

**MOORPARK CITY COUNCIL
AGENDA REPORT**

TO: The Honorable City Council

FROM: Jeremy Laurentowski, Parks and Recreation Director *JL*

BY: Jessica Sandifer, Management Analyst *JS*

DATE: May 23, 2014 (CC Meeting of June 4, 2014)

SUBJECT: Consider Update on Adoption of Emergency Ordinance E by the Fox Canyon Groundwater Management Agency and Possible Cost Implications to the City

BACKGROUND

In January 2014, Governor Brown signed a proclamation declaring a drought emergency in the State of California and requesting that Californians reduce their water usage by 20%. After hearing a report from the United Water Conservation District and the Watershed Protection District about historical and current precipitation data and groundwater basin conditions, the Fox Canyon Groundwater Management Agency (FCGMA) directed their staff to draft an Emergency Ordinance for consideration at its February 26, 2014 meeting that would contain appropriate actions for addressing the declining groundwater conditions within the FCGMA area.

After several public meetings at which the FCGMA Board of Directors heard from the various agricultural, municipal, and industrial operators, the FCGMA Board of Directors adopted Emergency Ordinance E on April 11, 2014.

The purpose of this report is to discuss the implications of Emergency Ordinance E ("The Ordinance") on water usage at Arroyo Vista Community Park (AVCP).

DISCUSSION

The Ordinance sets parameters and requirements for agricultural, municipal, and industrial well operators to follow. The requirements for municipal and industrial operators affect the City's pumping activities at AVCP.

The City of Moorpark has two well sites located at AVCP. These pumps are located in the South Las Posas Basin within the Fox Canyon Groundwater Management Agency area. The city pumps (extracts) water from these wells for irrigation water use in order to maintain approximately forty-four acres of turf that are primarily used for sport fields.

The Ordinance sets Temporary Extraction Allocations (TEA) based on an operator's average annual reported extractions, not including extractions that incurred surcharges, for calendar years 2003 through 2012. Once the TEA is established, the Ordinance calls for a phased reduction in groundwater extractions of 20% over the next 18 months. If an operator fails to reduce their groundwater extractions by the prescribed amount, they will be subject to an extraction surcharge for the amount of water that was extracted over the TEA. The first reduction becomes effective July 1, 2014, at which time the City will have to reduce their well extractions by 10%. Further reductions of 5% occur every 6 months thereafter, arriving at the full reduction of 20% in January 1, 2016.

The Ordinance will be reviewed by the FCGMA Board of Directors every 18 months, unless superseded or rescinded based on a finding that certain conditions relating to groundwater recharge, as outlined in more detail in the Ordinance, have been met. Given the current drought situation it is likely the Ordinance will be in effect for the foreseeable future.

Staff has calculated the City of Moorpark's TEA at 62.6 acre feet of water per year for operations at AVCP. An initial 10% reduction would mean the City could only extract 56.3 acre feet/year of water from its wells, and a 20% reduction would drop water use to approximately 50.0 acre feet/year. Current water usage at AVCP has slightly increased over the last several years due to turf renovation practices that were implemented in 2011. The average water use during a normal year is approximately 72 acre feet/year. During the drought of 2013, the City used approximately 113 acre feet of water to irrigate the sport fields at AVCP. During a normal year, with seasonal temperature fluctuations, staff is able to minimize water use over an approximate three month period during the winter months. This is due to the fact that bermuda turf will go dormant when average daily temperatures drop to approximately fifty degrees Fahrenheit. In 2013, the turf thrived during the winter months and required regular water use to maintain the turf. Due to increases in well extractions across the County in 2013, the FCGMA has omitted 2013 from the TEA average.

In January, 2016, the City's well water extraction allocation of 50.0 acre feet/year will result in an approximate 31% reduction in water use, when compared to a typical year with normal seasonal rainfall and continued turf renovation practices. The current extraction surcharge rate is \$1,315/acre-foot. This would equal an extraction surcharge cost of approximately \$28,930 per year without any changes to the irrigation system, total turf acreage or turf management practices at AVCP.

