



## Guidance Document for the Sustainable Management of Groundwater

## **Preparation Checklist for GSP Submittal**

December 2016

The objective of this Guidance Document is to provide Groundwater Sustainability Agencies (GSAs) and other interested stakeholders a checklist of Groundwater Sustainability Plan (GSP) content requirements for the purpose of verifying a GSP is complete and is ready for submission to DWR. Please note that if multiple GSAs develop multiple GSPs for a basin, the coordinated submission of those GSPs shall not occur until the entire basin is covered by GSPs.

The Preparation Checklist for GSP Submittal is only intended to provide a guide to GSAs and other stakeholders. This guidance is optional, since the content of this Guidance Document does not create any new requirements or obligations for the GSA or other stakeholders.

Guidance documents are not a substitute for the GSP Emergency Regulations (GSP Regulations) or the Sustainable Groundwater Management Act (SGMA). Those GSAs submitting a GSP are strongly encouraged to read the GSP Regulations and SGMA. In addition, using this Guidance Document to develop a GSP using does not equate to an approval determination by DWR.

## **Context with GSP Regulations**

The Preparation Checklist for GSP Submittal can be used by GSAs in conjunction with the GSP Annotated Outline Guidance Document as a method to develop a GSP consistent with the requirements of the GSP Regulations and SGMA. The detailed requirements of a GSP may be found in the GSP Regulations, primarily in Article 5 – Plan Contents, and in SGMA, primarily in Chapter 6 beginning with California Water Code (CWC) Section 10727. The checklist includes references to applicable GSP Regulations sections and CWC sections, as well as a brief description of the required GSP information. The checklist also contains a column for GSAs to record the page number, or section of the GSP, where the information for that particular requirement is found. The preparation checklist may also be included in the GSP.

Table 1 contains the Preparation Checklist for GSP Submittal.



California Department of Water Resources
Sustainable Groundwater Management Program
1416 Ninth Street
P.O. Box 942836
Sacramento, CA 94236-0001
www.water.ca.gov/groundwater

**Table 1. Preparation Checklist for GSP Submittal** 

GSP Regulations Section	Water Code Section	Requirement	Description	Section(s) or Page Number(s) in the GSP
Article 3. Te	echnical and I	Reporting Standar	ds	
352.2		Monitoring Protocols	<ul> <li>Monitoring protocols adopted by the GSA for data collection and management</li> <li>Monitoring protocols that are designed to detect changes in groundwater levels, groundwater quality, inelastic surface subsidence for basins for which subsidence has been identified as a potential problem, and flow and quality of surface water that directly affect groundwater levels or quality or are caused by groundwater extraction in the basin</li> </ul>	
Article 5. Pl	an Contents,	Subarticle 1. Adm	inistrative Information	
354.4		General Information	Executive Summary     List of references and technical studies	
354.6		Agency Information	<ul> <li>GSA mailing address</li> <li>Organization and management structure</li> <li>Contact information of Plan Manager</li> <li>Legal authority of GSA</li> <li>Estimate of implementation costs</li> </ul>	
354.8(a)	10727.2(a)(4)	Map(s)	<ul> <li>Area covered by GSP</li> <li>Adjudicated areas, other agencies within the basin, and areas covered by an Alternative</li> <li>Jurisdictional boundaries of federal or State land</li> <li>Existing land use designations</li> <li>Density of wells per square mile</li> </ul>	

GSP Regulations Section	Water Code Section	Requirement	Description	Section(s) or Page Number(s) in the GSP
Article 5. Pl	an Contents,	Subarticle 1. Adm	ninistrative Information (Continued)	
354.8(b)		Description of the Plan Area	Summary of jurisdictional areas and other features	
354.8(c) 354.8(d) 354.8(e)	10727.2(g)	Water Resource Monitoring and Management Programs	<ul> <li>Description of water resources monitoring and management programs</li> <li>Description of how the monitoring networks of those plans will be incorporated into the GSP</li> <li>Description of how those plans may limit operational flexibility in the basin</li> <li>Description of conjunctive use programs</li> </ul>	
354.8(f)	10727.2(g)	Land Use Elements or Topic Categories of Applicable General Plans	<ul> <li>Summary of general plans and other land use plans</li> <li>Description of how implementation of the GSP may change water demands or affect achievement of sustainability and how the GSP addresses those effects</li> <li>Description of how implementation of the GSP may affect the water supply assumptions of relevant land use plans</li> <li>Summary of the process for permitting new or replacement wells in the basin</li> <li>Information regarding the implementation of land use plans outside the basin that could affect the ability of the Agency to achieve sustainable groundwater management</li> </ul>	

