Resolution 2011-02

of the

Fox Canyon Groundwater Management Agency

A RESOLUTION CREATING THE UNITED WATER CONSERVATION DISTRICT SATICOY WELL FIELD STORAGE PROGRAM

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

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

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

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

WHEREAS, the Management Plan finds that depressed groundwater levels caused by pumping in the Oxnard Plain Basin and Pleasant Valley Basin increase the potential for saline intrusion from multiple sources into the aquifers present in these basins. Saline intrusion is a serious threat to beneficial uses and the cost to remediate saline intrusion may be prohibitively expensive for most water users; and

WHEREAS, the Management Plan identifies groundwater management strategies that involve supplying water to the Oxnard Plain Basin and Pleasant Valley Basin to decrease pumping in these basins; and

WHEREAS, United Water Conservation District's ("UWCD") mission is to manage, protect, conserve and enhance the water resources of the Santa Clara River, its tributaries, and associated aquifers; and

WHEREAS, UWCD has and continues to serve an integral role in evaluating groundwater conditions within the Agency jurisdiction and developing strategies to optimize the management and use of water resources within the region. UWCD's efforts in this regard are documented in the Management Plan and its ongoing responsibilities in monitoring aquifer conditions and regularly operating and updating the Ventura Regional Groundwater Model; and

WHEREAS, UWCD owns and operates the Santa Felicia Dam in Piru and the Saticoy Spreading Grounds and Saticoy Well Field located in the Oxnard Plain Forebay Basin ("Forebay"); and

WHEREAS, In conjunction with its Fall Conservation Release water releases from Santa Felicia Dam, UWCD diverts and temporarily stores surface water beneath its Saticoy Spreading Grounds for later recovery and delivery to the Pleasant Valley and Oxnard Plain Basins for the purpose of reducing pumping in these basins; and

WHEREAS, UWCD has operated its facilities in the above-described manner and for the above-described purposes since 2007 without an extraction allocation. UWCD has recovered 9,384 AF of stored surface water via pumping through 2010; and

WHEREAS, UWCD proposes a storage program ("Storage Program") to account for historical and future pumping of stored surface water via the Saticoy Well Field in the manner described above; and

WHEREAS, UWCD has submitted an application for the Storage Program in accordance with Section 5.7.2.1.2 of the Agency's Ordinance Code (Attachment No. 1); and

WHEREAS, UWCD's proposed Storage Program as set forth herein meets the requirements of Section 5.7.2.1.2 of the Agency's Ordinance Code and contributes to the maintenance of groundwater quality and groundwater supply in the Oxnard Plain Basin and Pleasant Valley Basin.

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

The Agency approves the Storage Program retroactively to 2007 as described in Attachment No. 1, subject to the conditions listed below.

- 1. The Agency grants its approval of the Storage Program based on the finding that it will result in no net detriment to any basin, subbasin or aquifer within the Agency boundaries.
- State Water Project water released from Santa Felicia Dam and spread at the Saticoy Spreading Grounds shall not be eligible for extraction under this program. State Water Project water shall continue to be accounted for under the Good Deed Credits Trust Program pursuant to Agency Resolution No. 2002-01.
- Extractions made under this Storage Program shall be limited to the volume of non-State Water Project surface water released from Santa Felicia Dam and spread at the Saticoy Spreading Grounds.
- 4. Temporary storage. For the purposes of accounting and retroactive to 2007, surface water released from Santa Felicia Dam and spread at the Saticoy Spreading Grounds shall be assumed to remain in storage no more than two (2) years. After two (2) years, any unrecovered stored water will no longer be eligible for extraction under this Storage Program.
- 5. Extractions associated with this Storage Program shall be from the four shallow wells located immediately adjacent to the UWCD Saticoy Spreading Grounds Saticoy Well Field (State Well Nos. 02N21W07L07, 02N21W07M04, 02N22W12H01, and 02N22W12J04).

- 6. UWCD shall provide an accounting for all water stored and extracted under the Storage Program each year in conjunction with its second period semi-annual extraction statement.
- 7. As part of UWCD's annual reporting to the Agency regarding basin-wide conditions, UWCD shall provide an evaluation of any impacts directly associated with the pumping approved under this Storage Program. This information will be provided to the Agency by March 31 each year.