On February 5, 2014, staff brought to the City Council's attention the fact that the pump system for well water at AVCP was not only inefficient, due to the agricultural nature of the pump, but was also very difficult to manage the turf renovation practices started in 2011. The City Council approved staff's recommendation to install a variable frequency drive (VFD) system to help alleviate many of the irrigation system inefficiencies. In addition to a preferred turf management system, staff estimated that this system would save a minimum of 5% in irrigation water use. This estimate may be somewhat conservative, as the VFD system will enable staff to efficiently schedule the irrigation system based on actual turf needs, rather than the pump system parameters, and will eliminate many of the flooding problems due to overwatering. Staff estimated that the cost to provide irrigation water at AVCP through a standard potable water source provided by Ventura County Water Works District No.1 would be in the neighborhood of approximately \$250,000 annually at current water rates.

Staff is also currently in the process of evaluating the WeatherTRAK water management system that was installed in the Landscape Maintenance Districts in 2010 and will be making a recommendation to the City Council by August, 2014, for phase II, which includes the majority of the City parks. Staff is evaluating several additional water management systems in an effort to insure that the system chosen for the parks does not limit the City's turf management capabilities. The parks are much more difficult to maintain than the LMD's and require hands-on type management to effectively maintain the turf areas, particularly the sports fields. Staff originally did not consider AVCP in phase II of the water management system, due to the fact that AVCP utilizes well water, with minimal direct costs to the City. However, due to the mandated reductions established by The Ordinance, and associated penalties, staff will include AVCP in the phase II analysis. Staff prepared a summary for the City Council on the WeatherTRAK system on February 19, 2014, and determined that the WeatherTRAK system saved approximately 14.5% of water use between 2012 and 2013. Staff is confident that a water management system installed at AVCP will accomplish similar results.

In addition to these water saving opportunities, staff is also looking at ways to reduce turf at all City parks in an effort to save water and reduce direct costs associated with park maintenance practices. Earlier this year, the City Council approved the recreational trail improvement project at AVCP. The loop trail portion of this project will ultimately reduce the total turf acreage by approximately one acre, or 2% of the total turf area. Along with the water reduction strategies mentioned previously, staff is confident that the City will come close to meeting the extraction reductions mandated by The Ordinance without compromising the quality of the turf fields at AVCP, and with minimal surcharges. However, if weather patterns similar to 2013 continue, the City will need to consider other alternatives or face paying surcharges for overages in well water extractions.

It should be noted that historically, the City has made a conscious effort to minimize well water extractions at AVCP. The FCGMA well water extraction allocation for AVCP prior to The Ordinance has been set at approximately 200 acre feet/year. This allocation is

based on the type of use or type of crop for agricultural customers. Since 2003, the City has only utilized an average of 32% of the total approved extraction allocation, resulting in a credit of approximately 2,415 acre feet of water. Most FCGMA customers save these credits for drought years or the ability to rotate high water use crops. However, The Ordinance does not allow for the ability to utilize well water extraction credits. It should also be noted that the low well water use at AVCP since the 2003 monitoring period, has ultimately reduced the TEA established by The Ordinance over the monitoring period from 2003 through 2012.

The Ordinance allows the FCGMA Executive Officer to grant a variance provided the owner can demonstrate the following:

1. That there are special circumstances or exceptional characteristics of the owner or operator which do not apply generally to comparable owners or operators in the same vicinity; and
2. That strict application of the reductions as they apply to the owner or operator will result in practical difficulties or unnecessary hardships inconsistent with the general purpose of this emergency ordinance; and
3. That the granting of such a variance will result in no net detriment to the aquifer systems.

Staff does not recommend submitting a variance to increase the well water extraction requirements or any other changes to The Ordinance at this time.

FISCAL IMPACT

If the City continues to pump water at the 72 acre feet/year, consistent with the last several years of irrigation water use, the City will be subject to an extraction surcharge for the amount above the TEA. By January, 2016, the difference between a normal year (72 acre-feet/year) and the TEA (50.0 acre-feet/per year) is 22.2 acre-feet/year, without any changes to the irrigation system, total turf acreage or turf management practices at AVCP. This would equal an extraction surcharge cost of \$28,930 per year at the current extraction surcharge rate of \$1,315/acre-foot. Currently, the cost to irrigate the 44 acres of turf and other landscape areas at AVCP is approximately \$3,500/year.

