



California Department of Water Resources
Sustainable Groundwater Management Program

Sustainable Groundwater
Management Program

Groundwater Sustainability Plan (GSP) Emergency Regulations Guide

July 2016

Groundwater Sustainability Plan Emergency Regulations

The legislative intent of the 2014 [Sustainable Groundwater Management Act](#) (SGMA) is for groundwater to be managed sustainably in California's groundwater basins by local public agencies and newly-formed groundwater sustainability agencies (GSAs). Withstanding adjudicated areas, in basins designated by the Department of Water Resources (DWR) as medium and high priority, local public agencies and GSAs are required to develop and implement groundwater sustainability plans (GSPs) or alternatives to GSPs (Alternatives) to avoid potential State Water Resources Control Board (SWRCB) intervention. Pursuant to Water Code Section 10733.2, DWR was required to draft and adopt emergency regulations for the evaluation of GSPs and Alternatives, the implementation of GSPs and Alternatives, and coordination agreements by June 1, 2016. Although not subject to SGMA, local public agencies in basins designated as low and very-low priority are encouraged and authorized to form GSAs and develop GSPs, update existing groundwater management plans, or coordinate with others to develop a new groundwater management plan in accordance with Water Code Section 10750 et seq.

Development of GSP Emergency Regulations

The GSP emergency regulations were developed through an extensive public engagement process that included a comprehensive, multi-phased outreach approach to: (1) educate the public about groundwater science and the regulatory requirements of SGMA; (2) better understand important regional and local issues; and (3) collect statewide information to assist with the development of GSP emergency regulations. The DWR's Sustainable Groundwater Management Program held three required public meetings and a statewide webinar to solicit comment from local agencies, interested parties, and the general public on Draft GSP emergency regulations. The proposed GSP emergency regulations were presented to the California Water Commission on May 18, 2016, for consideration of approval. The California Water Commission unanimously approved the proposed regulations, as written, on May 18, 2016.

GSP Emergency Regulations

Full text of the GSP Emergency Regulations (May 18, 2016) are available at:

<http://www.water.ca.gov/groundwater/sgm/gsp.cfm>

More Information

For additional information please contact:

California Department of Water Resources

P.O. Box 942836

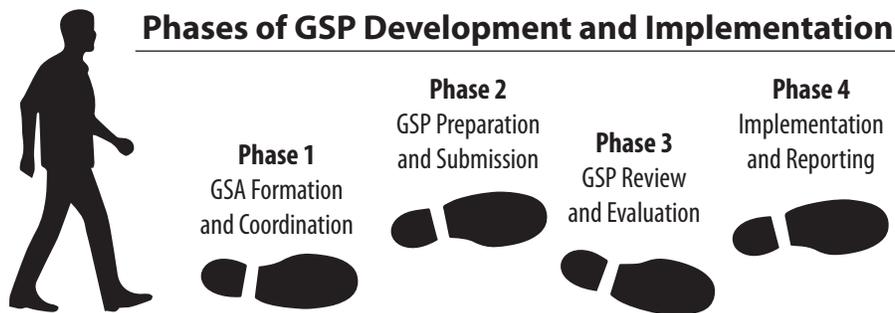
Sacramento, CA 94236



Purpose

This guide includes information designed to aid with the understanding the Groundwater Sustainability Plan (GSP) Emergency Regulations (regulations). Written for local agencies¹ and interested parties including stakeholders, this guide is organized to walk the reader through four phases developed to compartmentalize activities necessary or potentially necessary to address GSP regulations or related requirements, beginning with the formation of groundwater sustainability agencies (GSAs) and leading up to implementation of an adopted and State approved GSP or alternative to GSP (Alternative). Therefore, the intent of this guide is to explain the fundamental concepts of the regulations and information directly relevant to the regulations to the reader through four general phases of development and implementation. The regulations provide a descriptive overview of requirements for development and implementation of GSPs, Interagency Agreements, Alternatives, and DWR's evaluation process. This guide focuses on the requirements for completing GSPs and also presents the timeline for Alternatives that comply with the regulations. Details regarding Alternatives are described in Article 9 of the regulations.

This guide does not serve as a substitute for the regulations.



Readers are strongly encouraged to read the GSP Emergency Regulations.

How to Use This Guide

This guide includes a separate section for each of the four phases of GSP development and implementation. The reader should use this guide to help them understand the following:

1. Their role, either as a local agency, an interested party, stakeholder, or city or county during each of the four general phases
2. Key concepts presented in the regulations
3. Key considerations including potential GSP or Alternative requirements and key dates during SGMA implementation

¹ Local agency means a local public agency that has water supply, water management, or land use responsibilities within a groundwater basin.

Background

On September 16, 2014, the Governor signed into law a three-bill legislative package Assembly Bill (AB) 1739 (Dickinson), Senate Bill (SB) 1168 (Pavley), and SB 1319 (Pavley). These laws are collectively known as the Sustainable Groundwater Management Act (SGMA). SGMA defines sustainable groundwater management as the “management and use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results.” “Undesirable results” are defined in SGMA and are summarized here as any of the following effects caused by groundwater conditions occurring throughout the basin²:

-  Chronic lowering of groundwater levels indicating a significant and unreasonable depletion of supply
-  Significant and unreasonable reduction of groundwater storage
-  Significant and unreasonable seawater intrusion
-  Significant and unreasonable degraded water quality
-  Significant and unreasonable land subsidence
-  Depletions of interconnected surface water that have significant and unreasonable adverse impacts on beneficial uses of the surface water

SGMA identifies the following:

- Requires critically-overdrafted high and medium priority basins to be managed under a GSP by January 31, 2020
- Requires all other groundwater basins designated as high or medium priority basins to be managed under a GSP by January 31, 2022
- Adjudicated basins are not required to develop GSPs, but they are required to submit annual reports to DWR beginning April 1, 2016
- Local agencies have the option of submitting an Alternative plan by January 1, 2017
- Gives GSAs the financial and enforcement authority to carry out effective local sustainable groundwater management

SGMA also expands the role of DWR to support local implementation of sustainable groundwater management, and allows for intervention by the State Water Resources Control Board (SWRCB) at discrete points throughout the process if local agencies are not willing or able to manage groundwater sustainably. Attachment 1 (page 20 and 21) summarizes the major timelines and milestones on California’s path to sustainable groundwater management.

2 “Basin” as defined in SGMA, means a groundwater basin or subbasin identified and defined in Bulletin 118 or as modified pursuant to Water Code 10722 et seq (Chapter 3, Basin Boundaries). Bulletin 118 will be updated as presented in the timeline shown in Attachment 1.

The Governor’s signing message states,

“A central feature of these bills is the recognition that groundwater management in California is best accomplished locally.”

In September 2015, Governor Brown signed SB 13, by Senator Fran Pavley. The Bill makes various clarifying changes to SGMA related to GSA formation. These changes relate to:

- Notification completeness reviews
- Overlapping GSA Boundaries
- Service Area Boundaries

This Bill and others went into effect in January 2016.

SGMA Roles and Responsibilities

Local agencies, DWR, and the SWRCB have key roles and responsibilities for implementing SGMA, as illustrated in **Figure 1**. Stakeholders, including federal and tribal interests, play an integral role in communicating and providing input with all of the agencies involved in implementing SGMA.

GSA – Planning and Implementing Agency

- Lead communication, outreach, and engagement efforts within the basin.
- Develop and implement a GSP, and complete 5-year GSP updates.
- Monitor, evaluate, and report progress towards achieving sustainability goals.

DWR – Regulating and Assisting Agency

- Lead communication, engagement, and coordination efforts at a statewide level.
- Provide data and information, tools, funding, and non-technical and technical support.
- Review GSPs for adequacy, and evaluate implementation and 5-yr updates.
- Develop Basin Boundary and GSP Emergency Regulations.

SWRCB – Enforcing Agency

- May intervene and create an interim plan if a GSA is not formed or it fails to implement a GSP.
- May assess fees for purposes of supporting interim plan intervention.

Federal Government and Tribal Interests – Communication, Input, and Participation

- Participate, at their own discretion, with communication efforts with DWR and local agencies.
- Participate, at their own discretion, with the development and implementation of a GSP.

Other Stakeholders – Communication and Input

- Provide Input to regulations development, GSA formation, and GSP development and implementation.
- Provide comments during review periods pursuant to SGMA.

GSP Emergency Regulations

DWR was required to adopt regulations per Water Code for the development and evaluation of GSPs, Alternatives, and Coordination Agreements.