On motion by Director Naumann, seconded by Director Kelley, the foregoing resolution was passed and adopted on this 27th day of April, 2011.

Bv:

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. 2011-02.

By

Miranda Nobriga, Clerk of the Board

Attachment:

1. Letter from M. Solomon to J. Pratt dated February 9, 2010, Subject: United Water Conservation District Saticoy Well Field Storage Program

Board of Directors
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UNITED WATER CONSERVATION DISTRICT

General Manager E. Michael Solomon "Conserving Water Since 1927"

February 9, 2011

Jeff Pratt, P.E., Executive Officer
Fox Canyon Groundwater Management Agency
800 South Victoria Avenue
Ventura, CA 93009-1610

Subject:

United Water Conservation District Saticoy Well Field Storage Program

Dear Jeff,

As you are aware, United Water Conservation District (UWCD) and Fox Canyon Groundwater Management Agency (FCGMA) staff have been working to clarify UWCD's Pumping Trough Pipeline (PTP) and Saticoy Well Field groundwater extraction reporting to the FCGMA. Based on our meeting with your staff on November 8, 2010 we are confident that we have identified a mutually acceptable solution consistent with provisions of the Fox Canyon Groundwater Management Agency Ordinance Code. At the November meeting, the attendees agreed that the reporting issues for PTP and Saticoy Well Field required different solutions and should be handled separately. This letter lays out a proposed plan to address the Saticoy Well Field reporting through the creation of a FCGMA Board-approved groundwater storage program. This letter serves as our written application for approval of a storage program retroactive to 2007, in accordance with Section 5.7.2.1.2 of the FCGMA Ordinance Code. We will address the PTP reporting issues at a later time.

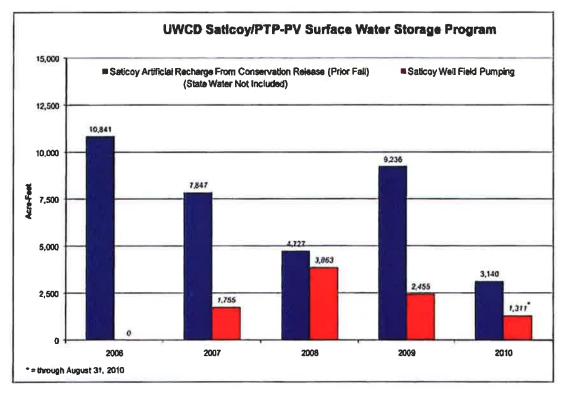
Background

The UWCD Saticoy Well Field, formally the Groundwater Storage Management Project, was completed in 2005 adjacent to our Saticoy Spreading Grounds. The project was funded by a grant from the California Department of Water Resources, which recognized it as serving an important storage management function. The purpose of the Saticoy Well Field is to pump shallow water from the recharge mound underlying the spreading grounds in wet years. This pumping from the Oxnard Plain Forebay Basin (Forebay) decreases the recharge mound, allowing more spreading during wet periods. The pumped water is delivered to our customers along our existing agricultural pipeline system (Pleasant Valley (PV) and Pumping Trough Pipeline (PTP) pipelines) thereby reducing Lower Aquifer System (LAS) pumping in severely overdrafted areas of the Oxnard Plain and Pleasant Valley Basins. In accordance with Resolution 1999-3, we do not need an allocation or credits to pump when mounding conditions prevail.

