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Subject: Revised Agricultural Water Measurement Regulation

Please see the attached amended Agricultural Water Measurement Regulation with changes provided by the Sacramento Valley members of the ASC.

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California Code of Regulations
Title 23. Waters
Division 2. Department of Water Resources
Chapter 5.1. Water Conservation Act of 2009
Article 2. Agricultural Water Measurement

§597. Agricultural Water Measurement [Is this reg addition really necessary since it simply restates other water code sections? While this is good background for the regulation itself, it seems redundant and an unnecessary code addition. Prefer to strike and have this as a SBX7-7 implementation summary]

Under the authority included under Paragraph 10608.48(i)(1), the Department of Water Resources shall adopt regulations that provide for a range of options that agricultural water suppliers may use or implement to comply with the measurement requirements in paragraph (1) of subdivision (b) of §10608.48.

For reference, §10608.48(b) of the California Water Code requires that:

Agricultural water suppliers shall implement all of the following critical efficient management practices:

(1) Measure the volume of water delivered to customers with sufficient accuracy to comply with subdivision (a) of Section 531.10 and to implement paragraph (2).

For further reference, paragraph (2) of §10608.48(b) of the California Water Code requires that agricultural suppliers:

(2) Adopt a pricing structure for water customers based at least in part on quantity delivered.

For further reference, §531.10 of the California Water Code require that:

(a) An agricultural water supplier shall submit an annual report to the department that summarizes aggregated farm-gate delivery data, on a monthly or bi-monthly basis, using best professional practices.

Note: Authority cited: Section 10608.48 (b), Section 531.10 Water Code. Reference:

§597.1. Applicability [Is this reg addition really necessary since these applications are in other water code sections? While this is good background for the regulation itself, it seems redundant and an unnecessary code addition. Prefer to strike and have this as a SBX7-7 implementation summary]

- a) Agricultural water suppliers that serve less than 10,000 irrigated acres are not subject to the SBx7-7 water measurement requirements. They remain subject to requirements of Section 531.10 of the Water Code if they deliver more than 2,000 acre feet of water or irrigate 2,000 or more acres of land.

- b) Agricultural water suppliers serving 10,000 or more irrigated acres but less than 25,000 irrigated acres are not required to implement the SBx7-7 water measurement requirements unless sufficient funding is provided specifically for that purpose. They remain subject to requirements of Section 531.10 of the Water Code.
- c) Agricultural water suppliers serving 25,000 irrigated acres or more shall be required to implement the SBx7-7 water measurement requirements and are subject to requirements of Section 531.10 of the Water Code.
- d) A wholesale agricultural water supplier that distributes or sells water to another water supplier (the receiving water supplier) for ultimate resale to customers is subject to the measurement regulations at the location at which control of the water is transferred to the receiving water supplier. It is not required to measure deliveries that the receiving water supplier makes to its customers. [Pending further work by DWR staff, this bullet will also clarify the applicability of measurement regulations to Joint Powers Authorities or other entities that act as agents to distribute water for USBR or DWR.]
- e) [Pending further work by DWR staff, this bullet will clarify the applicability of measurement regulations to agricultural water suppliers that provide water for ground water extraction
- f) Paragraph 10608.8 (d) also excludes from the measurement requirement any agricultural water supplier “that is a party to the Quantification Settlement Agreement, as defined in subdivision (a) of Section 1 of Chapter 617 of the Statutes of 2002, during the period within which the Quantification Settlement Agreement remains in effect.” [DWR staff to follow-up on which agencies are technically included in the QSA].
- g) Paragraph 10608.12(a) excludes the Department of Water Resources

§597.2. Definitions [Note of caution...once these definitions are inserted into the Water code they become defining unless limited to the applicability of the actual regulation, perhaps the following addition would be helpful]. The applicability of the definitions under this Section shall only apply to Section 597.3.

- (a) The terms used in this article are defined in this subdivision.
 - 1) “Accuracy” is defined as the range of measured flow rate relative to the actual flow rate, expressed as a percent. The percent shall be calculated as $100 \times (\text{actual value} - \text{measured value}) / \text{actual value}$.
 - 2) “Agricultural water supplier,” as defined in §10608.12(a), means a water supplier, either publicly or privately owned, providing water to 10,000 or more irrigated acres, excluding recycled water. “Agricultural water supplier” includes a supplier or contractor for water, regardless of the basis of right that distributes or sells water for ultimate resale to customers. “Agricultural water supplier” does not include the Department.
 - 3) “Best professional practices” means practices attaining and maintaining accuracy of measurement and reporting devices and methods.

