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.

NOTE: This is an excerpt from the Groundwater Sustainability Regulations. Read the full regulations here:

https://water.ca.gov/LegacyFiles/groundwater/sgm/pdfs/GSP Emergency Regulations.pdf