Groundwater Committee Meeting

October 22, 2019

Agenda Items 1 through 3

1. PUBLIC COMMENT
2. APPROVAL OF THE AGENDA
3. APPROVAL OF THE MINUTES
4. FCGMA Agenda Review

**Oxnard sub-basin (Oxnard Plain)**
- **Priority:** High – Critically Overdrafted
- **Reason:** Seawater intrusion, overdraft
- **GSA:** Fox Canyon GMA

**Las Posas basin**
- **Priority:** High
- **Reason:** Water quality, overdraft
- **GSA:** Fox Canyon GMA

**Pleasant Valley basin**
- **Priority:** High – Critically Overdrafted
- **Reason:** Saline intrusion, overdraft
- **GSA:** Fox Canyon GMA

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**Last Month’s FCGMA BoD Meeting (9/25):**

- **Sustainability fee increase approved**
  - **Total FCGMA pumping fees:**
    - **Current**
      - Ext. fee: $6.00
      - Sust. fee: $6.50
      - Totals: $12.50
    - **2019-20**
      - Ext. fee: $6.00
      - Sust. fee: $11.00
      - Totals: $17.00
    - **2020-21**
      - Ext. fee: $6.00
      - Sust. fee: $14.00
      - Totals: $20.00

- **Information item:** Article 21 deliveries and invoice
- **Extend agreement with TNC & NRCS for water market and AMI system**
Since the Last FCGMA Meeting...

• Oct. 1—FCGMA Executive Committee Meeting
  • FCGMA staff recommend “limits” approach for “SCR Flex Allocation” (applies to PTP and PV only)

• Oct. 3—“Working Draft” version of revised O-PV Pumping Allocation Ordinance shared with stakeholders

• Oct. 17—Revised O-PV Pumping Allocation Ordinance released with FCGMA agenda packet

Key Agenda Items for Oct. 23 BoD Meeting:

2. Letter of Support for United’s Prop. 1 grant application
   • For implementing El Rio iron and manganese treatment facility

3. Periodic review of Emergency Ordinance E
   • Continue until new pumping allocation ordinance takes effect
   • FCGMA staff recommending that M&I allocations revert to TEA baseline
     • Reportedly consistent with proposed allocations under new ordinance

4. O-PV Pumping Allocation Ordinance
   • Proposed implementation on October 1, 2020

5. Consider resolution authorizing FCGMA staff to apply for Prop. 68 groundwater sustainability planning grant
   • For expenses incurred after June 5, 2018
Pumping Allocation Ordinance—Impacts on United

- Base period: CY 2005 through 2014 (10 years)
- Base period allocation: Reported extractions during CY 2005-14
  - Excluding any extractions that incurred surcharges
  - Supplemental M&I program pumping from O-H wells included
  - Most Saticoy-well pumping from late 2000’s was not counted as groundwater
- Allocations can be shared among commonly owned extraction facilities within a basin
  - In future, sharing of allocations may be restricted to management areas
- “The Agency intends to move from a wellhead-based to a land-based allocation system”
- Extraction allocations may be reduced “according to a schedule and method to be determined by the Board”

“An operator’s extraction allocation shall be the base-period (2005-14) extraction”
Historical O-PV Groundwater Extractions

Total GW Extractions

Historical O-PV Total Water Use

Historical O-PV Total Water Use

Total Water Use

Calendar Year
O-H Pipeline Allocation

• Extraction allocation assigned to O-H Pipeline is:
  • “Held in trust [by United] for any or all contractors” as a “suballocation” as defined in the O-H Pipeline Agreement.

• If a party withdraws from the O-H Pipeline Agreement, the distribution of the allocation will be decided by mutual agreement of “United and the affected parties or as determined by a court.”

• Surcharges and carryover apply to over-pumping and under-pumping each year

O-H Groundwater Allocation Expected to be Sufficient to Meet Historical Demand

2005-14 Base Period Avg. Total OH pumping by United = 14,350 AF/yr
PTP and PV Groundwater Allocations are Modified by the “SCR Flex Allocation”

“SCR Flex Allocation”

- SCR surface water deliveries to PTP and PVP affect groundwater allocations:
  - Groundwater allocation adjusted up or down depending on how much surface water is available each year
  - A “floor” of ~1,000 AF is proposed as a minimum PTP extraction allocation
    - Will be adjusted downward if rampdown in pumping required by FCGMA
    - Not subject to carryover
    - If surface water not fully used, extraction allocation reduced accordingly
  - Surcharges totaled every 5 years, rather than every year
  - Carryover will be applied annually, apply to 5-year totals for over- or under-pumping
Historical PTP Operation

Other Notable Points

- **Allocation carryover:**
  - 50% of unused extraction allocation can be carried over to the subsequent year
  - Carryover can be accumulated to a maximum of 100% of the normal extraction allocation
  - Carryover expires after 5 years (but this might never happen)
  - First extractions of subsequent year

- **Minimum allocation for Ag operators:**
  - To be established, assuming rampdowns necessary
Reporting Requirements

• For PTP:
  • Total volume of water supplied from each source (GW, SW)
  • Location of each turnout owned by United
  • Monthly deliveries and meter readings for each turnout owned by United
  • List of APNs served by each turnout
  • Customer name associated with each APN

• For OH:
  • Total volume of water supplied from each source (GW)
  • Monthly delivery volumes
  • List of APNs served by United(?)