- 4) “Community conveyance system” is a lateral system not owned, maintained or otherwise controlled by the water supplier.
- 5) “Customer” means (DWR staff to follow-up on this definition).
- 6) “Delivery point” is the location at which the agricultural water supplier transfers physical control of irrigation water to a customer or group of customers. Delivery points can include farm-gates, turnouts to a community conveyance system, or turnouts to another water supplier.
- 7) “Farm-gate” means the point at which water is delivered from the agricultural water supplier’s distribution system to each of its customers. [§531(f)]
- 8) “Ground water recharge” is the mechanism by which surface water moves from the land surface, through the topsoil and subsurface, and into de-watered aquifer space, or through injection of water directly into the aquifer by wells.
- 9) “In house built devices” are those devices that are manufactured by an entity other than a licensed manufacturing business.
- 10) “Lateral” is a portion of an agricultural water supplier’s distribution system that directly feeds multiple farm-gate turnouts and is generally supplied from other primary or secondary canals or pipelines...
- 11) “Measurement device” is the means by which the water supplier measures the water delivered. Measurement devices generally fall into two categories: totalizing and non-totalizing. Totalizing devices provide a direct measurement of volume delivered, and include most meters, such as propeller meters. Non-totalizing devices require a combination of measurements, such as flow rate and duration or head difference and duration, in order to determine the volume of water delivered.
- 12) “On-site built devices or structures” measurement devices that are built in-situ on water conveyance system.
- 13) “Recycled water” is defined in subdivision (n) of Section 13050 as water, which as a result of treatment of waste is suitable for a direct beneficial use or a controlled use that would not otherwise occur and is therefore considered a valuable resource.
- 14) “Standard” is the criterion that establishes the accepted accuracy levels.

Note: Authority cited: Section 10608.48, Water Code. Reference: Sections 10608.

§597.3 Agricultural Water Measurement Range of Options Regulation

- a) **Eligible Measurement Devices.** Agricultural water suppliers shall measure water delivered using devices that can be shown to be accurate within $\pm XX\%$ by flow rate in the laboratory or by in-field certification following installation. The manufacturer’s accuracy may be used for off-the-shelf proprietary devices installed in accordance with

the manufacture's specifications or custom-built devices that are certified by licensed or professional testing organizations or professional engineers.

b) Measurement Location. Measurement of flow rate using devices approved in Section 597.3(a) shall be made at the point of delivery to water supplier customers or at a point upstream of one or more customers provided that the supplier provides the following information in its Agricultural Water Management Plan:

- i. Information documenting that measurement under section 597.3(a) is not technically feasible, legally allowable, or provides unreliable measurements for reporting and pricing.

Water suppliers may include a technical evaluation of the relative merits associated with farm gate and lateral-based measurement, including an assessment of the probable error associated with each measurement approach, supporting the determination that this option is likely to provide more accurate accounting of customer deliveries than at the customer point of delivery.

- ii. The methodology the supplier will use to apportion the quantities measured into volumes delivered to individual customers for purposes of reporting aggregated farm delivery and adoption of a water pricing structure based at least in part on volume delivered. This methodology must:
 1. Account for differences in water use among individual customers, using information that may include, but is not limited to, irrigated acreage, crop, and irrigation system
 2. Be formally approved by the supplier's governing body (e.g., Board of Directors, Proposition 218 process)
 3. Accommodate protests of allocation methods and resulting volumes while assuring that all measured delivery is accounted for.

c) USBR Water Supplier

An agricultural water supplier that has a current, approved United States Bureau of Reclamation Water Management Plan prepared for compliance under Bureau of Reclamation Mid-Pacific Region's Conservation and Efficiency Criteria (Criteria) shall be deemed in compliance with the measurement requirement, provided that all irrigation water delivered by that supplier is delivered through devices that comply with Reclamation's measurement accuracy standards outlined in the Best Management Practices of the Criteria and is consistent with the metering requirement in CVPIA Section 3405(b).

- d) **Installation, Operation and Maintenance of Agricultural Water Measurement devices.** All measurement devices, shall be correctly installed, maintained, inspected, and monitored. Devices shall be appropriate for the site and installed and maintained in a manner consistent with the manufacturer's recommendations, industry standards and best professional practices.

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