The regulations will be part of the California Code of Regulations³ and are arranged into nine articles, as shown to the right. Subchapter 1 contains the regulations previously developed by DWR for basin boundary modifications. Definitions for understanding the implementation of SGMA are contained in multiple documents. For more information about DWR’s Sustainable Groundwater Management Program, please visit <http://www.water.ca.gov/groundwater/sgm/>

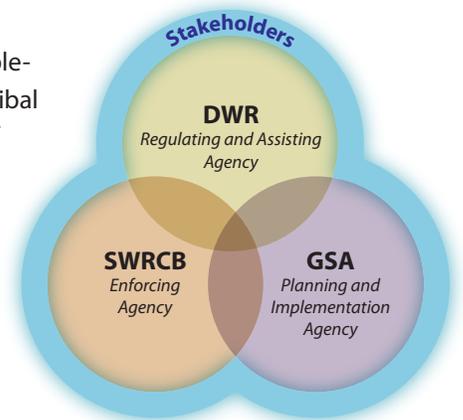


Figure 1. SGMA Roles and Responsibilities

GSP Emergency Regulations Articles and Subarticles

1. Introductory Provisions
2. Definitions
3. Technical and Reporting Standards
4. Procedures
5. Plan Contents
6. Department Evaluation and Assessment
7. Annual Reports and Periodic Evaluations by the Agency
8. Interagency Agreements
9. Adjudicated Areas and Alternatives

³ Title 23 – Waters, Division 2 – Department of Water Resources, Chapter 1.5 – Groundwater Management, Subchapter 2 – Groundwater Sustainability Plans and Alternatives

General Principles (Article 1)

Before diving into the detailed phases of development and implementation of the GSPs it is important to understand the general principles that DWR will use to guide implementation of the regulations. General principles guiding GSP evaluation include the following:

- Groundwater conditions must be adequately defined and monitored to demonstrate the GSPs achieving the sustainability goals for the basin
- GSAs must be sufficiently defined and compatible to evaluate the effect of GSPs on adjacent basins
- GSPs must meet a substantial compliance standard
- A GSA shall provide a description of basin setting and establish criteria that will maintain or achieve sustainable groundwater management
- DWR will consider state policy regarding the human right to water when implementing these regulations
- The GSP sustainable groundwater management criteria, and projects and management actions shall be commensurate with the level of understanding of the basin setting based on uncertainty and data gaps
- A GSP must achieve the sustainability goals for the basin in 20 years

For more about the general principles of the regulations, see Article 1.

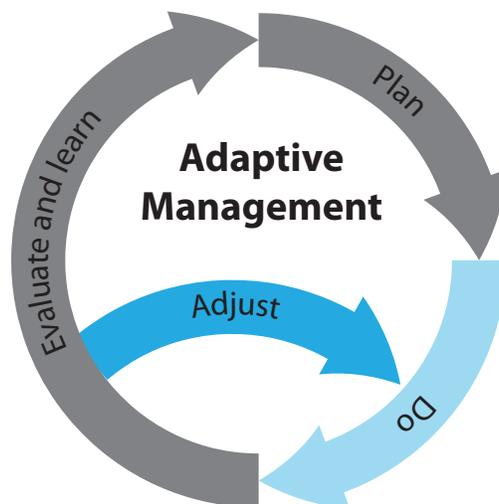


Figure 2. Adaptive Management

As illustrated in **Figure 2**, GSAs are provided an opportunity to amend the GSP based on new information or furthered understanding, or to incorporate corrective actions required by DWR.

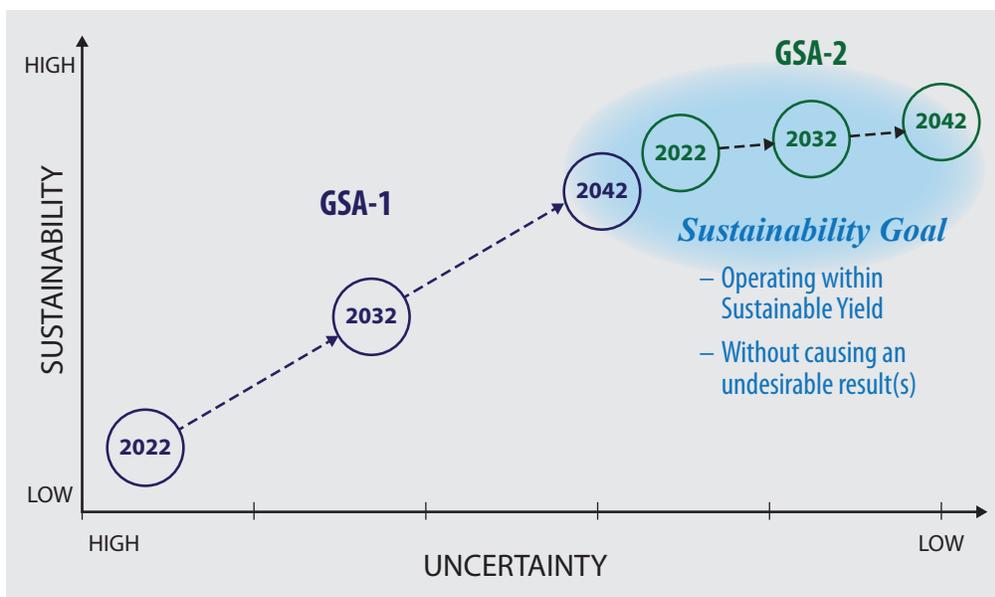
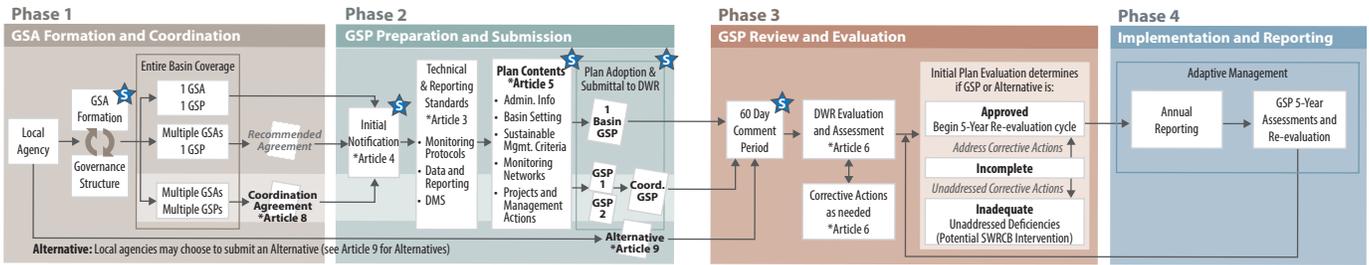


Figure 3. Sustainability Goal

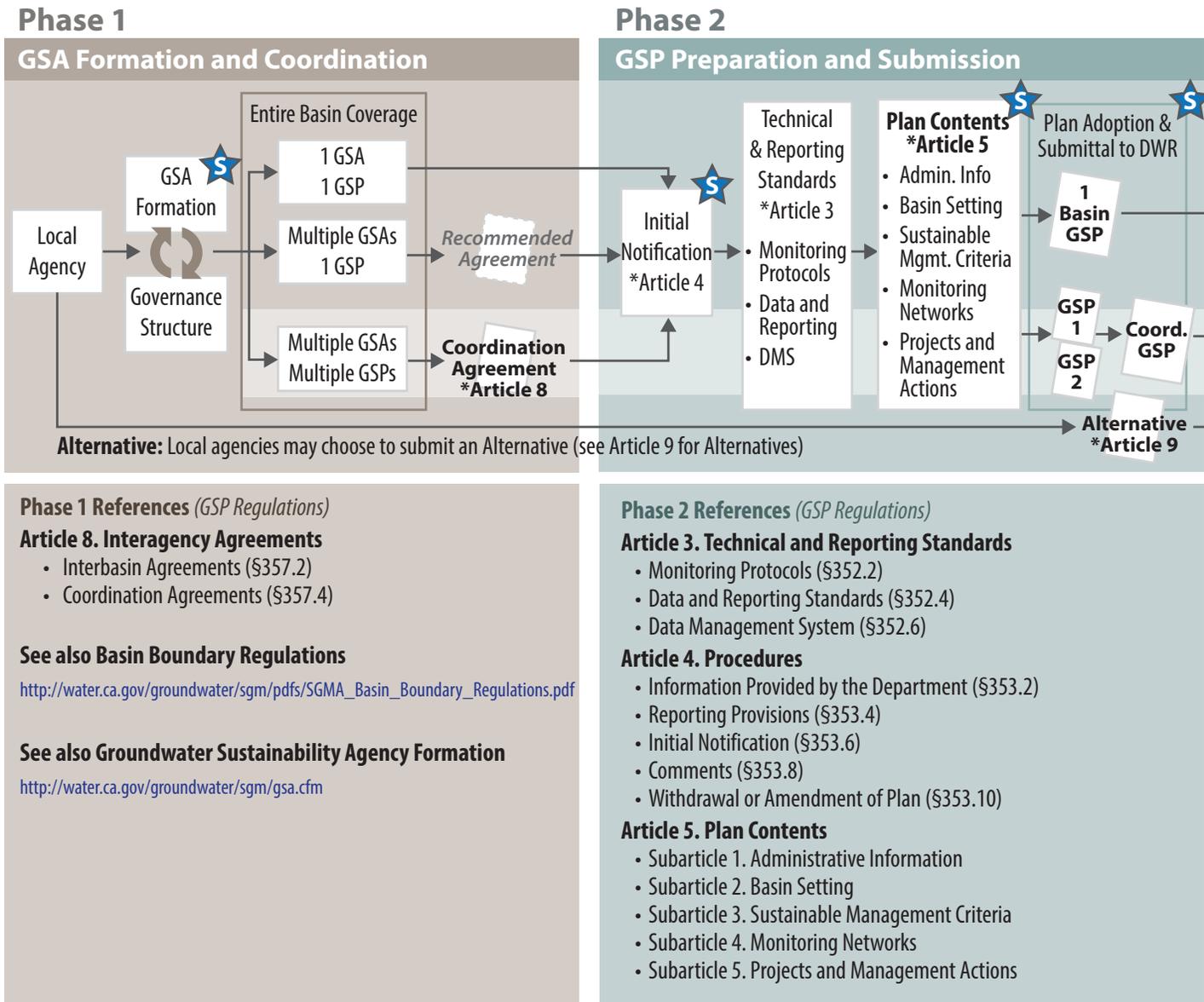
As illustrated in **Figure 3**, The relationship between uncertainty and sustainability may track differently for GSAs throughout the state, but ultimately all GSAs must achieve their sustainability goal after 20 years of implementation.



