

CALIFORNIA CODE OF REGULATIONS  
TITLE 23. WATERS  
DIVISION 2. DEPARTMENT OF WATER RESOURCES  
CHAPTER 1.5. GROUNDWATER MANAGEMENT  
SUBCHAPTER 2. GROUNDWATER SUSTAINABILITY PLANS

ARTICLE 1. Introductory Provisions

**§ 350. Authority and Purpose**

These regulations specify the components of groundwater sustainability plans, alternatives to groundwater sustainability plans, and coordination agreements prepared pursuant to the Sustainable Groundwater Management Act (Part 2.74 of Division 6 of the Water Code, beginning with Section 10720), and the methods and criteria used by the Department to evaluate those plans, alternatives, and coordination agreements, and information required by the Department to facilitate that evaluation.

Note: Authority cited: Section 10733.2, Water Code.

Reference: Sections 10733.2, and 10733.4, Water Code.

**§ 350.2. Applicability**

(a) The process and standards for an Agency to develop and submit a Plan for evaluation by the Department, and for Department evaluation of that Plan and its implementation, as described in these regulations, are also applicable to multiple Agencies developing multiple Plans, as described in Article 8, and to entities submitting Alternatives, as described in Article 9.

(b) Unless as otherwise noted, section references in these regulations refer to this Subchapter.

Note: Authority cited: Section 10733.2, Water Code.

Reference: Sections 10727.6, 10733.2, 10733.4, and 10733.6, Water Code.

**§ 350.4. General Principles**

Consistent with the State's interest in ~~achieving~~ groundwater sustainability through local management ~~and the avoidance of undesirable results within groundwater basins~~, the following general principles shall guide the Department in the implementation of these regulations.

~~(a) The Plan must achieve~~ (a) Groundwater conditions must be adequately defined and monitored to demonstrate that a Plan is achieving the sustainability goal for the entire basin within 20 years of Plan implementation without adversely affecting, and the ability of an Department will evaluate the level of detail provided considering the basin setting.

~~(b) To comply with the Department's statutory mandate to evaluate Plans, Plan implementation, and the effect on Plan implementation on adjacent basin to implement their basins, Plan or achieve their sustainability goal.~~

~~(b) The Plan shall describe a process for the collection, interpretation, and reporting of sufficient reliable content information to permit the Department to evaluate the adequacy of the Plan must be sufficiently detailed and readily comparable.~~

(c) The Department shall evaluate the adequacy of all Plans, including subsequent modifications to Plans, and reports and periodic evaluations based on a substantial compliance standard as described in Article 6, provided that the goals/objectives of the Act are satisfied.

~~(d) The Department may determine that an initial Plan is adequate, notwithstanding identified deficiencies, provided that the Plan contains sufficient credible information to support reasonable interpretations about basin conditions and describes all of the following:~~

~~(1) A process for prioritizing and filling data gaps throughout the course of Plan implementation.~~

~~(2) The specific actions and projects that will bring the Plan~~ (d) Sustainable management criteria and projects and management actions shall be commensurate with the level of understanding of the basin setting, based on the level of uncertainty and data gaps, as reflected in the Plan.

~~(e) An Agency shall have the responsibility for adopting a Plan that defines the basin setting and establishes criteria that will maintain or achieve sustainable groundwater management, and the Department shall have the ongoing responsibility to evaluate the adequacy of that Plan and the success of its implementation.~~

~~(f) A Plan into compliance within minimum standards and best management practices on a reasonable schedule.~~

~~(3) A definite course to achieve the sustainability goal will be evaluated, and its implementation assessed, consistent with the objective that a basin be sustainably managed within 20 years of Plan implementation.~~

~~(4) The institutional system that will without adversely affecting the ability of an adjacent basin to implement its Plan or achieve and maintain its sustainability goal over the planning and implementation horizon.~~

~~(e) Adaptive management may be employed as a tool for improving local and regional management of the state's groundwater basins within 20 years of Plan implementation and over the planning and implementation horizon.~~

~~(f) The processes for an Agency to develop and submit a Plan for evaluation by the Department, and for Department evaluation, as described in these regulations, are made applicable to multiple Agencies developing multiple Plans and to Alternatives, as described in Article 9.~~

~~(g) The Department may evaluate a Plan at any time, for compliance with the Act and this Subchapter.~~

~~(h) Unless otherwise noted, all section references in these regulations refer to this Chapter.~~

(g) The Department shall consider the state policy regarding the human right to water when implementing these regulations.

Note: Authority cited: Section 10733.2, Water Code.

Reference: Sections 106.3, 113, 10720.1, 10720.9, 10727.6, 10733, and 10733.2, 10733.4, 10733.6, Water Code.

## ARTICLE 2. Definitions

### § 351. Definitions

~~In addition to terms defined in~~ The definitions in the Sustainable Groundwater Management Act and in Bulletin 118, and ~~terms defined in~~ Subchapter 1 of this Chapter, which definitions shall apply to these regulations. In the event of conflicting definitions, the definitions in the Act govern the meanings in this Subchapter. In addition, the following terms used in this Subchapter have the following meanings:

- (a) “Agency” refers to a groundwater sustainability agency as defined in the Act.
- (b) “Agricultural water management plan” refers to a plan adopted pursuant to the Agricultural Water Management Planning Act as described in Part 2.8 of Division 6 of the Water Code, commencing with Section 10800 et seq.
- (c) “Alternative” refers to ~~any~~ an alternative to a Plan described in Water Code Section 10733.6.
- (d) “Annual report” refers to the report required by Water Code Section 10728.
- (e) “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.
- ~~(f) “Best available information” refers to information that is accurate, applicable, actionable, and accessible.~~
- ~~(g)~~ (f) “Basin” means a groundwater basin or subbasin identified and defined in Bulletin 118 or as modified pursuant to Water Code 10722 et seq.
- ~~(h)~~ (g) “Basin setting” refers to the information about the physical setting, characteristics, and current conditions of the basin as described by the Agency in the hydrogeologic conceptual model, the groundwater conditions, and the water budget, pursuant to Subarticle 2 of Article 5.
- ~~(i)~~ (h) “Best available science” refers to the use of high-value sufficient and credible information and data, specific to the decision being made and the time frame available for making that decision, that is consistent with scientific and engineering professional standards of practice.
- ~~(j)~~ (i) “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.
- ~~(k)~~ (j) “Coordinating agency” refers to a groundwater sustainability agency or other authorized entity that represents two or more Agencies or Plans for a basin and is the sole point of contact with the Department.
- ~~(l)~~ (k) “Critical parameter” refers to chronic lowering of groundwater levels indicating a depletion of supply if continued over the planning and implementation horizon, reduction of groundwater storage, sea water intrusion, degraded water quality, land subsidence that substantially interferes with surface land uses, and depletions of surface water that

~~have adverse impacts on beneficial uses of surface water that may lead to undesirable results, as described in Water Code Section 10721(x).~~

~~(k)~~ (j) “Board” refers to the State Water Resources Control Board.

(k) “CASGEM” refers to the California Statewide Groundwater Elevation Monitoring Program developed by the Department pursuant to Water Code Section 10920 et seq., or as amended.

(l) “Data gap” refers to a lack of information that significantly affects the understanding of the basin setting or evaluation of the efficacy of Plan implementation, and could limit the ability to assess whether a basin is being sustainably managed.

(m) “Groundwater dependent ecosystem” refers to ecological communities or species that depend on groundwater emerging from aquifers or on groundwater occurring near the ground surface.

(n) “Groundwater flow” refers to the volume and direction of groundwater movement into, out of, or throughout a basin.

(o) “Interconnected surface water” refers to surface water that is hydraulically connected at any point by a continuous saturated zone to the underlying aquifer and the overlying surface water is not completely depleted.

(p) “Interested parties” refers to all persons and entities on the list of interested persons established by the Agency pursuant to Water Code §Section 10723.4.

~~(m) “Interconnected surface water” refers to conditions where surface water and the underlying aquifer are hydraulically connected by a continuous saturated zone and the overlying surface water is not completely depleted.~~

~~(nq) “Interim milestone” refers to a target value for management actions or representing measurable groundwater conditions, in increments of five years, set by an Agency as part of a Plan implementation.~~

~~(or) “Management area” refers to areasan area within a basin where conditions such asfor which the Plan may identify different minimum thresholds, measurable objectives, monitoring, or projects and management actions based on differences in water use sector, water source type, geology, aquifer characteristics, or critical parameters related to undesirable results are significantly different from basin conditions as a whole, and justify different minimum thresholds, measurable objectives, monitoring and management actionsother factors.~~

~~(ps) “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 in afor the basin.~~

~~(qt) “Minimum threshold” refers to the point at which groundwater conditionsa numeric value for a given critical parameter are significant and unreasonable. each sustainability indicator used to define undesirable results.~~

~~(ru) “NAD83” refers to the North American Datum of 1983 computed by the National Geodetic Survey, or as modified.~~

~~(sy)~~ “NAVD88” refers to the North American Vertical Datum of 1988 computed by the National Geodetic Survey, or as modified.

~~(tw)~~ “Plain language” means language that the intended audience can readily understand and use because that language is concise, well-organized, uses simple vocabulary, avoids excessive acronyms and technical language, and follows other best practices of plain language writing.

~~(ux)~~ “Plan” refers to a groundwater sustainability plan as defined in the Act. ~~The status of a Plan may change as follows:~~

~~(1) “Adopted Plan” refers to a Plan that has been adopted by an Agency pursuant to the requirements of the Act and this Subchapter.~~

~~(2) “Approved Plan” refers to an adopted Plan that has been evaluated by the Department and found to be adequate.~~

~~(3) “Initial Plan” refers to the first version of a Plan developed by an Agency and evaluated by the Department.~~

~~(vy)~~ “Plan implementation” refers to ~~the date when an Agency exercises anyan Agency’s exercise of the powers and authorities described in the Act, which commences after adopting and submitting to the Department an Agency adopts and submits a Plan or Alternative to the Department and begins exercising such powers and authorities.~~

~~(wz)~~ “Plan manager” is an employee or authorized representative of ~~a groundwater sustainability agencyan Agency, or Agencies, appointed through a coordination agreement or other agreement, who has been delegated management authority for submitting the groundwater sustainability Plan and serving as the point of contact between the groundwater sustainability Agency and the Department.~~

~~(xaa)~~ “Principal aquifers” refer to aquifers or aquifer systems that store, transmit, and yield significant or economic quantities of groundwater to ~~the~~ wells, springs, or surface water systems.

~~(yab)~~ “Reference point” refers to a permanent, stationary and readily identifiable mark or point on a well, such as the top of casing, from which groundwater level measurements are taken, or other monitoring site.

~~(z)~~ “Reporting period” refers to ~~the period covered by the annual report required by Water Code Section 10728, which shall consist of the previous water year.~~

~~(aac)~~ “Representative monitoring” refers to a monitoring site within a broader ~~systemnetwork~~ of sites that typifies one or more conditions within the basin or an area of the basin.

~~(abd)~~ “Seasonal high” refers to the highest annual static groundwater elevation that is typically measured in the Spring and associated with stable aquifer conditions following a period of lowest annual groundwater demand.

~~(aeae)~~ “Seasonal low” refers to the lowest annual static groundwater elevation that is typically measured in the Summer or Fall, and associated with a period of stable aquifer conditions following a period of highest annual groundwater demand.

~~(adaf)~~ “Seawater intrusion” refers to the advancement of seawater into a groundwater supply that results in degradation of water quality in the basin, and includes seawater from any source.

~~(aeag)~~ “Statutory deadline” refers to the date by which an Agency must be managing a basin pursuant to an adopted Plan, as described in Water Code Sections 10720.7 or 10722.4.

~~(ah)~~ “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).

~~(ai)~~ “Uncertainty” refers to a lack of understanding of the basin setting that significantly affects an Agency’s ability to develop sustainable management criteria and appropriate projects and management actions in a Plan, or to evaluate the efficacy of Plan implementation, and therefore may limit the ability to assess whether a basin is being sustainably managed.

~~(aj)~~ “Urban water management plan” refers to a plan adopted pursuant to the Urban Water Management Planning Act as described in Part 2.6 of Division 6 of the Water Code, commencing with Section 10610 et seq.

~~(afak)~~ “Water source type” represents the source from which water is derived to meet the applied beneficial uses, including, ~~but not limited to,~~ groundwater, recycled water, reused water, and ~~local or imported~~ surface water sources identified as Central Valley Project, the State Water Project, the Colorado River Project, local supplies, and local imported supplies.

~~(ag)~~ “Water supply reliability” refers to the likelihood that the supply of water within the basin will satisfy reasonable demands for the beneficial uses and users of water.

~~(ahal)~~ “Water use sector” refers to categories of water demand based on the general land uses to which the water is applied. ~~They include, but may not be limited to,~~ including urban, industrial, agricultural, managed wetlands, managed recharge, and native vegetation.

~~(aiam)~~ “Water year” refers to the period from October 1 through the following September 30, inclusive, as defined in the Act.

~~(ajan)~~ “Water year type” refers to the classification ~~system index~~ provided by the Department to assess the amount of annual precipitation in a basin.

Note: Authority cited: Section 10733.2, Water Code.

Reference: ~~Section~~ Sections 25, 10720.7, 10721, 10722, 10722.4, 10723, 10727.2-, 10728, 10729, 10733.2, 10733.6, and 10924, Water Code-.

## ARTICLE 3. Technical and Reporting Standards

### § 352. Introduction to Technical and Reporting Standards

This Article describes the ~~use of best management practices and minimum~~monitoring protocols, standards for monitoring sites, and other technical ~~matters appropriate~~elements related to ~~develop~~the development or ~~monitor~~the implementation of a Plan.

Note: Authority cited: Section 10733.2, Water Code.

Reference: Section 10733.2, Water Code.

### ~~§ 352.4. Best Management Practices~~2. Monitoring Protocols

~~(a) Each Plan shall include best management practices~~monitoring protocols adopted by the Agency for ~~management actions, data collection and analysis, and other necessary elements of the Plan.~~management, as follows:

~~(a) Monitoring protocols shall be developed according to best management practices.~~

~~(b) The Agency may rely on best management practices developed by the Department, or shall~~may adopt their own best management practices~~similar monitoring protocols that will yield comparable data.~~

~~(b) Best management practices~~(c) Monitoring protocols shall be reviewed at least every five years as part of the periodic evaluation of the Plan, and modified as necessary.

~~(c) If best management practices developed by the Department are modified, an Agency shall not be required to amend the Agency's best management practices until the next five-year review.~~

Note: Authority cited: Section 10733.2, Water Code.

Reference: ~~Section~~Sections 10727.2, 10728.2, 10729, and 10733.2, 10733.8, Water Code.

### ~~§ 352.64. Data and Reporting Standards~~

(a) The following reporting standards apply to all categories of information required of a Plan, unless otherwise indicated:

(1) Water volumes shall be reported in acre-feet.

~~(2)~~(2) Surface water flow shall be reported in cubic feet per second and groundwater flow shall be reported in acre-feet per year.

(3) Field measurements of elevations of groundwater, surface water, and land surface elevations shall be measured and reported in feet relative to NAVD88, or as modified, to an accuracy of at least 0.1 feet relative to NAVD88, or another national standard that is convertible to NAVD88, and the method of measurement described.

