



SUSTAINABLE GROUNDWATER MANAGEMENT IN CALIFORNIA

CALIFORNIA WATER FOUNDATION

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STAKEHOLDER DIALOGUE- INTEREST GROUP SESSIONS

I. CONTEXT FOR GROUNDWATER MANAGEMENT IN CALIFORNIA

The current drought has highlighted both the value of California’s groundwater resource and problems associated with its current management. These problems are summarized in this excerpt from the California Water Action Plan prepared by the Brown Administration:

Groundwater accounts for more than one-third of the water used by cities and farms – much more in dry years, when other sources are cut back. Some of California’s groundwater basins are sustainably managed, but unfortunately, many are not. Inconsistent and inadequate tools, resources and authorities make managing groundwater difficult in California and impede our ability to address problems such as overdraft, seawater intrusion, land subsidence, and water quality degradation. Pumping more than is recharged lowers groundwater levels – which makes extracting water more expensive and energy intensive. Under certain conditions, excessive groundwater pumping could mobilize toxins that impair water quality and cause irreversible land subsidence which damages infrastructure and diminishes the capacity of aquifers to store water for the future. When properly managed, groundwater resources will help protect communities, farms and the environment against the impacts of prolonged dry periods and climate change.

Groundwater is a crucial component of California’s water supply. It is critical to the viability of agriculture in places such as the Central and Salinas Valleys, urban areas as diverse as Fresno and Los Angeles, and environments from the Scott River to the Amargosa Springs. In many areas of the state, it is a primary source of water supply, particularly during drought when surface water supplies may become unavailable. This year, groundwater use has become the most significant response to severe drought conditions, highlighting its value and flexibility.

Groundwater use and management vary widely around California, and there are significant differences in the current conditions of the state’s 500-plus groundwater basins. Most groundwater management is the responsibility of local or regional authorities, each of which functions differently, reflecting the demands of local conditions including hydrology, geology, land use, and governance. However, not all regions have the tools and authorities to manage groundwater resources and there is ambiguity about the scope of current authorities. Many areas of the state are not covered by groundwater plans or actively managed by local agencies. Infrastructure in many places is insufficient to get wet-weather water into groundwater basins. In addition to the importance of the local role in management, the state must maintain responsibility to avoid permanent damage to aquifers, harm to public trust resources,

and waste and unreasonable use. Unfortunately, the mechanisms for meeting these responsibilities do not sufficiently empower local agencies or provide a defined mechanism or set of standards for doing so. As a result, the only place where people can go to resolve disputes between groundwater users is the court system and an expensive and time consuming adjudication process.

Many stakeholders are raising important questions about what measures can be taken to better manage groundwater. In this light, there is an increased awareness that improving overall groundwater management is important for individual users, local and regional entities, communities, and the broad interests of the state. This awareness, combined with the problems identified above and importance of groundwater's role in California's overall management of water resources, is the focus for CWF's Stakeholder Dialogue.

II. KEY QUESTIONS

These questions are intended for use in each Interest Group session being organized as part of the CWF Sustainable Groundwater Management Stakeholder Dialogue. The questions cover two parts of the meeting agenda: "II. Current Context and Challenges for Groundwater Management in California," and "III. Potential Approaches: Understanding Key Perspectives."

1. What insights or perspectives are missing from the groundwater management context described above?
2. Assuming local and regional agencies need new tools and authorities to sustainably manage groundwater:
 - a. What suggestions do you have for improving *existing* authorities, tools, and incentives?
 - b. What *new* authorities, tools, and incentives would you suggest, and why?
3. Assuming changes in local governance will be needed for local agencies to assume the new tools and authorities:
 - a. What appropriate governance structures should be established for local agencies to manage groundwater sustainability in a region?
 - b. Should local regions have the flexibility to choose a governance structure if state standards are in place?
 - c. How should existing local agencies and overlapping jurisdictions be addressed?

4. Assuming the state can play a key role in promoting sustainable groundwater management (technical, financial, oversight and enforcement):
 - a. What role do you think the state should play in promoting sustainable groundwater management?
 - b. What suggestions do you have for the role of the State Water Resources Control Board? Department of Water Resources? Other agencies?

5. What is the most significant obstacle or challenge for achieving sustainable groundwater management in California from your organization's perspective?