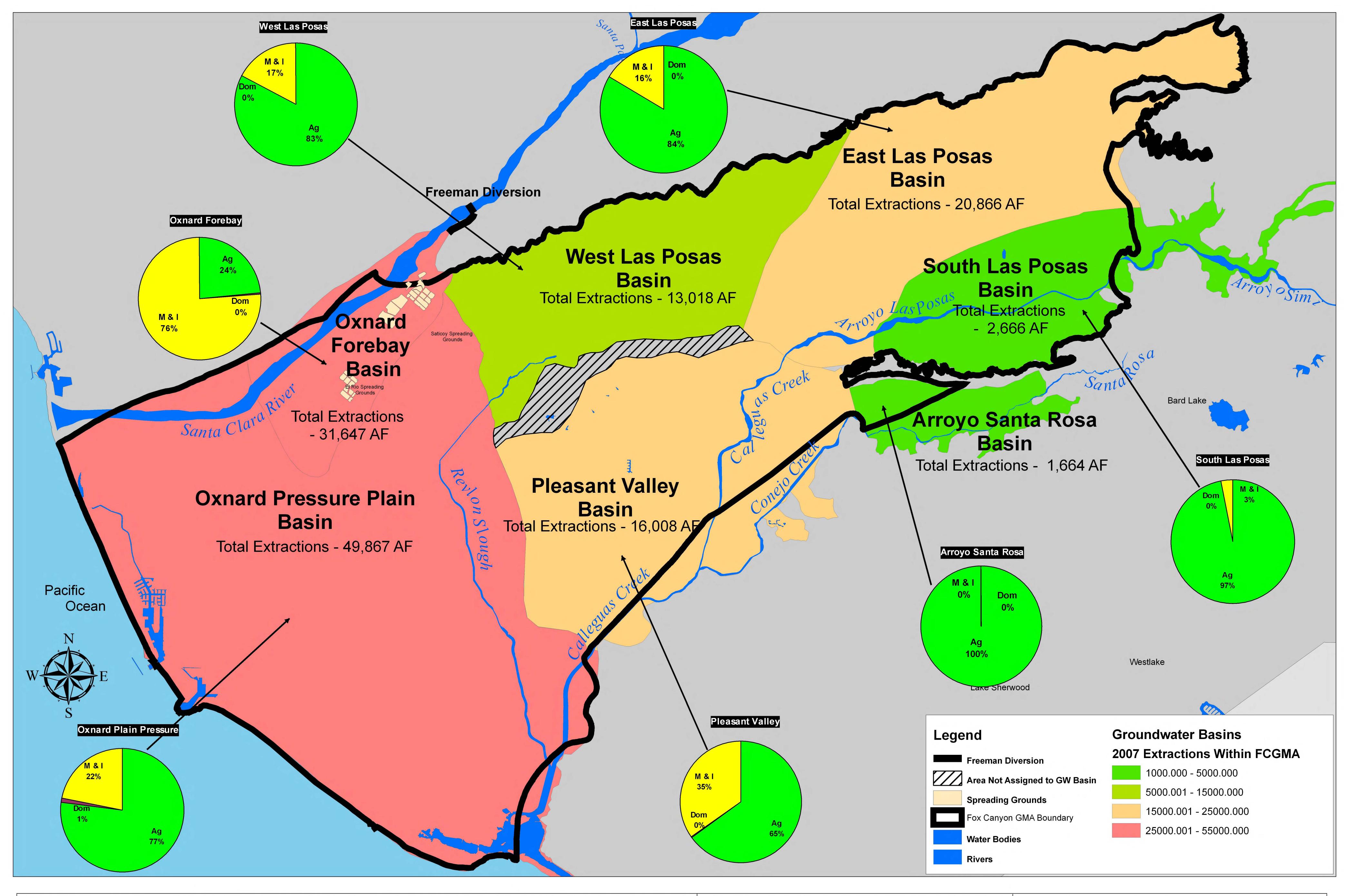
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Figure 7: Regional Geology Within the FCGMA





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

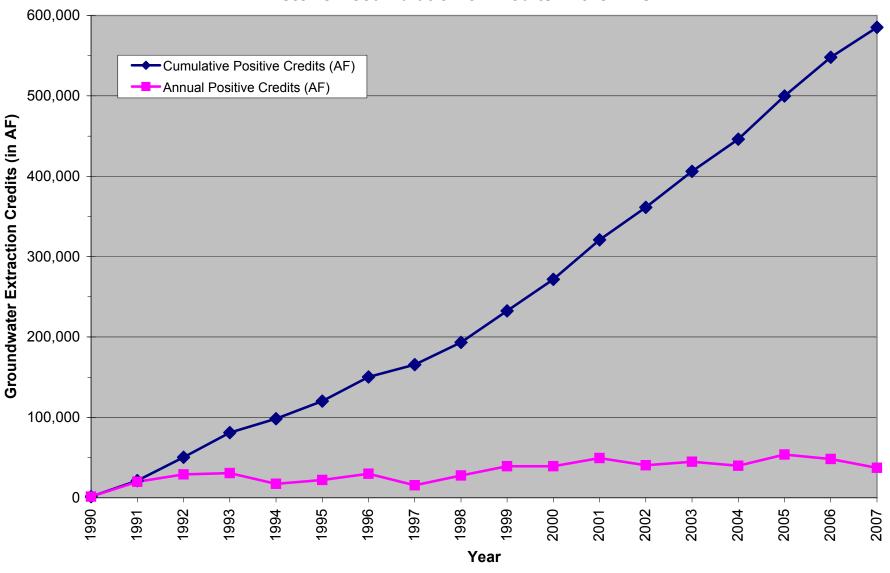
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 City limits: Ventura County Geographic Information Sysytems, 2007
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Scale = 1:42,000 0 1.25 2.5 5 Figure 8: Summary of Reported Groundwater Extractions Within the FCGMA

FIGURE 9
Historic Accumulation of Credits in the FCGMA



### Appendix A

Resolutions Passed by the Fox Canyon Agency Board of Directors in Calendar Year 2007

### Resolution 2007-01

#### of the

### Fox Canyon Groundwater Management Agency

# ADOPTION OF THE 2007 UPDATE TO THE FOX CANYON GROUNDWATER MANAGEMENT AGENCY'S GROUNDWATER MANAGEMENT PLAN AND EXECUTIVE OFFICER AUTHORIZATION TO FILE A CEQA NOTICE OF EXEMPTION

WHEREAS, pursuant to applicable provisions of the Fox Canyon Groundwater Management Agency Act (California Water Code Appendix Chapter 121-102 through 108 *et seq.*), the Fox Canyon Groundwater Management Agency (FCGMA) has been granted certain powers for the purposes of groundwater management within its boundaries; and

WHEREAS, since its inception in 1983, FCGMA (during numerous noticed public meetings) has determined there is evidence of inland seawater intrusion in both the Upper Aquifer System and the Lower Aquifer System; and

WHEREAS, according to its enabling legislation, FCGMA shall adopt plans to control groundwater extractions from the aquifer systems located within its boundaries with the objective of bringing those aquifers and groundwater basins into safe-yield balance; and

WHEREAS, the FCGMA Board of Directors desires to update the original groundwater management plan adopted in 1985 due to significant land use, natural resource, and water management changes which have occurred since that time; and

WHEREAS, the FCGMA Board of Directors has determined that proactive groundwater management plans, programs, policies, resolutions, and ordinances are necessary in order to improve or protect the quantity and quality of groundwater supplies and help bring the aquifers and groundwater basins managed by FCGMA into "safe-yield balance" in accordance with its statutory mission; and