~~(3)~~(4) Reference point elevations shall be measured and reported in feet relative to NAVD88, or as modified, to an accuracy of at least 0.5 feet, or the best available

information, relative to NAVD88, or another national standard that is convertible to NAVD88, and the method of measurement described.

(45) Geographic locations shall be reported in GPS coordinates by latitude and longitude ~~relative to NAD83, or as modified,~~ in decimal degree to five decimal places, ~~and to~~ a minimum accuracy of 30 feet, relative to NAD83, or another national standard that is convertible to NAD83.

(b) ~~The following standards apply to wells and monitoring sites, unless otherwise indicated:~~

~~(1) All Monitoring sites shall include the following information, as appropriate:~~

~~(A1) A unique site identification number and narrative description of the site location.~~

~~(B2) A description of the type of monitoring, type of measurement taken, and monitoring frequency.~~

~~(C3) Location, elevation of the ground surface, and identification and description of the reference point, including a description of any reference point.~~

~~(D4) A description of the standards used to install the monitoring site, and identification of any. Sites that do not conform to best management practices-~~

~~(2) Wells used as the source of basic geologic or other information, including data used to develop the hydrogeologic conceptual model, to determine the water budget, or establish the basin setting, shall provide the best available information. All available information about the wells shall be reported in the Plan, which shall include, at a minimum, well location, well construction, be identified and well use. the nature of the divergence from best management practices described.~~

~~(3)(c) The following standards apply to wells:~~

~~(1) Wells used to monitor groundwater conditions shall be constructed according to applicable construction standards described in DWR Bulletin 74-90, as amended, and shall ~~include~~provide the following ~~identifying~~ information presented in both tabular and geodatabase-compatible shapefile form:~~

~~(A) CASGEM well identification number and, if available, a State. If a CASGEM well identification number and any local well identification has not been issued, appropriate well information shall be entered on forms made available by the Department, as described in Section 353.2.~~

~~(B) Well location, elevation of the ground surface, and reference point, including a description of the reference point.~~

~~(C) A description of the well use, such as public supply, irrigation, domestic, monitoring, or other type of well, whether the well is active or inactive, and whether the well is a single, cluster, or clustered, nested, or other type of well.~~

~~(D) A list of all Casing perforations, borehole depth, and total well depth.~~

~~(E) A copy of any Well completion reports, if available, from which the names of private owners have been redacted.~~

~~(F) Any Geophysical logs, well construction diagrams, or other relevant information, if available.~~

(G) Identification of principal aquifers monitored.

(H) ~~Any~~ Other relevant well construction information, such as well capacity, casing diameter, or casing modifications, ~~or other information~~ as available.

(42) If an Agency relies on wells that lack casing perforations, borehole depth, ~~and/or~~ total well depth information to monitor groundwater conditions as part of ~~an initial~~ a Plan, the Agency shall describe a schedule for acquiring monitoring wells with the necessary information, or demonstrate to the Department that such information is not necessary to understand and manage groundwater in the basin.

(e3) Well information used to develop the basin setting shall be maintained in the Agency's data management system.

(d) Maps submitted to the Department shall meet the following requirements:

~~(1) Each map, including all~~ (1) Data layers, shapefiles, geodatabases, and other information ~~used to create the~~ provided with each map, shall be submitted electronically to the Department in accordance with the procedures described in Article 4.

~~(2) Each map~~ Maps shall be clearly labeled and contain a level of detail ~~and be clearly labeled~~ to ensure that the map is informative and useful.

(3) The datum shall be clearly identified on the maps or in an associated legend ~~or table included in the Plan.~~

~~(d)~~ (e) Hydrographs submitted to the Department shall meet the following requirements:

(1) Hydrographs shall be submitted electronically to the Department in accordance with the procedures described in Article 4.

(2) Hydrographs shall include ~~the state well~~ a unique site identification number ~~or CASGEM well identifier~~ and any local well designation, and elevation of the ground surface, ~~and reference point elevation for each site.~~

(3) Hydrographs shall use the same datum and scaling to the greatest extent practical ~~and contain a level of detail and be clearly labeled to ensure that they are informative and useful.~~

~~(e)~~ (f) Groundwater and surface water models ~~developed or utilized as part of or in support of~~ used for a Plan shall ~~be consist of public domain open-source software that meets~~ meet the following ~~requirements~~ standards:

~~(1) Shall have publicly~~ The model shall include publicly available supporting documentation ~~that establishes its ability to represent groundwater and surface water flow.~~

~~(2) Shall be calibrated against site-specific field data.~~

~~(3) The model~~ shall be based on ~~actual~~ field or laboratory measurements, or equivalent methods, that ~~document~~ justify the ~~validity of chosen parameters~~ selected values, and calibrated against site-specific field data.

~~(f)~~ The Agency shall provide a list of references and technical studies ~~relied upon by the Agency in developing the Plan. The Agency shall provide electronic copies of all reports and other documents and materials that are not otherwise generally available to the~~

~~public. Proprietary data and reports need not be disclosed unless requested by the Department to resolve interbasin disputes, as described in Section 355.12.~~

~~Note: Authority cited: Section 10733.2, Water Code.~~

~~Reference: Sections 10727.2, 10733.2, Water Code.~~

### **~~§ 352.8. Data Management and Recordkeeping~~**

~~Each Agency shall develop and implement a coordinated data management system that is capable of storing, maintaining, and reporting all relevant information related to the development or implementation of the Plan.~~

(3) Groundwater and surface water models developed in support of a Plan after the effective date of these regulations shall consist of public domain open-source software.

(g) The Department may request data input and output files used by the Agency, as necessary. The Department may independently evaluate the appropriateness of model results relied upon by the Agency, and use that evaluation in the Department's assessment of the Plan.

~~Note: Authority cited: Section 10733.2, Water Code.~~

~~Reference: SectionSections 10727.2, 10727.6, and 10733.2, 10728, Water Code.~~

### **§ 352.6. Data Management System**

Each Agency shall develop and maintain a data management system that is capable of storing and reporting information relevant to the development or implementation of the Plan and monitoring of the basin.

~~Note: Authority cited: Section 10733.2, Water Code.~~

~~Reference: Sections 10727.2, 10728, 10728.2, and 10733.2, Water Code.~~

## ARTICLE 4. Procedures

### § 353. Introduction to Procedures

This Article describes various procedural and notification requirements issues related to the submission of Plans and public comment to those Plans.

Note: Authority cited: Section 10733.2, Water Code.

Reference: Section 10733.2, Water Code.

### § 353.2. Information Provided by the Department

(a) The Department shall make forms and instructions for submitting Plans, reports, and other information available on its ~~Internet Web site~~ website.

(b) ~~Information provided by~~ The Department pursuant shall provide information, to this ~~Subchapter~~ the extent available, to assist Agencies in the preparation and implementation of Plans, which shall be ~~provided~~ posted on the Department's ~~Internet Web site~~ website.

Note: Authority cited: Section 10733.2, Water Code.

Reference: ~~Section~~ Sections 10729, and 10733.2, Water Code

### § 353.4. Reporting Provisions

Information required by the Act or this Subchapter, including Plans, Plan amendments, annual reports, and five-year assessments, shall be submitted by each Agency ~~in accordance with the requirements of this section~~ to the Department as follows:

(a) ~~All~~ Materials shall be submitted electronically to the Department through an online reporting system, in a format provided by the Department as described in Section 353.2.

(b) ~~All~~ Submitted materials shall be accompanied by a transmittal letter signed by a ~~person~~ the plan manager or other duly authorized ~~under California law to bind the party submitting the report, and including the following certification:~~

~~“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.”~~

(c) ~~All materials submitted to the Department shall be posted on the Department's Internet Web site.~~ person.

Note: Authority cited: Section 10733.2, Water Code.

Reference: Sections 10728, 10728.2, 10733.2, 10733.4, 10733.6, 10733.8, and 10737.4, Water Code.

### **§ 353.6. Initial Notification**

(a) Each Agency shall notify the Department, in writing, ~~within 30 days~~ prior to initiating development of an Agency's decision to develop a Plan. The notification shall provide general information about the Agency's process for developing the Plan, including the manner in which interested parties may contact the Agency and participate in the development and implementation of the Plan. The Agency shall make the information publicly available by posting relevant information on the Agency's ~~Internet Web site~~ website.

(b) The Department shall post the initial notification required by this Section, including Agency contact information, on the Department's ~~Internet Web site~~ website within 20 days of receipt.

(c) Upon request, prior to adoption of a Plan, the Department shall provide ~~reasonable~~ assistance to an Agency regarding the elements of a Plan required by the Act and this Subchapter. ~~Notwithstanding any advice provided by the Department, however,~~ the Agency is solely responsible for the development ~~and, adoption, and implementation~~ of a Plan that ~~is capable~~ satisfies the requirements of achieving sustainable groundwater management ~~the Act and this Subchapter.~~

Note: Authority cited: Section 10733.2, Water Code.

Reference: Sections 10723.4, 10727.8, 10729, and 10733.2, Water Code.

### **§ 353.8. ~~Public Comment~~Comments**

(a) ~~Any person may provide comments to the Department regarding any~~ proposed or adopted Plan.

~~(a) The Department shall accept public comment on any aspect of an Agency's decision~~ (b) Pursuant to develop a Plan as described in Water Code Section 353.6, including all elements of the proposed Plan as it may be developed by the Agency.

~~(b) 10733.4,~~ the Department shall establish a comment period of no less than 60 days ~~on~~ for an adopted Plan that has been accepted by the Department for evaluation pursuant to Section 355.2.

~~(c) The following guidelines apply to all public comments:~~

~~(1) Public comment~~ (c) In addition to the comment period required by Water Code Section 10733.4, the Department shall accept comments on an Agency's decision to develop a Plan as described in Section 353.6, including comments on elements of a proposed Plan under consideration by the Agency.

(d) Comments shall be submitted to the Department by written notice, and with a duplicate copy of the comment provided to the Agency. Organizations or government entities providing comments shall include the name, address, and electronic mail address, if available, of the person or entity providing the comments and information, with a duplicate copy of the comment provided to the Agency at the same time.

~~(2) Public comment should include a clear statement of relevant issues that are the subject of the comments and information.~~

~~(3) The level of detail provided by public comment need not be as comprehensive as that contained in the proposed or adopted Plan, but should rely on similar scientific and technical information, including the reliance upon the best available information and best available science.~~

~~(d) All comments and other information~~ (e) Comments received by the Department shall be posted on the Department's ~~Internet Web site~~ website.

(e) The Department is not required to respond to comments, but ~~will~~ shall consider comments as part of its evaluation of a Plan.

~~(f) The Department shall give the Agency a reasonable opportunity to respond to public comment, including the opportunity to modify the Plan consistent with Section 355.2.~~

Note: Authority cited: Section 10733.2, Water Code.

Reference: ~~Section~~ Sections 10727.8, 10733.2, and 10733.4, Water Code.

#### **§ 353.10. Withdrawal or Amendment of Plan**

An Agency may withdraw a Plan at any time by providing written notice to the Department. ~~An Agency,~~ and may amend a Plan at any time pursuant to the requirements of Section ~~356.12~~ 355.10.

Note: Authority cited: Section 10733.2, Water Code.

Reference: ~~Section~~ Sections 10728.4, and 10733.2, Water Code.

## ARTICLE 5. Plan Contents

### § 354. Introduction to Plan Contents

This Article describes the required contents of Plans submitted to the Department for evaluation, including ~~general~~ administrative information, a description of the basin setting ~~and characteristics of the aquifer system~~, sustainable management criteria, ~~and a~~ description of the monitoring network, ~~reports~~, and projects and management actions.

Note: Authority cited: Section 10733.2, Water Code.

Reference: Section 10733.2, Water Code.

### SUBARTICLE 1. Administrative Information

#### § 354.2. Introduction to Administrative Information

This Subarticle describes information in the Plan relating to administrative and other general information ~~in the Plan relating to~~ about the Agency that has adopted the Plan, and the area covered by the Plan, ~~and other procedural matters~~.

Note: Authority cited: Section 10733.2, Water Code.

Reference: Section 10733.2, Water Code.

#### § 354.4. ~~Executive Summary~~ General Information

Each Plan shall include the following general information:

(a) An executive summary written in plain language that provides an overview of the Plan and description of groundwater conditions ~~of~~ in the basin.

(b) A list of references and technical studies relied upon by the Agency in developing the Plan. Each Agency shall provide to the Department electronic copies of reports and other documents and materials cited as references that are not generally available to the public.

Note: Authority cited: Section 10733.2, Water Code.

Reference: ~~Section~~ Sections 10733.2, and 10733.4, Water Code.

#### § 354.6. Agency Information

When submitting an adopted Plan to the Department, the Agency shall include a copy of the information provided pursuant to Water Code Section 10723.8, with any updates, if necessary, along with the following information:

(a) The name and mailing address of the Agency.

(b) ~~Documentation of~~ The organization and management structure of the Agency. ~~The documentation shall identify,~~ identifying persons with management authority for implementation of the Plan.

(c) The name and contact information, including the phone number, mailing address and electronic mail address, of the plan manager.

(d) The legal authority of the Agency, with specific reference to citations setting forth the duties, powers, and responsibilities of the Agency, ~~including information demonstrating that the Agency has the necessary~~ legal authority to implement the Plan.

(e) ~~A description of anticipated revenues and costs~~ An estimate of the cost of implementing the Plan, including programs, projects, contracts, administrative expenses and other expected costs, and information demonstrating that and a general description of how the Agency has the necessary financial ability ~~plans to implement the Plan~~ meet those costs.

Note: Authority cited: Section 10733.2, Water Code.

Reference: Sections 10723.8, 10727.2, and 10733.2, Water Code.

### § 354.8. Description of Plan Area

Each Plan shall include a description of the geographic areas covered, including the following information:

(a) One or more maps of the basin that depict the following, as applicable:

(1) The area covered by the Plan, delineating areas managed by the Plan Agency as an exclusive Agency and any areas for which the Agency is not an exclusive Agency, and the name and location of any adjacent basins.

(2) Adjudicated areas, other Agencies within the basin, and areas covered by an Alternative.

(3) Jurisdictional boundaries of federal land, or state land, (including the identity of the agency with jurisdiction over that land), tribal land, cities and counties and other land use, agencies with water management responsibilities, and all areas covered by relevant general plans.

~~(3) Adjudicated areas, all Agencies within the basin, and areas governed by Plan alternatives.~~

(4) ~~Designation of~~ Existing land ~~uses~~ use designations and the identification of each water use sector and water source type.

(5) The density of wells per square mile, by dasymetric or similar mapping techniques, showing the general distribution of ~~all~~ agricultural, industrial, and domestic water supply wells in the basin, including de minimis extractors, and the location and extent of communities dependent upon groundwater. ~~Each Agency shall utilize data available from, utilizing data provided by the Department, as specified in Section 353.2, or the best available information.~~

(b) A written description of the Plan area, including a summary of the jurisdictional areas and other features depicted on the map.

