

**State of California
Office of Administrative Law**

In re:
Department of Water Resources

Regulatory Action:

Title 23, California Code of Regulations

Adopt sections: 350, 350.2, 350.4, 351, 352,
352.2, 352.4, 352.6, 353,
353.2, 353.4, 353.6, 353.8,
353.10, 354, 354.2, 354.4,
354.6, 354.8, 354.10,
354.12, 354.14, 354.16,
354.18, 354.20, 354.22,
354.24, 354.26, 354.28,
354.30, 354.32, 354.34,
354.36, 354.38, 354.40,
354.42, 354.44, 355, 355.2,
355.4, 355.6, 355.8, 355.10,
356, 356.2, 356.4, 357,
357.2, 357.4, 358, 358.2,
358.4

Amend sections:

Repeal sections:

**NOTICE OF FILING AND PRINTING ONLY
OF EMERGENCY REGULATION(S) OR
ORDER(S) OF REPEAL**

Government Code Section 11343.8

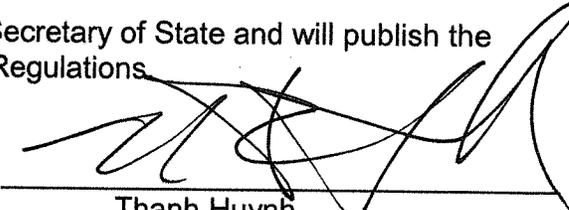
OAL Matter Number: 2016-0805-02

**OAL Matter Type: Emergency File and Print
Only (EFP)**

In this emergency file and print, the Department adopts a new subchapter in Title 23 of the California Code of Regulations. The regulations address groundwater sustainability plans and are exempt from OAL review pursuant to Water Code section 10733.2, subdivision (d). The regulations cover matters such as technical and reporting standards, procedures, plan contents, department evaluation and assessment, annual reports and periodic evaluations by the agency, interagency agreements, and alternatives.

OAL filed these emergency regulations with the Secretary of State and will publish the emergency regulations in the California Code of Regulations.

Date: August 15, 2016



Thanh Huynh
Senior Attorney

For: Debra M. Cornez
Director

Original: Mark Cowin
Copy: Trevor Joseph

EMERGENCY

STATE OF CALIFORNIA—OFFICE OF ADMINISTRATIVE LAW

NOTICE PUBLICATION/REGULATIONS SUBMISSION

(See instructions on reverse)

For use by Secretary of State only

STD. 400 (REV. 01-2013)

OAL FILE NUMBERS	NOTICE FILE NUMBER Z-	REGULATORY ACTION NUMBER	EMERGENCY NUMBER 2016-0605-02EFP
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For use by Office of Administrative Law (OAL) only

2016 AUG -5 P 12:54

OFFICE OF ADMINISTRATIVE LAW

ENDORSED - FILED
in the office of the Secretary of State

AUG 15 2016
1:52PM

NOTICE	REGULATIONS
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AGENCY WITH RULEMAKING AUTHORITY
California Department of Water Resources

AGENCY FILE NUMBER (If any)

A. PUBLICATION OF NOTICE (Complete for publication in Notice Register)

1. SUBJECT OF NOTICE	TITLE(S)	FIRST SECTION AFFECTED	2. REQUESTED PUBLICATION DATE
3. NOTICE TYPE <input type="checkbox"/> Notice re Proposed Regulatory Action <input type="checkbox"/> Other	4. AGENCY CONTACT PERSON	TELEPHONE NUMBER	FAX NUMBER (Optional)
OAL USE ONLY	ACTION ON PROPOSED NOTICE <input type="checkbox"/> Approved as Submitted <input type="checkbox"/> Approved as Modified <input type="checkbox"/> Disapproved/Withdrawn	NOTICE REGISTER NUMBER	PUBLICATION DATE

B. SUBMISSION OF REGULATIONS (Complete when submitting regulations)

1a. SUBJECT OF REGULATION(S) Groundwater Management - Groundwater Sustainability Plan	1b. ALL PREVIOUS RELATED OAL REGULATORY ACTION NUMBER(S)
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2. SPECIFY CALIFORNIA CODE OF REGULATIONS TITLE(S) AND SECTION(S) (Including title 26, if toxics related)

SECTION(S) AFFECTED (List all section number(s) individually. Attach additional sheet if needed.)	ADOPT Title 23, Division 2, Chapter 1.5, Subchapter 2. See attached for section numbers.
	AMEND
	REPEAL
TITLE(S) 23	