Phases of GSP Development and Implementation

The GSP and Alternative development and implementation process can be divided into four general phases as illustrated in **Figure 4** on the following page.

- **Phase 1 GSA Formation and Coordination** involves realignment of basins (according to basin boundary modifications where applicable), and establishment of basin governance through formation of GSAs.
- **Phase 2 GSP Preparation and Submission** involves the development and adoption of GSPs by GSAs. Phases 1 and 2 are locally-driven activities to be completed in adherence to the statutory milestones required by SGMA. Key milestone dates are shown in the timeline illustrated in Attachment 1.
- **Phase 3 GSP Review and Evaluation** is a DWR-driven activity whereby DWR staff will review and evaluate GSPs to determine adequacy.
- **Phase 4 Implementation and Reporting** is locally-driven and includes development of annual reports and GSP assessments completed every five years during implementation of the GSPs.



Phase 1 References (GSP Regulations)

Article 8. Interagency Agreements

- Interbasin Agreements (§357.2)
- Coordination Agreements (§357.4)

See also Basin Boundary Regulations

http://water.ca.gov/groundwater/sgm/pdfs/SGMA_Basin_Boundary_Regulations.pdf

See also Groundwater Sustainability Agency Formation

<http://water.ca.gov/groundwater/sgm/gsa.cfm>

Phase 2 References (GSP Regulations)

Article 3. Technical and Reporting Standards

- Monitoring Protocols (§352.2)
- Data and Reporting Standards (§352.4)
- Data Management System (§352.6)

Article 4. Procedures

- Information Provided by the Department (§353.2)
- Reporting Provisions (§353.4)
- Initial Notification (§353.6)
- Comments (§353.8)
- Withdrawal or Amendment of Plan (§353.10)

Article 5. Plan Contents

- Subarticle 1. Administrative Information
- Subarticle 2. Basin Setting
- Subarticle 3. Sustainable Management Criteria
- Subarticle 4. Monitoring Networks
- Subarticle 5. Projects and Management Actions

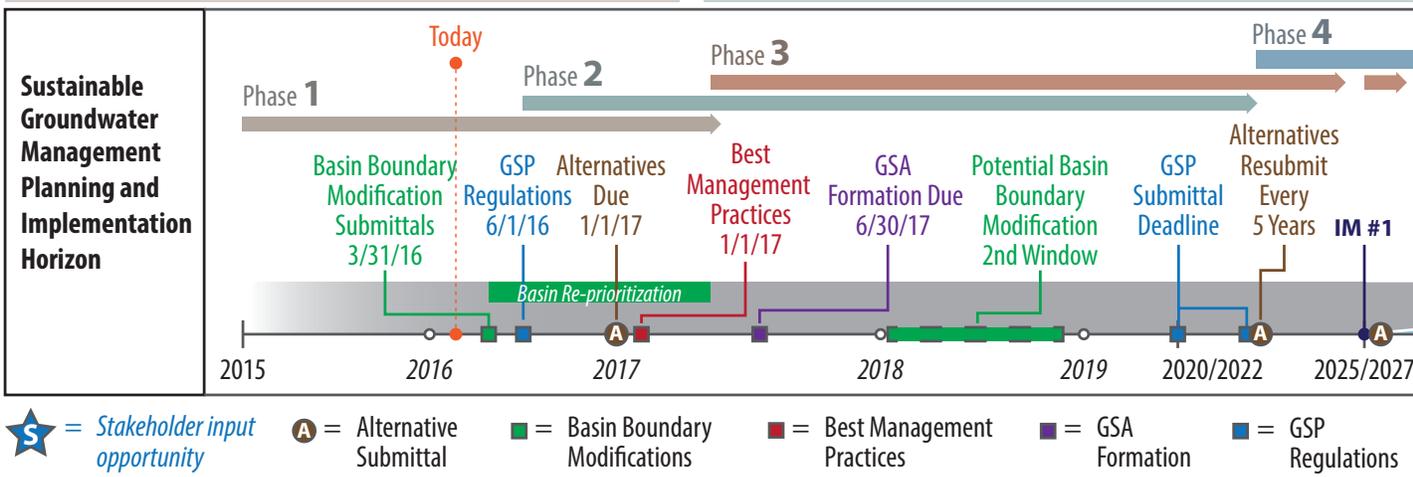
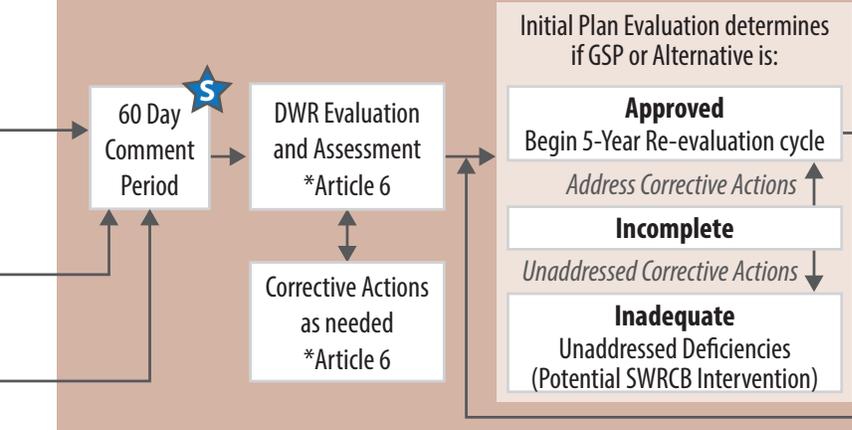


Figure 4. Phases of GSP Development and Implementation

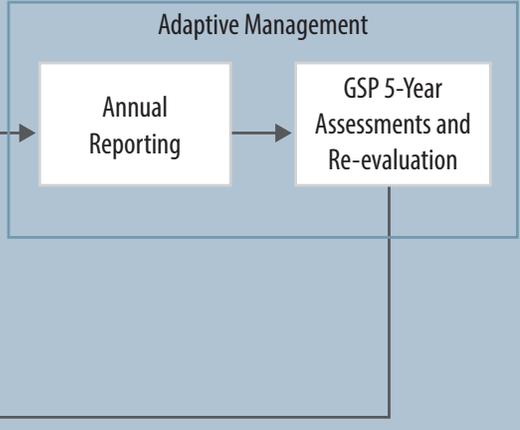
Phase 3

GSP Review and Evaluation



Phase 4

Implementation and Reporting



Phase 3 References (GSP Regulations)

Article 6. Department Evaluation and Assessment

- Department Review of Adopted Plan (§355.2)
- Criteria for Plan Evaluation (§355.4)
- Periodic Review of Plan by Department (§355.6)

Article 9. Adjudicated Areas and Alternatives

- Alternatives to Groundwater Sustainability Plans (§358.2)
- Department Evaluation of Alternatives (§358.4)

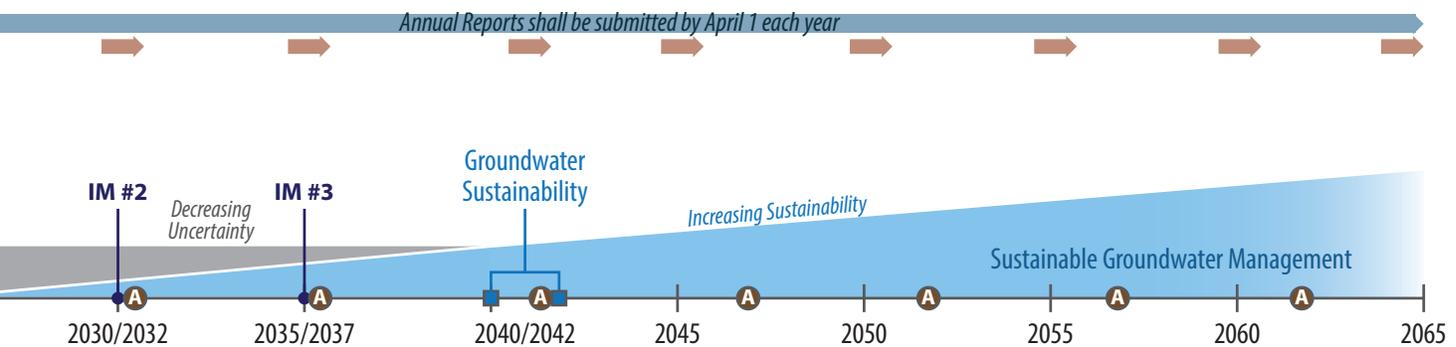
Phase 4 References (GSP Regulations)

Article 6. Department Evaluation and Assessment

- Department Review of Annual Reports (§355.8)
- Plan Amendments (§355.10)

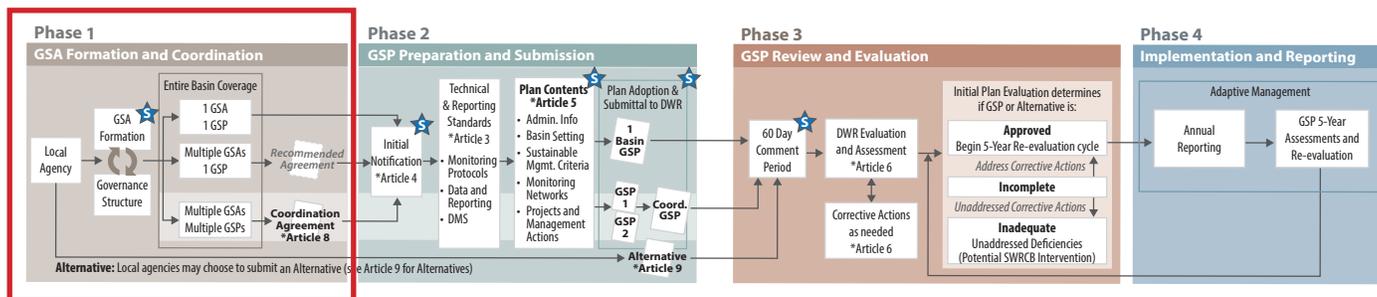
Article 7. Annual Reports and Periodic Evaluations by the Agency

- Annual Report (§356.2)
- Periodic Evaluation by Agency (§356.4)



IM # = Interim Milestone

Phase 1: GSA Formation and Coordination



What Should Local Agencies and GSAs Consider?