GSP Regulations Section	Water Code Section	Requirement	Description	Section(s) or Page Number(s) in the GSP
Article 5. Pl	an Contents,	Subarticle 1. Adm	ninistrative Information (Continued)	
354.8(g)	10727.4	Additional GSP Contents	<ul> <li>Description of Actions related to:</li> <li>Control of saline water intrusion</li> <li>Wellhead protection</li> <li>Migration of contaminated groundwater</li> <li>Well abandonment and well destruction program</li> <li>Replenishment of groundwater extractions</li> <li>Conjunctive use and underground storage</li> <li>Well construction policies</li> <li>Addressing groundwater contamination cleanup, recharge, diversions to storage, conservation, water recycling, conveyance, and extraction projects</li> <li>Efficient water management practices</li> <li>Relationships with State and federal regulatory agencies</li> <li>Review of land use plans and efforts to coordinate with land use planning agencies to assess activities that potentially create risks to groundwater quality or quantity</li> <li>Impacts on groundwater dependent ecosystems</li> </ul>	
354.10		Notice and Communication	<ul> <li>Description of beneficial uses and users</li> <li>List of public meetings</li> <li>GSP comments and responses</li> <li>Decision-making process</li> <li>Public engagement</li> <li>Encouraging active involvement</li> <li>Informing the public on GSP implementation progress</li> </ul>	

GSP Regulations Section	Water Code Section	Requirement	Description	Section(s) or Page Number(s) in the GSP
Article 5. Pl	an Contents,	Subarticle 2. Basii	n Setting	
354.14		Hydrogeologic Conceptual Model	<ul> <li>Description of the Hydrogeologic Conceptual Model</li> <li>Two scaled cross-sections</li> <li>Map(s) of physical characteristics: topographic information, surficial geology, soil characteristics, surface water bodies, source and point of delivery for imported water supplies</li> </ul>	
354.14(c)(4)	10727.2(a)(5)	Map of Recharge Areas	Map delineating existing recharge areas that substantially contribute to the replenishment of the basin, potential recharge areas, and discharge areas	
	10727.2(d)(4)	Recharge Areas	Description of how recharge areas identified in the plan substantially contribute to the replenishment of the basin	
354.16	10727.2(a)(1) 10727.2(a)(2)	Current and Historical Groundwater Conditions	<ul> <li>Groundwater elevation data</li> <li>Estimate of groundwater storage</li> <li>Seawater intrusion conditions</li> <li>Groundwater quality issues</li> <li>Land subsidence conditions</li> <li>Identification of interconnected surface water systems</li> <li>Identification of groundwater-dependent ecosystems</li> </ul>	
354.18	10727.2(a)(3)	Water Budget Information	<ul> <li>Description of inflows, outflows, and change in storage</li> <li>Quantification of overdraft</li> <li>Estimate of sustainable yield</li> <li>Quantification of current, historical, and projected water budgets</li> </ul>	
	10727.2(d)(5)	Surface Water Supply	Description of surface water supply used or available for use for groundwater recharge or in-lieu use	

GSP Regulations Section	Water Code Section	Requirement	Description	Section(s) or Page Number(s) in the GSP
Article 5. Pl	an Contents,	Subarticle 2. Basiı	n Setting (Continued)	
354.20		Management Areas	<ul> <li>Reason for creation of each management area</li> <li>Minimum thresholds and measurable objectives for each management area</li> <li>Level of monitoring and analysis</li> <li>Explanation of how management of management areas will not cause undesirable results outside the management area</li> <li>Description of management areas</li> </ul>	
Article 5. Pl	an Contents,	Subarticle 3. Susta	ainable Management Criteria	
354.24		Sustainability Goal	Description of the sustainability goal	
354.26		Undesirable Results	<ul> <li>Description of undesirable results</li> <li>Cause of groundwater conditions that would lead to undesirable results</li> <li>Criteria used to define undesirable results for each sustainability indicator</li> <li>Potential effects of undesirable results on beneficial uses and users of groundwater</li> </ul>	
354.28	10727.2(d)(1) 10727.2(d)(2)	Minimum Thresholds	<ul> <li>Description of each minimum threshold and how they were established for each sustainability indicator</li> <li>Relationship for each sustainability indicator</li> <li>Description of how selection of the minimum threshold may affect beneficial uses and users of groundwater</li> <li>Standards related to sustainability indicators</li> <li>How each minimum threshold will be quantitatively measured</li> </ul>	

