DATE GROUNDWATER
SUSTAINABILITY PLAN
REGULATION COMMENT
RECEIVED BY DWR
04/01/2016

Via e-mail to: sgmps@water.ca.gov

Subject: Draft GSP Emergency Regulations Public Comment

Overall comment: The draft emergency regulations do not comport well with SGMA's reliance on local entities to act as the implementers of the law. Greater flexibility should be allowed in the design, methods, and format of GSP's. The emergency regulations should be no more prescriptive than the language in SGMA. GSAs, especially in areas already managed sustainably, should have broad discretion and flexibility to develop GSP's based on their locally identified needs and practices.

Overall comment: Critical parameters, minimum thresholds, and their interrelationship are not defined clearly. The definition of critical parameter in 351(j) appears to be a lowering of groundwater levels leading to an undesirable result, or alternatively, it may simply be an undesirable result. It's not clear from the definition. The definition of a minimum threshold in 351(q) is the point at which groundwater conditions for a critical parameter become significant and unreasonable. The reason these terms are somewhat vague and abstract in the emergency regulations seems to be that they are hard to define in broad flexible terms. The means (and nomenclature) by which GSAs achieve their goals should be left up to GSAs. If these terms are retained in the final regulations, they need to be more clearly defined and related.

A rational approach to sustainable management is to:

1. Define an objective. Not necessarily quantitative, it just needs to describe the desired outcome, e.g., "avoid harm to infrastructure due to subsidence" or "maintain groundwater dependent habitat."
2. Define the quantitative hydrogeologic condition that meets the objective, e.g., "subsidence should not exceed X" or "spring discharge must exceed Y."
3. Define a monitoring point and threshold that will maintain the necessary hydrologic condition, e.g., "drawdown should not exceed X in a particular monitoring well."
4. Identify further monitoring points and thresholds to provide early warning of undesirable results at some point in the future. This is aimed at accounting for time lags between groundwater pumping and possible undesirable effects. For example, in the case of well interference, the water level in a potentially impacted pumping well may be the best measure of whether the well will remain operable, but water level in a monitoring well near the offending well is a better gauge of whether the cone of depression will propagate from the offending well to the potentially impacted well.
5. Develop an adaptive management scheme where the above monitor points and thresholds can be modified based on future observations.

It isn't clear how the mechanism laid out in the emergency regulations accommodates such an approach.

Specific comments:

351(ab) and (ac). The patterns of seasonal highs and lows described here are not applicable throughout the State, or even throughout certain basins, for example monitoring wells affected by irrigation conveyances may exhibit fall highs and spring lows. These definitions and subsequent reliance on them should be omitted.

351(ai). Some jurisdictions may use other annual accounting calendars than the traditional "water year." GSA's should be provided the flexibility to choose their own annual unit.

351(aj). Given the diversity of precipitation patterns in California (cf. Del Norte and Imperial counties), it is

inappropriate to prescribe a precipitation year index or typing system for all GSPs.

352.6(e). Omit these modeling standards. If GSAs use models in the development of their GSP, they will explain the basis of their model and why their approach supports the GSP in the GSP. In the first line, it's not clear if the intended meaning is "…shall consist of…" or "…shall be consistent with…"

354.8(a)(5). It is likely impossible to identify the location of all de minimis extractors.

354.16(c). Seawater intrusion is not relevant to inland basins.

354.16(e). This section should provide for statewide InSAR subsidence products to be developed by the State and be made publically available for all GSAs.

354.18(a)(2). This section should provide that a statewide evapotranspiration product will be prepared by the state and be made publically available to GSAs.

Subarticle 3. In general, this subarticle is far too prescriptive. It should be cast more as guidance than requirements.

354.28(e)(6)(B). While models may be useful for assessing surface water depletion, other methods may be equally or more applicable (water budgets, double mass curves, linear regression). Use of these other methods shouldn't require a higher (or lower) level of explanation than required for using a model.

354.28(d). Use of water levels as indicators of pending undesirable results will in many cases be preferable to data that more directly signifies the potential results, because groundwater levels are easy to measure, provide earlier warning of a pending undesirable result, and are less subject to other disturbances. For example, the effect of a pumping well on interconnected streamflow would be apparent much sooner looking at groundwater levels than from stream discharge. GSAs should not be required to consult with DWR for permission to adopt such strategies.

354.30(d). "Clear and convincing evidence" of the effectiveness of objectives and thresholds may only be obtainable through an adaptive management process where the effectiveness of parameters is evaluated as the plan is implemented and parameters modified based on that ongoing evaluation. In many cases, measurable objectives and thresholds will be set with a significant amount of uncertainty. Rather than requiring GSP preparers to show clear and convincing evidence that the thresholds in the plan are effective, provide guidance as to how to adaptively modify thresholds so that they become more effective over time.

354.32 and 354.34(a). There is an assumption that no monitoring networks exist. As CASGEM and other programs show, many monitoring networks are already in place.

354.34(e)(3). The measurable objective, minimum threshold, and interim milestone might not all be at the same monitoring site.

354.34(h)(5). The State should provide InSAR subsidence products statewide.

354.36(b). As discussed above, using groundwater elevations to assess critical parameters will often be preferable to other measures. There should be no additional requirements for GSP developers desiring to do this.

355.4(a)(3). Certain portions of certain basins are exempt from SGMA, such as tribal lands and adjudicated areas. GSAs may be unable to produce an adequate plan due to lack of cooperation of entities out of their control. The emergency regulations should have a contingency for GSA's with jurisdictions that not cover the entire basin, and may not be able to effect a GSP for the entire basin. The emergency regulations appear to give the same status to a local entity that in good faith thoroughly prepares a GSP within their jurisdiction to that of a neighboring local entity in the same basin that does nothing as all to comply with SGMA.

Thank you for consideration of these comments.

Bob Harrington, Water Director
Inyo County Water Department
135 S. Jackson
POB 337
Independence, CA 93526
bharrington@inyocounty.us
760-878-0001