SGMA provides local agencies who are interested in becoming a GSA the process and/or requirements to access the necessary resources, level of commitment, and collaboration needed to achieve sustainable groundwater management. The regulations identify considerations for local agencies when organizing their governance structure and establishing interagency agreements (as needed).

During Phase 1, local agencies should:

- Review existing basin boundaries and coordinate with other agencies within the basin
- Identify future opportunities for basin boundary modifications (DWR's first application process closed March 31, 2016). Information on basin boundary modifications are available at: <http://sgma.water.ca.gov/basinmod/>
- Establish a GSA by June 30, 2017: Information on GSA formation is available at: <http://www.water.ca.gov/groundwater/sgm/gsa.cfm>
- Establish a coordination agreement and identify a corresponding point of contact, if required, or determine if an optional interbasin agreement is needed

What Should Interested Parties Consider?

During this phase interested parties including stakeholders and beneficial users of groundwater should contact their local agencies to express interest in being added to the interested parties list that will be maintained by each GSA. Information regarding water agency boundaries and GSAs is available on DWR's Water Management Planning Tool or at DWR's GSA Web site at:

- <http://water.ca.gov/groundwater/boundaries.cfm>
- http://water.ca.gov/groundwater/sgm/gsa_map.cfm

DWR's Role

During this period, DWR is providing more than \$2M in facilitation services to local agencies to aid with GSA formation. In addition, DWR is also accepting basin boundary modifications and notices of GSA formation.

GSA Formation and Governance Structure

Under SGMA local agencies are responsible for developing and implementing GSPs. A local agency can decide to become a GSA, or a combination of local agencies can form a GSA through a joint powers agreement (JPA) or other legal agreement.

Depending on the number of GSAs within a basin, there are three options for GSP submittals, illustrated in **Figure 5**:

- Single GSA developing a single GSP
- Multiple GSAs developing a single GSP
- Multiple GSAs developing multiple GSPs, with a coordination agreement

Once an entire basin is covered by one or more GSAs, the first action of each GSA is to begin discussing and coordinating activities related to the development and implementation of the GSP(s).

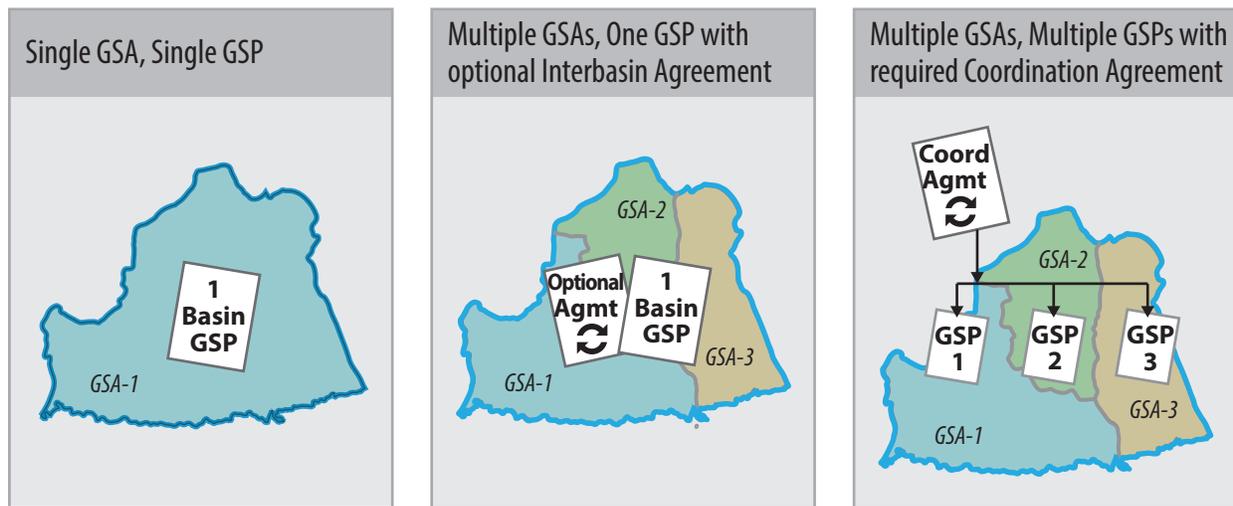


Figure 5. Three Options for GSP Submittals

Interagency Agreements (Article 8)

Interagency agreements are used to coordinate management actions and share data. There are two types of interagency agreements: Coordination Agreements, which are required, and Interbasin Agreements, which are optional.

Coordination Agreements

As illustrated in **Figure 6**, in cases where GSAs develop multiple GSPs within a basin, a single Coordination Agreement must be submitted with the GSPs to DWR. The Coordination Agreement must include the information necessary to show how multiple GSPs can achieve the sustainability goal of the basin. The specific requirements are in Section 357.4, and include, but are not limited to, the following:

- A point of contact with the DWR.
- The responsibility of each GSA, and procedures for exchange of information and resolving conflicts between GSAs.
- A description of how GSAs utilized the same data and methodologies for assumptions in support of GSP development, including groundwater elevation data, a coordinated water budget, and sustainable yield.
- A description of how the GSPs implemented together satisfy the SGMA.
- The procedures for submittal of GSPs, GSP amendments, supporting information, monitoring data, and procedures for annual reporting and periodic evaluations.
- A description of a coordinated data management system.
- The identification of adjudicated areas within the basin, and local agencies that developed an Alternative Plan.

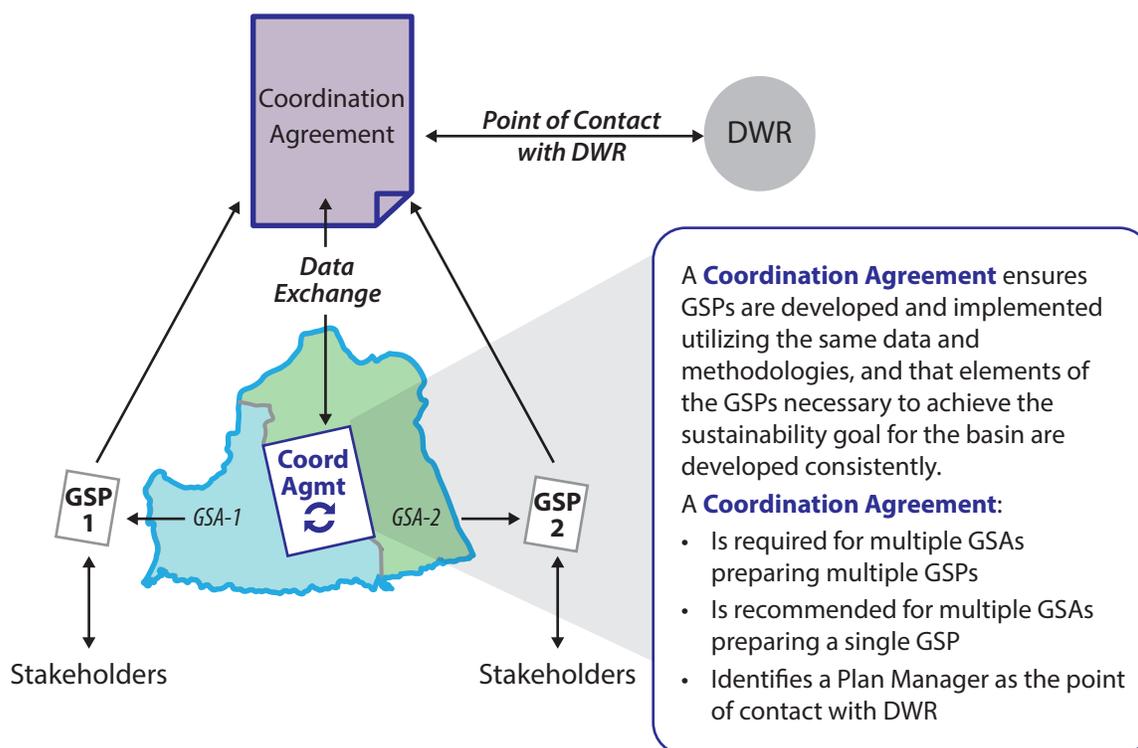


Figure 6. Coordination Agreements

Interbasin Agreements

Interbasin Agreements are optional. Two or more GSAs may enter into an Interbasin Agreement to establish compatible goals and understandings regarding fundamental elements of each GSP (Figure 7). Interbasin agreements:

- Is an optional requirement
- Apply where a groundwater hydraulic connection exists between basins
- Identifies all basins participating
- Shares technical information
- Provides a process for resolving conflict
- Can be in a GSP to support findings that implementation of a basin GSP will not adversely affect an adjacent basin and implementation of that basin GSP

