SUSTAINABLE GROUNDWATER MANAGEMENT ACT UPDATE

Building Industry Association of Fresno/Madera Counties
May 16, 2019
**Timeline**

- **June 30, 2017**
  - Groundwater Sustainability Agencies formation required

- **Late Summer 2019**
  - Draft GSPs released for public review

- **Jan 31, 2020**
  - Groundwater Sustainability Plans submitted to State

- **Dec – Jan 2020**
  - Groundwater Sustainability Plans adopted by respective GSA Boards

- **January 31, 2040**
  - All critically overdraft required to achieve sustainability.

- **Reports**
  - Annual Reports and 5-Year Updates of the Plan
Kings Subbasin GSAs
Governing Structure

<table>
<thead>
<tr>
<th>Seat Assignment</th>
<th>Member</th>
<th>Current Board Member</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1</td>
<td>Fresno Irrigation District</td>
<td>Jerry Prieto (FID)</td>
</tr>
<tr>
<td>#2</td>
<td>Shared irrigation district: Garfield WD, International WD, Fresno ID</td>
<td>Karl Kienow (Garfield W.D.)</td>
</tr>
<tr>
<td>#3</td>
<td>Shared “Small Agency”: Bakman Water Company, Biola CSD, CSU Fresno*, City of Kerman, FMFCD</td>
<td>Rhonda Armstrong (City of Kerman)</td>
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<tr>
<td>#4</td>
<td>City of Clovis</td>
<td>Jose Flores (City of Clovis)</td>
</tr>
<tr>
<td>#5</td>
<td>City of Fresno</td>
<td>Lee Brand (City of Fresno)</td>
</tr>
<tr>
<td>#6</td>
<td>County of Fresno</td>
<td>Brian Pacheco (County of Fresno)</td>
</tr>
<tr>
<td>#7</td>
<td>At-Large</td>
<td>Steve Pickens (Bakman Water Company)</td>
</tr>
</tbody>
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Decision-Making Support

- Executive Officer – FID’s Gary Serrato
  - Advisory Committee – Chair is Scott Redelfs (Clovis) & Vice Chair is Bill Stretch (FID)
  - Technical Subcommittee – Chair is Adam Claes (FID)
  - Membership/Outreach/Communications Subcommittee – Chair is Brandy Swisher (FMFCD)
  - Administrative/Fiscal Subcommittee – Chair is Lisa Koehn (Clovis-retired)

- Stakeholders – *You!*
Agency Responsibilities
Regional Challenge
Chronic Overdraft

Average Depth to Groundwater - Fresno Irrigation District
Climate Variability

Hydrologic Period

Kings River Water Year as % of 1955-2016 Average

1998-2010
(Spr 1999-2011)
Land Subsidence
Path to Sustainability

Groundwater Level - Sustainability Criteria
Variables

Rate of GW Decline
Alt 1: Last 10 Years
Alt 2: Last 20 Years
Alt 3: Worst 20-year Period
Alt 4: Hydrologic Avg Period
Alt 5: Other

Rate of Mitigation
Alt 1: Constant
Alt 2: Phased
Alt 3: Gradually Increasing
Alt 4: Other

Operational Flexibility
Alt 1: Recent drought
Alt 2: Other smaller drought
Alt 3: Conjunctive use operations
Alt 4: Other

Minimum Threshold

Value #1 to be set by GSA

Value #2 to be set by GSA

Measurable Objective
**AG CONTRIBUTION**
Excess applied irrigation from crops percolates through the soil into the aquifer.

**EVAPOTRANSPIRATION**
Moisture is absorbed through plant roots and evaporates into the atmosphere through evapotranspiration.

**INTENTIONAL RECHARGE**
Of the aquifer takes place at Leaky Aker and Flood Control District basins.

**SAN JOAQUIN RIVER**

**KINGS RIVER**

**FRIANT DAM**

**UNDERGROUND AQUIFER**

**SUBSURFACE INFLOW**
Groundwater flows into the aquifer from the north and northeast.

**SUBSURFACE OUTFLOW**
Groundwater flows out of the region to the southwest.

**TREATED & RECLAIMED WASTEWATER**
Percolates into the aquifer to aid in recharge.

**250 WELLS PUMP GROUNDWATER**
From the underground aquifer for Fresno's drinking water supply.

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**SGMA Requirements**
The 6 Undesirable Results

- Lowering of GW Levels
- Reduction of GW Storage
- Seawater Intrusion
- Water Quality Degradation
- Land Subsidence
- Depletion of Interconnected Streams

SGMA Overview
A GSP shall include...