(c) ~~A description~~ Identification of existing water resource monitoring ~~programs including, but not limited to, agricultural water and management plans, urban water management plans, the California Statewide Groundwater Elevation Monitoring Program, the~~

~~Irrigated Lands Regulatory Program, and the Groundwater Ambient Monitoring Assessment Program, Salt Nutrient Management Plans. To the extent existing programs, and description of any such programs require information similar to that required by this Subchapter, the Plan may the Agency plans to incorporate data from existing programs.~~

~~(d) How in its monitoring network or in development of its Plan. The Agency may coordinate with existing water resource monitoring and management programs and agencies with water management authority, could affect the ability of the Agency to achieve sustainable groundwater management, and how the Plan addresses potential effects.~~

~~(e) A description of coordination between the Plan, Integrated Regional Water Management Plans, and Flood Management Plans, if applicable.~~

~~(f) A description to incorporate and adopt that program as part of the Plan.~~

~~(d) A description of how existing water resource monitoring or management programs may limit operational flexibility in the basin, and how the Plan has been developed to adapt to those limits.~~

~~(e) A description of conjunctive use programs and infrastructure in the basin.~~

~~(g) A plain language description of the land use elements or topic categories of any applicable general plans that includes the following:~~

~~(1) A summary of general plans and other land use plans governing the basin.~~

~~(2) A general description of how implementation of existing land use plans are expected to may change water demands within the basin.~~

~~(3) An identification and assessment of proposed land use activities that may pose a risk to groundwater quality or quantity in the basin.~~

~~(4) An assessment of how implementation of the Plan may affect applicable land use plans.~~

~~(5) A summary of land use plans outside the basin, for any area the Agency determines to be linked to the hydrology of the basin governed by the Plan.~~

~~(6) A summary of the process for permitting wells in the basin.~~

~~(7) How implementation of existing land use plans may or affect the ability of the Agency to achieve sustainable groundwater management over the planning and implementation horizon, and how the Plan addresses those potential effects.~~

~~(8) How implementation of existing land use plans outside the basin, including a (3) A general description of how implementation of those land use plans could affect the ability of the Plan may affect the water supply assumptions of relevant land use plans over the planning and implementation horizon.~~

(4) A summary of the process for permitting new or replacement wells in the basin, including adopted standards in local well ordinances, zoning codes, and policies contained in adopted land use plans.

(5) To the extent known, the Agency may include information regarding the implementation of land use plans outside the basin that could affect the ability of the Agency to achieve sustainable groundwater management, for any area the Agency determines to be linked to the hydrology of the basin governed by the Plan.

~~(h)(g)~~ A description of any of the additional Plan elements included in Water Code Section 10727.4 that the Agency determines to be appropriate.

Note: Authority cited: Section 10733.2, Water Code.

Reference: Sections 10720.3, 10727.2, 10727.4, 10733, and 10733.2, Water Code.

### **§ 354.10. Notice and Communication**

Each Plan shall include a summary of information relating to notification and communication by the Agency with other agencies and interested parties including the following:

~~(a) The list of interested persons established and maintained by the Agency.~~

~~(b) A description of the interests of beneficial uses and users of groundwater in the basin, and the persons or entities including the land uses and property interests potentially affected by the use of groundwater in the basin, the types of parties representing those interests, and the nature of consultation with those interests parties.~~

~~(e) A summary list of public meetings at which the Plan was discussed or considered by the Agency.~~

~~(d) A copy of all~~ (c) Comments regarding the Plan received by the Agency and a summary of any responses made by the Agency.

~~(e)(d) A communication plan adopted by section of the Agency, including Plan that includes the following:~~

~~(1) An explanation of the Agency's decision-making process and how stakeholder input and public response will be used.~~

~~(2) Identification of opportunities for stakeholder public engagement and a discussion of how public input and response will be used.~~

(3) A description of how the Agency encourages the active involvement of diverse social, cultural, and economic elements of the population within the basin.

~~(4) A schedule~~ The method the Agency shall follow to inform the public about progress implementing the Plan, including the status of milestones and scheduled dates for known projects and actions.

~~(5) A description of the roles and responsibilities of local agencies and the public.~~

Note: Authority cited: Section 10733.2, Water Code.

Reference: Sections 10723.2, ~~10723.4~~, 10727.8, 10728.4, and 10733.2, ~~10733.4~~, Water Code

## SUBARTICLE 2. Basin Setting

### § 354.12. Introduction to Basin Setting

This Subarticle describes the information about the physical setting and characteristics of the basin and current conditions of the basin that shall be ~~included with each Plan, part of each Plan, including the identification of data gaps and levels of uncertainty, which comprise the basin setting that serves as the basis for defining and assessing reasonable sustainable management criteria and projects and management actions.~~ Information provided pursuant to this Subarticle shall be prepared by or under the direction of a professional geologist or professional engineer.

Note: Authority cited: Section 10733.2, Water Code.

Reference: Section 10733.2, Water Code.

### § 354.14. Hydrogeologic Conceptual Model

(a) Each Plan shall include a descriptive hydrogeologic conceptual model of the basin consisting of a written description, map, and cross-sections, based on technical studies or and qualified maps— ~~that characterizes the physical components and interaction of the surface water and groundwater systems in the basin.~~

(b) ~~The written description~~ hydrogeologic conceptual model shall include a discussion of ~~be summarized in a written description that includes~~ the following:

- (1) The regional geologic and structural setting of the basin and including the immediate surrounding area, as necessary for geologic consistency.
- (2) Lateral basin boundaries, including major geologic features that significantly ~~impede or impact~~ affect groundwater flow.
- (3) The definable bottom of the basin.
- (4) Principal aquifers and aquitards, including the following information:
  - (A) Formation names, if defined.
  - (B) ~~The~~ Physical properties of aquifers and aquitards, including ~~their lateral and the~~ vertical and lateral extent, hydraulic conductivity, and storativity, which ~~information~~ may be based on existing technical studies or other sources of best available information.
  - (C) ~~The~~ Structural properties of the basin that restrict groundwater flow within the principal aquifers, including information regarding stratigraphic changes, truncation of units, or other features.
  - (D) General water quality of the principal aquifers, which may be based on information derived from existing technical studies or regulatory programs.

(E) Identification of the ~~aquifers used for~~ primary use or uses of each aquifer, such as domestic, irrigation, or municipal water supply.

~~(5) Other relevant information required by the Department as necessary to evaluate the Plan.~~

~~(b)(5) Identification of data gaps and uncertainty within the hydrogeologic conceptual model~~

(c) The hydrogeologic conceptual model shall be represented graphically by at least two scaled cross-sections, approximately perpendicular to one another and extending the length and width of the basin, that display the information required by this section and are sufficient to depict major stratigraphic and structural features in the basin.

(ed) Physical characteristics of the basin shall be represented on one or more maps that depict the following:

(1) Topographic information, of adequate scale, derived from the U.S. Geological Survey or another ~~qualified~~ reliable source.

(2) Surficial geology derived from a qualified map including the locations of basin-wide cross-sections required by this ~~Subarticle~~ Section.

(3) Soil characteristics such as hydraulic conductivity or other water transmitting properties as described by the appropriate Natural Resources Conservation Service (NRCS) soil survey or other applicable studies.

(4) Delineation of existing recharge areas that substantially contribute to the replenishment of the basin, potential recharge areas, and discharge areas, including significant active springs, seeps, and wetlands within or adjacent to the basin.

(5) Surface water bodies with water supply diversions greater than 10 acre-feet per year, storage facilities with a capacity that are significant to the management of greater than 100 acre-feet the basin.

(6) The source location, distribution system, and point of diversion delivery for imported water supplies.

Note: Authority cited: Section 10733.2, Water Code.

Reference: ~~Section~~ Sections 10727.2, 10733, and 10733.2, Water Code.

### **§ 354.16. ~~Basin~~ Groundwater Conditions**

~~The~~ Each Plan shall ~~characterize~~ provide a description of current and historical groundwater conditions in the basin. ~~The Plan shall rely, including data from January 1, 2015, to current conditions, based on the best available data to characterize historical conditions prior to January 1, 2015. The description of historical basin conditions shall specifically include conditions that existed as of January 1, 2015, and a comparison with present conditions. The description shall also contain all of~~ information that includes the following:

(a) Groundwater elevation data demonstrating flow directions, lateral and vertical gradients, and regional pumping patterns, including:

(1) Groundwater elevation contour maps depicting the groundwater table or potentiometric surface associated with the current seasonal high and seasonal low for each principal aquifer within the basin.

(2) Hydrographs depicting long-term groundwater elevations, historical highs and lows, and hydraulic gradients between principal aquifers.

~~(b) Groundwater~~ A graph depicting estimates of the change in groundwater in storage, based on data, demonstrating the annual and cumulative change in the volume of groundwater in storage based on between seasonal high groundwater conditions, water including the annual groundwater use, and water year type.

~~(c) Seawater intrusion conditions in the basin that includes,~~ including maps and cross-sections of the seawater intrusion front for each principal aquifer.

~~(d) Groundwater quality issues that may impact affect the supply and beneficial uses of groundwater, including a description and map of the following:~~

~~(1) The location of known groundwater contamination sites and plumes including current or historical waste discharge requirements, known historical or ongoing cleanup activities, and superfund sites.~~

~~(2) Horizontal and vertical proximity of wells to known sources of groundwater contamination.~~

~~(e) The extent, cumulative total, and annual rate of land subsidence, including maps depicting total subsidence. Each Agency shall utilize, utilizing data available from the Department, as specified in Section 353.2, or the best available information.~~

~~(f) Identification of interconnected surface water systems and within the basin and an estimate of the quantity and timing of depletions of those systems, utilizing data available from the Department, as specified in Section 353.2, or the best available information.~~

~~(g) Identification of groundwater -dependent ecosystems within the basin. Each Agency shall utilize, utilizing data available from the Department, as specified in Section 353.2, or the best available information.~~

Note: Authority cited: Section 10733.2, Water Code.

Reference: ~~Section~~ Sections 10723.2, 10727.2, 10727.4, and 10733.2, Water Code.

### **§ 354.18. Water Budget**

~~The~~ (a) Each Plan shall include a water budget for the basin that provides an accounting and assessment of the total annual ~~amount~~ volume of groundwater and surface water entering and leaving the basin, including historical, current and projected water budget conditions, and the change in the ~~amount~~ volume of water stored. Water budget information shall be reported in tabular and graphical form.

~~(a)~~ (b) The water budget shall quantify the following: either through direct measurements or estimates based on data:

~~(1) All water supplies~~ Total surface water entering and leaving a basin by water source type.

~~(2) Inflow to the groundwater system by water source type, including but not limited to subsurface groundwater inflow and infiltration of precipitation, infiltration from applied water, infiltration from and surface water systems, and subsurface groundwater inflows such as lakes, streams, rivers, canals, springs and conveyance systems.~~

~~(2) All water demands~~  
~~(3) Outflows from the groundwater system by water use sector, including but not limited to evapotranspiration, groundwater extraction, groundwater discharge to surface water sources, and subsurface groundwater outflow.~~

~~(3) All water supplies by water source type.~~

~~(4) All water demands by water source type and water use sector.~~

~~(5)~~  
~~(4) The change in the annual volume of groundwater in storage between seasonal high conditions.~~

~~(5) If overdraft conditions occur, as defined in Bulletin 118, the water budget shall include a quantification of overdraft over a period of years during which water year and water supply conditions approximate average conditions.~~

~~(6) The water year type associated with the annual supply, demand, and change in groundwater stored.~~

~~(b) The~~  
~~(7) An estimate of sustainable yield for the basin.~~

(c) Each Plan shall quantify the current, historical, and projected water budget for the basin as follows:

(1) Current water budget information shall quantify ~~present-day supply~~ current inflows and demand outflows for the basin using the most recent hydrology, water supply, water demand, and land use information.

(2) Historical water budget information shall be used to evaluate availability or reliability of past surface water supply reliability deliveries and aquifer response to water supply and demand trends relative to water year type. The historical water budget shall include the following:

(A) A quantitative evaluation of the availability or reliability of historical surface water supply reliability deliveries as a function of the historical planned versus actual annual surface water deliveries, by surface water source and water year type, and based on the most recent ten years of surface water supply information.

(B) A quantitative assessment of the historical water budget, starting with the most recently available information and extending back a minimum of 10 years, or as is sufficient to adequately calibrate and reduce the uncertainty of the tools and methods used to estimate and project future water budget information and future aquifer response to proposed sustainable groundwater management practices over the planning and implementation horizon.

(C) A description of how historical conditions concerning hydrology, water demand, and surface water supply availability or reliability have impacted the basins ability of the Agency to achieve operate the basin within sustainable yield. Basin hydrology may be characterized and evaluated using water year type.

(3) Projected water budgets shall be used to estimate future baseline conditions of supply, demand, and aquifer response to Plan implementation, and to identify the uncertainties of these projected water budget components. The projected water budget shall utilize the following methodologies and assumptions ~~for historical~~ to estimate future baseline conditions concerning hydrology, water demand and surface water supply availability or reliability over the planning and implementation horizon:

(A) ~~Hydrology~~: Projected hydrology shall utilize 50 -years of historical precipitation, evapotranspiration, and streamflow information as the baseline condition for estimating future hydrology over. The projected hydrology information shall also be applied as the planning and implementation horizon, while evaluating baseline condition used to evaluate future scenarios of future hydrologic uncertainty associated with projections of climate change and sea level rise.

(B) ~~Water Demand~~: Projected water demand shall utilize the most recent land use, evapotranspiration, and crop coefficient information as the baseline ~~water demand over the planning and implementation horizon, while evaluating scenarios of condition for estimating future water demand~~. The projected water demand information shall also be applied as the baseline condition used to evaluate future scenarios of water demand uncertainty associated with projections of projected changes in local land use planning, future population growth, and climate change.

(C) ~~Surface Water Supply and Reliability~~: Projected surface water supply shall utilize the most recent water supply information as the baseline condition for estimating future surface water supply over. The projected surface water supply shall also be applied as the planning and implementation horizon, while evaluating baseline condition used to evaluate future scenarios of future surface water supply uncertainty associated with availability and reliability as a function of the historical surface water supply reliability, and projections of future identified in Section 354.18(c)(2)(A), and the projected changes in local land use planning, future population growth, and climate change.

~~(e) The Plan shall rely on the best available information and best available science to quantify the water budget for the basin in order to provide an adequate understanding of historical and projected hydrology, water demand, water supply, land use, population, climate change, sea level rise, groundwater-surface water interaction, and subsurface groundwater flow. If a groundwater-surface water model is not used to quantify and evaluate the projected water budget conditions and the potential impacts to beneficial uses and users of water, the Plan shall 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 projected water budget conditions no later than the first five-year assessment.~~

(d) ~~The Agency shall utilize the following information shall be provided, as available, by the Department and shall be used by Agencies in developing pursuant to Section 353.2, or other data of comparable quality, to develop the water budget:~~

(1) Historical water budget information for mean annual temperature, mean annual precipitation, water year type, and ~~central valley~~ land use.

(2) Current water budget information for temperature, water year type, evapotranspiration, and ~~Statewide~~ land use.

(3) Projected water budget information for population, population growth, climate change, and sea level rise.

~~(e)~~ Each Plan shall rely on the best available information and best available science to quantify the water budget for the basin in order to provide an understanding of historical and projected hydrology, water demand, water supply, land use, population, climate change, sea level rise, groundwater and surface water interaction, and subsurface groundwater flow. If a numerical groundwater and surface water model is not used to quantify and evaluate the projected water budget conditions and the potential impacts to beneficial uses and users of groundwater, the Plan shall identify and describe an equally effective method, tool, or analytical model to evaluate projected water budget conditions.