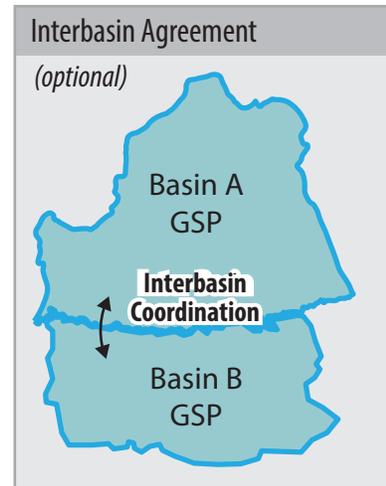


Figure 7. Interbasin Agreements

Phase 1 – Key Considerations

- GSA Formation Notification must be submitted to DWR
- In accordance with SB 13, GSAs shall not be established with overlapping boundaries
- For information on future basin boundary modifications see http://water.ca.gov/ground-water/sgm/basin_boundaries.cfm
- Coordination Agreements required in basins with multiple GSAs and multiple GSPs
- Coordination Agreements require a single point of contact (a Plan Manager) to DWR

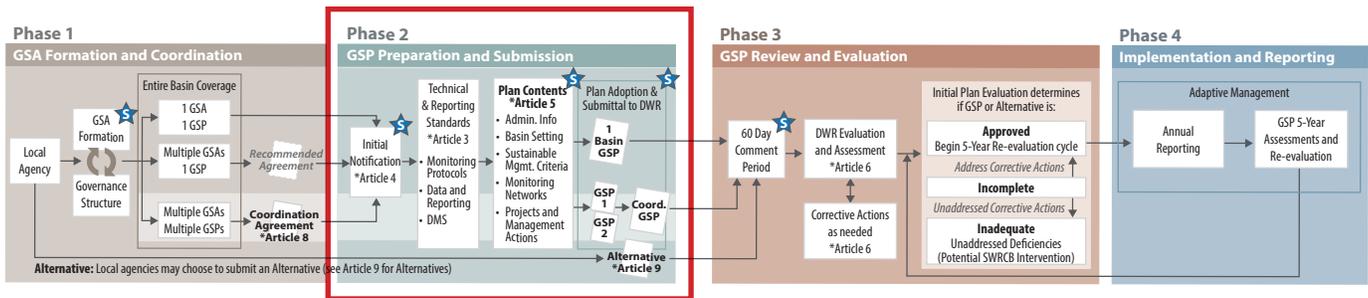
GSP Emergency Regulations References

- Article 8. Coordination Agreements
- Interbasin Agreements (§357.2)
 - Coordination Agreements (§357.4)

Phase 1 Key Dates

- GSP Emergency Regulations Approved May 2016
- Alternatives Due 1/1/2017
- GSAs Formed 6/30/2017

Phase 2: GSP Preparation and Submission



What Should Local Agencies and GSAs Consider?

When a basin has complete GSA coverage, GSAs in the basin should discuss groundwater management and GSP development with managers in adjacent basins if a groundwater hydraulic connection exists. Laying the foundation for GSP development should happen early-on in the discussion process by closely reviewing the regulations and setting expectations based on existing data, or documents such as existing groundwater management plans, and Integrated Regional Water Management Plans. A communications section of a GSP for identifying and engaging the public stakeholders should be developed as one of the first priorities.

Land use agencies (such as Cities and Counties) should consider GSPs in their basin and coordinate with local GSAs before amending or adopting general plans. Land use agencies provide land and water use projection data, and may speak on behalf of unrepresented land use sectors, de minimis pumpers, and disadvantaged communities.

What Should Interested Parties Consider?

During Phase 2, interested parties are encouraged to provide public comments to DWR and GSAs after an initial notification is provided to DWR from a GSA. For additional information on the comment process, see Article 4, Section 353.8 of the regulations.

DWR's Role

During Phase 2, DWR will be providing local assistance with the development of GSPs, including:

- **Funding Support:** DWR will administer nearly \$100M of Proposition 1 funding to support sustainable groundwater management.
- **Facilitation:** DWR will continue to provide facilitation services to local agencies during this period.
- **Technical Support with Basin Information:** DWR will provide guidance and support in the form of a variety of datasets regarding sustainability indicators and other water budget components. This information, in addition to the Bulletin 118 Basin descriptions and Bulletin 160, will be useful starting points.
- **Technical Support with Water Budgets:** DWR will provide the Central Valley Groundwater-Surface Water Simulation Model (C2VSim) and the Integrated Water Flow Model (IWFm) for developing water budgets.
- **Development of Best Management Practices (BMP):** DWR has a statutory requirement to publish BMPs for sustainable management of groundwater on or before January 1, 2017, with an opportunity for comment.
- **Water Supply Available for Replenishment:** DWR will publish a report summarizing water available for replenishment on or before December 31, 2016.
- **Bulletin 118 Update:** DWR will provide interim and comprehensive updates to Bulletin 118 showing basin boundary revisions, updated basin prioritization, and reissues (as needed) of basins subject to conditions of critical overdraft.
- **Consultation:** DWR will be available to the extent possible to meet with GSAs to provide guidance in developing GSPs and applying BMPs in their basins.

Preparing a “Basin Setting” and describing groundwater conditions for the GSP (Article 5)

The “Basin Setting” includes a description of both the static physical characteristics of the basin and the dynamic groundwater and water budget conditions.

A descriptive hydrogeologic conceptual model is used to describe basin setting static conditions. The hydrogeologic conceptual model provides a qualitative and quantitative understanding of the basin’s physical characteristics and how the aquifers react to hydrologic stresses over time, and interaction of the surface water and groundwater systems in the basin. As an informational tool, a hydrogeologic conceptual model becomes the basis for much of the stakeholder understanding of groundwater behavior and cause and effect relationships. The breadth and level of detail of the basin conditions should be sufficient to capture long-term changes in groundwater behavior.

The dynamic groundwater conditions will be described by historical and present day groundwater conditions related to undesirable results, including a description as of January 1, 2015. Data gaps and data uncertainty that limit basin understanding or evaluation of GSP performance must be noted.

The basin setting will also include a quantitative description of the water budget that provides an accounting of inflows and outflows. Basins subject to critical overdraft must quantify the overdraft. Baseline conditions related to supply, demand, hydrology, and surface water supply reliability will be established for the purpose of understanding future projected conditions and for development of management actions and projects.

For more information about Basin Setting, see Article 5, Subarticle 2 of the regulations.

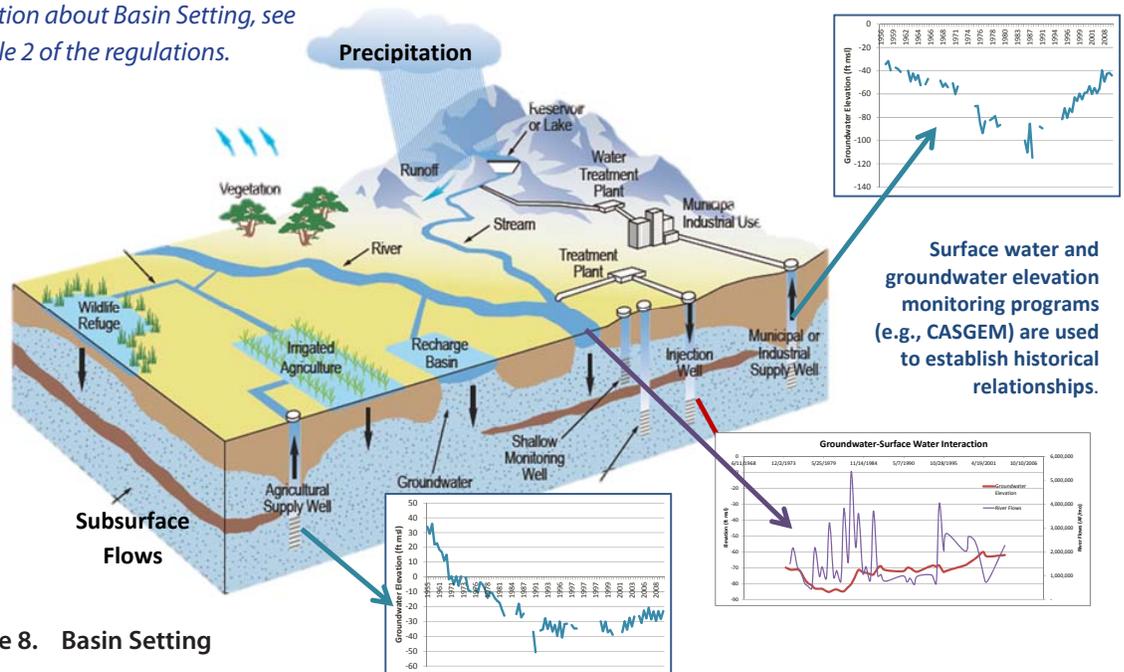


Figure 8. Basin Setting

Public Stakeholder Process

Depending on the number of stakeholders and varying interests, the public process can include the following categories:

- Citizens Groups and General Public
- Governmental and Land Use Agencies
- Commercial and Industrial Self-Supplied
- Private and Public Water Purveyors
- Tribal Governments and Communities
- Agricultural and Aquaculture Interests
- Environmental and Ecosystem Interests
- Remediation and Groundwater Cleanup

Existing groundwater management agencies formed using well-documented interest-based stakeholder processes can continue to use current stakeholder engagement methods and document the process in a **communications section of the GSP**, in addition to any additional requirements per Article 5, Subarticle 1 of the regulations. Given the broad diversity of California’s interested stakeholders, the regulations allow the GSA flexibility in deciding how the stakeholder process is conducted.