3. TYPE OF FILING

<input type="checkbox"/> Regular Rulemaking (Gov. Code §11346)	<input type="checkbox"/> Certificate of Compliance: The agency officer named below certifies that this agency complied with the provisions of Gov. Code §§11346.2-11347.3 either before the emergency regulation was adopted or within the time period required by statute.	<input type="checkbox"/> Emergency Readopt (Gov. Code, §11346.1(h))	<input type="checkbox"/> Changes Without Regulatory Effect (Cal. Code Regs., title 1, §100)
<input type="checkbox"/> Resubmittal of disapproved or withdrawn nonemergency filing (Gov. Code §11349.3, 11349.4)	<input type="checkbox"/> Resubmittal of disapproved or withdrawn emergency filing (Gov. Code, §11346.1)	<input checked="" type="checkbox"/> File & Print	<input type="checkbox"/> Print Only
<input checked="" type="checkbox"/> Emergency (Gov. Code, §11346.1(b))		<input checked="" type="checkbox"/> Other (Specify) <u>Wat. Code sec. 10733-attached</u>	<u>10733-2 (d)</u>

4. ALL BEGINNING AND ENDING DATES OF AVAILABILITY OF MODIFIED REGULATIONS AND/OR MATERIAL ADDED TO THE RULEMAKING FILE (Cal. Code Regs. title 1, §44 and Gov. Code §11347.1)

5. EFFECTIVE DATE OF CHANGES (Gov. Code, §§ 11343.4, 11346.1(d); Cal. Code Regs., title 1, §100)

<input type="checkbox"/> Effective January 1, April 1, July 1, or October 1 (Gov. Code §11343.4(a))	<input checked="" type="checkbox"/> Effective on filing with Secretary of State	<input type="checkbox"/> \$100 Changes Without Regulatory Effect	<input type="checkbox"/> Effective other (Specify)
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6. CHECK IF THESE REGULATIONS REQUIRE NOTICE TO, OR REVIEW, CONSULTATION, APPROVAL OR CONCURRENCE BY, ANOTHER AGENCY OR ENTITY

<input type="checkbox"/> Department of Finance (Form STD. 399) (SAM §6660)	<input type="checkbox"/> Fair Political Practices Commission	<input type="checkbox"/> State Fire Marshal
<input type="checkbox"/> Other (Specify)		

7. CONTACT PERSON

Trevor Joseph	TELEPHONE NUMBER (916) 651-9218	FAX NUMBER (Optional) (916) 651-9289	E-MAIL ADDRESS (Optional) Trevor.Joseph@water.ca.gov
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8. I certify that the attached copy of the regulation(s) is a true and correct copy of the regulation(s) identified on this form, that the information specified on this form is true and correct, and that I am the head of the agency taking this action, or a designee of the head of the agency, and am authorized to make this certification.

SIGNATURE OF AGENCY HEAD OR DESIGNEE 	DATE 7/21/2016
TYPED NAME AND TITLE OF SIGNATORY Mark Cowin, Director	

For use by Office of Administrative Law (OAL) only

ENDORSED APPROVED

AUG 15 2016

Office of Administrative Law

per agency request 8/15/16 (TH)

Attachment

Notice of Regulations Submission – Form Std. 400

Department of Water Resources

Groundwater Management – Groundwater Sustainability Plan

B2. Sections Affected

Title 23, Division 2, Chapter 1.5, Subchapter 2, Sections:

350, 350.2, 350.4, 351, 352, 352.2, 352.4, 352.6, 353, 353.2, 353.4, 353.6, 353.8, 353.10, 354, 354.2, 354.4, 354.6, 354.8, 354.10, 354.12, 354.14, 354.16, 354.18, 354.20, 354.22, 354.24, 354.26, 354.28, 354.30, 354.32, 354.34, 354.36, 354.38, 354.40, 354.42, 354.44, 355, 355.2, 355.4, 355.6, 355.8, 355.10, 356, 356.2, 356.4, 357, 357.2, 357.4, 358, 358.2, 358.4.

B3. Type of Filing

Water Code section 10733.2, subdivision (d) provides the following:

The department shall adopt the regulations, including any amendments thereto, authorized by this section as emergency regulations in accordance with the Administrative Procedure Act (Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code). The adoption of these regulations is an emergency and shall be considered by the Office of Administrative Law as necessary for the immediate preservation of the public peace, health and safety, or general welfare. Notwithstanding the Administrative Procedure Act, emergency regulations adopted by the department pursuant to this section shall not be subject to review by the Office of Administrative Law and shall remain in effect until revised by the department.

