KERN COUNTY Groundwater Basin Stakeholder Workshop #4

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Funded By: California Department of Water Resources

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Kern SGMA – Stakeholder Assessment

The Center for Collaborative Policy is contracted by Department of Water Resources to:

- Conduct a comprehensive stakeholder assessment.
- Coordinate and facilitate public workshops about critical issues that must be addressed in SGMA implementation.

- October 24th, 5:30 p.m., Ag Pavilion
- November 1st, 2:30 p.m., Kern County Water Agency
- November 15th, 5:30 p.m., Kern Ag Pavilion
- November 28th, 11:00 a.m., Kern County Admin Bldg
- December 5th, 5:00 p.m., Kern Ag Pavilion
- December 20th, 11:00 a.m., Kern County Admin Bldg
Meeting Agenda

• Collaborative GSA Decision Making & GSP Development

• Discussing Stakeholder Concerns: Sustainable Yield & Water Budget
  • Discuss factors and data for determining sustainable yield
  • Discuss interests and perspectives regarding data consistency
  • Identify how models can assist the collaborative process

• Values and Principles to Guide GSP Development
  • Review Stakeholder Assessment & Workshop #4 Input
  • Discuss determination of equity and fairness

• Comments and Questions
Develop Governance Structure

- Develop Public Outreach Plan
- Stakeholder Advisory Group(s)
- Public Meetings
- GSA Formation Committee
- Local Agencies’ BODs
The Sustainable Groundwater Management Act (SGMA) in Kern Subbasin

Map Image by GEI Consultants Inc.
GSAFormation Process and Deadlines

*Effective January 1st, 2016, eligible agencies must...*

- Submit GSA formation notice within 30 days of decision (e.g. resolution or legal agreement)
- Include map and accompanying narrative indicating:
  1. Local agency service area boundaries
  2. Boundaries the local agency intends to manage
  3. Any other agencies managing or proposing to manage groundwater in the basin
SGMA Background – GSA Formation

GSA Formation Process and Deadlines

*Effective January 1st, 2016, eligible agencies must...*

- Submit a copy of the resolution or legal agreement forming the local agency
- A copy of any new bylaws, ordinances or new authorities developed by the local agencies
- A list of interested parties and explanation of how their interests will be considered
GSAs and GSPs

- GSA formation/Governance is all about decision making
  - If important decisions will be made, then governance is important; otherwise, not so much

- What are the key decisions embedded in preparing GSPs (or Plans)?

- “Key decisions” are ones that could affect the availability and/or the cost of groundwater to overlying landowners

- “How should GSA’s be formed to make these key decisions (and many others) appropriately?”
Decision Making Matters!

• Special Interest Advocacy vs Collaborative Dialogue
• Positions vs. Interests
• Simple Majority Rule vs Sufficient Agreement for Success
The Values of Collaboration

- Shared Responsibility
- Full Participation
- Inclusive Solutions
- Mutual Understanding
DYNAMICS OF GROUP DECISION-MAKING

THE DIAMOND OF PARTICIPATORY DECISION-MAKING

Business as Usual

Divergent Zone

NEW TOPIC

Groan Zone

Convergent Zone

Closure Zone

DECISION POINT

TIME
Proposed GSP Values

• Agreeable outcomes
  • Equitable may not be achievable: Agreeable might be a substitute
  • Willingness to compromise: All will need to give something up
• Representative-GSA’s governance structures represent the voices of beneficial users in their service areas.
• Vested Authority – GSA governance allows for enforcement.
• Compliance -- Seeks to prevent state intervention
Proposed GSA and GSP Principles

- Impact local economies in the least impactful way
- Reward non-wasteful practices/proactive management
- Adaptive/Responsive
Stakeholder Concerns: Determining Sustainable Yield?

• Stakeholder Perspectives
Stakeholder Concerns: Determining Sustainable Yield?

- Critical Issues, Factors and Concerns?
  - Data Consistency
  - Models and the collaborative process

- Critical Issues for Successful GSA coordination regarding:
  - Water budget
  - Baseline Settings
  - Sustainability Goal
Sustainable Yield and Water Budget

From Department of Water Resources.
BMP # 3 – Hydrogeologic Conceptual Model

- Characterizing Physical Components
  - Geologic and structural boundaries
  - Lateral boundaries
  - Bottom of the basin
  - Principal Aquifers and Aquitards
  - Graphical Representation

- Mapping Requirements
BMP # 4 – Water Budget (WB)

- General WB Requirements
  - Certification
  - WB Data, Information, and Modeling Requirements
  - Defining Basin Area and Water Budget Systems
  - Accounting and Quantification of WB Components
- Tabular and Graphical Representation of WB Components
- Defining WB Time Frames
  - Current, Historical, Projected
BMP # 5 – Modeling

Fundamentals
- Types of Models, Software, Uses
- Models Used for SGMA

Technical Assistance
- Guiding Principles For Models
- General Modeling Requirements

Modeling Considerations
- Addressing Sustainability Indicators
  - Lowering GW Levels of Storage
  - Sea Level Rise
  - Land Subsidence
  - Degraded Quality
  - Surface Water Depletion
- Developing Water Budgets
- Forecasting Future Conditions, Projects, Actions
- Assessing Impacts on Adjacent Basins
- Groundwater Modeling Process
- Related References and Guidance Material
Stakeholder Concerns: Determining Sustainable Yield & Water Budget?

• Work with a shared set of assumptions early on for GSP development: need for non-politicized, shared data & shared understanding of sustainable yield as GSP starting point.
  • Basin-wide coordinated technical study, shared baseline data, models, and costs
  • Shared criteria for non-politicized interpretation of data  (Some have heard different views on how sustainable yield will be calculated and are concerned with different interpretations of the science.)
  • Shared understandings of definitions of imported water, native water, return flows, groundwater banking credits and losses, etc.

• Concern with fair and equitable water allocation and distribution across the Basin and across multiple GSAs
  • Hope for a systemically equitable/agreeable plan that encourages sharing and transferring of shares of water to mitigate impacts of water shortages
    • Concern about if and how water is marketed and sold out of management areas for profit
    • Farmers & water districts want to sell or trade water credits to offset shortages, losses & costs
  • Co-beneficial/Synergistic uses should be emphasized  (i.e. alfalfa irrigated at certain times of year benefit migratory birds; Oil extractors treat water for Ag uses)
Related Stakeholder Discussions: Surface Water/Groundwater

• Concern that historical efforts and resources invested into water banking, water trading, and recharge be accounted for in a GSP
  • Concern with who gets credit for imported surface water which makes its way to groundwater, such as return flows (i.e. direct recharge, in lieu recharge, seepage from canals, and others)
  • Concern with accounting for water losses and credits from groundwater banking

• Need to account for water quality & TDS values in water budget
  • Operations of water banks could effect groundwater conditions and quality

• Need for recognition of regional hydrogeologic differences: concern with disagreement of sustainable or negative groundwater levels
  • Issues with return flow credits, subsurface inflows/outflows, and localized recovery of groundwater

• Concern with how regional surface water flows become groundwater and fair accounting in a GSP
  • Need to account for subsurface inflow and outflow
EQUALITY

EQUITY