STAFF RECOMMENDATION

Receive and file report.

Attachments:

1. Fox Canyon Groundwater Management Agency, Emergency Ordinance E

EMERGENCY ORDINANCE – E

AN EMERGENCY ORDINANCE LIMITING EXTRACTIONS FROM GROUNDWATER EXTRACTION FACILITIES, SUSPENDING USE OF CREDITS AND PROHIBITING CONSTRUCTION OF ANY GROUNDWATER EXTRACTION FACILITY AND/OR THE ISSUANCE OF ANY PERMIT THEREFOR

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

ARTICLE 1. Findings

The Board of Directors hereby finds that:

- A. On January 17, 2014, the Governor of the State of California proclaimed a state of emergency due to current drought conditions and called on Californians to reduce their water usage by 20 percent. On March 1, 2014, the Governor signed into law emergency drought legislation that finds and declares that California is experiencing an unprecedented dry period and shortage of water for its citizens, local governments, agriculture, environment, and other uses.
- B. The U.S. Drought Monitor has designated the territory of the Agency to be currently in a condition of exceptional drought.
- C. The United Water Conservation District has reported that groundwater storage in the Oxnard Plain Basin Forebay dropped by 32,200 acre feet in the past year and groundwater levels are currently below sea level. Continued dry conditions and regulatory restrictions on diversions from the Vern Freeman Diversion will result in less water available for recharge of the Forebay.
- D. On February 25, 2009, the Fox Canyon Groundwater Management Agency Board of Directors in response to a serious water resource problem constituting a very real and immediate threat to groundwater quality and quantity to the West, East, and South Las Posas Basins and any and all basins tributary thereto adopted Emergency Ordinance D, entitled An Emergency Ordinance to Impose a Temporary Moratorium on Construction of New Wells and to Provide an Upper Limitation to Efficiency Extraction Allocation Within the West, East, and South Las Posas Groundwater Basins Pending Development of a Basin-Specific Management Plan.
- E. Emergency Ordinance D was replaced by Ordinance 8.6 which presumed the development of a Basin-Specific Management Plan. However, the threats to groundwater quality and quantity in the Las Posas Basins remain and have increased due to persistent drought conditions, and the lack of a Basin-Specific Management Plan.

- F. The Agency's 2007 Update to its Groundwater Management Plan established basin yield at 100,000 acre-feet per year; however, average annual total extractions within the Agency for Calendar Years 2003 through 2012 were 124,586 acre-feet.
- G. Due to persistent dry conditions, the Department of Water Resources on January 31, 2014, announced a 2014 State Water Project Allocation of zero percent.
- H. The cumulative use of conservation credits has reduced the benefit of previous reductions in historical allocations, and could limit any benefit derived through this Emergency Ordinance.
- I. The Board may adopt ordinances for the purpose of regulating, conserving, managing, and controlling the use and extraction of groundwater within the territory of the Agency.
- J. The measures adopted in this emergency ordinance are necessary in order to improve and protect the quantity and quality of groundwater supplies within the territory of the Agency, to prevent a worsening of existing conditions, to allow time to implement a definite and long-term solution to improve groundwater conditions in the Agency and to bring groundwater extractions into balance with recharge.
- K. This emergency ordinance is exempt from the California Environmental Quality Act pursuant to CEQA Guidelines Sections 15307 and 15308 as an action taken "to ensure the maintenance, restoration, or enhancement of natural resources or the environment."