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 groundwater sustainability through local management, the following general principles shall guide the Department in the implementation of these regulations.

(a) Groundwater conditions must be adequately defined and monitored to demonstrate that a Plan is achieving the sustainability goal for the basin, and the 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 basins, Plan content information 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 objectives of the Act are satisfied.

(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 will be evaluated, and its implementation assessed, consistent with the objective that a basin be sustainably managed within 20 years of Plan implementation 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.

(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, Water Code.

ARTICLE 2. Definitions

§ 351. Definitions

The definitions in the Sustainable Groundwater Management Act, Bulletin 118, and Subchapter 1 of this Chapter, 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 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) "Basin" means a groundwater basin or subbasin identified and defined in Bulletin 118 or as modified pursuant to Water Code 10722 et seq.
- (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.
- (h) "Best available science" refers to the use of 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.
- (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.
- (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 persons and entities on the list of interested persons established by the Agency pursuant to Water Code Section 10723.4.
- (q) "Interim milestone" refers to a target value representing measurable groundwater conditions, in increments of five years, set by an Agency as part of a Plan.
- (r) "Management area" refers to an area within a basin for 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 other factors.
- (s) "Measurable objectives" refer to specific, quantifiable goals for the maintenance or improvement of specified groundwater conditions that have been included in an adopted Plan to achieve the sustainability goal for the basin.
- (t) "Minimum threshold" refers to a numeric value for each sustainability indicator used to define undesirable results.
- (u) "NAD83" refers to the North American Datum of 1983 computed by the National Geodetic Survey, or as modified.
- (v) "NAVD88" refers to the North American Vertical Datum of 1988 computed by the National Geodetic Survey, or as modified.
- (w) "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.
- (x) "Plan" refers to a groundwater sustainability plan as defined in the Act.
- (y) "Plan implementation" refers to an Agency's exercise of the powers and authorities described in the Act, which commences after an Agency adopts and submits a Plan or Alternative to the Department and begins exercising such powers and authorities.
- (z) "Plan manager" is an employee or authorized representative of an Agency, or Agencies, appointed through a coordination agreement or other agreement, who has been delegated management authority for submitting the Plan and serving as the point of contact between the Agency and the Department.
- (aa) "Principal aquifers" refer to aquifers or aquifer systems that store, transmit, and yield significant or economic quantities of groundwater to wells, springs, or surface water systems.
- (ab) "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.
- (ac) "Representative monitoring" refers to a monitoring site within a broader network of sites that typifies one or more conditions within the basin or an area of the basin.

(ad) "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.

(ae) "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.

(af) "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.

(ag) "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.

(ak) "Water source type" represents the source from which water is derived to meet the applied beneficial uses, including groundwater, recycled water, reused water, and surface water sources identified as Central Valley Project, the State Water Project, the Colorado River Project, local supplies, and local imported supplies.

(al) "Water use sector" refers to categories of water demand based on the general land uses to which the water is applied, including urban, industrial, agricultural, managed wetlands, managed recharge, and native vegetation.

(am) "Water year" refers to the period from October 1 through the following September 30, inclusive, as defined in the Act.

(an) "Water year type" refers to the classification provided by the Department to assess the amount of annual precipitation in a basin.

Note: Authority cited: Section 10733.2, Water Code.

Reference: 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 monitoring protocols, standards for monitoring sites, and other technical elements related to the development or implementation of a Plan.

Note: Authority cited: Section 10733.2, Water Code.

Reference: Section 10733.2, Water Code.

§ 352.2. Monitoring Protocols

Each Plan shall include monitoring protocols adopted by the Agency for data collection and management, as follows:

- (a) Monitoring protocols shall be developed according to best management practices.
- (b) The Agency may rely on monitoring protocols included as part of the best management practices developed by the Department, or may adopt similar monitoring protocols that will yield comparable data.
- (c) Monitoring protocols shall be reviewed at least every five years as part of the periodic evaluation of the Plan, and modified as necessary.

Note: Authority cited: Section 10733.2, Water Code.

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

§ 352.4. 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) 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 shall be measured and reported in feet 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.
- (4) Reference point elevations shall be measured and reported in feet 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.
- (5) Geographic locations shall be reported in GPS coordinates by latitude and longitude in decimal degree to five decimal places, to a minimum accuracy of 30 feet, relative to NAD83, or another national standard that is convertible to NAD83.

