Sustainable Groundwater Management Program

Floodplain Mgt. Association
Annual Conference

September 6, 2017
Department of Water Resources
Presentation Overview

1. Groundwater Management Milestones and the SGMA
2. Groundwater Sustainability Agency (GSA) Formation
3. & Groundwater Sustainability Plan (GSP) Requirements
4. Planning and Technical Assistance
Groundwater Management Milestones and the SGMA
California’s Major Groundwater Milestones

Voluntary Groundwater Management (Non-Regulatory)
- Service Area Planning
- Variable Levels of Implementation
- Variable Authority
- Grant Incentives

Required Groundwater Management (Regulatory)
- Entire Basin Planning
- Required Implementation
- New GSA Authorities
- State Backstop (SWRCB)

AB 3030
- 1992
- SB 1938

CASGEM Program
- 2003

AB 359
- 2009
- 2010

CA Water Action Plan
- 2013
- 2014
- 2015

GSPs (Basins in Overdraft)
- 2020
- 2022

GSPs (Non-Overdraft Basins)
- 2040/2042

SGMA
- 2009
- 2010

Achieve Sustainability Goal
Legislative Intent of SGMA

*Water Code Section 10720.1*

a) To provide for the sustainable management of groundwater basins.
b) To enhance local management.
c) To establish minimum management standards.
d) To provide local groundwater agencies with authority and the necessary technical and financial assistance.
e) To avoid or minimize subsidence.
f) To improve data collection.
g) **To increase groundwater storage.**
h) To manage groundwater basins through the actions of local governmental agencies while minimizing state intervention.
“A central feature of these bills is the recognition that groundwater management in California is best accomplished locally.”
Governor Jerry Brown, September 2014

- Local Control
- Sustainability

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

Groundwater Sustainability Plans Required for **High** and **Medium** Priority Basins by 2020/22
Achieving Sustainable Yield and Avoidance of Undesirable Results

- Lowering of GW Levels
- Reduction of GW Storage
- Seawater Intrusion
- Water Quality Degradation
- Land Subsidence
- Depletion of Interconnected Streams
## Phases to Implement SGMA and Achieve Sustainable Groundwater Management

<table>
<thead>
<tr>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
<th>Phase 4</th>
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<tbody>
<tr>
<td>Realignment of Governance and Areas</td>
<td>Development and Adoption of Groundwater Sustainability Plans (GSPs)</td>
<td>Early Implementing of GSPs thru Water Budgets &amp; Outcome Based Metrics</td>
<td>Sustainable Groundwater Management</td>
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<td>(Oct 2014 through 2017)</td>
<td>(2017 to Jan 2020 or 2022)</td>
<td>(Jan 2020 or 2022 plus 5-10 years)</td>
<td>(20 years from 2020 or 2022)</td>
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GSA Formation
GSP Requirements
GSP Requirements = SGMA Statutes + GSP Regulation

(SB 1168 + AB1739 + SB1319 + SB 13)  
GSP Regulations  
(§350 – 358.4)
GSP Regulation Articles

1. Introductory Provisions
2. Definitions
3. Technical & Reporting Standards
4. Procedures
5. Plan Contents
6. Department Evaluation & Assessment
7. Annual Reports and Periodic Evaluations by the Agency
8. Interagency Agreements
9. Alternatives

Required for All High and Medium Priority Basins
Article 5. Plan Contents

1. Administrative Information
   § 354.4. General Information
   § 354.6. Agency Information
   § 354.8. Description of Plan Area
   § 354.10. Notice & Communication

2. Basin Setting
   § 354.16. Groundwater Conditions
   § 354.18. Water Budget
   § 354.20. Management Areas

3. Sustainable Management Criteria
   § 354.24. Sustainability Goal
   § 354.26. Undesirable Results
   § 354.28. Minimum Thresholds
   § 354.30. Measureable Objectives

4. Monitoring Networks
   § 354.34. Monitoring Network
   § 354.36. Representative Monitoring
   § 354.38. Assessment & Improvement
   § 354.40. Reporting Monitoring Data to the Department

5. Projects and Management Actions
   § 354.44. Projects & Management Actions

Undesirable Results
Significant and Unreasonable
- Lowering GW Levels
- Reduction of Storage
- Seawater Intrusion
- Degraded Quality
- Land Subsidence
- Surface Water Depletion
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**Undesirable Results**

*Significant and Unreasonable*

- Lowering GW Levels
- Reduction of Storage
- Seawater Intrusion
- Degraded Quality
- Land Subsidence
- Surface Water Depletion
Planning and Technical Assistance
SGM Program Implementation

1. GSA Formation & Governance
   - DWR Outreach
     - Facilitation Services: Stakeholder Assessment, Meeting Facilitation, Consensus Building
     - Tech. Services: Guidance & Education, Field Activities, Modeling Support

2. Assistance & Engagement
   - DWR Outreach

3. GSP Eval.
   - GSP Evaluation

4. GSP Implementation
   - Education & Guidance
     - Statewide & Basin Info
     - Data & Tools
     - Tools

GSP Development & Submission

Advisory Role  Evaluation Role
SGM Program Implementation

1. GSA Formation & Governance

2. Assistance & Engagement
   - DWR Outreach
   - Facilitation Services
     - Stakeholder Assessment
     - Meeting Facilitation
     - Consensus Building
   - Tech. Services
     - Guidance & Education
     - Field Activities
     - Modeling Support

3. GSP Eval.
   - GSP Evaluation

4. GSP Implementation
   - Guidance, Data, & Tools
     - Education & Guidance
       - Statewide & Basin Info
         - General SGMA Information
         - Bulletin -118 & 160
         - BMP’s & Guidance Docs.
         - Training/Outreach
     - Data & Tools
       - Data
         - Data Collection
         - Data Distribution
       - Tools
         - Model Enhancements

GSP Development & Submission

Advisory Role

Evaluation Role
Data and Tools

New Data, Tools, and Reports Webpage

1. Download Data

2. Groundwater Tools
   1. Interactive Maps
   2. Modeling Tools

4. Maps and Reports

http://www.water.ca.gov/groundwater/sgm/data_tools_reports.cfm
Data & Tools

Tools - Interactive Maps

1. Groundwater Information Center
2. Water Management Planning Tool
3. Disadvantaged Communities Tool
4. Basin Boundary Tool

➢ More Tools will be added soon

https://gis.water.ca.gov/app/gicimo/
https://gis.water.ca.gov/app/boundaries/
https://gis.water.ca.gov/app/dacs/
https://gis.water.ca.gov/app/bbat/
DWR Land Use Viewer
SGMA Portal
http://sgma.water.ca.gov/portal/

- Local agency and stakeholder accessible single interface
- Provides access to submittals under SGMA
- Provides additional opportunity to comment
- Look for future improvements