~~(f)~~ The Department shall provide the California Central Valley Groundwater-Surface Water Simulation Model (C2VSIM) and the Integrated Water Flow Model (IWFM) for use by Agencies in developing the water budget. Each Agency may choose to use a different flow model-groundwater and surface water model, pursuant to Section 352.4.

~~(g)~~ Information provided by the Department pursuant to this Subchapter shall be provided on the Department's Internet Web site.

~~(h)~~ The Agency may utilize other data in addition to or in lieu of information provided by the Department if the Agency is able to demonstrate that the data is of sufficient quality.

Note: Authority cited: Section 10733.2, Water Code.

Reference: ~~Section~~ Sections 10721, 10723.2, 10727.2, 10727.6, 10729, and 10733.2, Water Code.

### **§ 354.20. Management Areas**

~~(a)~~ Each Agency may define one or more management areas within a basin if local conditions for one or more critical parameters differ significantly from those of the basin at large, and if the Agency has determined that subdivision into creation of management areas will facilitate implementation of the Plan. Management areas may have define different minimum thresholds and be operated to different measurable objectives than the basin at large, provided that the goal of the Plan is to achieve sustainable management for the entire basin by the target date and that operation to different standards within a management area does not produce undesirable results elsewhere undesirable results are defined consistently throughout the basin.

~~(a) Plans~~ b) A basin that include includes one or more management areas shall describe the following in the Plan:

(1) The basis reason for the formation creation of each management area.

(2) The minimum thresholds and measurable objectives appropriate to established for each management area, and an explanation of the rationale for selecting those values, if different from the basin at large.

(3) The appropriate level of monitoring and analysis appropriate for each management area based on documented differences between.

(4) An explanation of how the management area and the basin at large can operate under different minimum thresholds and measurable objectives without causing undesirable results outside the management area, if applicable.

~~(b)~~ (c) If a Plan creates ~~includes~~ one or more management areas, the Plan shall include descriptions, maps, and ~~cross-sections~~ other information required by this Subarticle ~~shall include information about~~ sufficient to describe conditions in those areas.

Note: Authority cited: Section 10733.2, Water Code.

Reference: ~~Section~~ Sections 10733.2, and 10733.4, Water Code.

### SUBARTICLE 3. Sustainable Management Criteria

#### § 354.22. Introduction to Sustainable Management Criteria

~~This Subarticle describes criteria for by which an Agency defines conditions in its Plan that constitute sustainable groundwater management of a for the basin, including the standards process by which an the Agency shall define characterize undesirable results, and establish minimum thresholds for each relevant critical parameter. Critical parameter refers to chronic lowering of groundwater levels indicating a depletion of supply if continued over the planning and implementation horizon, reduction of groundwater storage, sea water intrusion, degraded water quality, land subsidence that substantially interferes with surface land uses, and depletions of surface water that have adverse impacts on beneficial uses of surface water that may lead to undesirable results, as described in Water Code Section 10721(x). This Subarticle describes the following:~~

- ~~(a) The interrelationship between minimum thresholds, undesirable results, and measurable objectives.~~
- ~~(b) The groundwater conditions for which critical parameters are significant and unreasonable, at a given location, which determines the minimum threshold.~~
- ~~(c) The process for determining the point at which exceeding minimum thresholds has the cumulative effect of causing undesirable results.~~
- ~~(d) The operational range above the minimum threshold that defines the measurable objective.~~
- ~~(e) The requirements for the Agency to establish measurable objectives and interim milestones necessary to achieve the for each applicable sustainability goal in the basin within 20 years of Plan implementation and to maintain the sustainability goal over the planning and implementation horizon indicator.~~

Note: Authority cited: Section 10733.2, Water Code.

Reference: ~~Sections~~ Section 10733.2, Water Code.

### § 354.24 Sustainability Goal

Each Agency shall establish in its Plan a sustainability goal for the basin that culminates in the absence of undesirable results within 20 years of the applicable statutory deadline. The Plan shall include a description of the sustainability goal, including information from the basin setting used to establish the sustainability goal, a discussion of the measures ~~meant~~that will be implemented to ensure that the basin will be operated within its sustainable yield, and an explanation of how the sustainability goal ~~will~~is likely to be achieved within 20 years of Plan implementation. ~~The Agency will show that it has achieved the sustainability goal by demonstrating that the management and use of groundwater in the basin can~~is likely to be maintained through the planning and implementation horizon without causing undesirable results.

Note: Authority cited: Section 10733.2, Water Code.

Reference: Sections 10721, 10727, 10727.2, 10733.2, and 10733.8, Water Code.

### § 354.26. Undesirable Results

(a) Each Agency shall describe in its Plan the processes and criteria relied upon to define undesirable results applicable to the basin. Undesirable results occur when significant and unreasonable effects for any of the ~~critical parameters~~sustainability indicators are caused by groundwater conditions occurring throughout the basin.

~~(a)(b) The description provided by the Agency of undesirable results shall include, but is not limited to,~~ the following:

(1) ~~The cause of groundwater conditions under which occurring throughout the critical parameters are significant and unreasonable, which shall define minimum thresholds for basin that critical parameter as would lead to or has led to undesirable results based on information described in Section 354.28, the basin setting, and other data or models as appropriate.~~

(2) ~~An explanation of The criteria used to define when and where the cumulative effects of such the groundwater conditions create cause undesirable results for each applicable sustainability indicator. The criteria shall be based on a quantitative description of the combination of minimum threshold exceedances that cause significant and unreasonable effects in the basin.~~

(3) ~~A description of known or projected Potential effects on the beneficial uses and users of groundwater, on land uses and property interests, and other potential effects that would may occur or are occurring from undesirable results.~~

(4) ~~A description of the cause of groundwater conditions that would lead to undesirable results based on information developed in the hydrogeologic conceptual model, basin conditions, water budget, and other data or models as appropriate.~~

~~(b) Each Agency may apply different criteria and establish different definitions of the groundwater conditions giving rise to undesirable effects in management areas, provided that the interests of beneficial uses and users of groundwater have been adequately considered and that the Agency demonstrates that the use of different criteria in~~

~~management areas does not adversely affect the ability of the Agency to achieve the sustainability goal for the basin.~~

(c) The Agency may need to evaluate multiple minimum thresholds to determine whether an undesirable result is occurring in the basin. The determination that undesirable results are occurring may depend upon measurements from ~~a network of instruments~~ multiple monitoring sites, rather than a single ~~point or the measurement value of one instrument~~ monitoring site.

(d) An Agency that is able to demonstrate that ~~one or more critical parameters would not lead to undesirable results in the basin related to one or more sustainability indicators are not present and are not likely to occur in a basin~~ shall not be required to ~~conduct the analysis~~ establish criteria for those critical parameters described in this Section ~~undesirable results related to those sustainability indicators.~~

Note: Authority cited: Section 10733.2, Water Code.

Reference: ~~Section~~ Sections 10721, 10723.2, 10727.2, 10733.2, and 10733.8, Water Code.

### **§ 354.28. Minimum Thresholds**

(a) ~~Each Agency in its Plan shall establish minimum thresholds for each critical parameter based on the that quantify groundwater conditions under which the Agency determines that those critical parameters are significant and unreasonable, as described in Section 354.26. The minimum threshold refers to the point for each applicable sustainability indicator at which conditions for a given critical parameter are significant and unreasonable.~~

~~(a) each monitoring site or representative monitoring site established pursuant to Section 354.36. The numeric value used to define minimum thresholds shall be numeric values that define conditions that represent a point in the basin that, if exceeded, could lead to may cause undesirable results, as described in Section 354.26.~~

(b) The description of minimum thresholds shall include the following:

(1) The information and criteria relied upon ~~in establishing to establish and justify the minimum thresholds for each critical parameter sustainability indicator.~~ The justification for the minimum threshold shall be supported by information ~~from~~ provided in the hydrogeologic conceptual model, basin conditions, water budget setting, and other data or models as appropriate, and qualified by uncertainty in the understanding of the basin setting.

(2) The ~~interrelationship~~ relationship between critical parameters that explains how the minimum threshold for each critical parameter will not cause undesirable results for ~~any other critical parameter.~~

~~(3) A discussion of how the minimum thresholds do not adversely affect~~ for each sustainability indicator, including an explanation of how the Agency has determined that basin conditions at each minimum threshold will avoid undesirable results for each of the sustainability indicators.

(3) How minimum thresholds have been selected to avoid causing undesirable results in adjacent basins or affecting the ability of adjacent basins to achieve sustainability goals.

(4) How minimum thresholds will may affect the interests of beneficial uses and users of groundwater or land uses and property interests.

(5) How state, federal, or local standards that relate to the critical parameter for which the minimum threshold has been established relevant sustainability indicator. If the minimum threshold differs from other regulatory standards, the Agency shall explain the nature of and basis for the difference.

(6) How each minimum threshold will be quantitatively measured throughout the basin, consistent with the monitoring network requirements described in Subarticle 4.

~~(b)(c)~~ Minimum thresholds for each critical parametersustainability indicator shall be defined based on the followingas follows:

(1) Chronic Lowering of Groundwater Levels. The minimum threshold for chronic lowering of groundwater levels shall be the groundwater elevation ~~that indicates~~indicating a significant and unreasonable depletion of supply at a given location that may lead to undesirable results. Minimum thresholds for chronic lowering of groundwater levels shall be supported by the following:

(A) The rate of groundwater elevation decline ~~calculated~~ based on historical trends, water year type, and projected water use in the basin, ~~based on water year type.~~

(B) Potential effects on other ~~critical parameters, including reduction of groundwater storage and land subsidence, and where appropriate, sea water intrusion, surface water depletion, and degraded water quality.~~

~~(C) Management of 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.~~sustainability indicators.

(2) Reduction of Groundwater Storage. The minimum threshold for reduction of groundwater storage shall be a total volume of groundwater that can be ~~taken out of storage~~withdrawn from the basin without causing conditions that may lead to undesirable results. Minimum thresholds for reduction of groundwater storage shall be supported by the ~~following:~~sustainable yield of the basin, calculated based on historical trends, water year type, and projected water use in the basin.

(A) The annual sustainable yield of the basin, ~~calculated based on historical trends and projected water use in the basin, based on water year type.~~

(3) Seawater Intrusion. The minimum threshold for seawater intrusion shall be ~~the location where seawater intrusion is considered significant and unreasonable, and shall be defined by a numeric-chloride concentration isocontour for each principal aquifer where seawater intrusion may lead to undesirable results.~~ Minimum thresholds for seawater intrusion shall be supported by the following:

(A) Maps and cross-sections of the chloride concentration isocontour that defines the minimum threshold, ~~interim milestones,~~ and measurable objective ~~for seawater intrusion~~ for each principal aquifer.

(B) A description of ~~the consideration given to~~ how the seawater intrusion minimum threshold considers the effects of current and projected sea level rise ~~on seawater intrusion of the following during development of the seawater intrusion minimum threshold levels.~~

(4) Degraded Water Quality. The minimum threshold for degraded water quality shall be the ~~significant and unreasonable~~ degradation of water quality, including the migration of contaminant plumes that impair water supplies, or other indicator of water quality as determined by the Agency that may lead to undesirable results. The minimum threshold shall be based on the number of supply wells, a volume of water, or a location of an isocontour that exceeds concentrations of constituents determined by the Agency to be of concern for the basin. In setting minimum thresholds for degraded water quality, the Agency shall consider local, state, and federal water quality standards applicable to the basin.

(5) Land Subsidence. The minimum threshold for land subsidence shall be the rate and extent of subsidence that substantially interferes with surface land uses, and may lead to undesirable results. Minimum thresholds for land subsidence shall be supported by the following:

(A) Identification of land uses and property interests that have been affected or are likely to be affected by land subsidence in the basin, including an explanation of how ~~those uses and interests were~~ the Agency has determined and considered those uses and interests, and the Agency's rationale for how establishing minimum thresholds ~~were established~~ in light of those effects.

(B) Maps and graphs showing the extent and rate of land subsidence in the basin that defines the minimum threshold, ~~interim milestones,~~ and measurable objectives.

(6) Depletions of Interconnected Surface Water. The minimum threshold for depletions of interconnected surface water shall be the rate or volume of surface water depletions caused by groundwater use that has ~~significant and unreasonable~~ adverse impacts on beneficial uses of the surface water and may lead to undesirable results. The minimum threshold established for depletions of interconnected surface water shall be supported by the following:

(A) The location, quantity, and timing of depletions of interconnected surface water. ~~If sufficient data to quantify depletions of interconnected surface water is not available, the Plan shall describe how the Agency will acquire sufficient information no later than the first five-year assessment.~~

(B) A description of the groundwater- and surface water model used to quantify surface water depletion. If a numerical groundwater- and surface water model is not used to ~~estimate~~ quantify surface water depletion, the Plan shall identify and describe an equally effective method ~~or, tool, or analytical model~~ to accomplish the requirements of this requirement, or identify provisions for developing a groundwater-surface water model capable of quantifying surface water depletion no later than the first five-year assessment. Paragraph.

~~(d) An Agency, after consultation with the Department, may establish a representative minimum threshold for groundwater elevation to serve as the minimum threshold value for multiple critical parameters, as appropriate sustainability indicators, where the Agency shall can demonstrate that the representative minimum threshold value is a reasonable and effective surrogate proxy for multiple individual minimum thresholds and is as supported by clear adequate evidence.~~

~~(e) An Agency that has demonstrated that undesirable results related to one or more sustainability indicators are not present and convincing evidence are not likely to occur in the Plana basin, as described in Section 354.26, shall not be required to establish minimum thresholds related to those sustainability indicators.~~

~~(e) If the Agency determines that minimum thresholds are not required for seawater intrusion, land subsidence, depletions of interconnected surface water, or water quality, the Plan shall support this determination with clear and convincing evidence.~~

Note: Authority cited: Section 10733.2, Water Code.

Reference: ~~Section 10721~~ Sections 10723.2, 10727.2, 10733.2, 10733.2, and 10733.8, Water Code.

### **§ 354.30. Measurable Objectives**

~~(a) Each Plan Agency shall include one or more establish measurable objectives for each critical parameter that has an established minimum threshold. The measurable objectives shall ensure that the basin is managed to avoid undesirable results, including interim milestones in increments of five years, to achieve the sustainability goal for the basin within 20 years of Plan implementation and groundwater is to continue to sustainably managed manage the groundwater basin over the planning and implementation horizon.~~

~~(a) Measurable objectives shall be represented by established for each sustainability indicator, based on quantitative values using the same metrics and monitoring sites as are used to define the minimum threshold for each measurable objective, and shall rely on the same monitoring sites as minimum thresholds.~~

~~(b) The measurable objective shall be above the minimum threshold to~~ (c) Measurable objectives shall provide a reasonable margin of operational flexibility under adverse conditions which shall take into consideration components such as historical water budgets, seasonal and long-term trends, and overdraft during a period periods of drought, and be commensurate with levels of uncertainty.

~~(e) Each~~ (d) An Agency may establish a representative measurable objective for groundwater elevation to serve as the value for multiple sustainability indicators where the Agency can demonstrate that the representative value is a reasonable proxy for multiple individual measurable objectives as supported by adequate evidence.