(b) Monitoring sites shall include the following information:

- (1) A unique site identification number and narrative description of the site location.
 - (2) A description of the type of monitoring, type of measurement taken, and monitoring frequency.
 - (3) Location, elevation of the ground surface, and identification and description of the reference point.
 - (4) A description of the standards used to install the monitoring site. Sites that do not conform to best management practices shall be identified and the nature of the divergence from best management practices described.
- (c) The following standards apply to wells:
- (1) Wells used to monitor groundwater conditions shall be constructed according to applicable construction standards, and shall provide the following information in both tabular and geodatabase-compatible shapefile form:
 - (A) CASGEM well identification number. If a CASGEM well identification number 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, clustered, nested, or other type of well.
 - (D) Casing perforations, borehole depth, and total well depth.
 - (E) Well completion reports, if available, from which the names of private owners have been redacted.
 - (F) Geophysical logs, well construction diagrams, or other relevant information, if available.
 - (G) Identification of principal aquifers monitored.
 - (H) Other relevant well construction information, such as well capacity, casing diameter, or casing modifications, as available.
 - (2) If an Agency relies on wells that lack casing perforations, borehole depth, or total well depth information to monitor groundwater conditions as part of 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.
 - (3) 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) Data layers, shapefiles, geodatabases, and other information provided with each map, shall be submitted electronically to the Department in accordance with the procedures described in Article 4.

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

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

(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 a unique site identification number and the ground surface elevation for each site.

(3) Hydrographs shall use the same datum and scaling to the greatest extent practical.

(f) Groundwater and surface water models used for a Plan shall meet the following standards:

(1) The model shall include publicly available supporting documentation.

(2) The model shall be based on field or laboratory measurements, or equivalent methods that justify the selected values, and calibrated against site-specific field data.

(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: Sections 10727.2, 10727.6, and 10733.2, 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 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 website.

(b) The Department shall provide information, to the extent available, to assist Agencies in the preparation and implementation of Plans, which shall be posted on the Department's website.

Note: Authority cited: Section 10733.2, Water Code.

Reference: 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 to the Department as follows:

(a) 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) Submitted materials shall be accompanied by a transmittal letter signed by the plan manager or other duly authorized 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, prior to initiating development of 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 website.

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

(c) Upon request, prior to adoption of a Plan, the Department shall provide assistance to an Agency regarding the elements of a Plan required by the Act and this Subchapter, however, the Agency is solely responsible for the development, adoption, and implementation of a Plan that satisfies the requirements of 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. Comments

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

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

(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, 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.

(e) Comments received by the Department shall be posted on the Department's website.

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

Note: Authority cited: Section 10733.2, Water Code.

Reference: 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, and may amend a Plan at any time pursuant to the requirements of Section 355.10.

Note: Authority cited: Section 10733.2, Water Code.

Reference: 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 administrative information, a description of the basin setting, sustainable management criteria, description of the monitoring network, 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 about the Agency that has adopted the Plan and the area covered by the Plan.

Note: Authority cited: Section 10733.2, Water Code.

Reference: Section 10733.2, Water Code.

§ 354.4. 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 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: 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) The organization and management structure of the Agency, 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, demonstrating that the Agency has the legal authority to implement the Plan.
- (e) An estimate of the cost of implementing the Plan and a general description of how the Agency plans to 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 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 or state land (including the identity of the agency with jurisdiction over that land), tribal land, cities, counties, agencies with water management responsibilities, and areas covered by relevant general plans.
 - (4) Existing land use designations and the identification of 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 agricultural, industrial, and domestic water supply wells in the basin, including de minimis extractors, and the location and extent of communities dependent upon groundwater, 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) Identification of existing water resource monitoring and management programs, and description of any such programs the Agency plans to incorporate in its monitoring network or in development of its Plan. The Agency may coordinate with existing water resource monitoring and management programs 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 in the basin.

(f) A plain language description of the land use elements or topic categories of 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 may change water demands within the basin 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.
- (3) A general description of how implementation 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.

(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) A description of the beneficial uses and users of groundwater in the basin, 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 parties.
- (b) A list of public meetings at which the Plan was discussed or considered by the Agency.
- (c) Comments regarding the Plan received by the Agency and a summary of any responses by the Agency.
- (d) A communication section of the Plan that includes the following:
 - (1) An explanation of the Agency's decision-making process.
 - (2) Identification of opportunities for 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) The method the Agency shall follow to inform the public about progress implementing the Plan, including the status of projects and actions.

Note: Authority cited: Section 10733.2, Water Code.

Reference: Sections 10723.2, 10727.8, 10728.4, and 10733.2, 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 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 based on technical studies and qualified maps that characterizes the physical components and interaction of the surface water and groundwater systems in the basin.