WHEREAS, in November 2002, the California electorate approved Proposition 50, (the Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002 (Water Code Section 79560 et seq), which included \$500 million under Chapter 8 for plans and projects included under an Integrated Regional Water Management Plan (IRWMP); and

WHEREAS, Proposition 50, Chapter 8 planning and implementation funds will only be awarded to projects that are consistent with an adopted IRWMP with preference being given to areas subject to a current groundwater management plan (GMP); and

WHEREAS, the adoption of a current GMP by FCGMA is critical to the success of the IRWMP developed by the Watersheds Coalition of Ventura County (WCVC) and the \$25 Million in Implementation Grants awarded to the County of Ventura under the Proposition 50 Grant by the State Water Resources Control Board (SWRCB); and

WHEREAS, FCGMA has prepared a 2007 Update to the GMP that meets the requirements of California Water Code Section 10753.7; and

**WHEREAS**, the 2007 update to the FCGMA GMP was developed through a comprehensive stakeholder process and provides for ongoing data gathering, planning, design, implementation, and evaluation through a long-term, iterative, stakeholder-based planning process; and

WHEREAS, FCGMA has determined the GMP is statutorily exempt from the California Environmental Quality Act (CEQA) pursuant to Article 18, Section 15262 (Feasibility and Planning Studies); and

WHEREAS, FCGMA has also determined the GMP is categorically exempt from CEQA pursuant to Article 18, Sections 15306 (Information Collection), 15307 (Actions by Regulatory Agencies for Protection of Natural Resources), and 15308 (Actions by Regulatory Agencies for Protection of the Environment); and

WHEREAS, FCGMA has prepared a Notice of Exemption (NOE) for the GMP in accordance with CEQA and any laws, rules, or procedures associated thereof; and

WHEREAS, subsequent to the adoption of the Plan, FCGMA's Executive Officer will forward both the Plan and appropriate documentation of the adoption of the Plan to the California Department of Water Resources and the State of California State Water Resources Control Board;

**NOW, THEREFORE, BE IT RESOLVED,** that the FCGMA Board of Directors hereby finds, determines, and declares as follows:

- 1. The 2007 update to the Fox Canyon Groundwater Management Agency Groundwater Management Plan is hereby adopted; and
- 2. The adoption of the Plan is hereby determined to be both statutorily and categorically exempt under CEQA Guidelines Sections 15262, 15306, 15307, and 15308; and
- 3. The Executive Officer is hereby authorized and directed to file a Notice of Exemption with the Ventura County Recorder's office; and
- The Executive Officer is hereby directed to provide certified copies of this Resolution documenting adoption of the GMP, along with the GMP itself, to the California Department of Water Resources and the State Water Resources Control Board.

On motion of Director Craven, and seconded by Director Kelley, the foregoing Resolution No. 2007-01 was passed and adopted on this 23<sup>rd</sup> day of May 2007.

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. 2007-01.

Tammy Butterworth, FCGMA Clerk of the Board

# Resolution 2007-02 of the

### Fox Canyon Groundwater Management Agency

A RESOLUTION AUTHORIZING APPLICATION FOR, AND ACCEPTANCE OF, GRANT FUNDS FROM THE CALIFORNIA DEPARTMENT OF WATER RESOURCES LOCAL GROUNDWATER ASSISTANCE PROGRAM

**WHEREAS**, pursuant to applicable provisions of the Fox Canyon Groundwater Management Agency Act (California Water Code Appendix Chapter 121-102 through 108 *et seq.*), the Fox Canyon Groundwater Management Agency (FCGMA) has been granted certain powers for the purposes of groundwater management within its boundaries; and

WHEREAS, since its inception in 1983, FCGMA (during numerous noticed public meetings) has determined there is evidence of inland seawater intrusion in both the Upper Aquifer System and the Lower Aquifer System that is likely due to extraction of groundwater beyond the ability of the aquifers to provide; and

**WHEREAS**, the FCGMA Board of Directors has determined that proactive groundwater management plans, programs, policies, resolutions, and ordinances are necessary in order to improve or protect the quantity and quality of groundwater supplies and help bring the aquifers and groundwater basins managed by FCGMA into "safe-yield balance" in accordance with its statutory mission; and

**WHEREAS**, pursuant to applicable provisions of the Fox Canyon Groundwater Management Agency Ordinance No. 8.1, Section 3.0, the Agency requires the installation and use of metering equipment for reporting of groundwater extraction data; and

WHEREAS, the FCGMA Board of Directors recently approved its 2007 Update to the Fox Canyon Groundwater Management Plan that meets the requirements of California Water Code Section 10753.7 and includes current and future groundwater management strategies that involve the collection of groundwater extraction data and management of groundwater resources using metering equipment; and

**WHEREAS**, the use of automated meter-reading equipment will allow for more accurate, efficient, and cost-effective management of the groundwater resource; and

**WHEREAS**, the California Local Groundwater Management Assistance Act of 2000 (CWC Section 10795 et seq.) was enacted to provide grants to public agencies to conduct groundwater studies or to perform groundwater monitoring and management activities; and

WHEREAS, the California Department of Water Resources (DWR) established a Local Groundwater Assistance Grant Program pursuant to the Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002 (Water Code Section 79560 et. seq.); and

**WHEREAS**, the mission and activities of the FCGMA are directly concurrent with the goals of the DWR LGAP, which evaluates and funds projects that perform groundwater studies, groundwater monitoring, or groundwater management activities; and

**WHEREAS**, grant funds from the LGAP will assist the Agency in acquiring automated meter-reading equipment in support of its Ordinance and updating its regional groundwater flow model; and

WHEREAS, the updated regional groundwater flow model will be used to evaluate current groundwater management strategies and develop new groundwater monitoring and management activities that will assist bringing FCGMA aquifers into "safe-yield balance" in accordance with its statutory mission;

**NOW, THEREFORE, BE IT RESOLVED,** that the Board of Directors of the Fox Canyon Groundwater Management Agency hereby finds, determines, and declares as follows:

- 1. All of the above recitals are true and correct.
- 2. That application be made to the California Department of Water Resources (DWR) for a Local Groundwater Assistance Grant pursuant to the Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002 (Water Code Section 79560 et seq.) and enter into an agreement to receive a grant for the *Pilot Implementation of Groundwater Extraction Flowmeter Reading Equipment and Update of the Ventura Regional Groundwater Flow Model*.
- 3. The Executive Officer of the FCGMA is hereby authorized and directed to prepare the necessary data, make investigations, file such application, and execute a grant agreement with the California Department of Water Resources.

On motion of Director Maulhardt, and seconded by Director McIntyre, the foregoing Resolution was passed and adopted on this 5<sup>th</sup> day of December 2007.

