An overview of the Sustainable Groundwater Management Act (SGMA)

Sacramento Water Forum
Negotiating Steering Committee
August 4, 2020

Trevor Joseph, PG, CHg - City of Roseville
2014 Sustainable Groundwater Management Act
Where does SGMA apply?
Groundwater Basin Prioritization & Classification

SGMA Basins are High and Medium Priority

Critically Overdrafted Basins

Source: modified from Department of Water Resources
SGMA guiding principles and key info

Local Control

“A central feature of these bills is the recognition that groundwater management in California is best accomplished locally.”
Governor Jerry Brown, September 2014

SGMA Timeline

GSA Formation
June 30, 2017

GSP Due
Jan 31, 2022

Achieve Sustainability
Jan 31, 2040/42

GSP Due (COD)
Jan 31, 2020

Annual Reporting & 5yr GSP Updates

Sustainability

Avoid Six Undesirable Results

- Lowering
- Reduction
- Seawater Intrusion
- Degraded GW Levels
- Quality
- Land Subsidence
- Surface Water Depletion

Source: modified from Department of Water Resources
Achieving Sustainable Yield through the avoidance of Undesirable Results

- Lowering of GW Levels
- Reduction of GW Storage
- Seawater Intrusion

- Water Quality Degradation
- Land Subsidence
- Depletion of Interconnected Streams

Source: Department of Water Resources
## SGMA timeline by phase

### Phase 1:
- **Complete.** But boundary realignment and governance reorganization will be ongoing.

### Phase 2:
- **Active.** GSAs are developing GSPs. DWR is providing planning, technical, and financial assistance.

### Phase 3:
- **Active.** GSAs can begin implementing GSPs upon submittal to DWR and GSAs must submit annual reports and GSP updates.

### Phase 4:
- **Future.** Sustainability goals must be achieved within 20 years and address a 50-year planning and implementation horizon.

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**Source:** modified from Department of Water Resources
Department of Water Resources (DWRs) Dual Triple Role

Engagement and Assistance Role

- Financial Assistance
  - Prop 1
- Planning Assistance
  - Facilitation
  - GSA and GSP Support
- Technical Assistance
  - Statewide Datasets, Analysis, and Tools
  - Best Management Practices
  - Water Available for Replenishment Report

Regulatory Role

- DWR Evaluation of GSPs
- Sustainable Groundwater Management

Source: Department of Water Resources
Groundwater Sustainability Agencies (GSAs)
Groundwater Sustainability Agencies (GSAs)

- June 2016: Begin to develop GSP
- Est. Early 2021: Draft GSP
- Est. Mid 2021: Final GSP
- January 31, 2022: Implement GSP
- January 31, 2042: Achieve sustainability goal
GSA Formation Summary

GSA Formations

Source: Department of Water Resources
Groundwater Sustainability Plan (GSP) Regulations
Groundwater Sustainability Plan (GSP) Components

Who
- Administrative Information -

What
- Basin Setting -

Where
- Sustainable Management Criteria -
- Monitoring Network -

How
- Projects & Management Actions -

Source: modified from Department of Water Resources
How is Sustainability Defined?

Achievement of Sustainability Goal

- A single sustainability goal for the basin
- Achieved within 20 years of GSP implementation
- Maintained without causing undesirable results

Sustainability Goal

Sustainable Groundwater Management
- GSP Implementation

Sustainable Yield
- Achieved by 2040/42
- Avoid Undesirable Results

Undesirable Results
Significant and Unreasonable

- Lowering GW Levels
- Seawater Intrusion
- Reduction of Storage
- Degraded Quality
- Land Subsidence
- Surface Water Depletion

For each Sustainability Indicator

- Measurable Objectives
- Minimum Thresholds

Source: modified from Department of Water Resources
Undesirable Results and Sustainability Indicators