(e) Each Plan shall describe a reasonable path to achieve the sustainability goal for the basin within 20 years of Plan implementation, including a description of interim milestones for each relevant sustainability indicator, using the same metric as the measurable objective, in increments of five years. The description shall explain how the Plan is likely to maintain sustainable groundwater management over the planning and implementation horizon.

(f) Each Plan may include measurable objectives and interim milestones for additional Plan elements described in Water Code Section 10727.4 where the Agency determines such measures are appropriate for sustainable groundwater management in the basin.

(g) An Agency may establish measurable objectives that exceed the reasonable margin of operational flexibility for the purpose of improving overall conditions in the basin, but failure to achieve those objectives shall not be grounds for a finding of inadequacy of the Plan.

~~(d) Each Agency may use representative minimum thresholds for groundwater levels developed pursuant to Section 354.26(d), as the basis for defining a representative measurable objective that represents all critical parameters. The Agency must demonstrate that the representative measurable objective is a reasonable and effective surrogate for multiple individual measurable objectives supported by clear and convincing evidence in the Plan.~~

~~(e) Each Plan shall include interim milestones for each measurable objective, in increments of five years, which outline a reasonable path to attaining the measurable objectives within 20 years of Plan implementation. Interim milestones shall be expressed numerically in the same units as the measurable objective.~~

~~(f) Each Plan may include measurable objectives and interim milestones for additional Plan contents described in Water Code Section 10727.4 where the Agency determines such measures are appropriate for sustainable groundwater management in the basin.~~

Note: Authority cited: Section 10733.2, Water Code.

Reference: ~~Section~~Sections 10727.2, 10727.4, and 10733.2, Water Code.

## **SUBARTICLE 4. Monitoring Networks**

### **§ 354.32. Introduction to Monitoring Networks**

This Subarticle describes the monitoring network that shall be developed for each basin, including monitoring objectives, monitoring ~~site summary, monitoring frequency,~~ ~~monitoring~~ protocols, and data reporting requirements. The monitoring network shall promote the collection of data of sufficient quality, frequency, and ~~from sufficient~~ locations ~~distribution~~ to adequately characterize groundwater and related surface water and groundwater conditions in the basin, and evaluate management actions, and assess progress toward achieving changing conditions that occur through implementation of the sustainability goal ~~Plan~~.

Note: Authority cited: Section 10733.2, Water Code.

Reference: ~~Sections~~Section 10733.2, Water Code.

### § 354.34. Monitoring Network

~~(a) Each Agency shall develop a monitoring network capable of collecting sufficient data to demonstrate short-term, seasonal, and long-term trends in surface and groundwater and related surface conditions, and yieldsyield representative information about changes relative groundwater conditions as necessary to the minimum thresholds and measurable objectives for the basin.~~ evaluate Plan implementation.

~~(a)~~ Each Plan shall include a description of the monitoring network objectives for the basin, including an explanation of how the network will be developed and implemented to monitor ~~surface water~~groundwater and ~~groundwater~~related surface conditions, and the interconnection of surface water and groundwater, with sufficient temporal frequency and spatial density to ~~adequately~~ evaluate the affects and effectiveness of Plan implementation. The monitoring network objectives shall be implemented to accomplish the following:

- (1) Demonstrate progress toward achieving measurable objectives described in the Plan.
- (2) ~~Identify~~Monitor impacts to the beneficial uses or users of groundwater.
- (3) ~~Identify~~Monitor changes in ~~basin~~groundwater conditions relative to measurable objectives and minimum thresholds.
- (4) Quantify annual changes in water budget components.
- ~~(5) Identify impacts to the ability of adjacent basins to meet the sustainability goal.~~

~~(b) The~~(c) Each monitoring network shall be designed to ~~ensure adequate coverage of critical parameters. If localized conditions warrant the formation of management areas, those areas shall be specifically monitored with a quantity and spacing of monitoring sites sufficient to evaluate conditions in that area.~~

~~(c) A Plan may incorporate site information and monitoring data from existing sources into the monitoring network. Incorporated sources of data may include, but are not limited to, existing groundwater management plans, California Statewide Groundwater Elevation Monitoring data, or other Department programs, Salt and Nutrient Management Plans, the Irrigated Lands Regulatory Program, the Surface Water Ambient Monitoring Program, the Groundwater Ambient Monitoring Assessment Program, the Salt Nutrient Management Plans, as well as other relevant monitoring sites.~~

~~(d) The density of monitoring sites and frequency of measurements required to demonstrate short-term, seasonal, and long-term trends shall be determined based upon~~accomplish the following factors:

- ~~(1) Level of current and projected groundwater use.~~
- ~~(2) Aquifer characteristics including, but not limited to, confined or unconfined aquifer conditions, or other physical characteristics that affect groundwater flow.~~
- ~~(3) Impacts on beneficial uses and users of groundwater and the ability of adjacent basins to meet the sustainability goal.~~

~~(4) Whether the Agency has adequate long-term existing monitoring results or other technical information that demonstrates an understanding of aquifer response.~~

~~(c) The Plan shall describe the following information about the monitoring network:~~

~~(1) Scientific rationale used for the site selection process.~~

~~(2) Monitoring site compliance with best management practices. If a site is not consistent with best management practices, the Plan shall explain why the site is necessary to the monitoring network.~~

~~(3) for each critical parameter, the quantitative values for the minimum threshold, measurable objective, and interim milestones for each monitoring site. sustainability indicator.~~

~~(f) The location and type of each monitoring site within the basin shall be displayed on a map, and reported in tabular format, and shall include information regarding the monitoring site type, frequency of measurement, and the purposes for which the site is being monitored.~~

~~(g) The best management practices developed by each Agency shall include a description of technical standards, data collection methods, and other procedures or protocols pursuant to Water Code Section 10727.2(f) for all monitoring sites or other data collection facilities to ensure that the monitoring network utilizes on the comparable data and methodologies. Best management practices related to construction and completion standards for wells or other monitoring sites developed for this purpose shall apply prospectively.~~

~~(h) The best management practices for monitoring developed by each Agency shall include the following minimum standards:~~

~~(1) Groundwater Elevations. The monitoring network shall be capable of demonstrating~~(1) Chronic Lowering of Groundwater Levels. Demonstrate groundwater occurrence, flow directions, and hydraulic gradients between principal aquifers and surface water features ~~that includes~~by the following methods:

~~(A) A sufficient density of monitoring wells eapable of collecting~~to collect representative measurements through depth-discrete perforated intervals to ~~adequately~~ characterize the groundwater table or potentiometric surface for each of ~~the~~ principal aquifer.

~~(B) Static groundwater elevation measurements shall be collected at least two times per year, to represent seasonal low and seasonal high groundwater conditions.~~

~~(2) Reduction of Groundwater Storage. The monitoring network shall be capable of providing sufficient data to enable a reasonably accurate and detailed assessment~~Provide an estimate of the change in annual groundwater in storage.

~~(3) Seawater Intrusion. The network shall be capable of monitoring~~Monitor seawater intrusion using chloride concentrations, or other constituents approved by the Department, and be sufficiently dense to calculate measurements convertible to chloride concentrations, so that the current and projected rate and extent of seawater intrusion for each applicable principal aquifer, may be calculated.

~~(4) Degraded Water Quality. The monitoring network shall be capable of collecting~~Collect sufficient spatial and temporal data from each applicable principal aquifer to determine groundwater quality trends for established constituents of concern water quality indicators, as determined by the Agency, to address known water quality issues.

~~(5) Land Subsidence. The monitoring network shall be capable of identifying~~Identify the rate and spatial distribution extent of land subsidence, which may be measured by extensometers, GPS-surveying, remote sensing technology, or other appropriate method approved by the Department.

~~(6) Depletions of Interconnected Surface waters. The monitoring network shall be capable of monitoring~~Water. Monitor surface water and groundwater conditions, where interconnected surface water exists. Monitoring of interconnected surface water systems shall be sufficient conditions exist, to characterize the spatial and temporal exchanges between surface water and groundwater, as necessary and appropriate, to adequately calibrate and apply the tools and methods selected necessary to identify interconnected calculate depletions of surface water systems caused by groundwater extractions. The interconnected surface water monitoring network shall be able to characterize the following:

~~(1A) Flow conditions including, but not limited to, surface water discharge, surface water head, and baseflow contribution.~~

~~(2B) Identifying the approximate date and location where ephemeral or intermittent flowing streams and rivers cease to flow, if applicable.~~

~~(3) Monitor the conditions to adequately characterize temporal changes~~(C) Temporal change in conditions with varying due to variations in stream discharges discharge and regional groundwater pumping conditions extraction.

~~(4) Any other factor~~(D) Other factors that is may be necessary to identify potential significant and unreasonable adverse impact impacts on beneficial uses of the surface water.

(d) The monitoring network shall be designed to ensure adequate coverage of sustainability indicators. If management areas are established, the quantity and density of monitoring sites in those areas shall be sufficient to evaluate conditions of the basin setting and sustainable management criteria specific to that area.

(e) A Plan may utilize site information and monitoring data from existing sources as part of the monitoring network.

(f) The Agency shall determine the density of monitoring sites and frequency of measurements required to demonstrate short-term, seasonal, and long-term trends based upon the following factors:

(1) Amount of current and projected groundwater use.

(2) Aquifer characteristics, including confined or unconfined aquifer conditions, or other physical characteristics that affect groundwater flow.

(3) Impacts to beneficial uses and users of groundwater and land uses and property interests affected by groundwater production, and adjacent basins that could affect the ability of that basin to meet the sustainability goal.

(4) Whether the Agency has adequate long-term existing monitoring results or other technical information to demonstrate an understanding of aquifer response.

(g) Each Plan shall describe the following information about the monitoring network:

(1) Scientific rationale for the monitoring site selection process.

(2) Consistency with data and reporting standards described in Section 352.4. If a site is not consistent with those standards, the Plan shall explain the necessity of the site to the monitoring network, and how any variation from the standards will not affect the usefulness of the results obtained.

(3) For each sustainability indicator, the quantitative values for the minimum threshold, measurable objective, and interim milestones that will be measured at each monitoring site or representative monitoring sites established pursuant to Section 354.36.

(h) The 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.

(i) The monitoring protocols developed by each Agency shall include a description of technical standards, data collection methods, and other procedures or protocols pursuant to Water Code Section 10727.2(f) for monitoring sites or other data collection facilities to ensure that the monitoring network utilizes comparable data and methodologies.

(j) An Agency that has demonstrated that undesirable results related to one or more sustainability indicators are not present and are not likely to occur in a basin, as described in Section 354.26, shall not be required to establish a monitoring network related to those sustainability indicators.

Note: Authority cited: Section 10733.2, Water Code.

Reference: Sections 10723.2, 10727.2, 10727.4, 10728, 10733.2, 10733.2, and 10733.8, Water Code

### **§ 354.36. Representative Monitoring**

Each Agency may designate a subset of monitoring sites as representative of conditions in the basin or an area of the basin ~~for the purposes of establishing specific minimum thresholds, measurable objectives, and related interim milestones, as follows:~~ as follows:

(a) Representative monitoring sites may be designated by the Agency as the point at which ~~critical parameters~~ sustainability indicators are monitored, and for which quantitative values for ~~the minimum threshold~~ thresholds, measurable objective ~~objectives,~~ and interim milestones are defined.

(b) Groundwater elevations may be used as a proxy for monitoring other ~~critical parameters~~ sustainability indicators if the Agency demonstrates the following:-

(1) ~~A substantial~~ Significant correlation exists between groundwater elevations and the ~~critical parameters~~ sustainability indicators for which groundwater elevation measurements serve as a ~~substitute~~ proxy.

(2) Measurable objectives established for groundwater elevation shall include a reasonable margin of operational flexibility taking into consideration the basin ~~conditions required~~ setting to avoid undesirable results for the ~~critical parameters~~ sustainability indicators for which groundwater elevation measurements serve as a ~~substitute~~ proxy.

(c) The designation of a representative monitoring site shall be supported by ~~technical~~ adequate evidence demonstrating that the site ~~adequately~~ reflects general conditions in the area.

Note: Authority cited: Section 10733.2, Water Code.

Reference: Sections 10727.2; and 10733.2, Water Code

### **§ 354.38. Assessment and Improvement of Monitoring Network**

(a) Each Agency shall ~~evaluate~~ review the monitoring network and include an ~~assessment~~ evaluation in the ~~initial~~ Plan and each five-year ~~evaluation~~ assessment, including ~~an assessment~~ a determination of uncertainty and whether there are data gaps that could affect the ability of the Plan to achieve the sustainability goal for the basin.

(~~a~~b) Each Agency shall identify data gaps wherever the basin does not contain a sufficient number of monitoring sites, does not monitor sites ~~with~~ at a sufficient frequency, or utilizes monitoring sites that are unreliable, including those that do not satisfy ~~best management practices~~ minimum standards of the monitoring network adopted by the Agency.

(~~b~~c) If the monitoring network contains data gaps, the Plan shall include a description of the following:

(1) The location and reason for data gaps in the monitoring network.

(2) Local issues and circumstances that limit or prevent monitoring.

(~~e~~d) Each Agency shall describe steps that will be taken to fill ~~any~~ data gaps ~~within the first five years of implementation of the Plan or~~ before the next five-year assessment, including the location and purpose of newly added or installed monitoring sites.

(~~d~~e) Each Agency shall adjust the monitoring frequency and density of monitoring sites to provide ~~a greater~~ an adequate level of detail about site-specific surface water and groundwater conditions and to assess the effectiveness of management actions under circumstances that include ~~, but are not limited to~~ the following:

(1) ~~If minimum thresholds are exceeded.~~ Minimum threshold exceedances.

(2) Highly variable spatial or temporal conditions.

(3) Adverse impacts to beneficial uses and users of groundwater.

(4) ~~Adversely affects~~The potential to adversely affect the ability of an adjacent basin to implement ~~their~~its Plan or ~~impedes~~impede achievement of sustainability goals in an adjacent basin.

Note: Authority cited: Section 10733.2, Water Code.

Reference: Sections 10723.2, 10727.2, 10728.2, 10733.2, 10733.2, and 10733.8, Water Code

#### **§ 354.40. Reporting Monitoring Data to the Department**

~~All~~ Monitoring data shall be stored in the data management system developed pursuant to Section 352.86. A copy of ~~that~~the monitoring data shall be included in the Annual Report and submitted electronically on forms provided by the Department ~~according to the Department's data standards, in one of the following methods:~~

(a) ~~Each Agency shall compile and include all monitoring data in each Annual Report and,~~  
~~or~~

(b) ~~The Agency shall make all monitoring data available to the Department throughout the year, as collected or measured by the Agency.~~

Note: Authority cited: Section 10733.2, Water Code.

Reference: Sections 10728, 10728.2, 10733.2, and 10733.8, Water Code.

## SUBARTICLE 5. Projects and Management Actions

### § 354.42. Introduction to Projects and Management Actions

This Subarticle describes the criteria for ~~actions and projects~~ and management actions to be included in a Plan to meet the sustainability goal ~~of~~ for the basin in a manner that can be maintained over the planning and implementation horizon.

Note: Authority cited: Section 10733.2, Water Code.

Reference: Section 10733.2, Water Code.

### § 354.44. Projects and Management Actions

(a) Each Plan shall include a description of the projects and management actions ~~adopted to meet measurable objectives and prevent undesirable results.~~ The description shall include the following: the Agency has determined will achieve the sustainability goal for the basin, including projects and management actions to respond to changing conditions in the basin.