	Lynn E. Maulhardt, Chair, Board of Directors Fox Canyon Groundwater Management Agency
ATTEST: Ih	nereby certify that the above is a true and correct copy of Resolution 2007-02.
by:But	itterworth, Clerk of the Board

### **Appendix B**

Fox Canyon Groundwater Management Agency Ordinance 8.1

#### **ORDINANCE NO. 8.1**

AN ORDINANCE TO ADOPT THE FOX CANYON GROUNDWATER MANAGEMENT AGENCY CODE

The Board of Directors of the Fox Canyon Groundwater Management Agency ordains as follows:

- 1. The Board hereby repeals Ordinance No 8.0.
- 2. The Board will periodically review the effectiveness of this Ordinance toward meeting its purpose and intent. This review shall occur at least once every five years. If necessary, this Ordinance will be amended by the Board to ensure that the goals of the Agency are met.
- 3. The Board hereby adopts the Fox Canyon Groundwater Management Agency Ordinance Code as follows:

## Fox Canyon Groundwater Management Agency Ordinance Code

Adopted July 27, 2005

## CHAPTER 1.0 Definitions

As used in this code, the following terms shall have the meanings stated below:

- 1.1. "Agency" means the Fox Canyon Groundwater Management Agency.
- 1.2. "Agency Boundary" shall be as depicted on the map adopted by the Ventura County Board of Supervisors and recorded as an official record with the Ventura County Recorder's Office, and as may be updated as provided in the Agency's enabling legislation.
- 1.3. **"Agricultural extraction facility"** means a facility whose groundwater is used on lands in the production of plant crops or livestock for market, and uses incidental thereto.
- 1.4. "Annual" means the calendar year January 1 through December 31.
- 1.5. **"Aquifer"** means a geologic formation or structure that yields water in sufficient quantities to supply pumping wells or springs. A confined aquifer is an aquifer with an overlying less permeable or impermeable layer.
- 1.6. **"Board"** means the Board of Directors of the Fox Canyon Groundwater Management Agency.
- 1.7. "Developed Acreage" means that portion of a parcel within the boundaries of the Agency that is receiving water for reasonable and beneficial agricultural, domestic or municipal and industrial (M & I) use.

- 1.8. "East Las Posas Basin" That part of the former North Las Posas Basin that is East of the subsurface anomaly described by significant changes in groundwater levels and located for record purposes on maps in the Agency Offices.
- 1.9. **"Excess extraction"** means those extractions in excess of an operator's extraction allocation or adjusted extraction allocation.
- 1.10. **"Executive Officer"** means the individual appointed by the Board to administer Agency functions. Replaces the former title of Agency Coordinator.
- 1.11. "Exempt well operators" means all well operators operating extraction facilities supplying a single family dwelling on one acre or less, with no income producing operations and those operators granted an exemption by the Board of Directors.
- 1.12. "Expansion area" means the lower aquifer system (LAS) outcrop in the north and northeasterly portion of the Agency. Map Number Two, entitled Fox Canyon Outcrop, Las Posas Basin, 1995 shows the expansion area and is available in the County Water Resources Division office.
- 1.13. **"Extraction"** means the act of obtaining groundwater by pumping or other controlled means.
- 1.14. "Extraction allocation" means the amount of groundwater that may be obtained from an extraction facility for a given calendar year, before a surcharge is imposed.
- 1.15. **"Extraction facility"** means any device or method (e.g. water well) for extraction of groundwater within a groundwater basin or aquifer.
- 1.16. **"Foreign Water"** means water imported to Ventura County through the State Water Project facilities or other newly available water as approved by the Board, such as recycled water that would otherwise be lost to the Ocean.
- 1.17. **"Groundwater"** means water beneath the surface of the earth within the zone below the water table in which the soil is completely saturated with water.
- 1.18. "Groundwater basin" means a geologically and hydrologically defined area containing one or more aquifers, which store and transmit water yielding significant quantities of water to extraction facilities. For the purposes of this Ordinance Code, groundwater Basins inside the Agency Boundary shall include but not be limited to the Forebay Basin, Oxnard Plain Pressure Basin, Pleasant Valley Basin, East Las Posas Basin, West Las Posas Basin, South Las Posas Basin and the Arroyo Santa Rosa Basin. The boundaries of these basins are shown on maps that have been recorded with the County Recorder. Copies of the maps may be viewed in the Agency Offices and portions of the maps may be available at the Agency web site.
- 1.19. "Historical extraction" means the average annual groundwater extraction based on the five (5) calendar years of reported extractions from 1985 through 1989 within the

- boundaries of the Agency. This average will be expressed in acre-feet per year. *All historical extraction allocations became effective on January 1, 1991.*
- 1.20. "Inactive Well" An inactive well is a well that conforms to the County of Ventura Ordinance Code requirements for an active well, but is being held in an idle status in case of future need. Inactive wells are not required to have a flow meter. Pumping to meet Ventura County Ordinance Code requirements shall not exceed 12 hours in a 12 month period. Meters shall be installed on inactive wells and the well shall revert to a groundwater extraction facility if the requirement exists to pump the well for more than 12 hours in any 12 month period. The pumping to meet Ventura County Ordinance Code requirements shall be for beneficial use and the 12 hour pumping limitation shall not be used to justify the lack of a meter for any well that serves a primary purpose. The application of an inactive well status implies that there is a minimum of one additional source of water to serve as a primary supply.
- 1.21. "Injection/storage Program" means any device or method for injection/storage of water into a groundwater basin or aquifer within the boundaries of the Agency, including a program to supply foreign water in lieu of pumping.
- 1.22. "Las Posas outcrop" or "outcrop" means the area of Lower Aquifer System surface exposure as defined by Map Number One, Fox Canyon Outcrop, Las Posas Basin, 1982. This map is available for inspection in the Ventura County Water Resources Division office.
- 1.23. "May" as used in this Ordinance Code, permits action but does not require it.
- 1.24. "Metering Equipment" or "Meters" means a manufactured instrument for accurately measuring and recording the flow of water in a pipeline.
- 1.25. "Municipal and Industrial (M & I) Provider" means an entity or person which provides water for domestic, industrial, commercial, or fire protection purposes within the boundaries of the Agency.
- 1.26. "Municipal and Industrial (M & I) Operator" An owner or operator that supplied groundwater for M & I use during the historical allocation period and did not supply a significant amount of agricultural irrigation during the historical period."
- 1.27. "Municipal and Industrial (M & I) User" means a person or other entity that used or uses water for any purpose other than agricultural irrigation. "Municipal and Industrial (M & I) use" means any use other than agricultural irrigation.
- 1.28. **"Operates"** means to manage the use of groundwater and report the well extraction data to the Agency.
- 1.29. "Operator" means a person who operates a groundwater extraction facility. In the event the Agency is unable to determine who operates a particular extraction facility, then "operator" shall mean the person to whom the extraction facility is assessed by the County Assessor, or, if not separately assessed, the person who owns the land upon which the extraction facility is located.

- 1.30. "Overdraft" means the condition of a groundwater basin or aquifer where the average annual amount of water extracted exceeds the average annual supply of water to a basin or aquifer.
- 1.31. "Owner" means a person who owns a groundwater extraction facility. Ownership shall be determined by reference to whom the extraction facility is assessed by the County Assessor, or if not separately assessed, the person who owns the land upon which the extraction facility is located.
- 1.32. "Perched or Semi-Perched Aquifer" means the water bearing area that is located between the earth's surface and clay deposits that exist above an Aquifer.
- 1.33. "Person" includes any state or local governmental agency, private corporation, firm, Partnership, individual, group of individuals, or, to the extent authorized by law, any federal agency.
- 1.34. "**Recharge**" means natural or artificial replenishment of groundwater in storage by percolation or injection of one or more sources of water.
- 1.35. "Safe Yield" means the condition of groundwater basin when the total average annual groundwater extractions are equal to or less than total average annual groundwater recharge, either naturally or artificially.
- 1.36. "Section" as used in this Ordinance Code, is a numbered paragraph of a chapter.
- 1.37. **"Semi Annual Report of Groundwater Extractions"** is a statement filed by each well operator containing the information required by Section 2.2 and 2.3.1 and shall cover the periods from January 1 to June 30 and from July 1 to December 31 annually.
- 1.38. "Shall" as used in this Ordinance Code, is an imperative requirement.
- 1.39. "West Las Posas Basin" is that part of the former North Las Posas Basin that is West of the subsurface anomaly described by significant changes in groundwater levels and located for record purposes on maps in the Agency Offices.

