

Summary of Proposed Emergency Regulations for GSPs (released 10May2016)

1. Technical and Reporting Standards

- GSP must contain outline a monitoring program and protocols that are consistent with those of neighboring GSAs/GSPs. Monitoring protocols must rely on best management practices.
- Specifies data and reporting standards
 - Water volumes in AF
 - Surface flow in cfs and groundwater flow in AFY
 - All elevations in NAVD88 or other national standard convertible to NAVD88
 - Geographic locations in lat/long relative to NAD83 (or other national standard convertible to NAD83) or as modified in decimal degrees to 5 decimal places and minimum accuracy of 30 feet
- All monitoring sites shall have unique ID number, and GSP to describe type of monitoring, measurement and frequency, location, elevation of ground surface and reference point and description of standards used to construct well.
- Requires wells to be used to monitor groundwater conditions to be constructed per applicable construction standards and have CASGEM ID number.
- GSP to include information re: monitoring wells, including location, depth, listing of casing perforations and inclusion of well completion reports. All well information to be maintained in the GSA's data management system
- All models used in support of GSP must include publically available support documentation and be based on field or lab measurements or equivalent methods that justify the data used.
- Each Agency to develop and implement a 'coordinated data management system' capable of storing, maintaining and reporting all relevant information related to GSP development and implementation

2. GSP

- Reporting must include GSP, any amendments, annual reports and 5-year assessments
- Reports to be submitted electronically and include a transmittal letter
- Each Agency to notify DWR prior to initiating development of a GSP; notification to include general information regarding process for developing a GSP, including manner in which interested parties may contact GSA and participate in GSP development.
- DWR to provide assistance in GSP development upon request.
- Each submitted plan will be reviewed by DWR within 20 days and posted to DWR website for 60 days for public review.
- DWR will also accept comments on GSA decision to develop a GSP, including comments on elements of a proposed plan.
- Any person may submit comments on any proposed or adopted GSP to DWR. All public comments must be in writing with information identifying the person making the comment and copy submitted to Agency and to DWR. All comments received by DWR will be posted to their website.
- DWR to evaluate the plans within 2 years of their submittal date and issue a written assessment of the Plans

3. GSP contents

- Executive Summary
- List of references and technical studies used in developing GSP
- Administrative Information, includes:
 - Executive Summary
 - Agency Information, including organization and management structure of GSA
 - Description of Plan Area, including density of wells per square mile and existing water resources monitoring and management programs
 - Sustainable management criteria
 - Description of monitoring network, projects and management actions
 - Estimated cost of implementing the GSP and a general description of how the GSA plans to meet those costs
- Description of Plan Area, including:
 - Description of Plan area and maps showing area covered by plan, adjudicated areas, and jurisdictional boundaries of federal and tribal lands, entities with water management responsibilities and areas covered by relevant general plans
 - Existing land use designations and water use sectors and source type
 - Density of wells and existing monitoring and management programs and a description of any such program that will be incorporated into the monitoring network or development of the plan
 - Description of how existing water resources monitoring or management program may limit the operational flexibility in the basin
 - Description of conjunctive use programs in basin
 - Description of land use elements or topic categories of applicable general plans and how these affect the GSP or may be affected by the GSP
 - Summary of progress for permitting new or replacement wells, including adopted standards and ordinances
- Notice and Communication, including:
 - Description of beneficial uses and users of groundwater in the basin
 - List of interested persons
 - Summary of public meetings held when developing GSP and comments received
 - Communications plan describing the GSA's engagement and how decision-making process, identification of opportunities for public input and how responses are used, description how the GSA encourages involvement of diverse elements of the population, and methods GSA uses to inform the public about progress implementing the GSP
- Basin Setting (to be prepared by PE or PG), includes:
 - Hydrogeologic Conceptual Model, including a written description of the basin, a minimum of 2 scaled cross-sections, one or more maps showing a list of specified information, such as soil characteristics and surficial geology, and identification of data gaps and uncertainty.

- Groundwater Conditions, characterizing current and historical groundwater conditions. Historical conditions must specifically include conditions that existed as of January 1, 2015 and a comparison with present conditions. Graph of estimated change in groundwater in storage, demonstrating annual and cumulative changes. Each of the 6 primary issues must be addressed here.
- Water Budget, to be reported in both tabular and graphical form. Water budget to quantify current, historical and projected water budget for basin. Quantitative budgets required with historical budgets extending back a minimum of 10 years. Provides specific requirements for projected water budgets, including use of 50 years of historical precipitation, ET and streamflow information as baseline hydrology with scenarios evaluating future hydrologic uncertainty. Specifies that if a model is not used to quantify and evaluate the projected water budget,, then plan must 'identify and describe an equally effective method or tool to evaluate projected water budget conditions or identify provisions for developing a groundwater-surface water model capable of quantifying a projected water budget conditions no later than the first 5-year assessment'.
- Management Areas – allows subdivision of basin (or GSP study area) into management areas if it facilitates sustainability. May set different criteria and objectives for each separate management areas.
- Sustainability Management Criteria, must include:
 - Sustainability goal for basin, and include discussion of measures meant to ensure that the basin will be operated within its sustainable yield and explanation of how sustainability goal will be achieved within 20 years of plan implementation
 - Description of processes and criteria relied upon to define undesirable results applicable to the basin.
 - Minimum thresholds for each critical parameter (6 undesirable results) based on the conditions under which the Agency determines that those critical parameters are significant and unreasonable.
 - Minimum thresholds must be numeric values that quantify groundwater conditions for each applicable sustainability indicator which, if exceeded, may cause undesirable results. Proposed regulations provide minimum threshold qualifications for each of the 6 undesirable results. (For example, for chronic lowering of groundwater levels, minimum threshold is groundwater elevation that indicates a significant and unreasonable depletion of supply.)
 - Measurable Objectives, which must be:
 - Represented by quantitative values using the same metrics as the minimum thresholds established for each measurable objective
 - Have measurable objectives above the minimum threshold to provide a reasonable margin of operational flexibility under adverse conditions.
 - Have measurable objectives that provide a reasonable margin of operational flexibility under adverse conditions that take into consideration