(b) Each Plan shall include a description of the projects and management actions that include the following:

(1) A list of ~~all~~ projects and management actions proposed in the Plan with a description of the measurable objective that is expected to benefit from the project or ~~action-management action.~~ The list shall include projects and management actions that may be utilized to meet interim milestones, the exceedance of minimum thresholds, or where undesirable results have occurred or are imminent. The Plan shall include the following:

(A) A description of the circumstances under which projects or management actions shall be implemented, the criteria that would trigger implementation and termination of projects or management actions, and the process by which the Agency shall determine that conditions requiring the implementation of particular projects or management actions have occurred.

(B) The process by which the Agency shall provide notice to the public and other agencies that the implementation of projects or management actions is being considered or has been implemented, including a description of the actions to be taken.

(2) If overdraft conditions are identified through the analysis required by Section 354.18, the Plan shall describe projects or management actions, including a quantification of demand reduction or other methods, for the mitigation of overdraft.

(3) A summary of the permitting and regulatory process required for each project and management action.

(4) The status of each project and management action, including a time-table for expected initiation and completion, and the accrual of expected benefits.

(5) An explanation of the benefits that are expected to be realized from the project or management action, and how those benefits will be evaluated ~~and measured.~~

~~(56)~~ An explanation of how the project or management action will be accomplished. If the Plan relies 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.

~~(67)~~ A description of the legal authority required for each project and management action, and the basis for that authority within the Agency.

~~(78)~~ A description of the financial requirement estimated cost for each project and management action.

~~(b) Each Plan shall include contingency projects or actions as follows:~~

~~(1) For each project or management action, and for each measurable objective, the Plan shall describe contingency projects or actions that will be implemented in the event that groundwater conditions have not adequately responded to measures described in the Plan, or if the measures are no longer feasible.~~

~~(2) The Plan shall describe emergency contingency projects or actions that will be implemented in the event that groundwater conditions in the basin have passed a minimum threshold or that undesirable results have occurred or are imminent. Emergency contingency projects or actions shall be designed to achieve immediate results such that description of how the Agency is able to demonstrate that the emergency has been abated by or before the next annual report plans to meet those costs.~~

~~(3) Contingency projects or~~ (9) A description of the 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.

~~(c) Projects and management actions shall be supported by best available scientific data, analytical methods, and groundwater models, if information and best available, and quantify changes to groundwater use required to achieve the measurable objectives of the Plan or to avoid undesirable results in the basin. science.~~

~~(4) The Plan~~ An Agency shall describe take into account the following:

~~(A) Criteria that would trigger implementation and termination level of contingency uncertainty associated with the basin setting when developing projects or management actions, and the process by which the Agency shall determine that conditions require implementation of contingency projects or actions have occurred.~~

~~(B) The process by which the Agency shall provide notice to the public and other agencies that the implementation of contingency projects or actions is being considered or has been implemented, including a summary of the anticipated consequences of those projects or actions.~~

~~(5) Implementation of a contingency project or action, if fully described in the approved Plan, shall not constitute an amendment to that Plan.~~

~~Note: Authority cited: Section 10733.2, Water Code.~~

~~Reference: Section 10727.2, 10733.2, Water Code.~~

## **ARTICLE 6. Evaluation and Assessment**

### **§ 355. Introduction to Evaluation and Assessment**

~~This Article describes the methodology and criteria for the evaluation and assessment of a Plan, which shall also be applied, as appropriate, to the periodic evaluation and assessment of Plans undertaken by the Agency or by the Department, as well as to any amendments to a Plan previously approved by the Department.~~

Note: Authority cited: Section 10733.2, Water Code.

Reference: Sections 10727.2, 10727.4, and 10733.2, Water Code.

## **ARTICLE 6. Department Evaluation and Assessment**

### **§ 355. Introduction to Department Evaluation and Assessment**

This Article describes the methodology and criteria used by the Department to evaluate and assess a Plan, periodically evaluate and assess the implementation of a Plan, or evaluate and assess amendments to a Plan.

Note: Authority cited: Section 10733.2, Water Code.

Reference: Section 10733.2, Water Code.

### **§ 355.2. Department Review of Initial-Adopted Plan**

~~Upon adoption of a Plan~~(a) The Agency shall submit a copy of the initial-adopted Plan to the Department for evaluation.

~~(a) Upon receipt of an adopted Plan, and~~ the Department shall assign a submittal date to the Plan based on the day the Plan is received.

~~(b) The Department shall post the adopted Plan, submittal date, and all materials submitted by the Agency on the Department's Internet Web site~~ website within 20 days of receipt.

~~(c) The Department shall establish a period of no less than 60 days to receive public comments on the adopted Plan, as described in Section 353.8.~~

~~(d) If the Board has jurisdiction over the basin or a portion of the basin pursuant to Water Code Section 10735.2, the Department, after consultation with the Board, may proceed with an evaluation of a Plan.~~

~~(e) The Department shall evaluate a Plan within two years of its submittal date and issue a written assessment of the Plan that includes a description supporting the assessment, which will~~ shall be posted on the Department's website. The Department may include

~~recommended corrective actions to address any deficiencies identified in the assessment. When Department review is final, the assessment will~~The assessment shall include a determination of whether the status of the Plan, as one the following follows:

(1) ~~Adequate~~ Approved. The Department ~~has determined that the~~shall approve a Plan that satisfies the goals~~requirements~~ of the Act and is in substantial compliance with this Subchapter, based on the criteria described in Section 355.4.

(2) ~~Conditionally adequate~~Incomplete. The Department has determined that the Plan has one or more deficiencies that preclude approval, but which may be capable of being corrected by the Agency in a timely manner. An incomplete Plan may be completed and resubmitted to the Department for evaluation as follows:

(A) A Plan that is determined to be incomplete prior to the statutory deadline may be revised and resubmitted to the Department prior to the applicable deadline.

(B) A Plan that is determined to be incomplete after the statutory deadline, or less than 180 days prior to the statutory deadline, may be revised and resubmitted to the Department if the Department has determined that the Plan has minor deficiencies that preclude an adequacy determination, but that could be rectified~~addressed~~by the Agency in a timely manner through corrective actions, which may be recommended by the Department as described in this Section.

~~(3) Inadequate. The Department has determined that the Plan as submitted is not complete and does not satisfy the requirements of Section 355.4(a), that the Plan contains significant deficiencies that preclude an adequacy determination, and those deficiencies cannot be rectified by the Agency in a timely manner, or that the Agency has failed to address deficiencies in a Plan previously classified as conditionally adequate through corrective actions recommended by the Department as described in this Section. If the Department makes any of the determinations described in this subsection, the Department shall seek consultation with the Board to determine whether the Plan is inadequate.~~

~~(f) For a Plan that is conditionally adequate, the Agency may modify a Plan based on a request for additional information from the Department or to include corrective actions to address any deficiencies identified by the Department and submit the modified adopted plan for further evaluation.~~

~~(1)~~(i) The Department may consult with the Agency to determine the amount of time needed by the Agency to address any deficiencies, not to exceed 180 days from the date the Department issues the assessment.

~~(2) The Department may allow up to 180 days from the date the Department recommends corrective actions to address deficiencies in a Plan, unless a greater amount of time remains before the basin is required to be managed pursuant to a Plan established by Water Code Section 10720.7.~~

~~(3)~~(ii) No time limit shall apply to address deficiencies to Plans submitted for low or very low priority basins.

~~(g) If an Agency fails to address deficiencies in its Plan so that the Department is able to determine the Plan to be adequate,~~(3) Inadequate. The Department shall issue an

~~assessment of the Plan as inadequate and seek to disapprove a Plan if the Department, after consultation with the board, determines that a Plan is inadequate based on any of the following:~~

~~(A) The Plan does not satisfy the requirements of Section 355.4(a), and any deficiencies have not been corrected prior to the statutory deadline.~~

~~(B) The Plan contains significant deficiencies based on one or more criteria identified in Section 355.4(b), and any deficiencies have not been corrected prior to the statutory deadline.~~

~~(C) The Plan was determined to be incomplete, and the Agency has not taken sufficient actions to correct any deficiencies identified by the Department.~~

Note: Authority cited: Section 10733.2, Water Code.

Reference: ~~Section~~ Sections 10720.7, 10722.4, 10727, 10733, 10733.2, 10733.4, ~~10720.7 and 10735.2~~, Water Code.

#### § 355.4. Criteria for Plan Evaluation

~~The Department shall evaluate a Plan to determine whether the Plan has the overall effect of achieving the sustainability goal for the basin, complies with the Act, and is in substantial compliance with this Subchapter. Substantial compliance means that the Agency has attempted to comply with these regulations in good faith, that the supporting information is sufficiently detailed and the analyses sufficiently thorough and reasonable, in the judgment of the Department, to permit evaluation of the Plan, and the Department determines that any discrepancy would not materially affect the ability of the Agency to achieve the sustainability goal or of the Department to evaluate the likelihood of the Plan to attain that goal.~~

The basin shall be sustainably managed within 20 years of the applicable statutory deadline consistent with the objectives of the Act. The Department shall evaluate an adopted Plan for compliance with this requirement as follows:

~~(a) An initial Plan will be deemed inadequate unless it satisfies~~ adopted Plan must satisfy all of the following conditions:

~~(1) The Plan was submitted within the statutory period established by Water Code Section 10720.7, if~~ deadline, as applicable.

~~(2) The Plan is complete and includes all the information required by the Act and this Subchapter, including a legally adequate coordination agreement, if necessary~~ required.

~~(3) The Plan, either on its own or in coordination with other Plans, covers the entire basin.~~

~~(4) The Agency has taken corrective actions, within the period described in Section 355.2, to address any deficiencies in the Plan identified by the Department.~~

~~(b) The Department shall evaluate a Plan that satisfies the requirements of Subsection (a) to determine whether the Plan, either individually or in coordination with other Plans, complies with the Act and substantially complies with the requirements of this Subchapter. Substantial compliance means that the supporting information is likely~~ sufficiently detailed

and the analyses sufficiently thorough and reasonable, in the judgment of the Department, to evaluate the Plan, and the Department determines that any discrepancy would not materially affect the ability of the Agency to achieve the sustainability goal for the basin, or the ability of the Department to evaluate the likelihood of the Plan to attain that goal. When evaluating whether a Plan is likely to achieve the sustainability goal for the basin, the Department shall consider the following:

~~(1) Whether the Plan substantially complies with the requirements of this Subchapter.~~

~~(2) The quality of information, data, monitoring, and scientific methods upon which the Plan relies.~~

~~(3)~~ (1) Whether the assumptions, criteria, findings, and objectives, including the sustainability goal, undesirable results, minimum thresholds, measurable objectives, and interim milestones, are reasonable and supported by the best available evidence, information and best available science.

(2) Whether the Plan identifies reasonable measures and schedules to eliminate data gaps.

(3) Whether sustainable management criteria and projects and management actions are commensurate with the level of understanding of the basin setting, based on the level of uncertainty, as reflected in the Plan.

(4) Whether the interests of the beneficial uses and users of groundwater in the basin, and the land uses and property interests potentially affected by the use of groundwater in the basin, have been adequately considered.

~~(5) The feasibility of projects and management actions, including contingency~~ Whether the projects, and the likelihood that these management actions will be feasible and likely to prevent undesirable results and ensure that the basin is operated within its sustainable yield.

(6) Whether the Plan includes a reasonable assessment of overdraft conditions and includes reasonable means to mitigate overdraft, if present.

(7) Whether the Plan will adversely affect the ability of an adjacent basin to implement their groundwater sustainability Plan or impede achievement of its sustainability goals in an adjacent basingoal.

~~(7)~~ Whether the coordination agreements ensure, if required, have been adopted by all relevant parties, and satisfy the Plans utilize the same data and methodologies specified in Water Code Section 10727.6 requirements of the Act and this Subchapter.

~~(8)~~ Whether the Agency has the legal authority and financing plan financial resources necessary to implement the Plan.

~~(9) Whether the best management practices adopted by the Agency cover the range of projects and management actions anticipated by the Plan or are consistent with the best management practices recommended by the Department or general industry standards.~~

~~(10) Public comments and other information indicating that impacts were not adequately considered in determining undesirable results or in developing the plan.~~

~~(11) Whether the Plan would impair the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes.~~

~~-(10) Whether the Agency has adequately responded to comments that raise credible technical or policy issues with the Plan.~~

Note: Authority cited: Section 10733.2, Water Code.

Reference: Sections ~~106.3, 10720.7, 10727, 10722.4, 10723.2, 10727.2, 10727.2, 10727.4, 10727.6, 10733, 10733.2, and 10733.4,~~ Water Code.

### § 355.6. Periodic Review of Plan by Department

~~(a)~~ The Department shall periodically review ~~an approved Plan~~ an approved Plan to ensure the Plan, as implemented, remains ~~in conformance~~ consistent with the Act and in substantial compliance with this Subchapter, and is being implemented in a manner that will likely ~~to~~ achieve the sustainability goal for the basin.

~~(a)~~ The Department shall evaluate ~~existing approved Plans~~ existing approved Plans and issue an assessment at least every five years ~~and whenever the Plan is amended.~~ The Department review shall be based on information provided in the annual reports and the periodic evaluation of the Plan prepared and submitted by the Agency.

~~(b)~~ The Department shall consider the following in determining whether a Plan and its implementation ~~is adequate~~ remain consistent with the Act:

~~(1) The Agency is meeting all of its interim milestones. Whether the exceedances of any minimum thresholds or failure to meet any interim milestones are likely to affect the ability of the Agency to achieve the sustainability goal for the basin~~

~~(2) Whether the Agency is implementing projects and management actions and contingencies outlined consistent with the Plan, or that the Agency has demonstrated that actions described in the Plan have been rendered unnecessary based on changing basin conditions or an improved understanding of basin conditions.~~

~~(3) Amendments to the Plan are compatible with the measurable objectives and sustainability goal.~~

~~(3) Whether the Agency is addressing data gaps and reducing the levels of uncertainty identified in the Plan.~~

~~(4) Whether the Plan continues to satisfy the criteria described in Section 355.4.~~

~~(d)~~ The Department shall issue a written assessment of the review of the Plan, which shall be posted on the Department's website. The assessment shall include a determination of the status of the Plan, as follows:

~~(1) Approved. The Agency is compliant with the annual reporting~~ Department shall approve the implementation of a Plan that remains in conformance with the requirements of the Act and periodically in substantial compliance with this Subchapter, based on the criteria described in this Section.

~~(2) Incomplete. The Department has determined that the Plan as implemented has one or more deficiencies that preclude approval, but which may be capable of being corrected~~

by the Agency in a timely manner. An incomplete Plan may be completed and resubmitted to the Department for evaluation requirements as follows:

(5A) The Department concludes that shall identify deficiencies in the Plan as implemented, and its implementation are likely may recommend corrective actions to achieve address those deficiencies.

(B) The Department may consult with the sustainability goal and not likely Agency to adversely affect determine the sustainability goals amount of adjacent basin time needed by the Agency to propose projects or management actions to address any deficiencies, not to exceed 180 days from the date the Department issues its assessment.

(6) Inadequate. The Department shall disapprove the implementation of a Plan if the Department, after consultation with the board, determines that a Plan is inadequate in accordance with Section 355.2.