## CHAPTER 2.0 Registration of Wells and Levying of Charges

#### 2.1. Registration of Wells

2.2. All groundwater extraction facilities within the boundaries of the Agency shall be registered with the Agency. All new extraction facilities constructed within the Agency Boundary shall obtain a no-fee permit from the Agency prior to the issuance of a Well Permit by the Ventura County Watershed Protection District. No extraction facility may be operated or otherwise utilized so as to extract groundwater within the boundaries of the Agency, or in the Expansion Area unless that facility is registered with the Agency, metered and permitted, if required, and all extractions reported to the Agency as

required. The operator of an extraction facility shall register his extraction facility and provide in full, the information required to complete the form provided by the Agency that includes the following:

- 2.2.1. Name and address of the operator(s).
- 2.2.2. Name and address of the owner(s) of the land upon which the extraction facility is located.
- 2.2.3 A description of the equipment associated with the extraction facility.
- 2.2.4 Location, parcel number and state well number of the water extraction facility.
- 2.3. Reporting Extractions The method for computing extractions shall be as specified by Chapter 3. The Agency shall send a "Semi-Annual Report of Groundwater Extractions" form to each well owner on or about the first of January and the first of July each year. Each operator of a registered extraction facility shall enter the necessary information and return the "Semi Annual Report of Groundwater Extractions" covering all wells they operate on or before the due date. Statements are due on or before February 1st or August 1st annually or thirty days after the date on top right of the Semi Annual report form. Statements shall contain the following information on forms provided by the Agency:
  - 2.3.1. The information required under Section 2.2 above.
  - 2.3.2. The method of measuring or computing groundwater extractions.
  - 2.3.3. The crop types or other uses and the acreage served by the extraction facility.
  - 2.3.4. Total extractions from each extraction facility in acre-feet for the proceeding six (6) month period.

#### 2.4. Groundwater Extraction Charges

- 2.4.1. All persons operating groundwater extraction facilities shall pay a groundwater extraction charge for all groundwater extracted after July 1, 1993, in the amount as established by Resolution of the Board. Payments are due semi-annually, and shall accompany the statement required pursuant to Section 2.3.
- 2.4.2. Payments not received or postmarked by the date due forty-five days after the billing date shall be charged interest in the amount of 1.5 percent per month, or part of month that the charge remains unpaid. Late Penalty. The operator shall pay a late penalty for any extraction charge not satisfied by the due and payable date. The late penalty shall be 1½ percent per month, or any portion thereof, of the amount of the unsatisfied extraction charge. The late penalty shall not exceed 100% of the original charge, provided the penalty is paid within 60 days of the due date. If the fee is not paid within the 60 days, the penalty will continue to accrue at 1.5 percent per month with a final maximum of 200% of the original penalty due.

- 2.4.3. Owners of extraction facilities are ultimately responsible for payment of pumping charges and penalties should an operator not pay. Consequently, owners must consider this liability in respect to their agreements with well operators and water users.
- 2.5 Collection of Delinquent Extraction Charges and Late Penalties - The Board may order that any given extraction charge and/or late penalty shall be a personal obligation of the operator or shall be an assessment against the property on which the extraction facility is located. Such assessment constitutes a lien upon the property, which lien attaches upon recordation in the office of the County Recorder. The assessment may be collected at the same time and in the same manner as ordinary ad valorem taxes are collected, and shall be subject to the same penalties and the same procedure and sale, in case of delinquency as provided for such taxes. All laws applicable to the levy, collection and enforcement of ad valorem taxes shall be applicable to such assessment, except that if any real property to which such lien would attach has been transferred or conveyed to a bona fide purchaser for value, or if a lien of a bona fide encumbrance for value has been created and attaches thereon, prior to the date on which the first installment of such taxes would become delinquent, then the lien which would otherwise be imposed by this section shall not attach to such real property and an assessment relating to such property shall be transferred to the unsecured roll for collection.
- 2.6 Use of Extraction Charges and Late Penalties Revenues generated from extraction charges and late penalties shall be used exclusively for authorized Agency purposes, including financial assistance to support Board approved water supply, conservation, monitoring programs and water reclamation projects that demonstrate significant reductions in overdraft.

## CHAPTER 3.0 Installation and Use of Metering Equipment for Groundwater Extraction Facilities

#### 3.1. Installation and Use of Metering Equipment

- 3.1.1. Installation Requirement Operators of extraction facilities shall install metering equipment on each well that extracts groundwater. Meters are not required on inactive wells as defined in this Ordinance Code, nor are meters required for extraction facilities supplying a single family dwelling on one acre or less, with no income producing operations. If more than one operator uses the same extraction facility, meters shall be installed to record the water use of each operator. Well operators were required to install metering equipment on wells by July 1, 1994.
- 3.1.2. Back-up Metering Equipment Water meters occasionally fail, losing periods of record before the disabled or inaccurate meter is either replaced or repaired. Well operators shall be prepared to provide another acceptable method of computing extractions during these periods of meter failure to avoid the loss of record on wells that require metering under this Ordinance Code.

- 3.1.3. Back-up Methods It is the operator's responsibility to maintain the flow meter. Any allowable or acceptable method for backup metering will be specified in a separate resolution of the Board, and may be changed as technology improves or changes.
- 3.1.4. Special Cases If special circumstances exist where specified back-up procedures cannot be used or are impracticable to use, the operator shall request the Executive Officer's approval of another alternative back-up procedure.
- 3.1.5. Meter Readings Functional meters shall be read and the readings reported semiannually on the extraction statements required under Section 2.3 above.
- 3.1.6 Inspection of Metering Equipment The Agency may inspect metering equipment installations for compliance with this Ordinance Code at any reasonable time.
- 3.2. **Meter Testing and Calibration -** All water flow meters shall be tested for accuracy at a frequency interval determined by the Board to meet specific measurement standards. Calibration methods and procedures approved by the Board of Directors shall be detailed in an adopted Resolution of the Board.
- 3.3 **Altering Metering Equipment** Any person who alters, removes, resets, adjusts, manipulates, obstructs or in any manner interferes or tampers with any metering equipment affixed to any groundwater extraction facility required by this Ordinance Code, resulting in said metering equipment to improperly or inaccurately measure and record groundwater extractions, is guilty of an intentional violation of this Ordinance Code, and will be subject to any and all penalties as described in Chapter 8.
- 3.4 **Costs of Testing and Calibration**. All costs incurred with flow meter testing or calibration shall be the personal obligation of the well owner. Non-compliance with any provision of the meter calibration requirements will subject the owner to financial penalties and/or liens as described below or in Chapter 8 of the Ordinance Code.
- 3.5 **Fees and Enforcement.** If any water production facility within the Agency's boundaries is used to produce water without a flow meter, or with a non-operating flow meter, the Agency shall assess a Non-Metered Water Use Fee against the water production facility owner. The Non-Metered Water Use Fee shall be assessed during each Meter Report period until the first full Meter Report period after the Agency meter is installed. The amount of the fee shall be calculated as follows:
  - 3.5.1 Ground water extraction facilities The fee shall be equal to double the current ground water extraction charge for all estimated water used. Estimates of water used shall be calculated by the Agency staff using best available information about site use and conditions. Any delinquent extraction charge obligations shall also be charged interest at the rate of 1.5 percent per month on any unpaid balances.
- 3.6 Upon violation of any meter provision, the Agency may, as allowed by law, petition the Superior Court of the County for a temporary restraining order or preliminary or

permanent injunction prohibiting the well owner from operating the facility or for such other injunctive relief as may be appropriate.