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

- (1) The regional geologic and structural setting of the basin including the immediate surrounding area, as necessary for geologic consistency.
- (2) Lateral basin boundaries, including major geologic features that significantly 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) Physical properties of aquifers and aquitards, including the vertical and lateral extent, hydraulic conductivity, and storativity, which may be based on existing technical studies or other best available information.
 - (C) 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 primary use or uses of each aquifer, such as domestic, irrigation, or municipal water supply.

- (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 that display the information required by this section and are sufficient to depict major stratigraphic and structural features in the basin.
- (d) Physical characteristics of the basin shall be represented on one or more maps that depict the following:
 - (1) Topographic information derived from the U.S. Geological Survey or another reliable source.
 - (2) Surficial geology derived from a qualified map including the locations of cross-sections required by this Section.
 - (3) Soil characteristics as described by the appropriate Natural Resources Conservation Service 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 that are significant to the management of the basin.
 - (6) The source and point of delivery for imported water supplies.

Note: Authority cited: Section 10733.2, Water Code.

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

§ 354.16. Groundwater Conditions

Each Plan shall provide a description of current and historical groundwater conditions in the basin, including data from January 1, 2015, to current conditions, based on the best available 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) 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 between seasonal high groundwater conditions, including the annual groundwater use and water year type.
- (c) Seawater intrusion conditions in the basin, including maps and cross-sections of the seawater intrusion front for each principal aquifer.

- (d) Groundwater quality issues that may affect the supply and beneficial uses of groundwater, including a description and map of the location of known groundwater contamination sites and plumes.
- (e) The extent, cumulative total, and annual rate of land subsidence, including maps depicting total subsidence, utilizing data available from the Department, as specified in Section 353.2, or the best available information.
- (f) Identification of interconnected surface water systems 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, 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: Sections 10723.2, 10727.2, 10727.4, and 10733.2, Water Code.

§ 354.18. Water Budget

- (a) Each Plan shall include a water budget for the basin that provides an accounting and assessment of the total annual volume of groundwater and surface water entering and leaving the basin, including historical, current and projected water budget conditions, and the change in the volume of water stored. Water budget information shall be reported in tabular and graphical form.
- (b) The water budget shall quantify the following, either through direct measurements or estimates based on data:
 - (1) Total surface water entering and leaving a basin by water source type.
 - (2) Inflow to the groundwater system by water source type, including subsurface groundwater inflow and infiltration of precipitation, applied water, and surface water systems, such as lakes, streams, rivers, canals, springs and conveyance systems.
 - (3) Outflows from the groundwater system by water use sector, including evapotranspiration, groundwater extraction, groundwater discharge to surface water sources, and subsurface groundwater outflow.
 - (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.
 - (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 current inflows and 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 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 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 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 ability of the Agency to 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 to estimate future baseline conditions concerning hydrology, water demand and surface water supply availability or reliability over the planning and implementation horizon:

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

(B) Projected water demand shall utilize the most recent land use, evapotranspiration, and crop coefficient information as the baseline 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 projected changes in local land use planning, population growth, and climate.

(C) Projected surface water supply shall utilize the most recent water supply information as the baseline condition for estimating future surface water supply. The projected surface water supply shall also be applied as the baseline condition used to evaluate future scenarios of surface water supply availability and reliability as a function of the historical surface water supply identified in Section 354.18(c)(2)(A), and the projected changes in local land use planning, population growth, and climate.

(d) The Agency shall utilize the following information provided, as available, by the Department 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 land use.
- (2) Current water budget information for temperature, water year type, evapotranspiration, and 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 groundwater and surface water model, pursuant to Section 352.4.

Note: Authority cited: Section 10733.2, Water Code.

Reference: 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 the Agency has determined that creation of management areas will facilitate implementation of the Plan. Management areas may define different minimum thresholds and be operated to different measurable objectives than the basin at large, provided that undesirable results are defined consistently throughout the basin.

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

- (1) The reason for the creation of each management area.
- (2) The minimum thresholds and measurable objectives established for each management area, and an explanation of the rationale for selecting those values, if different from the basin at large.
- (3) The level of monitoring and analysis appropriate for each management area.
- (4) An explanation of how the management area can operate under different minimum thresholds and measurable objectives without causing undesirable results outside the management area, if applicable.

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

Note: Authority cited: Section 10733.2, Water Code.

Reference: Sections 10733.2 and 10733.4, Water Code.