- components of historical trends and be commensurate with levels of uncertainty
- GSA may establish a representative measurable objective for groundwater elevation to server as the value for multiple sustainability indicators
 - Include interim milestones for each measurable objective in increments of 5 years, outlining a path to attaining measurable objectives within 20 years
 - May include measurable objectives that exceed the reasonable margin of operational flexibility for the purposes of improving overall conditions, but failure to achieve these objectives would not be grounds for a finding of inadequacy
 - Describe a reasonable path to achieve the sustainability goal for the basin within 20 years of GSP implementation
- **Monitoring Networks**
 - Must be capable of collecting sufficient data to demonstrate short-term, seasonal and long-term trends in surface and groundwater conditions and yields representative information about changes relative to the minimum thresholds and measurable objectives for the basin
 - Plan to include description of monitoring network objectives and demonstrate adequate coverage of sustainability indicators
 - Proposed regulations sets minimum standards for monitoring networks, including requirements for monitoring for each of the 6 undesirable criteria. (For example, for water quality, the monitoring network must be capable of 'collecting sufficient spatial and temporal data from each principal aquifer to determine groundwater quality trends for established constituents of concern.')
 - May utilize site information and monitoring data from existing sources are part of network
 - Monitoring network and program required to demonstrate short-term, seasonal and long-term trends
 - GSP to describe monitoring network, including rationale for the monitoring site selection process and monitoring protocols, and shall demonstrate that undesirable results related to one or more sustainability indicators are not present and are not likely to occur in basin
 - Allows for representative monitoring whereby an Agency may designate a subset of monitoring sites as representative of the conditions in the basin or area of the basin for monitoring for sustainability indicators, and for which quantitative values for minimum thresholds, measurable objectives and interim milestones are defined.
 - Groundwater elevations may be used as a proxy for monitoring other sustainability indicators
 - Agencies to evaluate the monitoring networks and include an assessment in the initial plan and each 5-year evaluation, including an assessment of whether there are any data gaps that could affect the ability of the plan to achieve its sustainability goal.
 - Monitoring data to be reported to DWR annually via an electronic submittal

- Project Management and Actions
 - Plan to include a description of the projects and management actions to meet the sustainability goal in a manner that can be maintained over the planning and implementation horizon, including projects and management actions that may be used to meet interim milestones, the exceedance of minimum thresholds or where undesirable results have occurred or are imminent.
 - If overdraft conditions have been identified, GSP to describe projects or management actions for mitigating the overdraft
 - Summary of the permitting and regulatory process required for each project and management action, including status of project/program, benefits to be realized, explanation of how the project or management action will be accomplished, legal authority, and estimated cost.
 - Description of management of groundwater extractions and recharge to ensure that chronic lowering of groundwater levels or depletion of supply during periods of drought is offset by increases in groundwater levels or storage during other periods.
- Reports, Assessment and Amendments
 - Plans submitted to DWR will be posted on DWR website within 20 days for a 60 day public review period.
 - DWR will be evaluated within 2 years of its submittal date and a written assessment of the plan issued and posted on DWR website. Plans will be deemed either approved, incomplete or inadequate. Incomplete plans may be revised and resubmitted; GSA to work with DWR determine time required to address deficiencies; this period may not exceed 180 days from date DWR issues assessment.
 - Requires annual reports to DWR by April 1 of each year following adoption of the Plan with specific reporting components.
 - General information
 - Detailed description
 - Graphical representation of groundwater elevation data
 - Annual aggregated data identifying groundwater extraction
 - Surface water used or available for use for groundwater recharge or in-lieu use
 - Total water use
 - Change in groundwater storage.
 - GSPs to be evaluated and assessed at least every 5 years or whenever the plan is amended.
 - DWR to review any amendment or modification to a GSP for consistency with the regulations.
 - DWR requiring coordination agreements:
 - Interbasin agreements to establish compatible goals and understanding regarding the fundamental elements of the plans of each Agencies as they relate to sustainable groundwater management

- Coordination agreements (within a basin) to ensure that the plans are developed and implemented utilizing the same data and methodologies and that elements of the Plans are necessary to achieve the sustainability goal based on consistent interpretation of basin conditions.
4. For Alternative Plans:
- Must be submitted by January 1, 2017 and every 5 years thereafter
 - Agency must demonstrate that the alternative applies to the entire basin and satisfies the eligibility requirements of the Water Code.