ARTICLE 2. Reduction of Groundwater Extractions

- A. For the duration of this emergency ordinance, all Municipal and Industrial Operators' extraction allocations, regardless of type, shall be replaced with a Temporary Extraction Allocation (TEA) based on an operator's average annual reported extractions, not including any extractions that incurred surcharges, for Calendar Years 2003 through 2012.
- B. For the Port Hueneme Water Agency (PHWA), their TEA shall be established according to the Agency's approved July 24, 1996 agreement and allocations contained within.
- C. Temporary Extraction Allocations (TEA) shall be reduced in order to eliminate overdraft from the aquifer systems within the boundaries of the Agency for municipal and industrial uses. The reductions shall be as follows:

1. Beginning July 1, 2014	10% (TEA x 0.90/2)
2. Beginning January 1, 2015	15% (TEA x 0.85/2)
3. Beginning July 1, 2015	20% (TEA x 0.80/2)
4. Beginning January 1, 2016	20% (TEA x 0.80)

- D. For reported extractions starting on August 1, 2014, all Agricultural Operators' extraction allocations, regardless of type, shall be replaced with an Annual Efficiency Allocation as provided in Section 5.6.1.2. of the Agency Ordinance Code, except that the annual irrigation allowances used to calculate the Irrigation Allowance Index shall be adjusted downward 25% from the allowances set forth in Resolution No. 2011-04 (Exhibit No. 1). For computing the irrigation allowance, the definition of Planted Acre may include designated areas that grew irrigated crops in the twelve months prior to August 1, 2014, but have subsequently been fallowed or are growing a non-irrigated crop.
- E. On February 1, 2015, the Board may by Resolution undertake an additional adjustment to the annual irrigation allowances used to calculate the Irrigation Allowance Index, or other pumping restrictions in order to achieve a cumulative 10% reduction in pumping by Agricultural Operators.
- F. On August 1, 2015, the Board may by Resolution undertake an additional adjustment to the annual irrigation allowances used to calculate the Irrigation Allowance Index, or other pumping restrictions in order to achieve a cumulative 20% reduction in pumping by Agricultural Operators.
- G. Notwithstanding the extraction allocations established pursuant to Chapter 5.0 of the Agency Ordinance Code, all extractions in excess of the allocations established and adjusted by this emergency ordinance shall be subject to extraction surcharges.
- H. The Executive Officer may, on written request from a land owner or operator, grant a variance from the requirements of this article based on a showing:
 - 1. That there are special circumstances or exceptional characteristics of the owner or operator which do not apply generally to comparable owners or operators in the same vicinity; or
 - 2. That strict application of the reductions as they apply to the owner or operator will result in practical difficulties or unnecessary hardships inconsistent with the general purpose of this emergency ordinance; or
 - 3. That the granting of such variance will result in no net detriment to the aquifer systems.

ARTICLE 3. Limitation on Accrual and Use of Credits

Notwithstanding Section 5.7 of the Agency Ordinance Code, conservation credits shall not be obtained and may not be used to avoid paying surcharges for extractions while this emergency ordinance is in effect.

ARTICLE 4. Prohibition on New Extraction Facilities

The Board prohibits the issuance of any permit for construction of a groundwater extraction facility, other than a replacement, backup or standby facility which does not allow the initiation of any new or increased use of groundwater, within the territory of the Agency. The prohibition set forth shall not apply to any permit for which a completed application is on file with the Agency on or before February 26, 2014, or for any permit in furtherance of a pumping program approved by the Board. For the purpose of this Article 4, a new or increased use is one that did not exist or occur before the effective date of this emergency ordinance. The Board may grant exceptions to the prohibition set forth in this Article 4 on a case-by-case basis. Applications for exceptions shall conform to the requirements of Section 5.2.2.3. of the Agency Ordinance Code and will be approved only if the Board makes the findings set forth in Section 5.2.2.4. of the Agency Ordinance Code.

ARTICLE 5. Duration

This emergency ordinance shall remain in effect from the date of adoption and reviewed every eighteen months, unless superseded or rescinded by action of the Board or a finding by the Board that the drought or emergency condition no longer exists.

ARTICLE 6. Effective Date

This ordinance shall become effective immediately upon adoption by the vote of at least four members of the Board; otherwise it shall become effective on the thirty-first day after adoption.

PASSED AND ADOPTED this 11th day of April 2014 by the following vote:

AYES: 5
NOES: 0
ABSENT: 0

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

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

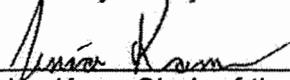
By: 
Jessica Kam, Clerk of the Board

Exhibit No. 1 – Current Irrigation Allowance Index and - Proposed Allowance Index Values
(Adjusted 25%)