SUBARTICLE 3. Sustainable Management Criteria

§ 354.22. Introduction to Sustainable Management Criteria

This Subarticle describes criteria by which an Agency defines conditions in its Plan that constitute sustainable groundwater management for the basin, including the process by which the Agency shall characterize undesirable results, and establish minimum thresholds and measurable objectives for each applicable sustainability indicator.

Note: Authority cited: Section 10733.2, Water Code.

Reference: 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 that will be implemented to ensure that the basin will be operated within its sustainable yield, and an explanation of how the sustainability goal is likely to be achieved within 20 years of Plan implementation and is likely to be maintained through the planning and implementation horizon.

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 sustainability indicators are caused by groundwater conditions occurring throughout the basin.

(b) The description of undesirable results shall include the following:

(1) The cause of groundwater conditions occurring throughout the basin that would lead to or has led to undesirable results based on information described in the basin setting, and other data or models as appropriate.

(2) The criteria used to define when and where the effects of the groundwater conditions 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) Potential effects on the beneficial uses and users of groundwater, on land uses and property interests, and other potential effects that may occur or are occurring from undesirable results.

(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 multiple monitoring sites, rather than a single monitoring site.

(d) An Agency that is able to demonstrate that undesirable results related to one or more sustainability indicators are not present and are not likely to occur in a basin shall not be required to establish criteria for undesirable results related to those sustainability indicators.

Note: Authority cited: Section 10733.2, Water Code.

Reference: 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 that quantify groundwater conditions for each applicable sustainability indicator at each monitoring site or representative monitoring site established pursuant to Section 354.36. The numeric value used to define minimum thresholds shall represent a point in the basin that, if exceeded, 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 to establish and justify the minimum thresholds for each sustainability indicator. The justification for the minimum threshold shall be supported by information provided in the basin setting, and other data or models as appropriate, and qualified by uncertainty in the understanding of the basin setting.

(2) The relationship between the minimum thresholds 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 may affect the interests of beneficial uses and users of groundwater or land uses and property interests.

(5) How state, federal, or local standards relate to the 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, consistent with the monitoring network requirements described in Subarticle 4.

- (c) Minimum thresholds for each sustainability indicator shall be defined as follows:
- (1) Chronic Lowering of Groundwater Levels. The minimum threshold for chronic lowering of groundwater levels shall be the groundwater elevation indicating a 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 based on historical trends, water year type, and projected water use in the basin.
 - (B) Potential effects on other 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 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 sustainable yield of the basin, calculated based on historical trends, water year type, and projected water use in the basin.
 - (3) Seawater Intrusion. The minimum threshold for seawater intrusion shall be defined by a 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 and measurable objective for each principal aquifer.
 - (B) A description of how the seawater intrusion minimum threshold considers the effects of current and projected sea levels.
 - (4) Degraded Water Quality. The minimum threshold for degraded water quality shall be the 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 the Agency has determined and considered those uses and interests, and the Agency's rationale for establishing minimum thresholds 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 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 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.

(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 quantify surface water depletion, the Plan shall identify and describe an equally effective method, tool, or analytical model to accomplish the requirements of this Paragraph.

(d) An Agency may establish a representative minimum threshold 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 minimum thresholds as supported by adequate evidence.

(e) 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 minimum thresholds related to those sustainability indicators.

Note: Authority cited: Section 10733.2, Water Code.

Reference: Sections 10723.2, 10727.2, 10733, 10733.2, and 10733.8, Water Code.

§ 354.30. Measurable Objectives

(a) Each Agency shall establish measurable objectives, including interim milestones in increments of five years, to achieve the sustainability goal for the basin within 20 years of Plan implementation and to continue to sustainably manage the groundwater basin over the planning and implementation horizon.

(b) Measurable objectives shall be established for each sustainability indicator, based on quantitative values using the same metrics and monitoring sites as are used to define the minimum thresholds.

(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 periods of drought, and be commensurate with levels of uncertainty.

(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.

Note: Authority cited: Section 10733.2, Water Code.

Reference: 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 protocols, and data reporting requirements. The monitoring network shall promote the collection of data of sufficient quality, frequency, and distribution to characterize groundwater and related surface water conditions in the basin and evaluate changing conditions that occur through implementation of the Plan.

Note: Authority cited: Section 10733.2, Water Code.

Reference: 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 groundwater and related surface conditions, and yield representative information about groundwater conditions as necessary to evaluate Plan implementation.

(b) 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 groundwater and related surface conditions, and the interconnection of surface water and groundwater, with sufficient temporal frequency and spatial density to 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) Monitor impacts to the beneficial uses or users of groundwater.
- (3) Monitor changes in groundwater conditions relative to measurable objectives and minimum thresholds.
- (4) Quantify annual changes in water budget components.