(e) The Department may request from the Agency any information the Department deems necessary to evaluate the progress toward achieving the sustainability goal and the potential for adverse effects on adjacent basins.

(7) The Department may identify deficiencies in a Plan or its evaluate the implementation and coordinate with the Agency to correct deficiencies prior to the issuance of the assessment.

(8) a Plan at any time to determine whether the Plan satisfies the criteria for an initial Plan as described in Section 355.4.

Note: Authority cited: Section 10733.2, Water Code.

Reference: Sections 10728.2, 10733.2, Water Code.

### **§ 355.8. Consultation is consistent with Board**

The Department shall consult with the Board if any the objectives of the following occur:

(a) The Department determines that a Plan may be inadequate.

(b) The Department determines that a groundwater sustainability program is not being implemented in a manner that will likely achieve the sustainability goal for the basin.

(c) The Agency has not taken actions to address any deficiencies in a Plan that had been identified by the Department Act and in substantial compliance with this Subchapter.

Note: Authority cited: Section 10733.2, Water Code.

Reference: Sections 10728.2, 10733.2, 10735.2, 10735.4, Water Code.

**§ 355.10. Resolution of Conflicts by Department**

~~The Department shall address disputes between Agencies or other entities responsible for groundwater management as follows:~~

- ~~(a) Disputes within a basin shall be the responsibility of the Coordinating Agency or other entities responsible for managing Plans and alternatives within that basin.~~
- ~~(b) Disputes between basins which claim that the implementation of Plans or alternatives in one basin affects the ability of an adjacent basin to implement its Plan, or impedes its ability to achieve the sustainability goal, shall be resolved by the Department.~~
- ~~(c) In resolving disputes, the Department may require additional information from each basin, including any proprietary data used by the Agency. Information withheld will be presumed not to support the interpretations that rely on that data.~~
- ~~(d) If the parties are unable to resolve disputes that relate to fundamental issues of sustainable groundwater management, the Department may find the relevant Plan or Plans and alternatives to be inadequate.~~

~~Note: Authority cited: Section, 10733.2, Water Code.~~

~~Reference: Sections 10727, 10727.6, 10733.2, Water Code.~~

## **ARTICLE 7. Reports, Assessments, and Amendments**

### **§ 356. Introduction to Reports, Assessments, and Amendments**

~~This Article describes the procedural and substantive requirements for annual reports, the periodic evaluation and assessments of Plans, and any proposed amendments to an approved Plan prepared by an Agency.~~

~~Note: Authority cited: Section 4, and 10733.28, Water Code.~~

~~Reference: Section 10733.2, Water Code.~~

### **SUBARTICLE 1. Annual Reports**

#### **§ 356.2. Introduction to Reports**

~~This Article describes the requirements for annual reports submitted by Agencies on or before April 1 of each year after the adoption of the Agency's Plan, including information required to demonstrate progress towards achieving the sustainability goal based on performance relative to measurable objectives described in the Plan, and Department review of those reports.~~

~~Note: Authority cited: Section 10733.2, Water Code.~~

~~Reference: Section 10733.2, Water Code.~~

#### **§ 356.4. Annual Report**

~~Each Agency shall submit an annual report to the Department by April 1 of each year following the adoption of the Plan. The annual report shall include the following components:~~

- ~~(a) General information, including a title page, a transmittal letter, as described in Section 353.4, a table of contents, an executive summary, and a location map depicting the basin covered by the report.~~

~~(b) A detailed description and graphical representation of the following conditions of the basin managed in the Plan:~~

~~(1) Groundwater elevation data from all monitoring wells identified in the monitoring network shall be analyzed and displayed as follows:~~

~~(A) Groundwater elevation contour maps for each principal aquifer in the basin illustrating, at a minimum, the seasonal high and seasonal low groundwater conditions.~~

~~(B) Hydrographs of groundwater elevations and water year type using historical data to the greatest extent available, but at a minimum from January 1, 2015, to current reporting year.~~

~~(2) Annual aggregated data identifying groundwater extraction for the preceding water year. Data shall be collected from the best available measurement methods and shall be presented in a table that summarizes groundwater extractions by water use sector, location of extractions, and identifies the method of measurement (direct or estimate) and accuracy of measurements, and a map that illustrates the general location and volume of groundwater extractions.~~

~~(3) Surface water supply used or available for use, for groundwater recharge or in-lieu use shall be reported based on quantitative data that describes the annual volume and sources for the preceding water year.~~

~~(4) Total water use shall be collected from the best available measurement methods and shall be reported in a table that summarizes total water use by water use sector, water source type, and identifies the method of measurement (direct or estimate) and accuracy of measurements. Existing water use data from the most recent Urban Water Management Plans or Agricultural Water Management Plans within the basin may be used, as long as the data are reported by water year.~~

~~(5) Change in groundwater storage shall include the following:~~

~~(A) Change in groundwater storage maps for each principal aquifer in the basin.~~

~~(B) A graph depicting water year type and cumulative change in groundwater storage for the basin based on historical data to the greatest extent available, but at a minimum from January 1, 2015, to the current reporting year.~~

~~(c) A synopsis of progress towards implementing the Plan, the ability of the Agency to achieve interim milestones and the implementation of any contingency measures.~~

~~Note: Authority cited: Section 10733.2, Water Code.~~

Reference: ~~Section 10727.2, 10728, 10733.2, Water Code.~~

~~§ 356.6~~

**§ 355.8. Department Review of Annual Reports**

The Department shall review annual reports as follows:

(a) ~~The Department shall acknowledge the receipt of annual reports by written notice and post the report and all-related materials on the Department's Internet Web site~~website within 20 days of receipt. ~~If the Department determines that the annual report is incomplete, the Department shall provide written notice to the requesting agency of the need for additional information.~~

(b) ~~The Department may~~shall ~~provide recommended corrective actions~~written notice to ~~address any deficiencies~~the Agency if additional information is required.

(c) ~~The Department shall review information contained in the annual report or implementation of to determine whether the Plan based on review of the annual report and shall treat is being implemented in a manner that will likely achieve the Plan as conditionally adequate, as described in sustainability goal for the basin, pursuant to Section 355.2, until the Agency takes appropriate actions to remediate any deficiencies.~~6.

Note: Authority cited: Section 10733.2, Water Code.

Reference: ~~Section~~Sections 10728, 10733.2, and 10733.8, Water Code.

**SUBARTICLE 2. Periodic Evaluation of Plan**

**§ 356.8. Introduction to Agency Evaluation and Assessment**

~~This Subarticle describes the requirements for periodic Plan evaluation and assessment undertaken by the Agency, including Department review of that assessment.~~

Note: Authority cited: ~~Section 10733.2, Water Code.~~

Reference: ~~Section 10733.2, Water Code.~~

## ~~§ 356~~ § 355.10. Agency Evaluation and Assessment

~~Each Agency shall evaluate and assess the Plan at least every five years and whenever the Plan is amended. The assessment shall be submitted to the Department together with the annual report for that year. The assessment shall describe basin conditions relative to the previous five-year period and the long-term sustainability goal for the basin. The Agency's assessment shall include an objective evaluation of Plan implementation and management of groundwater in the basin, including the following:~~

- ~~(a) A description of each of the measurable objectives and current groundwater conditions for each critical parameter relative to interim milestones and minimum thresholds.~~
- ~~(b) A description of the implementation of any corrective actions identified by the Agency or recommended by the Department, and the effect on groundwater conditions resulting from those actions.~~
- ~~(c) A description of the implementation of any contingency projects or actions, and the effect on groundwater conditions resulting from those projects or actions.~~
- ~~(d) A description of new information that has been made available since adoption or amendment of the initial Plan, or since the last five-year evaluation. The description shall also include whether new information warrants changes to any aspect of the Plan, including, but not limited to, the evaluation of basin conditions, minimum thresholds, or the criteria defining undesirable results.~~
- ~~(e) An evaluation of the hydrogeologic conceptual model, basin conditions, and the water budget in light of new information or changes in water use.~~
- ~~(f) A survey of the monitoring network within the basin, and evaluation of whether any areas within the basin are represented by less data or by data of insufficient quality or control than required by best management practices. The survey shall include the following:
  - ~~(1) An assessment of monitoring network function with an analysis of data collected to date, identification of potential data gaps, and the actions necessary to improve the monitoring network.~~
  - ~~(2) If the Agency identifies areas that require more or better data or other information, the Plan shall describe a program for the acquisition of such data sources and incorporation of newly obtained information into the overall Plan.~~
  - ~~(3) Gaps in data or data quality shall be remediated no later than the first five-year assessment by the Department.~~
  - ~~(4) Elements of the Plan, including, but not limited to, the hydrogeological conceptual model, groundwater conditions, management areas, water budget, or the identification~~~~

~~of undesirable results and the setting of minimum thresholds and measurable objectives, shall be reconsidered and revisions proposed, if necessary, for the second five-year assessment by the Department.~~

- ~~(5) The Plan shall prioritize the installation of new data collection facilities and analysis of new data based on the needs of the basin.~~
- ~~(g) Information describing any legislative actions, including a summary of regulations or ordinances related to the Plan adopted by the Agency.~~
- ~~(h) Information describing any enforcement or legal actions taken by the Agency.~~
- ~~(i) A description of completed or proposed Plan amendments.~~
- ~~(j) A summary of coordination that occurred between Agencies in a single basin and Agencies in hydrologically connected basins, and land use agencies where applicable.~~
- ~~(k) Other information the agency deems appropriate, along with any information necessary to the Department to conduct a periodic review as required by Water Code Section 10733.~~

~~Note: Authority cited: Section 10733.2, Water Code.~~

~~Reference: Section 10727.2, 10728.2, 10733.2, 10733.8, Water Code.~~

### **SUBARTICLE 3. Plan Amendments**

#### **§ 356.12. Amendments and Modifications to Plan**

- ~~(a) Any amendment or other modification to a Plan shall be evaluated by the Department for consistency with the requirements of the Act and of this Subchapter.~~
- ~~(b) An Agency may modifyamend a Plan at any time, and submit the modified Plan to the Department for evaluation.~~
  - ~~(1) Prior to modifying a Plan, the Agency may submit the proposed modifications to the Department for evaluation.~~
  - ~~(2) If the Department determines the proposed modifications are not significant, the Department shall notify the Agency that no further review shall be required and that the Agency may adopt the proposed modifications without formally amending the Plan.~~

~~(3) If the Department determines that the proposed modifications are or may be significant, the Department shall notify the Agency that the proposed modifications may only be adopted as formal amendments to the Plan.~~

~~(b) Whenever a Plan is amended, the Agency shall submit a copy of the amended Plan to the Department for evaluation pursuant to the requirements of this Subchapter for submission of a Plan.~~

~~(c) The Department shall review and issue an assessment of the amended Plan that states whether the amended plan is adequate or inadequate.~~

~~(d) The Department's evaluation shall focus on evaluate the amended portions of the Plan and any new information that is relevant to the amendments or other Plan elements. The Department will not evaluate any part Portions of the Plan that has have not been amended will not be evaluated unless the Department has reason to believe determines the proposed amendment may result in changed conditions to other areas or to other aspects of the Plan.~~

(d) An amendment to a Plan shall be evaluated by the Department as follows:

(1) An amended Plan that has been submitted, but not yet approved by the Department, shall be evaluated during the initial evaluation period, in accordance with Sections 355.2 and 355.4.

(2) An amended Plan that has been approved by the Department, but determined to be incomplete or inadequate as a result of a periodic assessment pursuant to Section 355.6, shall be evaluated in accordance with Sections 355.2 and 355.4.

(3) An amendment to a Plan that has been approved by the Department shall be evaluated in accordance with Section 355.6, except that if the Department does not approve the amendment, the Agency may revise and resubmit another amendment at any time, provided that the status of the Plan remains unchanged.

Note: Authority cited: Section 10733.2, Water Code.

Reference: Sections 10727.2, 10728.4, 10733.2, and 10733.8, Water Code.

**ARTICLE 8. ~~Coordination Agreements~~ 7. Annual Reports and Periodic Evaluations by the Agency**

**§ ~~357356~~. Introduction to ~~Coordination Agreements~~ Annual Reports and Periodic Evaluations by the Agency**

This Article describes the procedural and substantive requirements for voluntary the annual reports and periodic evaluation of Plans prepared by an Agency.

Note: Authority cited: Section 10733.2, Water Code.

Reference: Section 10733.2, Water Code.

**§ 356.2. Annual Reports**

Each Agency shall submit an annual report to the Department by April 1 of each year following the adoption of the Plan. The annual report shall include the following components for the preceding water year:

(a) General information, including an executive summary and a location map depicting the basin covered by the report.

(b) A detailed description and graphical representation of the following conditions of the basin managed in the Plan:

(1) Groundwater elevation data from monitoring wells identified in the monitoring network shall be analyzed and displayed as follows:

(A) Groundwater elevation contour maps for each principal aquifer in the basin illustrating, at a minimum, the seasonal high and seasonal low groundwater conditions.

(B) Hydrographs of groundwater elevations and water year type using historical data to the greatest extent available, including from January 1, 2015, to current reporting year.

(2) Groundwater extraction for the preceding water year. Data shall be collected using the best available measurement methods and shall be presented in a table that summarizes groundwater extractions by water use sector, and identifies the method of measurement (direct or estimate) and accuracy of measurements, and a map that illustrates the general location and volume of groundwater extractions.

(3) Surface water supply used or available for use, for groundwater recharge or in-lieu use shall be reported based on quantitative data that describes the annual volume and sources for the preceding water year.

(4) Total water use shall be collected using the best available measurement methods and shall be reported in a table that summarizes total water use by water use sector, water source type, and identifies the method of measurement (direct or estimate) and accuracy of measurements. Existing water use data from the most recent Urban Water Management Plans or Agricultural Water Management Plans within the basin may be used, as long as the data are reported by water year.

(5) Change in groundwater in storage shall include the following:

(A) Change in groundwater in storage maps for each principal aquifer in the basin.

(B) A graph depicting water year type, groundwater use, the annual change in groundwater in storage, and the cumulative change in groundwater in storage for the basin based on historical data to the greatest extent available, including from January 1, 2015, to the current reporting year.

(c) A description of progress towards implementing the Plan, including achieving interim milestones, and implementation of projects or management actions since the previous annual report.

Note: Authority cited: Section 10733.2, Water Code.

Reference: Sections 10727.2, 10728, and 10733.2, Water Code.

#### **§ 356.4. Periodic Evaluation by Agency**

Each Agency shall evaluate its Plan at least every five years and whenever the Plan is amended, and provide a written assessment to the Department. The assessment shall describe whether the Plan implementation, including implementation of projects and management actions, are meeting the sustainability goal in the basin, and shall include the following:

(a) A description of current groundwater conditions for each applicable sustainability indicator relative to measurable objectives, interim milestones and minimum thresholds.

(b) A description of the implementation of any projects or management actions, and the effect on groundwater conditions resulting from those projects or management actions.

(c) Elements of the Plan, including the basin setting, management areas, or the identification of undesirable results and the setting of minimum thresholds and measurable objectives, shall be reconsidered and revisions proposed, if necessary.

(d) An evaluation of the basin setting in light of significant new information or changes in water use, and an explanation of any significant changes. If the Agency's evaluation shows that the basin is experiencing overdraft conditions, the Agency shall include an assessment of measures to mitigate that overdraft.