- Description of plan area
- Groundwater conditions
- Water budget
- Managements areas
- Sustainability goals
- Description of undesirable results
- Measurable objectives
- Description of monitoring protocols and data management
- Description of projects to achieve sustainability
Kings Subbasin GSAs

7 Coordinated Groundwater Sustainability Plans
1) Develop HC
2) GW Conditions
3) Water Budget
4) Sustainable Management Criteria
5) Monitoring Network
6) Projects and Actions
7) Plan Implementation

NKGSA Plan Status
- Draft Complete
- In-Progress
- Future Chapter
Welcome to the
North Kings
Groundwater Sustainability Agency
Web Portal

www.northkingsgsa.org

Public Involvement
Stay Engaged

Talk to your water provider or GSA representative.

Sign-up to the NKGSA email list

Learn more about your regional water supplies

Attend public meetings and workshops

Provide input on the groundwater sustainability plan

Help us spread the word!
City of Clovis
SGMA Efforts
City of Clovis General Plan

Figure LU-2
Land Use Diagram

City of Clovis General Plan Land Use

- A - Agriculture (1 DU/20 AC)
- R - Rural Residential (1 DU/2 AC)
- VL - Very Low Density Residential (0.5-2.0 DU/AC)
- L - Low Density Residential (1.1-4.0 DU/AC)
- M - Medium Density Residential (1.1-7.0 DU/AC)
- MF - Medium High Density Residential (17.1-34.0 DU/AC)
- H - High Density Residential (56.1-125.0 DU/AC)
- VH - Very High Density Residential (25.1-40.0 DU/AC)
- MU - Mixed Use
- CS - Mixed Use/Nursing Home
- O - Office
- I - Industrial
- NC - Neighborhood Commercial
- GC - General Commercial
- GS - General Service
- P - Public/Kuasi-Public Facilities
- PN - Park
- S - School
- W - Water

Fresno County General Plan Land Use

- PRC - Planned Residential Community
- C-SP - Commercial Specialized

Planning Area Boundary
Sphere of Influence Boundary

*Not Shown on Map

Source: City of Clovis, City of Clovis General Plan

Document Name: City Of Clovis General Plan, 2024, A-21

Map Scale: 1/20,000

Source City of Clovis, 2014

CLOVIS
GENERAL PLAN

PLACEWORKS

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EXISTING CLOVIS SERVICE AREAS

- Existing Clovis service area within FID is ~12,200 acres
- Future (remaining) Clovis service area within FID is ~5,000 acres
- Planned Clovis service area outside of FID is ~7,200 acres
- Total service area at full build out is ~24,400 acres
City of Clovis Activities

- Participation on the NKGSA Board, Advisory Committee and subcommittees in preparation of the GSP and compliance with SGMA

- Technical Committee: Water budget and identification of projects
  - Preliminary numbers show NKGSA overall positive
  - Identification of sub-areas and local control
  - Projects may include recharge basins, ASR (Aquifer Storage and Recovery) direct well injection, water and sewer plant modifications, conservation programs

- Outreach Committee: General SGMA presentation May 23, 2019 to the City of Clovis Planning Commission

- Urban Water Management Plan (UWMP) update beginning in 2020

- Continue working with the Fresno Irrigation District (FID) to finalize an updated Conveyance Agreement and identify water supply for smart growth

- Prepare local studies identifying operational strategies with known current and future water supplies in meeting compliance with the GSP and being fully sustainable by 2040
City of Fresno
SGMA Efforts
City of Fresno SGMA Activities

- Member of the NKGSA Board of Directors, Advisory Committee, and Technical Subcommittee

- Actively engaged in the development of the GSP

- Development of the City of Fresno GSP Water Budget:
  - Historic groundwater pumping and recharge activities
  - CVP Contract, COF/FID Conveyance Agreement
  - Reclamation Water
  - NE & SE Surface Water Treatment Facilities
Figure IM-2: Sequencing of Development

Growth Areas:
- Inside City Limits
- Growth Area 1
- Growth Area 2
- County islands

Planning Area
- Sphere of Influence
- City Limits

*County Islands are considered to be inside City Limits in reference to sequencing of development.

Source: City of Fresno, 2014.
Next Steps...

• General SGMA Presentation to Fresno Planning Commission and Fresno City Council ahead of GSP public review

• Following GSP adoption, prepare and update local water management studies:
  • Water Reuse Master Plan (preparing scope)
  • Fresno Metropolitan Water Resource Management Plan Update
  • 2020 Urban Water Management Plan

• Implementation of SGMA projects and strategies to provide a sustainable water supply for current needs and future growth
Countywide SGMA Efforts
Focus of County Staff Activity

- Assist in the completion and review of the various GSPs where the County is partner agency with other local agencies

- Complete preparation of Fresno County Management Area A and B GSP where the County is the Exclusive GSA

- Participate to complete the required coordination agreements

- Partner with local agencies to assist in GSP implementation

- Evaluate and recommend revisions as necessary to County General Plan policies, ordinances, and development standards to address consistency with adopted GSPs

- Develop strategies to address potential fallowing of agricultural lands, crop conversion, intensive water uses
Questions?