(c) Each monitoring network shall be designed to accomplish the following for each sustainability indicator:

- (1) Chronic Lowering of Groundwater Levels. Demonstrate groundwater occurrence, flow directions, and hydraulic gradients between principal aquifers and surface water features by the following methods:
 - (A) A sufficient density of monitoring wells to collect representative measurements through depth-discrete perforated intervals to characterize the groundwater table or potentiometric surface for each 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. Provide an estimate of the change in annual groundwater in storage.
- (3) Seawater Intrusion. Monitor seawater intrusion using chloride concentrations, or other 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. Collect sufficient spatial and temporal data from each applicable principal aquifer to determine groundwater quality trends for water quality indicators, as determined by the Agency, to address known water quality issues.
- (5) Land Subsidence. Identify the rate and extent of land subsidence, which may be measured by extensometers, surveying, remote sensing technology, or other appropriate method.
- (6) Depletions of Interconnected Surface Water. Monitor surface water and groundwater, where interconnected surface water conditions exist, to characterize the spatial and temporal exchanges between surface water and groundwater, and to calibrate and apply the tools and methods necessary to calculate depletions of surface water caused by groundwater extractions. The monitoring network shall be able to characterize the following:
 - (A) Flow conditions including surface water discharge, surface water head, and baseflow contribution.
 - (B) Identifying the approximate date and location where ephemeral or intermittent flowing streams and rivers cease to flow, if applicable.
 - (C) Temporal change in conditions due to variations in stream discharge and regional groundwater extraction.
 - (D) Other factors that may be necessary to identify adverse 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, 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, as follows:

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

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

(1) Significant correlation exists between groundwater elevations and the sustainability indicators for which groundwater elevation measurements serve as a proxy.

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

(c) The designation of a representative monitoring site shall be supported by adequate evidence demonstrating that the site 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 review the monitoring network and include an evaluation in the Plan and each five-year assessment, including 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.

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

(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.

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

(e) Each Agency shall adjust the monitoring frequency and density of monitoring sites to provide 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 the following:

(1) Minimum threshold exceedances.

(2) Highly variable spatial or temporal conditions.

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

(4) The potential to adversely affect the ability of an adjacent basin to implement its Plan or 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, 10733.2, and 10733.8, Water Code

§ 354.40. Reporting Monitoring Data to the Department

Monitoring data shall be stored in the data management system developed pursuant to Section 352.6. A copy of the monitoring data shall be included in the Annual Report and submitted electronically on forms provided by the Department.

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 projects and management actions to be included in a Plan to meet the sustainability goal 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 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 projects and management actions proposed in the Plan with a description of the measurable objective that is expected to benefit from the project or 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.

(6) An explanation of how the project or management action will be accomplished. If the projects or management actions rely on water from outside the jurisdiction of the Agency, an explanation of the source and reliability of that water shall be included.

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

(8) A description of the estimated cost for each project and management action and a description of how the Agency plans to meet those costs.

(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 information and best available science.

(d) An Agency shall take into account the level of uncertainty associated with the basin setting when developing projects or management actions.

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 Adopted Plan

- (a) The Agency shall submit a copy of the adopted Plan to the Department for evaluation 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 materials submitted by the Agency on the Department's 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, 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 Department shall approve a Plan that satisfies the requirements of the Act and is in substantial compliance with this Subchapter, based on the criteria described in Section 355.4.
 - (2) 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 could be addressed by the Agency in a timely manner through corrective actions, which may be recommended by the Department.
 - (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.

- (ii) No time limit shall apply to address deficiencies to Plans submitted for low or very low priority basins.
- (3) Inadequate. The Department shall 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: Sections 10720.7, 10722.4, 10727, 10733, 10733.2, 10733.4, and 10735.2, Water Code.