## CHAPTER 4.0 Protection of the Las Posas Basins

#### 4.1 This chapter has the following purpose and intent:

- 4.1.1 To eliminate overdraft from the aquifer systems within the boundary of the East and West Las Posas basins and bring these basins to a "safe yield" condition by the year 2010.
- 4.1.2 To protect the Las Posas outcrop as a source of groundwater recharge into the East and West Las Posas basins.
- 4.1.3 To prevent groundwater quality degradation of the East and West Las Posas basins by influence from the Expansion area.
- 4.1.4 This Ordinance Code is only one means by which these goals will be met.

#### 4.2 Anti-degradation and Extraction Prohibition

- 4.2.1 Extraction Facility Permits.
  - 4.2.1.1 Permit Required Prior to: (a) initiating any new or increased use of groundwater in the Expansion area, obtained from any source within the Agency including the Expansion area; or (b) constructing a new or replacement extraction facility in the East or West Las Posas basins, or the Expansion area, a permit must be obtained from the Agency as provided in this Chapter. For the purpose of this Chapter, a new or increased use is that which did not exist or occur before June 30, 1988.
  - 4.2.1.2 Permit Application Application shall be made to the Agency on the approved Ventura County Water Well Ordinance form available from the Ventura County Public Works Agency and shall include all information required by the Ventura County Well Ordinance and the following:
    - 4.2.1.2.1 Location of each water well to be used, along with the associated state well number.
    - 4.2.1.2.2 Location(s) of groundwater use, including acreage accurately plotted on copy of the Ventura County Assessor's Parcel Map.
    - 4.2.1.2.3 The proposed crop type(s) or Municipal and Industrial use(s) at each location.

- 4.2.1.2.4 A brief description of the type of irrigation or distribution system and metering equipment to be used.
- 4.2.1.2.5 The estimated average annual quantity of water use proposed for each location of use.
- 4.2.1.2.6 An identification of the source of historical allocation to supply the proposed water use by the well.
- 4.2.1.2.7 An analysis of the potential impacts on the water balance in the Las Posas Basins resulting from the proposed use(s).
- 4.2.1.3 Findings A permit may only be granted if the Executive Officer finds that the proposed groundwater use will result in no net detriment to the East or West Las Posas Basins by determining that:
  - 4.2.1.3.1 The Las Posas outcrop is not exposed to potential degradation of water quality of any type, and
  - 4.2.1.3.2 Recharge to the East and West Las Posas Basins from the Las Posas outcrop is not diminished, and
  - 4.2.1.3.3 Neither baseline nor efficiency allocation will be used, directly or indirectly, to support groundwater use on the Expansion Area, and (an example of indirect use is using efficiency to supply a demand inside the Agency and using the replaced historical allocation on the outcrop)
  - 4.2.1.3.4 No increased or new uses of groundwater from inside the Agency boundary will be applied on any area outside the Expansion area (or outside the East or West Las Posas boundary).
- 4.2.1.4 Permit Conditions. The Executive Officer may include in the permit granted, any conditions consistent with the purpose of this Chapter, including:
  - 4.2.1.4.1 Any proposed agricultural use shall include the installation of irrigation systems that employ irrigation best management practices consistent with then current industry standards.
  - 4.2.1.4.2 Any proposed municipal or industrial use shall include the installation of systems that employ municipal and industrial best management practices consistent with the then current industry standards.
  - 4.2.1.4.3 A permit term, not to exceed 10 years from the date of issuance.

- 4.2.1.4.4 Mitigation, monitoring, and periodic reporting, as may be appropriate given the proposed use.
- 4.2.2 Permit Renewal Permits may be renewed pursuant to the requirements of Section 4.2.1.
- 4.3 **Registration of Existing Uses** The owners of groundwater wells located within the East or West Las Posas basins shall register their wells with the Agency no later than January 1, 2006, through the following procedure:
  - 4.3.1 Registration Form The Agency shall make available a registration form which shall be completed, and filed with the Agency for each well, which shall include the following:
    - 4.3.1.1 Location(s) of all water well(s), along with the associated state well number(s) including offsite well(s) serving the proposed use. Information concerning wells shall also include any other use for the water well.
    - 4.3.1.2 Location(s) of groundwater use for the well including acreage accurately plotted on a copy of the Ventura County Assessor's Parcel Map.
    - 4.3.1.3 The proposed crop type(s) or Municipal and Industrial use(s) at each location.
    - 4.3.1.4 A brief description of the type of irrigation or distribution system and metering equipment in use.
    - 4.3.1.5 The estimated average annual quantity of water use at each location and for each well.
- 4.4 **Monitoring** The Agency shall monitor compliance with this Chapter by reviewing County well permit applications and reported groundwater extractions and by conducting field surveys as may be necessary.
- 4.5 **Unreasonable Uses** The Agency may commence and prosecute legal actions to enjoin unreasonable uses or methods of use of water within the agency or outside the territory of the agency to the extent those uses or methods of use adversely affect the groundwater supply within the Agency.

## CHAPTER 5.0 Reduction of Groundwater Extractions

5.1. **Purpose** - The purpose of this Chapter is to eliminate overdraft from the aquifer systems within the boundaries of the Agency and bring the groundwater basins to safe yield by the year 2010. It is not the purpose of this Chapter to determine or allocate water right entitlements, including those, which may be asserted pursuant to California Water Code sections 1005.1, 1005.2 or 1005.4.

#### 5.2. Extraction Allocations

#### 5.2.1. General Limitations

- 5.2.1.1. The Executive Officer shall establish an operator's extraction allocation for each extraction facility located within the boundaries of the Agency. The extraction allocation shall be the historical extraction as reported to the United Water Conservation District and/or to the Agency pursuant to Chapter 2 (or its successor), reduced as provided by Section 5.4, or as otherwise provided for in Section 5.6 of this Ordinance Code. An alternative allocation, either baseline or efficiency, may also be approved as explained in Sections 5.6.1.1 and 5.6.1.2. All extraction facilities have an allocation of zero unless the Executive Officer determines otherwise. The operator may determine whether the annual allocation used shall be either a combination of baseline and historical allocation, or based on an efficiency allocation. All wells used by an operator in any given basin shall be operated on either a combination of historical and baseline or an efficiency allocation except water purveyors as approved by the Executive Officer. As explained by Section 5.6.1.2, an efficiency allocation may not be combined with either a baseline or a Extraction allocations may be adjusted or historical allocation. transferred only as provided in Section 5.3.
- 5.2.1.2. Regardless of allocation, the total water use for agricultural purposes must be at least 60 percent efficient as determined by the formula described in Section 5.6.1.2.4. This 60 percent irrigation efficiency is totally unrelated to the 80 percent efficiency described in Section 5.6.1.2, "Annual Efficiency Extraction Allocation".
- 5.2.1.3. Where an operator operates more than one extraction facility in the same basin, the extraction allocations for the individual facilities may be combined.
- 5.2.1.4. Where there is more than one operator for any agricultural extraction facility, each operator shall be entitled to a pro rata share of the facility's historical allocation based on either usage or acreage irrigated during the historical extraction period. Such pro rata shares shall be determined by the owner of the extraction facility, and this determination shall be subject to the approval of the Executive Officer.