Management Areas (Article 5)

A management area refers to an area within a basin for which a GSP may identify different minimum thresholds, measurable objectives, monitoring, or project and management actions based on unique local conditions for water use, water source, geology, aquifer characteristics, or other factors. For example, as illustrated by **Figure 9**, management areas could be designated by land use type or other management variables. The GSP must describe each management area, including the rationale behind the approach, and how it can be managed differently without causing undesirable results outside the area.

For more information on Management Areas, see Article 5, Subarticle 2 of the regulations.

Sustainable Management Criteria (Article 5)

Establishing and achieving a basin's sustainability goal is accomplished through the development of sustainable management criteria. Setting of the goal occurs through a local stakeholder process with the objective of having no undesirable results in the basin within 20 years of implementation.

Each GSA is expected to establish minimum thresholds for each sustainability indicator to avoid undesirable results. Undesirable results may occur when one or more sustainability indicators shown in **Figure 10** below experience conditions below the minimum thresholds, which are significant and unreasonable. GSPs will need to identify one or more measurable objectives for each sustainability indicator and establish associated interim milestones for every 5-year interval. Sustainable management criteria are not required where a GSA has demonstrated related undesirable results are not present. GSAs can use groundwater elevation as a proxy to multiple sustainability indicators where a relationship can be shown. Progress towards meeting interim milestones is reported to, and assessed by, DWR as GSPs are updated every five years.

For more information on Sustainable Management Criteria, see Article 5, Subarticle 3 of the regulations.

Management Areas (MA) are designated when a GSA has determined the area will benefit from site-specific conditions of water demand, use, source, management, or other characteristics.

Representative Wells are representative of the conditions in the area and are used to monitor for undesirable results.

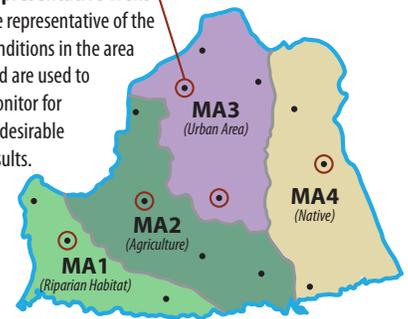


Figure 9. Management Areas

Key Definitions

Some new key terms introduced in the regulations are highlighted (defined) below.

“Sustainability indicator” refers to any of the effects caused by groundwater conditions occurring throughout the basin that, when significant and unreasonable, cause undesirable results, as described in Water Code Section 10721(x).

“Minimum threshold” refers to a numeric value for each sustainability indicator used to define undesirable results.

“Measurable objectives” refer to specific, quantifiable goals for the maintenance or improvement of specified groundwater conditions that have been included in an adopted Plan to achieve the sustainability goal for the basin.

“Interim milestone” (IM) refers to a target value representing measurable groundwater conditions, in increments of 5 years, set by an Agency as part of a Plan.

“Baseline” or “baseline conditions” refer to historic information used to project future conditions for hydrology, water demand, and availability of surface water and to evaluate potential sustainable management practices of a basin.

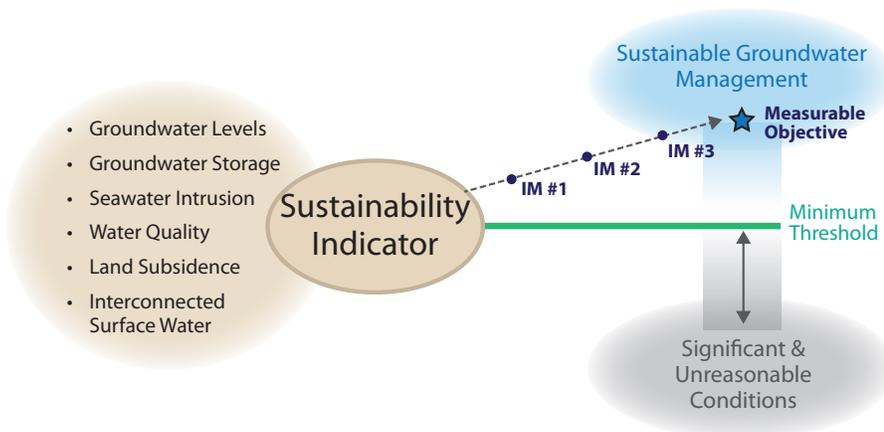


Figure 10. Sustainability Indicators

Monitoring Network (Article 5)

Each GSP must include a detailed description of the basin-specific monitoring network. A GSP may use CASGEM monitoring wells or other existing monitoring programs as the initial foundation for the monitoring network to measure and track each applicable sustainability indicator. GSPs will need to describe the monitoring protocols needed to accurately capture the cause (or source) of undesirable results. For example biannual monitoring of groundwater levels is the minimum standard to capture seasonal trends and long-term trends.

A GSA should consider the following when developing the GSP monitoring plan: may be unique for each basin; will follow minimum standards; and will be tailored by local stakeholder interests based on the basin’s current or potential future undesirable results.

It is anticipated that a GSP monitoring plan will group wells based on geographic and hydrogeologic conditions with one or two wells within each grouping potentially representing the surrounding area. Each GSA must develop and maintain a data management system to store data, and report data in the GSP Annual Report.

For more on Monitoring Networks, see Article 5, Subarticle 4 of the regulations.

Projects and Management Actions (Article 5)

The regulations identify the role of local agencies in managing their basins, which includes designing projects and management actions to address problems, responding to changing conditions, and helping achieve sustainability. The projects and management actions should outline required permitting, implementation time-table, expected benefits, required legal authority, and implementation costs.

Additionally, the description of projects and management actions must indicate the process by which implementation will be triggered, including how they will be used to address interim milestones, the exceedance of minimum thresholds, or undesirable results that have occurred or are imminent. If overdraft conditions are identified through a basin water budget, the GSP must describe projects or management actions designed to mitigate these conditions.

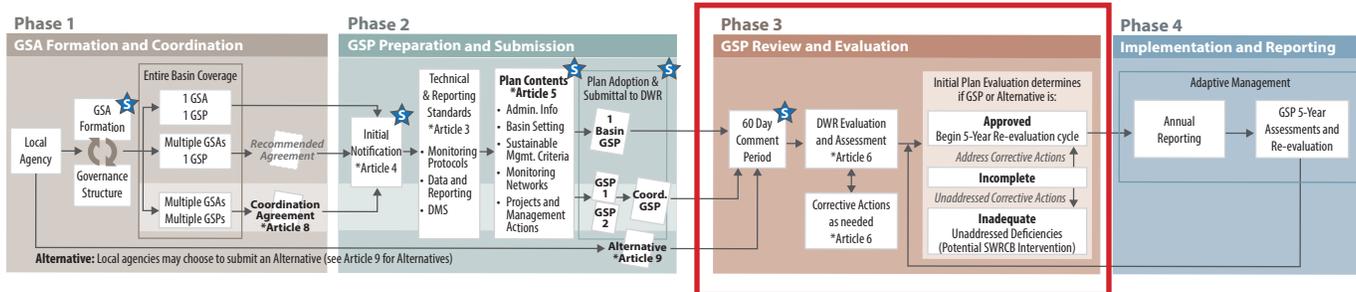
For more on Projects and Management Actions, see Article 5, Subarticle 5 of the regulations.

Phase 2 – Key Considerations

<ul style="list-style-type: none"> • GSAs submit Initial Notification to develop GSP • GSPs may rely on DWR’s BMP or GSA may use own BMP • GSPs follow data and reporting standards • GSAs have a coordinated data management system • Datasets, forms, and instructions for GSP submittal at: http://water.ca.gov/groundwater/sgm/index.cfm • Include required elements in GSP specified in Article 5 including applicable additional GSP elements included in Water Code Section 10727.4 • GSAs submit GSP or Alternative electronically • GSP or Alternative submittal accompanied by transmittal letter • Submit GSP in timeframe established by SGMA (see Attachment 1) 	<p>GSP Emergency Regulations References</p> <ul style="list-style-type: none"> • Article 3. Technical and Reporting Standards <ul style="list-style-type: none"> • Monitoring Protocols (§352.2) • Data and Reporting Standards (§352.4) • Data Management System (§352.6) • Article 4. Procedures <ul style="list-style-type: none"> • Information Provided by the Department (§353.2) • Reporting Provisions (§353.4) • Initial Notification (§353.6) • Comments (§353.8) • Withdrawal or Amendment of Plan (§353.10) • Article 5. Plan Contents <ul style="list-style-type: none"> • Subarticles 1 through 5
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<p>Phase 2 Key Dates</p> <ul style="list-style-type: none"> • GSP Regulations approved: May 2016 • Alternatives due: 1/1/2017 • GSAs formed: 6/30/2017 	<ul style="list-style-type: none"> • GSP Submittal due: 2020/2022 • First Alternative Resubmittal due: 2022
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Phase 3: GSP Review and Evaluation



What Should Local Agencies and GSAs Consider?

Each GSA will need to develop and adopt a GSP before submitting it to DWR for review and approval. Based on number of GSPs submitted, amount and degree of coordination, complexity of issues and science, and number of local public interests, the time required to complete, adopt, and have DWR review and approve a GSP can be considerable. A local agency should consider the different required elements in this process and initiate planning steps to ensure meeting the deadlines in the SGMA timeline (see Attachment 1).

What Should Interested Parties Consider?