GSP Regulations Section	Water Code Section	Requirement	Description	Section(s) or Page Number(s) in the GSP
Article 5. Pla	an Contents,	Subarticle 3. Susta	ainable Management Criteria (Continued)	
354.30	10727.2(b)(1) 10727.2(b)(2) 10727.2(d)(1) 10727.2(d)(2)	Measureable Objectives	<ul> <li>Description of establishment of the measureable objectives for each sustainability indicator</li> <li>Description of how a reasonable margin of safety was established for each measureable objective</li> <li>Description of a reasonable path to achieve and maintain the sustainability goal, including a description of interim milestones</li> </ul>	
Article 5. Pla	an Contents,	Subarticle 4. Mon	itoring Networks	
354.34	10727.2(d)(1) 10727.2(d)(2) 10727.2(e) 10727.2(f)	Monitoring Networks	<ul> <li>Description of monitoring network</li> <li>Description of how the monitoring network is designed to: demonstrate groundwater occurrence, flow directions, and hydraulic gradients between principal aquifers and surface water features; estimate the change in annual groundwater in storage; monitor seawater intrusion; determine groundwater quality trends; identify the rate and extent of land subsidence; and calculate depletions of surface water caused by groundwater extractions</li> <li>Description of how the monitoring network provides adequate coverage of Sustainability Indicators</li> <li>Density of monitoring sites and frequency of measurements required to demonstrate short-term, seasonal, and long-term trends</li> <li>Scientific rational (or reason) for site selection</li> <li>Consistency with data and reporting standards</li> <li>Corresponding sustainability indicator, minimum threshold, measureable objective, and interim milestone</li> </ul>	

GSP Regulations Section	Water Code Section	Requirement	Description	Section(s) or Page Number(s) in the GSP
			<ul> <li>(Monitoring Networks Continued)</li> <li>Location and type of each monitoring site within the basin displayed on a map, and reported in tabular format, including information regarding the monitoring site type, frequency of measurement, and the purposes for which the monitoring site is being used</li> <li>Description of technical standards, data collection methods, and other procedures or protocols to ensure comparable data and methodologies</li> </ul>	
354.36		Representative Monitoring	<ul> <li>Description of representative sites</li> <li>Demonstration of adequacy of using groundwater elevations as proxy for other sustainability indicators</li> <li>Adequate evidence demonstrating site reflects general conditions in the area</li> </ul>	
354.38		Assessment and Improvement of Monitoring Network	<ul> <li>Review and evaluation of the monitoring network</li> <li>Identification and description of data gaps</li> <li>Description of steps to fill data gaps</li> <li>Description of monitoring frequency and density of sites</li> </ul>	

GSP Regulations Section	Water Code Section	Requirement	Description	Section(s) or Page Number(s) in the GSP
Article 5. Pla	an Contents,	Subarticle 5. Proje	ects and Management Actions	
354.44		Projects and Management Actions	<ul> <li>Description of projects and management actions that will help achieve the basin's sustainability goal</li> <li>Measureable objective that is expected to benefit from each project and management action</li> <li>Circumstances for implementation</li> <li>Public noticing</li> <li>Permitting and regulatory process</li> <li>Time-table for initiation and completion, and the accrual of expected benefits</li> <li>Expected benefits and how they will be evaluated</li> <li>How the project or management action will be accomplished. If the projects or management actions rely on water from outside the jurisdiction of the Agency, an explanation of the source and reliability of that water shall be included.</li> <li>Legal authority required</li> <li>Estimated costs and plans to meet those costs</li> <li>Management of groundwater extractions and recharge</li> </ul>	
354.44(b)(2)	10727.2(d)(3)		Overdraft mitigation projects and management actions	

GSP Regulations Section	Water Code Section	Requirement	Description	Section(s) or Page Number(s) in the GSP
Article 8. In	teragency Ag	reements		
357.4	10727.6	Coordination Agreements - Shall be submitted to the Department together with the GSPs for the basin and, if approved, shall become part of the GSP for each participating Agency.	<ul> <li>Coordination Agreements shall describe the following:</li> <li>A point of contact</li> <li>Responsibilities of each Agency</li> <li>Procedures for the timely exchange of information between Agencies</li> <li>Procedures for resolving conflicts between Agencies</li> <li>How the Agencies have used the same data and methodologies to coordinate GSPs</li> <li>How the GSPs implemented together satisfy the requirements of SGMA</li> <li>Process for submitting all Plans, Plan amendments, supporting information, all monitoring data and other pertinent information, along with annual reports and periodic evaluations</li> <li>A coordinated data management system for the basin</li> <li>Coordination agreements shall identify adjudicated areas within the basin, and any local agencies that have adopted an Alternative that has been accepted by the Department</li> </ul>	