- 5.2.1.5. When an operator is no longer entitled to use an extraction facility, that operator is no longer entitled to any portion of the extraction allocation attributed to that extraction facility.
- 5.2.1.6. A historical allocation is assigned to an extraction facility and a baseline allocation is assigned to the land, both may be used, but neither is owned by the operator.
- 5.2.1.7. Where there is a sale or transfer of a part of the acreage served by any extraction facility, the extraction allocation for that facility shall be equitably apportioned between the real property retained and the real property transferred by the owner of the extraction facility, This apportionment shall be approved by the Executive Officer who may modify the apportionment to assure equity.
- 5.2.1.8. The name of the owner of each extraction facility, the parcel number on which the well is located along with the names of all operators for each extraction facility shall be reported to the Agency with each semi-annual report and upon any change of ownership or operators, together with such other information required by the Executive Officer.
- 5.2.1.9. The Executive Officer may, on written request from a land owner or well operator, waive allocation requirements for the extraction of groundwater from the Perched or Semi-perched aquifer of Sealing Zone III when the pumping of that groundwater is specifically for the purpose of lowering the water table to reduce the high water table threat to property, including the root zone of crops, or for dewatering construction sites. The Executive Officer shall require that the groundwater extraction facility used for this purpose be perforated only in the Perched or Semi-perched zone, and shall also require the landowner and/or the operator to protect the Agency from damage potentially caused by transferring water to another location.
- 5.2.2 General Limitations: Special Board Approval Requirements Notwithstanding any other provisions of this Ordinance Code, the following uses of water resources associated with the aquifers within the Agency may only be undertaken with prior Board approval of and subject to the conditions and restrictions established by the Board.
  - 5.2.2.1 Direct or indirect export of groundwater extracted from within the Agency boundary for use outside the Agency boundary.
  - 5.2.2.2 The direct or indirect use of surface water or Foreign Water from within the Agency outside the Agency in a manner that may adversely affect the groundwater supply within the Agency.
  - 5.2.2.3 Application to the Board To obtain the approval of the Board for any use provided in Sections 5.2.2.1 and 5.2.2.2, application shall be made to the Agency describing the details of the proposed use, including all the following information:

- 5.2.2.3.1 The location of each water well to be used, along with the associated state well number, and/or the location of each surface diversion and a description of the associated water right.
- 5.2.2.3.2 Location(s) of groundwater use, including acreage, accurately plotted on copy of the Ventura County Assessor's Parcel Map.
- 5.2.2.3.3 The proposed crop type(s) or Municipal and Industrial use(s) at each location.
- 5.2.2.3.4 A brief description of the type of irrigation or distribution system and metering equipment to be used.
- 5.2.2.3.5 The estimated average annual quantity of water use proposed for each location of use.
- 5.2.2.3.6 An identification of the source of historical allocation, if any, to supply the proposed water use by the well.
- 5.2.2.3.7 An analysis of the potential impacts on the water balance in any Basin or Subbasin within the Agency Boundaries resulting from the proposed use(s).
- 5.2.2.4 Findings The Board may approve the proposed use if, after a public hearing, it finds that the proposed use will result in no net detriment to the Basin, or any subbasin, or aquifer associated with the use, by determining that:
  - 5.2.2.4.1 The proposed use does not result in the material degradation of water quality of any type, or
  - 5.2.2.4.2 Recharge to any aquifer within the Agency is not materially diminished.
  - 5.2.2.4.3 In granting approval to projects subject to this subsection, the Board may impose any conditions as may be appropriate, including limitations on the quantity of water use, term of the approval, and periodic reporting to the Agency.
- 5.2.3. An operator shall comply with all provisions of this Ordinance Code and Resolutions prior to receiving an extraction allocation.

#### 5.3. Adjustments to Extraction Allocations

5.3.1 Adjustments to extraction allocations may be necessary to provide some flexibility, while still maintaining the goal of reaching a safe yield condition by the year 2010.

- Adjustments may be accomplished by a transfer, an assignment of historical extraction allocation, or a demonstration of a new water source.
- 5.3.2 Subject to the provisions in this Section 5.3, transfers of extraction allocation are authorized provided they result in no net detriment to the Basins within the Agency. In making this determination, consideration shall be given to the location of extraction facilities, the aquifer systems being used, potential groundwater quality impacts, and the overall assessment of the cumulative impacts of transfers of extraction allocation.
- 5.3.3 Types of Transfers of Allocation. When irrigated agricultural land(s) changes to M & I use, a basic extraction allocation of 2 acre-feet per acre shall be transferred. In addition, a historical extraction allocation shall be transferred from the agricultural extraction facility(s) operators to the M & I provider in accordance with the following conditions:
  - 5.3.3.1 When the extraction facility is located on the land transitioning and did not serve other land during the historical allocation determination period, the M & I Operator shall receive a historical extraction allocation of 2 acre-feet per acre per year for the acreage transitioning to M & I use. Any historical allocation in excess of 2 acre-feet per acre for the land transitioning to M & I use shall be eliminated.
  - 5.3.3.2 When the extraction facility is located on the land transitioning and served other land during the historical allocation determination period, the historical allocation associated with the transitioning property shall be allocated on a pro rata basis by acreage to the total property served. The pro rata share for the property transitioning shall be eliminated. Two acre-feet per acre per year, based upon the acreage being transferred, shall be provided to the M & I provider.
  - 5.3.3.3 When the extraction facility serving the lands transitioning is not located on the land transitioning, the Executive Officer shall determine the allocation on an equitable basis for the remaining properties not transitioning to M & I. Two acre-feet per acre per year, based upon the acreage being transferred, shall be provided to the M & I provider.
  - 5.3.3.4 The transfer shall be effective upon the approval of the Executive Officer, taking into account the ongoing use of the property.
  - 5.3.3.5 Allocation originating from an agricultural extraction facility shall not be transferred to an M & I use except as provided in this Section 5.3.3.
- 5.3.4 Allocation may be transferred between M & I extraction facilities provided there is no net detriment to the aquifer system. In making this determination, the Executive Officer shall, at a minimum, consider the location of extraction facilities, the aquifer system being used and groundwater quality impacts of the transfer.

- 5.3.5 Transfer of Allocation Upon request, the Executive Officer may transfer allocation from one agricultural operator to another agricultural operator or from one M & I operator to another M & I operator provided there is no net detriment to the basins and the transfer is equitable. The transfer of allocation will be of indefinite duration, approved on a "case-by-case" basis, and the Executive Officer shall determine the rate of extraction and the point or points of extraction. Requests for the transfer of allocations shall be submitted jointly by the parties involved and shall include the specific details of their proposal. To ensure that there is no net detriment to the aquifer systems, transfers of allocation shall be subject to other conditions as approved by the Board. Transfers of allocation from Agricultural use to M & I use shall only be approved as provided by Section 5.3.3.
- 5.3.6. The Executive Officer may approve a temporary assignment of allocation from one operator to another operator when there is no net detriment to the aquifer system. The temporary assignment shall not exceed one year.
- 5.3.7 Adjustments to M & I Allocations The Board may adjust the historical allocation of an M & I operator when that operator has supplied groundwater to either an agricultural or M & I user during the historical allocation period and discontinues service to that user. This adjustment may be made by transferring the supplied portion of the historical allocation from the M & I operator to the new user. This adjustment will avoid increased pumping due to windfall allocations that could otherwise result when the M & I operator discontinues service. To avoid retroactive inequities, where an M & I operator has discontinued service to a user prior to July 1, 2005, the amount of the supplied portion of the historical allocation may be allocated to both the M & I operator and the user.
- 5.3.8 Historical allocation is subject to adjustment as provided in Section 5.4 below.
- 5.3.9 Procedures for Adjustment
  - 5.3.9.1 It shall be necessary for the operator of the extraction facility to file a verified Application for Adjustment with the Executive Officer.
  - 5.3.9.2 Adjustments of extraction allocations, pursuant to the Applications for Adjustment, shall be considered for approval by the Board after reviewing the findings and recommendations of the Executive Officer and, if approved, shall be effective for the remainder of the calendar year and for all subsequent calendar years until modified by a subsequent Board approved adjustment.