During Phase 3, a 60-day comment period is required per SGMA for DWR to receive comments on adopted GSPs. Interested parties may review and provide comments electronically to DWR and the GSA or local agency on the locally adopted GSP(s) or Alternative(s) in the 60-day comment period or any time after the initial notification is posted on DWR's Web site (see Phase 2). For additional information on the comment process, see Article 4, Section 353.8 of the regulations.

DWR's Role

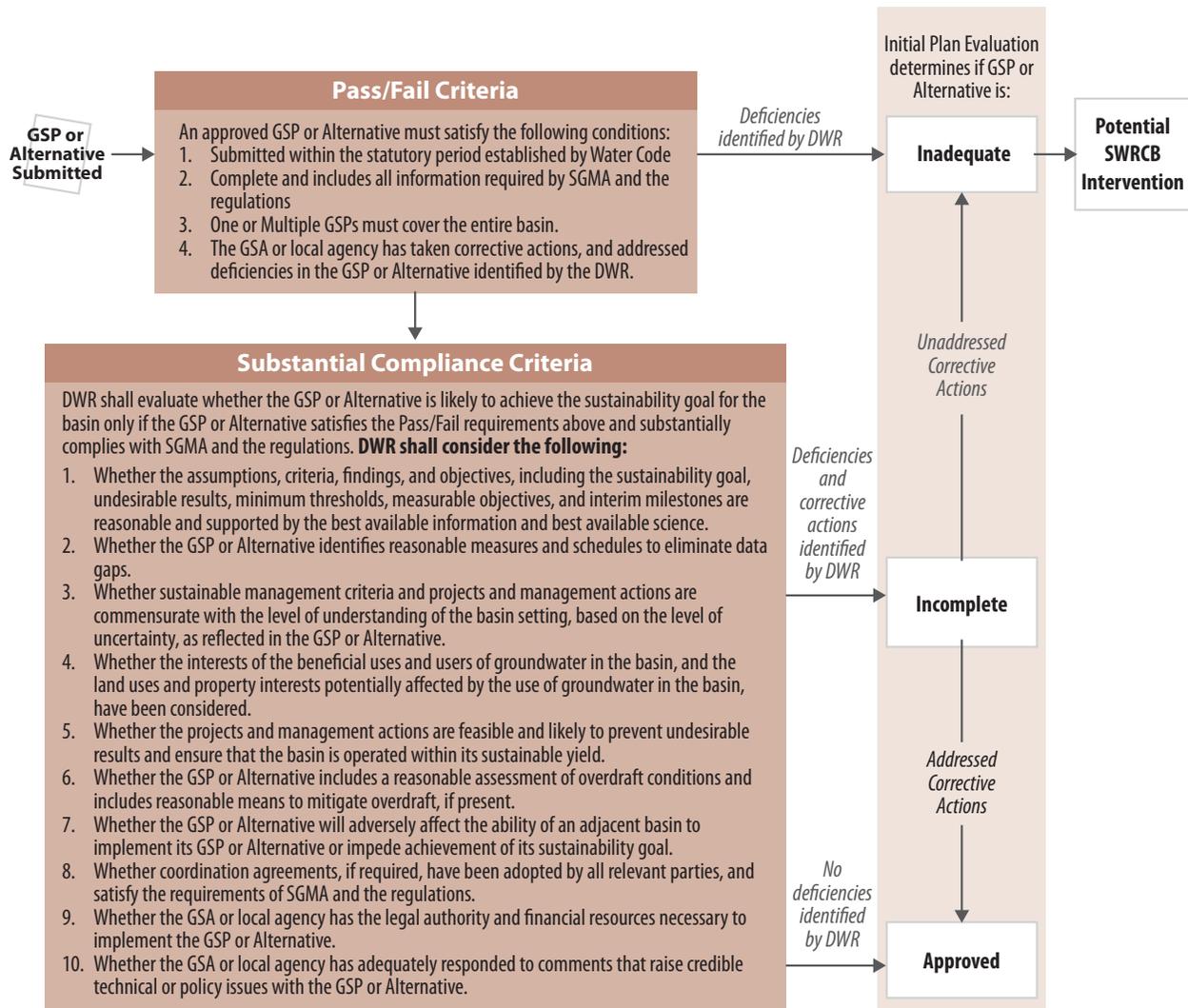
During this period, DWR will be reviewing and evaluating GSPs and Alternatives. Article 6 of the regulations details the methodology and criteria for evaluation and assessment of GSPs toward achieving sustainable groundwater management.

DWR will be reviewing the plans to ensure that they are in conformance with SGMA, regulations, and are likely to achieve the sustainability goal of the basin. Plans that do not contain all components required by SGMA, as identified in the regulations, or that contain components not adequately addressed, may be subject to SWRCB intervention.

DWR's evaluation of a GSA's progress towards meeting the sustainability goal relies on the responsiveness and effectiveness of the GSA in adequately complying with the regulations, implementing their adopted GSP, reporting on their progress, and taking action when and where minimum thresholds are being exceeded. If a GSP exhibits deficiencies in any one area, an inadequate determination may be made by DWR, which may trigger SWRCB intervention in accordance with SGMA.

Department Evaluation and Assessment (Article 6)

DWR will be carefully assessing GSPs over the 20-year implementation period. Initial plans will be evaluated within a 2-year period. Three levels of DWR assessment can occur: (1) Approved; (2) Incomplete (deficiencies exist and may be capable of being corrected in a timely manner); or (3) Inadequate (after consultation with the SWRCB).



Phase 3 – Key Considerations

- Address deficiencies if applicable

GSP Emergency Regulations

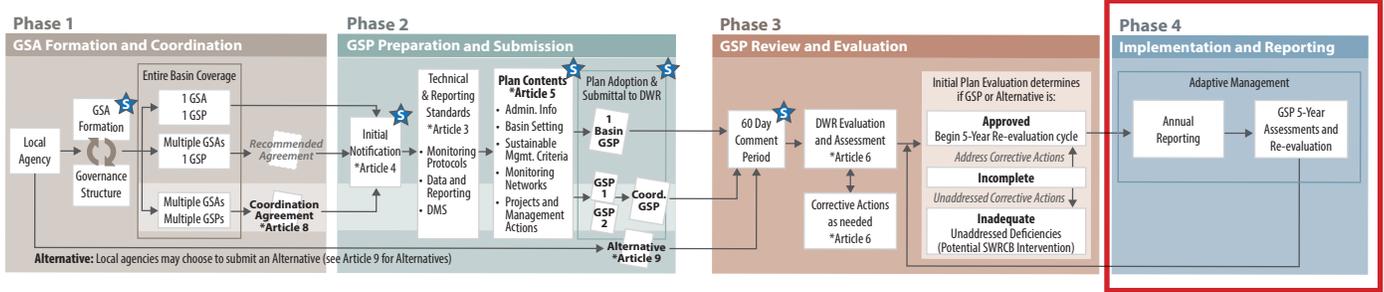
References

- Article 6. Department Evaluation and Assessment
- Article 9. Adjudicated Areas and Alternatives

Phase 3 Key Dates

- GSP Submittal due: 2020/2022
- First Alternative Resubmittal due: 2022
- Alternatives Resubmit every 5 years
- GSP Re-evaluation every 5 years after GSP Submittal
- Interim Milestones every 5 years after GSP Submittal

Phase 4: Implementation and Reporting



What Should Local Agencies or GSAs Consider?

GSA implementation and reporting activities occurring throughout a year are presented in an Annual Report (submitted April 1 of each year following GSP adoption) and include, but are not limited to, the following information:

- An executive summary, including general information about the basin covered
- A description of basin conditions (i.e. groundwater elevations, groundwater extractions, surface water supply for groundwater replenishment, total water use, change in groundwater storage)
- A description of the progress made towards implementing the GSP, including achieving interim milestones and implementation of projects and/or management actions

Annual reporting should follow a standard format and include technical information required by SGMA and the regulations.

What Should Interested Parties Consider?

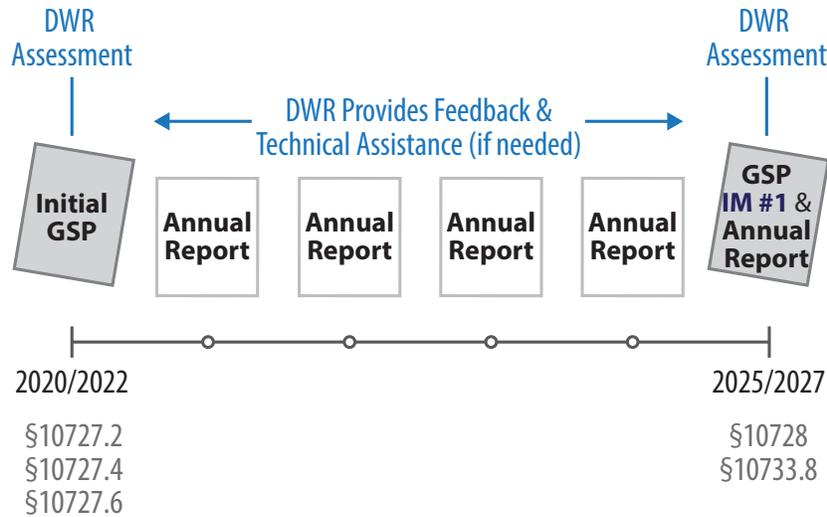
Consistent with Phase 3, during Phase 4 interested parties should review and provide comments electronically to DWR and the GSA or local agency on the locally adopted or amended GSP(s) or Alternative(s) posted on DWR's Web site. For additional information on the comment process, see Article 4, Section 353.8.