§ 355.4. Criteria for Plan Evaluation

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 adopted Plan must satisfy all of the following conditions:
 - (1) The Plan was submitted within the statutory deadline, as applicable.
 - (2) The Plan is complete and includes the information required by the Act and this Subchapter, including a coordination agreement, if 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 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 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 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 considered.
- (5) Whether the projects and management actions are 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 its Plan or impede achievement of its sustainability goal.
- (8) Whether coordination agreements, if required, have been adopted by all relevant parties, and satisfy the requirements of the Act and this Subchapter.
- (9) Whether the Agency has the legal authority and financial resources necessary to implement the Plan.
- (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 10720.7, 10722.4, 10723.2, 10727, 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 to ensure the Plan, as implemented, remains consistent with the Act and in substantial compliance with this Subchapter, and is being implemented in a manner that will likely achieve the sustainability goal for the basin.
- (b) The Department shall evaluate approved Plans and issue an assessment at least every five years. 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.
- (c) The Department shall consider the following in determining whether a Plan and its implementation remain consistent with the Act:
 - (1) 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 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) 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 Department shall approve the implementation of a Plan that remains in conformance with the requirements of the Act and is 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 as follows:
 - (A) The Department shall identify deficiencies in the Plan as implemented, and may recommend corrective actions to address those deficiencies.
 - (B) The Department may consult with the Agency to determine the amount of 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.
 - (3) 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.
- (f) The Department may evaluate the implementation of a Plan at any time to determine whether the Plan is consistent with the objectives of the Act and in substantial compliance with this Subchapter.

Note: Authority cited: Section 10733.2, Water Code.

Reference: Sections 10728.2, 10733, 10733.2, 10733.4, and 10733.8, Water Code.

§ 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 related materials on the Department's website within 20 days of receipt.

(b) The Department shall provide written notice to the Agency if additional information is required.

(c) The Department shall review information contained in the annual report to determine whether the Plan is being implemented in a manner that will likely achieve the sustainability goal for the basin, pursuant to Section 355.6.

Note: Authority cited: Section 10733.2, Water Code.

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

§ 355.10. Plan Amendments

(a) Any amendment 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 amend a Plan at any time, and submit the amended Plan to the Department for evaluation pursuant to the requirements of this Subchapter.

(c) The Department shall evaluate the amended portions of the Plan and any new information that is relevant to the amendments or other Plan elements. Portions of the Plan that have not been amended will not be evaluated unless the Department 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 7. Annual Reports and Periodic Evaluations by the Agency

§ 356. Introduction to Annual Reports and Periodic Evaluations by the Agency

This Article describes the procedural and substantive requirements for 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 that occurred between multiple Agencies in a single basin, Agencies in hydrologically connected basins, and land use agencies.

(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: Section 10733.2, Water Code.

§ 357.2. Interbasin Agreements

Two or more Agencies may enter into an agreement to establish compatible sustainability goals and understanding 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, such as the following:

(a) General information:

- (1) Identity of each basin participating in and covered by the terms of the agreement.
- (2) A list of the Agencies or other public agencies or other entities with groundwater management responsibilities in each basin.
- (3) A list of 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) A common understanding of the geology and hydrology of the basins and the hydraulic connectivity as it applies to the Agency's determination of groundwater flow across basin boundaries and description of the different assumptions utilized by different Plans and how the Agencies reconciled those differences.
- (4) Sustainable management criteria and a monitoring network that would confirm that no adverse impacts result from the implementation of the Plans of any party to the agreement. If minimum thresholds or measurable objectives differ substantially between basins, the agreement should specify how the Agencies will reconcile those differences and manage the basins to avoid undesirable results. The Agreement should identify the differences that the parties consider significant and include a plan and schedule to reduce uncertainties to collectively resolve those uncertainties and differences.

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

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

Note: Authority cited: Section 10733.2, Water Code.

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

§ 357.4. 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 setting.

(b) Coordination agreements shall describe the 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) 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.

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

(f) 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 358.2 and determine whether it satisfies the requirements of this Section.

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

(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 10733.8, Water Code.

ARTICLE 9. Alternatives

§ 358. Introduction to Alternatives

This Article describes the methodology and criteria for the submission and evaluation of Alternatives.

Note: Authority cited: Section 10733.2, Water Code.

Reference: Section 10733.2, Water Code.

§ 358.2. Alternatives to Groundwater Sustainability Plans

- (a) The entity that submits an Alternative shall demonstrate that the Alternative applies to the entire basin and satisfies the requirements of Water Code Section 10733.6.
- (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) An Alternative submitted to the Department shall include the following information:
 - (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 include the following:
 - (A) 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) A copy of the proposed stipulated judgment.
 - (3) An Alternative submitted pursuant to Water Code Section 10733.6(b)(3) shall 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 continuous data from the end of that 10-year period to current conditions.
- (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 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.
- (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: Sections 10727, 10727.2, 10733, 10733.2, 10733.6, 10733.8, and 10737.4, Water Code.

§ 358.4. Department Evaluation of Alternatives

The Department shall evaluate an Alternative submitted in lieu of a Plan 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 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 complies with the objectives of the Act.

Note: Authority cited: Section 10733.2, Water Code.

Reference: Sections 10733.2, 10733.6, and 10733.8, Water Code.