#### 5.4 Reduction of Extraction Allocations

- 5.4.1 Historical extraction allocations, adjusted or otherwise, shall be reduced in order to eliminate overdraft from the aquifer systems within the boundaries of the Agency for agricultural and M & I uses. The reductions shall be as set forth below:
  - 1992 1994 extraction allocation = 95% of historical extraction, as adjusted.
  - 1995 1999 extraction allocation = 90% of historical extraction, as adjusted.

- 2000 2005 extraction allocation = 85% of historical extraction, as adjusted. 2005 2009 extraction allocation = 80% of historical extraction, as adjusted.
- After 2009 extraction allocation = 75% of historical extraction, as adjusted.
- 5.4.2 Following the appropriate public review, the Board may exempt historical extraction allocations from these adjustments on a basin-by-basin basis.

#### 5.5 Exemptions from Reductions

- 5.5.1 The following types of extraction allocations are exempt from the reductions set forth in Section 5.4.1:
  - 5.5.1.1 Baseline Extraction Allocations as set forth in 5.6.1.1.
  - 5.5.1.2 Annual Efficiency Extraction Allocations as set forth in 5.6.1.2.
  - 5.5.1.3 Non-metered Extraction Facilities. Reductions in extraction allocations shall not apply to those extraction facilities as identified in Chapter 3 that do not require meters. Neither retroactive adjustments nor refunds will be made, except that any outstanding surcharges for non-metered extractions that existed prior to June 26, 2002 will be waived.

#### 5.6 Alternative Extraction Allocations

- 5.6.1 As an alternative to historical extractions, the Executive Officer may establish a Baseline or an Annual Efficiency extraction allocation for an operator, as follows:
  - 5.6.1.1 Baseline Extraction Allocations. If no historical extraction exists, or the historical allocation is less than one acre-foot per acre per year, a Baseline extraction allocation may be established by the Executive Officer at one acre-foot per acre per year.
    - 5.6.1.1.1 A Baseline Extraction Allocation specifically applies to undeveloped acreage that is being developed and once approved shall remain with that developed acreage. A Baseline allocation may be combined with a historical allocation for commonly operated facilities in the same basin. A baseline allocation shall not be used with an efficiency allocation.
    - 5.6.1.1.2 To obtain a Baseline Extraction Allocation, a detailed report must be submitted to the Executive Officer. The report shall describe the historical extraction of groundwater use, if any, during the period between the end of calendar year 1984 and the end of calendar year 1989, the type (crop type or M & I) and the amount of water use and acreage involved. The report shall include copies of Assessor's maps identifying the parcels where groundwater is presently being used. For the purpose of this ordinance, one (1) acre-foot per acre per year

- represents a reasonable use of water for a Baseline extraction allocation.
- 5.6.1.1.3 Application for the initial Baseline Extraction Allocation must be submitted prior to submission of the annual report of pumping. If approved, the Baseline Extraction Allocation shall apply beginning with the current calendar year.
- 5.6.1.1.4 To facilitate accounting procedures, an operator shall use Baseline Extraction Allocation before using Historical Allocation.
- 5.6.1.2 Annual Efficiency Extraction Allocation If an operator can demonstrate to the Executive Officer that water used for agriculturally developed land is at least 80 percent overall irrigation efficient, based on evapotranspiration requirements, an Annual Efficiency extraction allocation shall be established for one calendar year. An 80 percent overall irrigation efficiency has been determined by the Agency to be reasonable on agricultural lands within the Agency's boundaries.
  - 5.6.1.2.1 An Efficiency Allocation may be used when no historical allocation exists or when the historical allocation is not sufficient for the crop being grown. A historical allocation shall not be used in conjunction with an efficiency allocation.
  - 5.6.1.2.2 To prove that irrigation efficiency is at least 80 percent, the operator must submit a detailed report covering a minimum period of the immediately preceding calendar year. report shall be submitted to the Executive Officer no later than February 1st of the following year unless otherwise extended by the Board of Directors. The report shall include a complete crop and irrigation history for the extraction facility and actual acreage irrigated. The report shall include the reference evapotranspiration (ETo) rates and crop factors (Kc) for the calendar year period similar to that provided by the California Irrigation Management Information System (CIMIS) as developed and modified by the California Department of Water Resources. The report shall include a summary sheet that compares the water use to the evapotranspiration requirements for each crop and the corresponding acreage covered in the calendar year. The Board may extend the time to apply for an efficiency allocation for any year.
  - 5.6.1.2.3 Irrigation efficiency will include an appropriate amount of water necessary to avoid salt build-up based on the quality of irrigation water used.
  - 5.6.1.2.4 Irrigation Efficiency (I.E.) will be calculated using the following formula:

Where:

ETo is the reference evapotranspiration measured in inches

Kc is a crop factor, which is a dimensionless number that relates water use by a given plant in comparison to ETo.

ER is the effective rainfall measured in inches as determined by the Executive Officer.

5.6.2 Exceptions - The Board may grant exceptions to Sections 5.6.1.1 and 5.6.1.2 on a case-by-case basis. However, individual exceptions shall not become the norm. Where agricultural efficiency cannot be measured as set forth in Section 5.6.1.2, then the most efficient practices of record for the type of agricultural use shall be the measurement of efficiency utilized by the Board in its deliberations.

#### 5.7 Credits

- 5.7.1 Credits can be obtained by operators, but are not considered as extraction allocations or adjustments to extraction allocations. Credits are not subject to any reductions as set forth in Section 5.4.1. Credits, if available, shall be used to avoid paying extraction surcharges. Credits shall be accounted for through the normal reporting and accounting procedure and are carried forward from year to year. Except as provided below, credits may be transferred between commonly operated extraction facilities and within the basin where the credits were earned.
- 5.7.2 The Board may transfer credits between facilities that are not commonly operated within a basin or beyond the basin where such credits were earned, provided that there is no net detriment to the aquifers within the Agency. In determining whether there is no net detriment, the Board may, among other things, consider whether the transfer will help bring the aquifers within the Agency into equilibrium or whether the transfer is a part of an Agency or inter-Agency management plan or program to bring the aquifers of the Agency into balance. Also, in making this determination of no net detriment the Board may consider quality of water as well as the quantity. The transfer of credits will be of indefinite duration, approved on a "case-by-case" basis, and the Executive Officer shall determine the rate of extraction and the point or points of extraction.
  - 5.7.2.1 Requests for the transfer of credits shall be submitted jointly by the parties involved and shall include the specific details of their proposal. To ensure that there is no net detriment to the aquifer systems, transfers of credits shall be subject to other conditions as approved by the Board. Under no circumstances shall credits earned as a result of agricultural use be transferred to an M & I Provider, M & I Operator or an M & I User unless the transfer is specifically approved by the Board and no net detriment to the aquifer systems involved can be shown. Credits earned

- by an M & I facility shall remain with that facility unless transferred by the Board or transferred as part of a program such as an Agency or inter-Agency management plan or program approved by the Board. The types of credits are:
- 5.7.2.1.1 Conservation credits. An operator can obtain conservation credits by extracting less groundwater than the historical extraction allocation. Annual Efficiency, Baseline, or an allocation assigned to an extraction facility that is not required to have a meter shall not earn credits. Credits shall be determined by the Executive Officer after receipt of annual extraction data. Subsequent to determining the amount of credits earned, a confirmation shall be mailed to the operator indicating the current allocation, the groundwater extracted during the previous calendar year, and the credits or surcharges for the previous year.
- 5.7.2.1.2 Storage credits An operator may obtain storage credits for water that has been determined by the Board to qualify for credits or foreign water stored, injected or spread and percolated or delivered in lieu of pumping in a Board approved injection/storage program used within the boundaries of the GMA. A written application for approval of a program or an injection/storage facility shall include:
  - 5.7.2.1.2.1 Operator of proposed injection/storage program.
  - 5.7.2.1.2.2 Purpose of proposed injection/storage program.
  - 5.7.2.1.2.3 Location, depth, casing diameter, perforated interval and other information regarding proposed injection/extraction facilities, if applicable.
  - 5.7.2.1.2.4 Method of operation including source, quantity and quality of water, planned scheduling of storage, injection/extraction, delivery or percolation operations and proposed use of extracted water.
  - 5.7.2.1.2.5 Any other information deemed necessary by the Executive Officer.
- 5.7.3 Following Board approval of the application, successful storage, delivery or injection of water and reporting of results, an operator will obtain credit as determined by the Executive Officer.