DWR's Role

During this period, DWR will be reviewing and evaluating annual reports and GSP and Alternatives updates. Article 6 (Department Evaluation and Assessment) and Article 7 (Annual Reports and Periodic Evaluations by the Agency) of the regulations describes the methodology and criteria for evaluation and assessment of these documents toward achieving sustainable groundwater management. DWR will be reviewing annual reports and GSPs to ensure that they are in conformance with SGMA, regulations, and likely to achieve the sustainability goal of the basin. Annual Reports and GSP updates that do not contain all components required by SGMA, regulations, or components not adequately addressed, may be subject to consultation with SWRCB.

Five-Year and Annual Reporting (Article 7)

Five-year and annual reporting are required pursuant to SGMA. A DWR adequacy review will take place for the initial GSP development, at each annual report, and at each GSP re-evaluation throughout the 2020/2022 to 2040/2042 period. As an example, the first five years are illustrated below:



Phase 4 – Key Considerations

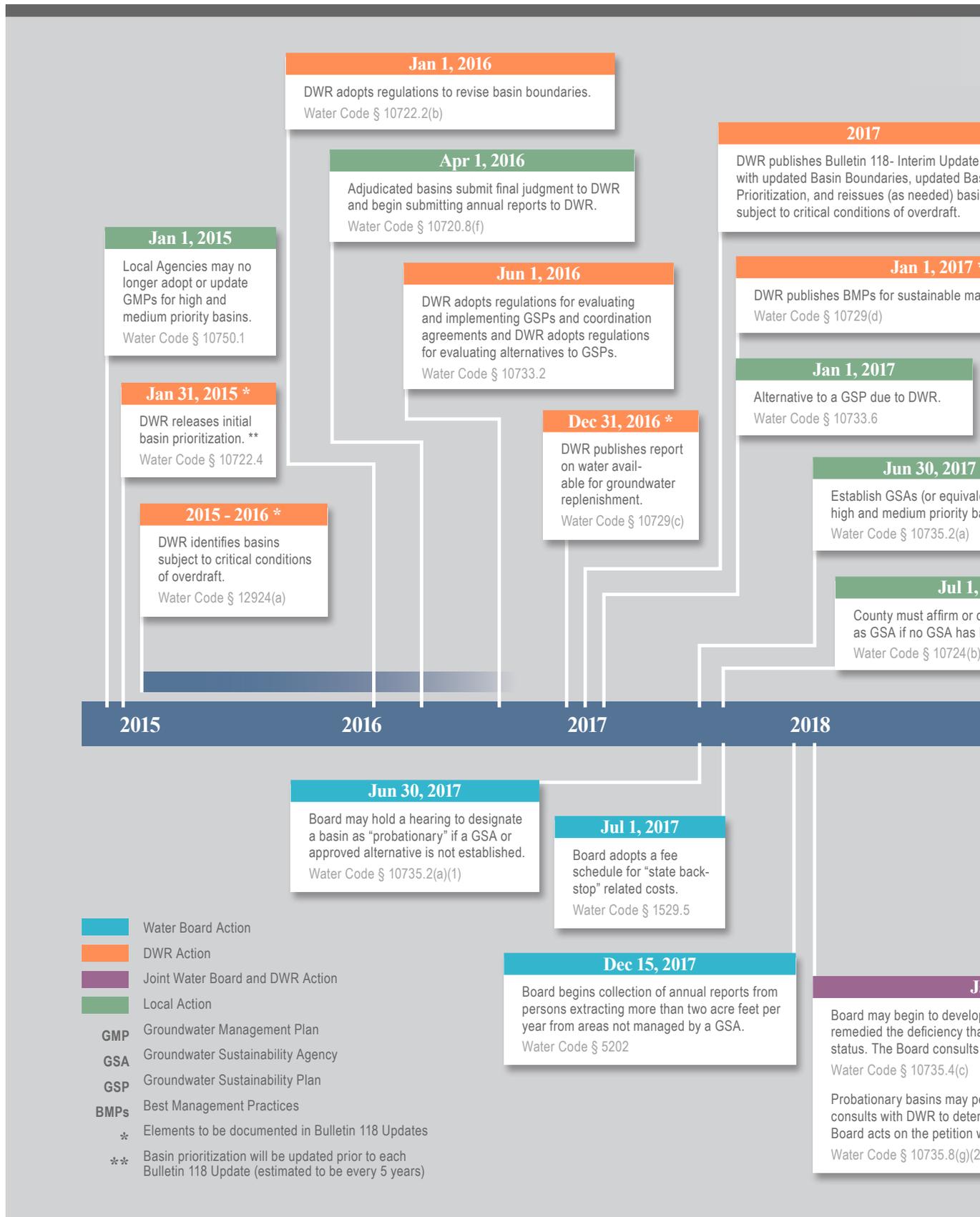
- Submit annual reports on or before April 1
- Submit 5-Year Assessments

GSP Emergency Regulations References

- Article 6. Department Evaluation and Assessment
- Periodic Review of Plan by Department (§355.6)
 - Department Review of Annual Reports (§355.8)
 - Plan Amendments (§355.10)
- Article 7. Annual Reports and Periodic Evaluations by the Agency
- Annual Report (§356.2)
 - Periodic Evaluation by Agency (§356.4)

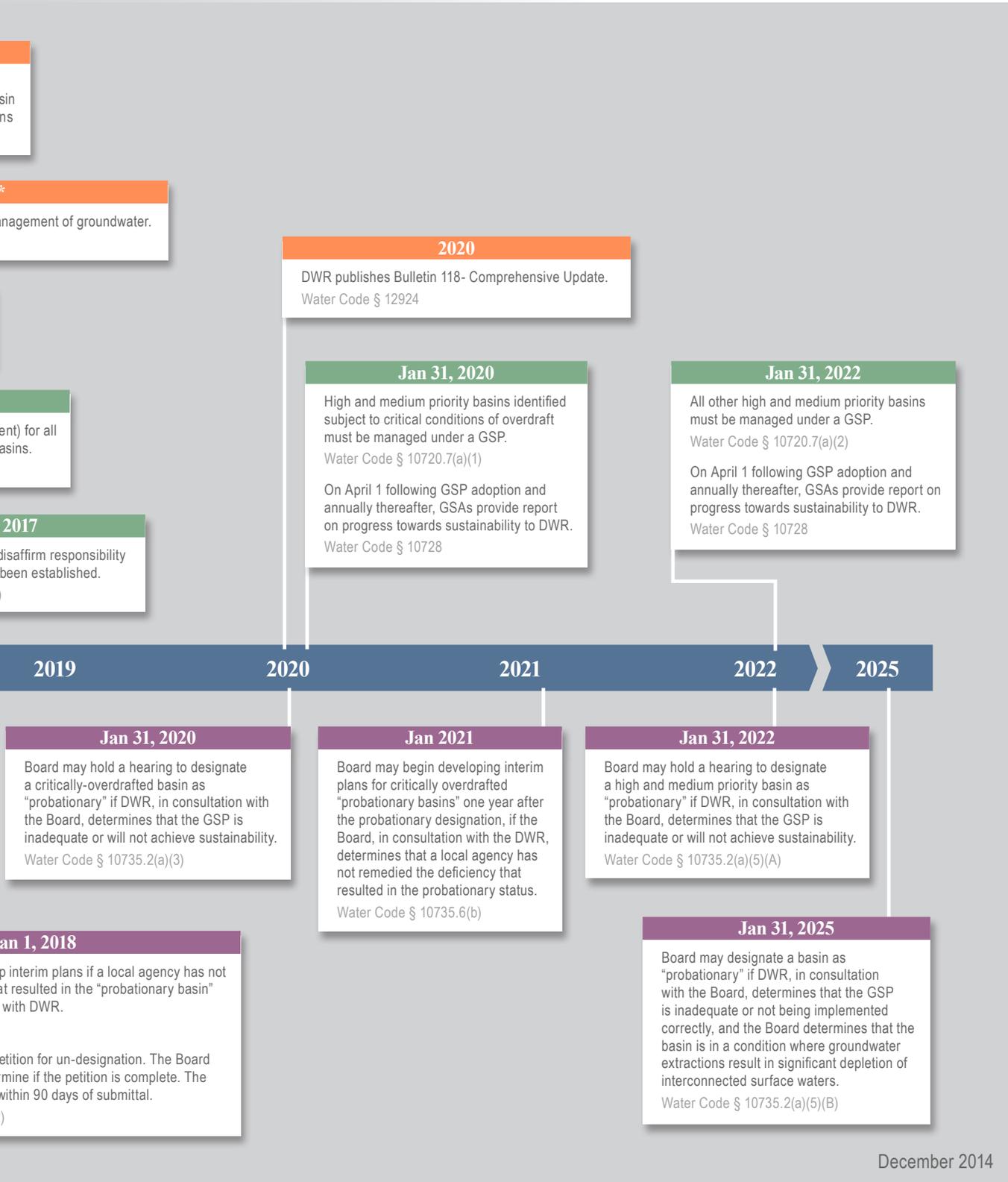
Phase 4 Key Dates

- First Alternative Resubmittal due: 2022
- Alternatives resubmitted every 5 years
- Interim milestones every 5 years
- Annual reports submitted by April 1
- Groundwater sustainability goals attained: 2040/2042



Attachment 1. Major Timeline of Key SGMA Milestones

Key SGMA Milestones



December 2014

July 2016



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