(e) A description of the monitoring network within the basin, including whether data gaps exist, or any areas within the basin are represented by data that does not satisfy the requirements of Sections 352.4 and 354.34(c). The description shall include the following:

(1) An assessment of monitoring network function with an analysis of data collected to date, identification of data gaps, and the actions necessary to improve the monitoring network, consistent with the requirements of Section 354.38.

(2) If the Agency identifies data gaps, the Plan shall describe a program for the acquisition of additional data sources, including an estimate of the timing of that acquisition, and for incorporation of newly obtained information into the Plan.

(3) The Plan shall prioritize the installation of new data collection facilities and analysis of new data based on the needs of the basin.

(f) A description of significant new information that has been made available since Plan adoption or amendment, or the last five-year assessment. The description shall also include

whether new information warrants changes to any aspect of the Plan, including the evaluation of the basin setting, measurable objectives, minimum thresholds, or the criteria defining undesirable results.

(g) A description of relevant actions taken by the Agency, including a summary of regulations or ordinances related to the Plan.

(h) Information describing any enforcement or legal actions taken by the Agency in furtherance of the sustainability goal for the basin.

(i) A description of completed or proposed Plan amendments.

(j) Where appropriate, a summary of coordination agreements that occurred between multiple Agencies in a single basin, Agencies in hydrologically connected basins, and land use agencies in different basins and mandatory.

(k) Other information the Agency deems appropriate, along with any information required by the Department to conduct a periodic review as required by Water Code Section 10733.

Note: Authority cited: Section 10733.2, Water Code.

Reference: Sections 10727.2, 10728, 10728.2, 10733.2, and 10733.8, Water Code.

## ARTICLE 8. Interagency Agreements

### § 357. Introduction to Interagency Agreements

This Article describes the requirements for coordination agreements between Agencies within a basin developed pursuant to Water Code Section 10727.6, and voluntary interbasin agreements.

Note: Authority cited: Section 10733.2, Water Code.

Reference: ~~Sections~~Section 10733.2, Water Code.

### § 357.2. Interbasin Agreements

Two or more Agencies may enter into an ~~interbasin~~ agreement to establish compatible sustainability goals and understandings regarding fundamental elements of the Plans of each Agency as they relate to sustainable groundwater management. Interbasin agreements may be included in the Plan to support a finding that implementation of the Plan will not adversely affect an adjacent basin's ability to implement its Plan or impede the ability to achieve its sustainability goal. Interbasin agreements should facilitate the exchange of technical information between Agencies and include a process to resolve disputes concerning the interpretation of that information. Interbasin agreements may include any information the participating Agencies deem appropriate, ~~including such as~~ the following:

(a) General information:

(1) Identity of ~~all basins~~each basin participating in and covered by the terms of the agreement.

(2) ~~For each basin,~~ A list of ~~all~~the Agencies or other public agencies or other entities with groundwater management responsibilities.

~~(3) For in~~ each basin,

(3) A list of ~~all Plan or alternatives~~the Plans, Alternatives, or adjudicated areas in each basin.

(b) Technical information:

(1) An estimate of groundwater flow across basin boundaries, including consistent and coordinated data, methods and assumptions.

(2) An estimate of stream-aquifer interactions at boundaries.

~~(3) Establish~~ A common understanding of the geology and hydrology of the basins and ~~their~~the hydraulic connectivity as it applies to ~~determining~~the Agency's determination of groundwater flow across basin boundaries, and ~~describe~~description of the different assumptions utilized by different Plans and how the Agencies reconciled those differences.

(4) ~~Establish measurable~~Sustainable management criteria and a monitoring network ~~regarding threshold values that would confirm that no adverse impacts are~~ resulting result from managing groundwater in the implementation of the Plans of any

~~basin pursuant party to terms of the agreement.~~ If minimum thresholds or measurable objectives differ substantially between basins, the agreement ~~will~~should specify how the Agencies will reconcile those differences and manage the basins to avoid undesirable results. The Agreement ~~shall~~should identify ~~all the~~ differences that the parties consider significant and include a plan and schedule to reduce ~~the uncertainties so that over time, they to~~ collectively resolve those ~~important~~ uncertainties and differences.

(c) A description of the process for identifying and resolving conflicts between Agencies that are ~~party~~parties to the agreement.

(d) Interbasin agreements submitted to the Department shall be posted on the Department's ~~Internet Web site~~website.

Note: Authority cited: Section 10733.2, Water Code.

Reference: Sections 10727.2, 10733, and 10733.2, Water Code.

#### **§ 357.4. ~~Intrabasin~~ Coordination Agreements**

(a) Agencies intending to develop and implement multiple Plans pursuant to Water Code Section 10727(b)(3) shall enter into a coordination agreement to ensure that the Plans are developed and implemented utilizing the same data and methodologies, and that elements of the Plans necessary to achieve the sustainability goal for the basin are based upon consistent interpretations of the basin conditions~~setting~~.

(b) ~~Intrabasin~~ Coordination agreements shall ~~establish or identify a Submitting Agency that shall be~~describe the single~~following~~:

(1) A point of contact with the Department.

(2) The responsibilities of each Agency for meeting the terms of the agreement, the procedures for the timely exchange of information between Agencies, and procedures for resolving conflicts between Agencies.

(3) How the Agencies have used the same data and methodologies for assumptions described in Water Code Section 10727.6 to prepare coordinated Plans, including the following:

(A) Groundwater elevation data, supported by the quality, frequency, and spatial distribution of data in the monitoring network and the monitoring objectives as described in Subarticle 4 of Article 5.

(B) A coordinated water budget for the basin, as described in Section 354.18, including groundwater extraction data, surface water supply, total water use, and change in groundwater in storage.

(C) Sustainable yield for the basin, supported by a description of the undesirable results for the basin, and an explanation of how the minimum thresholds and measureable objectives defined by each Plan relate to those undesirable results, based on information described in the basin setting.

(c) ~~Each Agency shall submit to the Submitting Agency~~The coordination agreement shall explain how the Plans implemented together, satisfy the requirements of the Act and are in substantial compliance with this Subchapter

(d) The coordination agreement shall describe a process for submitting all Plans, Plan amendments, supporting information, all monitoring data and other pertinent information, along with annual reports and periodic evaluations.

~~(d) The Submitting Agency shall compile and rectify data and interpretations regarding basin conditions provided by the Agencies and produce a single report synthesizing and summarizing that information into a coherent and credible account of basin conditions. Reports produced by the Submitting Agency shall include the following:~~

~~(1) An explanation of how the Plans implemented together satisfy the requirements of the Act and are in substantial compliance with this Subchapter.~~

~~(2) An explanation of how the Plans have been integrated using the same data and methodologies to provide useful information regarding the following:~~

~~(A) Hydrogeologic conceptual models, as described in Section 354.12.~~

~~(B) State of the basin, as described in Section 354.14.~~

~~(C) Water budgets, as described in Section 354.16.~~

~~(D) Undesirable results, minimum thresholds, measurable objectives, as described in Subarticle 3 of Article 5.~~

~~(E) Monitoring networks, and monitoring objectives, as described in Subarticle 4 of Article 5.~~

~~(F) Projects and management actions, as described in Subarticle 5 of Article 5.~~

~~(3) An explanation of how the integration of information and interpretations described in this section provides useful information regarding each of the assumptions described in Water Code Section 10727.6.~~

~~(4) Reports produced by the Submitting Agency shall accompany the initial Plan, any amendment to the Plan, annual reports, and the five-year assessment by each Agency within the basin.~~

~~(e) Intrabasin coordination agreements shall describe the responsibilities of each Agency for meeting the terms of the agreement, the procedures for the timely exchange of information between Agencies and with the Submitting Agency, and procedures for resolving conflicts between Agencies.~~

(e) The coordination agreement shall describe a coordinated data management system for the basin, as described in Section 352.6.

(f) ~~Intrabasin~~ 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. If an Agency forms in a basin managed by an Alternative, the Agency shall evaluate the agreement with the Alternative prepared pursuant to Section 358.4 and determine whether it satisfies the requirements of this Section.

(g) The ~~intrabasin~~ coordination agreement shall be submitted to the Department together with the Plans for the basin and, if approved, shall become part of the Plan for each participating Agency.

(h) The Department shall evaluate ~~the~~ a coordination agreement for compliance with the procedural and technical requirements of this Section, to ~~assure~~ ensure that the agreement is binding on all parties, and that provisions of the agreement are sufficient to address any disputes between or among ~~Agencies that are party~~ parties to the agreement.

(i) ~~Plans subject to the requirement of this section shall not be deemed adequate without a legally binding agreement.~~

~~(j) Interagency~~ (i) Coordination agreements shall be reviewed as part of the five-year assessment, revised as necessary, dated, and signed by all parties.

Note: Authority cited: Section 10733.2, Water Code.

Reference: Sections 10721, 10727.2, 10727.6, 10733, 10733.2, 10733.4, and 10733.28, Water Code.

## ARTICLE 9. ~~Alternatives and Adjudicated Areas and Alternatives~~

### § 358. ~~Introduction to Alternatives and Adjudicated Areas~~

This Article describes the methodology and criteria for the submission and evaluation of ~~Alternatives to a Plan and for adjudicated areas.~~

Note: Authority cited: Section 10733.2, Water Code.

Reference: Section 10733.2, Water Code.

### § 358.2. ~~Adjudicated Areas Subject to Water Code Section 10720.8~~

~~The watermaster or a local agency shall submit the following to the Department for an adjudicated area described in Water Code Section 10720.8:~~

- ~~(a) By April 1, 2016, a copy of a governing final judgment, or other judicial order or decree, and any amendments entered before April 1, 2016.~~
- ~~(b) Within 90 days of entry by a court, a copy of any amendment made and entered by the court to the governing final judgment or other judicial order or decree on or after April 1, 2016.~~
- ~~(c) By April 1, 2016, and annually thereafter, a report containing the following information to the extent available for the portion of the basin subject to the adjudication:~~
  - ~~(1) Groundwater elevation data unless otherwise submitted pursuant to Water Code Section 10932.~~
  - ~~(2) Annual aggregated data identifying groundwater extraction for the preceding water year.~~
  - ~~(3) Surface water supply used for or available for use for groundwater recharge or in-lieu use.~~
  - ~~(4) Total water use.~~
  - ~~(5) Change in groundwater storage.~~
  - ~~(6) The annual report submitted to the court.~~

Note: Authority cited: ~~Section 10733.2, Water Code.~~

Reference: ~~Section 10720.8, 10733.2, Water Code.~~

**§ 358.4. Alternatives to Groundwater Sustainability Plans**

(a) ~~A local agency~~The entity that submits an Alternative shall demonstrate that the Alternative applies to the entire basin and satisfies the ~~eligibility~~ requirements of Water Code Section 10733.6, ~~including an assessment that the alternative satisfies the objectives of the Act, and that the alternative is within a basin that is in compliance with Part 2.11 of the Water Code (commencing with Section 10920).~~

(b) An Alternative shall be submitted to the Department by January 1, 2017, and every five years thereafter. A local agency or party directed by a court that submits an Alternative based on an adjudication action described in Water Code Section 10737.4 may submit the adjudication action to the Department for evaluation after January 1, 2017.

(c) ~~A local agency~~An Alternative submitted to the Department shall include the following information ~~based on the type of alternative submitted:~~

(1) An Alternative submitted pursuant to Water Code Section 10733.6(b)(1) shall include a copy of the groundwater management plan.

(2) An Alternative submitted pursuant to Water Code Section 10733.6(b)(2) that is not an adjudicated area described in Water Code Section 10720.8 shall ~~do~~include the following:

(A) ~~Demonstrate~~Information demonstrating that the adjudication submitted to the Department as an Alternative is a comprehensive adjudication as defined by Chapter 7 of Title 10 of Part 2 of the Code of Civil Procedure (commencing with Section 830).

(B) ~~Provide the Department with a copy of the adjudication order and any annual report submitted to the court pursuant to the adjudication.~~

(C) ~~A local agency submitting an alternative based on an adjudication action described in Water Code Section 10733.6 (b)(4)(B) may, notwithstanding Water Code Section 10733.6 (c), submit the adjudication action to the Department for evaluation after January 1, 2017.~~

~~(B) A copy of the proposed stipulated judgment.~~

(3) An Alternative submitted pursuant to Water Code Section 10733.6(b)(3) shall ~~demonstrate that no undesirable results are present in the basin or have occurred between January 1, 2005, and January 1, 2015. Each subsequent submission shall demonstrate that no undesirable results are present in the basin or have occurred for the preceding ten-year period.~~

(e) A local agency provide information that demonstrates the basin has operated within its sustainable yield over a period of at least 10 years. Data submitted in support of this Alternative shall include an explanation of the functional equivalence of terms and concepts used in the alternative with the substantive and procedural requirements of the Act and this Subchapter, continuous data from the end of that 10-year period to current conditions.

~~(f) If a local agency submits an alternative for a basin that includes areas outside its jurisdiction or service area, the local agency shall enter into agreements with any local agency or other entity from which information will be required to comply with reporting requirements for the alternative and to demonstrate that basin satisfies ongoing requirements of the alternative. An agreement shall include a list and map of all local agencies or entities that are party to the agreement.~~

~~(g)(d) The entity submitting an Alternative shall explain how the elements of the Alternative are functionally equivalent to the elements of a Plan required by Articles 5 and 7 of this Subchapter and are sufficient to demonstrate the ability of the Alternative to achieve the objectives of the Act.~~

(e) After an Alternative has been approved by the Department, if one or more Plans are adopted within the basin, the Alternative ~~and any agreements~~ shall be revised, as necessary, to reflect any changes that may have resulted from adoption of the Plan, and the local agency responsible for the Alternative and Agency responsible for the Plan shall enter into an agreement that satisfies the requirements of Section 357.4.

~~(h)(f) Any person may provide comments to the Department regarding an Alternative in a manner consistent with Section 353.8.~~

Note: Authority cited: Section 10733.2, Water Code.

Reference: ~~Section~~Sections 10727, 10733.2, 10727.2, 10733, 10733.2, 10733.6, 10733.8, and 10737.4, Water Code.

### **§ 358.6. Department Evaluation of ~~Plan~~ Alternatives**

The Department shall evaluate an Alternative ~~to submitted in lieu of a Plan consistent as follows:~~

(a) An Alternative must satisfy all of the following conditions:

(1) The Alternative was submitted within the statutory period established by Water Code Section 10733.6, if applicable.

(2) The Alternative is within a basin that is in compliance with ~~Article 6 of these regulations~~ Part 2.11 of Water Code (commencing with Section 10920), or as amended.

(3) The Alternative is complete and includes the information required by the Act and this Subchapter.

(4) The Alternative covers the entire basin.

(b) The Department shall evaluate an Alternative that satisfies the requirements of Subsection (a) in accordance with Sections 355.2, 355.4(b), and Section 355.6, as applicable, to determine whether the Alternative ~~satisfies the goals of the Act to achieve groundwater sustainability through local management and avoid undesirable results, including to adjacent groundwater basins~~ complies with the objectives of the Act.

Note: Authority cited: Section 10733.2, Water Code.

Reference: ~~Section 10733.2,~~Sections 10733.62, 10733.6, and 10733.8, Water Code.