- Chronic lowering of groundwater levels indicating a significant and unreasonable depletion of supply if continued over the planning and implementation horizon.
- Significant and unreasonable reduction of groundwater storage
- Significant and unreasonable seawater intrusion
- Significant and unreasonable degraded water quality, including the migration of contaminant plumes that impair water supplies
- Significant and unreasonable land subsidence that substantially interferes with surface land uses
- Depletions of interconnected surface water that have significant and unreasonable adverse impacts on beneficial uses of the surface water

Source: Department of Water Resources
Groundwater Dependent Ecosystems (GDEs)

Natural Communities: Commonly Associated with Groundwater (NCCAG)

- VegCAMP (CDFW)
- CALVEG (USFS)
- NWI (USFWS)
- FVEG (Cal Fire)
- NHD (USGS)

Consideration of:
- Hydrology
- Geology
- Groundwater levels

Groundwater Dependent Ecosystems
Coordination & Inter Basin Agreements

Intra – required (if multiple GSPs)

- Water Code §10727.6
- GSP Regulations, Article 8, §357.4
- Same data and methodologies

Inter - optional

- GSP Regulations, Article 8, §357.2
- Optional agreement between two or more adjacent basins to coordinate sustainability goals

Source: modified from Department of Water Resources
Keys to an Approved GSP

- **Foundational and Fundamental**
  - GSPs submitted within the statutory deadline
  - Complete GSPs
  - GSP that covers the entire basin
    - If multiple GSPs are prepared must include a coordination agreement

- **Plan Level**
  - DWR expects:
    - Demonstration of a path to sustainability
    - A clear quantitative definition of sustainability
    - GSPs address Article 5 (sub articles 1-5)
    - The efforts to develop the GSP have considered the beneficial uses and user of groundwater in the basin
    - GSPs will have uncertainty and data gaps
    - GSPs will be amended and modified over the 20 year implementation period
    - The GSPs has taken into account local planning assumption stated in General Plans
  - A GSP will be approved if it stratifies the requirements of SGMA and the GSP regulations
State Water Resources Control Board (SWRCB)
SWRCB – “the backstop”
Areas of potential Involvement

TRIGGERING the BACKSTOP

- **2017**: No GSA that intends to develop a plan for the entire basin
- **2020**: Critical overdraft & No plan adopted for the entire basin, or DWR fails plan
- **2022**: No plan for the entire basin or DWR fails plan and long-term overdraft
- **2025**: DWR fails plan & significant surface water depletions

Source: modified from State Water Resources Control Board
### Proposed Schedule of Fees

<table>
<thead>
<tr>
<th>Fee Category</th>
<th>Annual Fee Amount</th>
<th>Applicable Parties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Filing Fee</td>
<td>$300 per well</td>
<td>All extractors required to report</td>
</tr>
<tr>
<td>Unmanaged Area Rate Rate</td>
<td>$10 per acre-foot, if metered</td>
<td>Extractors in unmanaged areas</td>
</tr>
<tr>
<td></td>
<td>$25 per acre-foot, if unmetered</td>
<td></td>
</tr>
<tr>
<td>Probationary Basin Rate</td>
<td>$40 per acre-foot</td>
<td>Extractors in probationary basins</td>
</tr>
<tr>
<td>Interim Plan Rate</td>
<td>$55 per acre-foot</td>
<td>Extractors in probationary basins where the Board determines an interim plan is required.</td>
</tr>
<tr>
<td>De minimis Fee</td>
<td>$100 per well</td>
<td>Parties that extract, for domestic purposes, two acre-feet or less per year from a probationary basin. If the Board decides the extractions will likely be significant.</td>
</tr>
<tr>
<td>Late Fee</td>
<td>25% of total fee amount per month late</td>
<td>Extractors that do not file reports by the due date.</td>
</tr>
</tbody>
</table>
SWRCB – “the backstop”
Interim plans & demand reduction

**NO Plan**

- **90 Days**
  - Probation
  - Public notice of hearing and contact cities and counties

- **180 Days**
  - Local Agencies
  - Remedy deficiencies resulting in probation

- **Board - DWR coordination**

- Water Board
  - Develops Interim Plan

Source: modified from State Water Resources Control Board
Questions/Comments

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