

California Department of Water Resources Sustainable Groundwater Management Program December 2016

Best Management Practice FRAMEWORK

Introduction to Best Management Practices

Chapter 7 of the Sustainable Groundwater Management Act (SGMA), in Water Code Section 10729(d), states that, "By January 1, 2017, the department shall publish on its internet Web site best management practices for the sustainable management of groundwater." Prior to the completion of a best management practices (BMPs) document, the Department of Water Resources (DWR) was required to adopt regulations for evaluating groundwater sustainability plans (GSPs), the implementation of GSPs, and coordination agreements by June 1, 2016 (GSP Regulations), and Alternatives.

"Best management practice" refers to a practice, or combination of practices, that are designed to achieve sustainable groundwater management and have been determined to be technologically and economically effective, practicable, and based on best available science.

-GSP Regulations §351(h)

The GSP Regulations adopted in May 2016 are part of the California Code of Regulations in Title 23, Division 2, Chapter 1.5, Subchapter 2. The GSP Regulations address BMPs in Section 352.2 (Monitor ing Protocols) and Section 352.4 (Data and Reporting Standards). Other than BMPs addressing monitoring protocols and monitoring sites, SGMA and the GSP Regulations provide no direction or limitation with respect to what type of BMPs or additional guidance should be developed to assist groundwater sustainability agencies (GSAs) with making sustainable groundwater management decisions.

Best Management Practices Development Process

BMP Webpage

DWR established a BMP Webpage at <u>http://water.ca.gov/groundwater/sgm/bmps.cfm</u> where BMPs are posted and where Draft BMPs were accessible during the public comment period.

Topic Selection

DWR prepared a BMP survey (Survey) and invited the public and groundwater stakeholders to participate. The Survey was posted on the BMP Webpage. DWR compiled and reviewed the Survey results and considered this information in developing the list of BMPs and Guidance Documents for completion by January 1, 2017. **Figure 1** provides a record of relative survey participation.



Figure 1. BMP Survey Participants

Public Outreach

During the 30-day public comment period from October 28 to November 28, 2016, DWR conducted three (3) public meetings and participated in a California Water Commission meeting to present the draft BMPs and solicit feedback from the public and groundwater stakeholders.

The location and date of these meetings are listed below:

- Willows November 14, 2016
- Sacramento and via webcast, California Water Commission November 15, 2016
- Clovis November 16, 2016
- Santa Ana November 17, 2016



Tim Godwin presenting Monitoring Protocols, Standards, and Sites in Willows, CA, November 14, 2016.

DWR elected to publish two categories of information that can assist GSAs and stakeholders with SGMA implementation and preparation of GSPs – **BMPs** and **Guidance Documents**.

Best Management Practices (BMPs)

BMPs are intended to provide clarification, guidance, and examples to help GSAs develop the essential elements of a GSP. BMPs rely on technical information from other groundwater management efforts, existing standards, or other guidance or reference reports. The BMP categories include the following:

- BMP 1: Monitoring Protocols, Standards, and Sites
- BMP 2: Monitoring Networks and Identification of Data Gaps
- BMP 3: Hydrogeologic Conceptual Model
- BMP 4: Water Budget
- BMP 5: Modeling

Guidance Documents

Guidance Documents are prepared for topic areas unique to SGMA, for either topics where no established practices in the water management industry exist or to provide suggestions with supporting graphics to aid GSAs in developing certain GSP components. The Guidance Documents include the following:

- Preparation Checklist for GSP Submittal
- GSP Annotated Outline
- Establishing Sustainable Management Criteria (In Development)
- Engagement with Tribal Governments (In Development)
- Stakeholder Engagement and Communication (In Development)

How to Utilize BMPs and Guidance Documents

BMPs and Guidance Documents are organized to follow a logical progression of SGMA compliance activities. **Figure 2** illustrates the relationship between BMPs and Guidance Documents in the general progression of activities needed to manage the groundwater basin sustainability. **Figure 2** is provided for illustrative purposes only and DWR acknowledges that the need for and level of effort required to complete each step will vary widely among basins.

The BMPs and Guidance Documents are only intended to provide technical or general guidance to GSAs and other stakeholders. GSAs and other stakeholders have the option of using this material, but the content provided in these documents does not create any new requirements or obligations for the GSA or other stakeholders.

The BMPs and Guidance Documents do not serve as a substitute for the GSP Regulations or the provisions in SGMA. Those GSAs submitting a GSP are strongly encouraged to fully read the GSP Regulations and the text of SGMA. In addition, using these BMPs to develop a GSP does not equate to an approval determination by DWR.

The BMPs and Guidance	Increa Sustain		Guidance
Documents inform various steps in the workflow toward increased sustainability. These steps may be repeated or re-ordered as a basin approaches its sustainability goal.		BMPs	Documents
	Monitoring	 Monitoring Protocols, Standards, and Sites Monitoring Networks and Identification of Data Gaps 	
	Projects and Management Actions	Use existing and/or develop new projects and management actions to achieve sustainability. Actions from existing programs may include, but are not limited to: GMPs. IRWMPs, UWMPs, WMPs, AWMPs	
Plann	ing	• Modeling	 Establishing Sustainable Management Criteria* Preparation Checklist for GSP Submittal GSP Annotated Outline
Basin Setting	I	 Hydrogeologic Conceptual Model Water Budget 	
Outreach			 Engagement with Tribal Governments* Stakeholder Engagement and Communication*
			* In Development

Figure 2. Logical Progression of Basin Activities Needed to Increase Basin Sustainability