• For deliveries of SCR surface water:
  • Total volumes of diversions, PTP deliveries, PVP deliveries, and other deliveries

Known Concerns of Other Stakeholders

• PVCWD strongly advocating “one water” approach to conjunctive use
  • Justifiably concerned about potential for much deeper cuts for some farmers during drought years

• M&I wants to end Emergency Ordinance E, ASAP

• M&I concerned that SCR Flex Allocation and 5-year-averaging give Ag users an advantage
5. Mound Basin Groundwater Sustainability Agency (MBGSA) Agenda Review

Mound basin
Priority: High
Reason: Water quality, dependence on groundwater, forecasted population growth
GSA type: JPA

Recent Activities:

• Oct. 17 regular BoD meeting:
  • Routine administrative and budget issues
  • United and Intera (MBGSA’s consultant) beginning to develop data management system and GSP

• Next BoD meeting likely to occur in December 2019
6. Fillmore and Piru Basins Groundwater Sustainability Agency (FPBGSA) Agenda Review

Fillmore basin
Priority: High
Reason: Water quality, dependence on groundwater, forecasted population growth
GSA type: JPA (Fillmore + Piru)

Piru basin
Priority: High
Reason: Water quality, dependence on groundwater
GSA type: JPA (Fillmore + Piru)

Recent activities:

• July 18 regular BoD meeting:
  • Encore presentation—roles & responsibilities of the GSA and its Board members (David Ceppos)
  • Comment on waiver of well permit prohibitions for 1307 Bardsdale Ave., Fillmore
  • Budget and extraction fees

• Conceptual modeling nearly done, numerical model construction beginning
Recent agenda items:

• No meeting in August

• September:
  • Outreach and engagement planning results from ad hoc committee
  • Modeling progress

• October: Additional outreach and engagement planning by the ad hoc committee
Regional Setting

Fillmore & Piru Basins
Numerical Modeling

- Extension of coastal plain model (2018)
  - Dr. Jason Sun
- Modeling Period
  - 1985 – 2015
- Validation Period
  - 2016 - 2019
Data Collection

& Pre-Processing

Data Collection – Precipitation

• Precipitation Gages
  • Ventura County
  • Los Angeles County
  • US Geological Survey
  • United Water
  • Research database products
Data Collection – **Recharge Processes**

- Groundwater Recharge to Aquifers
  - Ag and M&I return flows
  - Deep infiltration of precipitation
  - Mountain-front recharge
  - Stream-channel recharge
  - Artificial recharge

Data Collection – **Groundwater Pumping**

- ~500 wells with records
  - 1985 - 2015
Data Collection – **Streamflow at Boundaries**

- Streamflow gaging sites
  - 9 USGS and Ventura County gages
- Daily average discharge
- Decades of data

Data Collection – **Streamflow within Boundaries**

- Streamflow gaging sites
- Percolation rates within stream channel
- United (manual) measurements
  - 500 + along Santa Clara River and tributaries
  - Majority 1999 - present
Data Collection – *Groundwater Levels*

- Pressure Transducers
  - 4-hour intervals
  - 23 wells
  - 260,000+ records

- Water Level Elevations
  - Single measurements
  - 254 wells
  - 23,000+ records
Mapping of Hydrostratigraphic Units

• United staff also needed to map subsurface hydrostratigraphic units (aquifers)
• Used information from existing water and oil wells
  • Geophysical well logs
  • Description of lithology (sand, cobbles, silt, clay)
  • Well construction information (screened zones)
  • Other information (water levels, well production)

This mapping of units forms the framework/architecture of the groundwater flow model

Section lines in the Piru and Fillmore basins
Fine alluvial deposits
Along northern margin
Structural uplift
Deep wells

Alluvial deposits on flanks
7. Santa Paula Basin Technical Advisory Committee (TAC) Update

**Santa Paula basin**
**Priority:** Very Low
**Reason:** Adjudicated
**GSA type:** Technical Advisory Committee

Upcoming Activities

- **Next TAC meeting:** Nov. 7 (not a public meeting)
- **Upcoming activities:**
  - Consider effects of Ventura SWP-Interconnection project on potential Santa-Paula-basin “yield enhancement” projects
  - Progress regarding “triggers” document and funding for yield-enhancement projects
  - Review SP Basin Annual Report for 2018
8. **FUTURE AGENDA ITEMS**

![My idea is...]

9. **ADJOURNMENT**

![Gavel]