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In addition to decreasing the recharge mound during wet years, the Saticoy Well Field provides us the ability to store and recover surface water released from Santa Felicia Dam during the fall of most years for later delivery to severely overdrafted areas along the PV and PTP pipelines. This conjunctive use project operates as follows. During early fall in most years, we conduct a managed release from Santa Felicia Dam to supply the PV and PTP areas and recharge the Forebay. A portion of surface water recharged at the Saticoy Spreading Grounds is stored in the Upper Aquifer System (UAS) for later delivery when there is insufficient surface water in the Santa Clara River to meet irrigation demand in the PV and PTP areas. The Saticoy Well Field is used to recover the stored surface water. The aguifer is used to the store the water because there is no direct conveyance from Santa Felicia Dam to PV/PTP and there is insufficient surface storage for this water on the coastal plain. Since 2007, we have replaced approximately 9,400 AF of LAS pumping with stored surface water (Figure 1). Given that this mode of operation reduces pumping in severely overdrafted areas in the Oxnard Plain and Pleasant Valley Basins, it is clearly aligned with the goals of the Agency's Groundwater Management Plan and clearly provides a net benefit to the groundwater resources within the Agency. Since this program involves temporary storage and recovery of surface water for the benefit of the aquifers within the Agency, UWCD believes it qualifies as a storage program under Section 5.7.2.1.2 of the FCGMA Ordinance Code.





Saticoy Well Field Storage Program Application - Required Information

Below you will find the information required for storage program applications, as set forth in Section 5.7.2.1.2 of the FCGMA Ordinance Code.

5.7.2.1.2.1 - Operator of the proposed injection/storage program: UWCD

5.7.2.1.2.2 - Purpose of the proposed injection/storage program: Reduce LAS pumping in severely overdrafted areas of the Oxnard Plain and Pleasant Valley Basins, consistent with the FCGMA Groundwater Management Plan.

5.7.2.1.2.3 – Injection/storage facilities information & 5.7.2.1.2.4 – Method of operation: When available, surface water is released from Santa Felicia Dam during early fall. A portion of release reaches the Freeman Diversion as surface flow and is diverted by UWCD. Since the diversion rate typically exceeds our pipeline capacity to Pleasant Valley and the Oxnard Plain, a portion of the diversion is spread at the Saticoy Spreading Grounds and stored in the UAS for later use when surface water is insufficient to meet irrigation demand. The surface water is recovered via four shallow wells located immediately adjacent to the spreading basins (02N21W07L07, 02N21W07M04, 02N22W12H01, and 02N22W12J04). The construction details of these wells are on-file at your office.

As described above, the recharge phase of this program typically occurs during early fall of each year, depending on water availability. The timing of the extraction phase depends on surface water availability, irrigation demand, and groundwater levels beneath our Saticoy facility. In most years, the extraction phase will be limited to summer and fall months. Since the wells were designed to lower the groundwater mound during wet years, extraction is limited by the shallow well construction and declining groundwater levels following recharge events. For this reason, the volume of water recovered does not exceed the amount recharged and impacts to local wells have not been observed. Our current monitoring activities at the Saticoy facility and surrounding areas are sufficient to detect any unanticipated changes in groundwater levels associated with pumping under this program. Figure 1 shows our actual operations since 2006.

Program Summary

This request is for approval of a storage program for the Saticoy Well Field, in accordance with Section 5.7.2.1.2 of the FCGMA Ordinance Code. Under this program, we will obtain storage credits for that portion of our managed Fall Conservation Release from Santa Felicia Dam that is recharged at our Saticoy facility. This program is intended to operate independently from the Good Deed Credits Trust Program to avoid double credits for State Water Project water. In other words, State Water Project water will not be counted under this program.

The storage credits will be applied against groundwater extractions from the Saticoy Well field. As part of this approval, we ask that the program be approved retroactively to 2007

to address the accounting issues associated with the reported pumping during the previous three years. Based on our records, the accounting under this program for 2007 – 2009 would be as shown in Table 1 below. Moving forward, we will provide your staff with the recharge volume for the previous calendar year with our second period semi-annual extraction statement for FCGMA account "UWCD".

Table 1
Recharge, Extraction, and Cumulative Storage Credits

Year	Recharge (AF)	Extraction (AF)	Cumulative Storage Credits
2007	7,847	1,755	6,092
2008	4,727	3,863	6,956
2009	9,236	2,455	13,737

If you have any questions, please contact Bryan Bondy, Associate Hydrogeologist, by phone (805-525-4431) or by email (<u>bryanb@unitedwater.org</u>).

Sincerely

E. Michael Solomon General Manager

Cc: Mary Lindley, Administrative Services Manager

Bryan Bondy, Sr. Hydrogeologist Christine Williams, Controller