#### 5.8 Extraction Surcharges and Late Penalty

#### 5.8.1 Necessity for Surcharges

- 5.8.1.1 Extraction surcharges are necessary to achieve safe yield from the groundwater basins within the Agency and shall be assessed annually when annual extractions exceed the historical and/or baseline allocation for a given extraction facility or the combined sum of historical allocation and baseline allocation for combined facilities. The extraction surcharge shall be fixed by the Board and shall be based upon (1) the cost to import potable water from the Metropolitan Water District of Southern California, or other equivalent water sources that can or do provide nonnative water within the Agency jurisdiction; and (2) the current groundwater conditions within the Agency jurisdiction.
- 5.8.2 At the discretion of the Board, the extraction surcharge may be structured, tiered, and varied between basins and or aguifers.
- 5.8.3 The Board shall fix the surcharge by resolution at a cost sufficiently high to discourage extraction of groundwater in excess of the approved allocation when that extraction will adversely affect achieving safe yield of any basin within the Agency and may adjust the surcharge by resolution; provided however, that the then existing extraction surcharge shall remain in effect until adjusted by the Board.
- 5.8.4 Surcharge for No Allocation In circumstances where an individual or entity extracts groundwater from a facility(s) having no valid extraction allocation, the extraction surcharge shall be applied to the entire quantity of water extracted. Imposition and acceptance of payment of the surcharge imposed on an individual or entity that extracts water from a facility(s) that holds no extraction allocation shall not be deemed a waiver of the Agency's authority to limit or enjoin the unauthorized extractions.
- 5.8.5 Efficiency Surcharge Facilities relying on the annual, efficiency, allocation shall also be subject to surcharge for inefficient use. The extraction allocation for efficiency is the amount of water used at 80% efficiency as defined in 5.6.1.2 of this ordinance. Extraction surcharges will be applied to the difference between the water extracted which correlates with the actual efficiency achieved and the water that would have been extracted to attain the 80% efficiency allocation. For example, an actual efficiency of 70% would be subject to surcharges on the difference between the amount of water used at 70% efficiency and the amount of water that would have been used at 80% efficiency. If an efficiency of less than 60% is achieved, no efficiency allocation will be available, and the operator shall revert to a historical, baseline or to no allocation whichever applies to that facility. Extraction surcharges would then apply to the difference between actual water used and the applicable allocation, if any. For example, a facility operating at an actual efficiency of 59% with no historical or baseline allocation, would be subject to surcharges on all water used.

#### 5.8.6 Payment of Extraction Surcharges

- 5.8.6.1 Surcharges are assessed annually in respect to the annual allocation and shall become due and payable by the owner/operator on February 1<sup>st</sup> each year or 30 days after the date shown on the upper right of the "Semi Annual Report of Groundwater Extractions" statement. Payments shall be made with credits, if available. The Board may extend the 30-day time allowed to pay surcharges for a period of up to twelve months when circumstances exist that in the opinion of the Board warrant such extension. The Board may also approve the payment of surcharges in installments of up to 24 months with terms suitable to the Board.
- 5.8.6.2 Late Penalty The operator shall pay a late penalty for any extraction surcharge not satisfied by the due and payable date. The late penalty shall be 1.5 percent per month, or any portion thereof, of the amount of the unsatisfied extraction surcharge. The late penalty shall not exceed 100% of the original surcharge, provided the penalty is paid within 60 days of billing. If the fee is not paid within the 60 days, the penalty will continue to accrue at 1.5 percent per month with a final maximum of 200% of the original penalty due.
- Collection of Delinquent Extraction Surcharges and Late Penalties The 5.8.6.3 Board may order that any given extraction surcharge and/or late penalty shall be a personal obligation of the operator or shall be an assessment against the property on which the extraction facility is located. Such assessment constitutes a lien upon the property, which lien attaches upon recordation in the office of the County Recorder. The assessment may be collected at the same time and in the same manner as ordinary ad valorem taxes are collected, and shall be subject to the same penalties and the same procedure and sale, in case of delinquency as provided for such taxes. All laws applicable to the levy, collection and enforcement of ad valorem taxes shall be applicable to such assessment, except that if any real property to which such lien would attach has been transferred or conveyed to a bona fide purchaser for value, or if a lien of a bona fide encumbrance for value has been created and attaches thereon, prior to the date on which the first installment of such taxes would become delinquent, then the lien which would otherwise be imposed by this section shall not attach to such real property and an assessment relating to such property shall be transferred to the unsecured roll for collection.
- 5.8.6.4 Use of Extraction Surcharges and Late Penalties. Revenues generated from extraction surcharges and late penalties shall be used exclusively for authorized Agency purposes, including financial assistance to support Board approved water supply, conservation, monitoring programs and water reclamation projects that demonstrate significant reductions in overdraft.

## CHAPTER 6.0 Appeals

Any person aggrieved by a decision or determination made by the Executive Officer may appeal to the Board within forty-five (45) calendar days thereof by filing with the Clerk, or Deputy Clerk, of the Board a written request that the Board review the decision of the Executive Officer. The Board shall equitably act on the appeal within 120 days after all relevant information has been provided by the appellant.

## CHAPTER 7.0 Severability

7.1 If any section, part, clause or phrase in this Ordinance Code is for any reason held invalid or unconstitutional, the remaining portion of this Ordinance Code shall not be affected but shall remain in full force and effect.

## CHAPTER 8.0 Penalties

- 8.1 Any operator or other person who violates the provisions of this Ordinance Code is subject to the criminal and civil sanctions set forth in the Agency's enabling act and its Ordinances.
- 8.2 Any person who intentionally violates any provision of this Ordinance Code shall be guilty of an infraction and may be required to pay a fine to the Agency in an amount not to exceed five hundred dollars (\$500).
- 8.3 Any person who negligently or intentionally violates any provision of this Ordinance Code may also be liable civilly to the Agency for a sum not to exceed one thousand dollars (\$1,000) per day for each day of such violation, in addition to any other penalties that may be prescribed by law.
- 8.4 Upon the failure of any person to comply with any provision of this Ordinance Code, the Agency may petition the Superior Court for a temporary restraining order, preliminary or permanent injunction, or such other equitable relief as may be appropriate. The right to petition for injunctive relief is an additional right to those, which may be provided elsewhere in this Ordinance Code or otherwise allowed by law. The Agency may petition the Superior Court of the County to recover any sums due the Agency.

This Ordinance Code shall become effective on the thirty-first day after adoption.

**ADOPTED** this 27<sup>TH</sup> day of July 2005 by the following vote:

AYES: Directors Maulhardt, Borchard, Craven, Flynn and Fox

NOES: None

FCGMA 2007 Annual Report

ABSENT:	None
	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 Ordinance 8.1
	Kathy Miller, Clerk of the Board