

Rationale for Recommended Changes to March 18th Draft SBx7-7 Measurement California Code of Regulations

The following provides background information regarding the proposed changes to the March 18th draft of the SBx7-7 Water Measurement regulations, circulated by the Department of Water Resources (DWR) on March 19th. It is important to note, that measurement is ultimately not the purpose of 10608.48(b), rather measurement is but one tool to allow agencies to comply with SBx7-7's reporting and pricing structure requirements.

The group of Agricultural water supply agencies submitting these comments agree there are three critical areas that need to be resolved to facilitate implementation:

1. Implementation deadline is impractical.
2. Accuracy standards are too high and difficult to interpret.
3. Certification and Performance Requirements are onerous.

Below is a brief discussion of each issue, and proposed modifications designed to address these concerns.

Implementation Deadline

The legislation states that by July 31, 2012, agencies must comply with 10608.48(b), which will be impossible for most agencies. To fully implement measurement practices to establish a pricing structure, based at least in part on the quantity delivered, a reasonable time period must be given for compliance to allow sufficient time to incrementally address the myriad of issues compliance requires including:

- policy updates,
- engineering studies,
- CEQA analysis (pursuant to section 10851),
- development of pricing structures based in part on quantity delivered,
- public outreach
- Proposition 218 elections,
- procuring financing for facility modifications,
- measurement device installation, and
- implementation of measurement verification and pricing programs.

The attached sample schedule illustrates the difficulty in accomplishing all of the above tasks prior to the implementation deadline. Unless agencies existing facilities and pricing structures meet the requirements, implementation by July 2012 is simply not viable, both practically and economically.

We understand that DWR counsel has determined that the date is specific in the legislation and no extensions or phasing is allowed. However, our concern is that although agricultural water suppliers will be in the process of complying, it is not possible for most agencies to meet the requirements in the draft regulation by the July 31, 2012 deadline.

It is important to note that urban agencies, when faced with similar measurement and pricing requirements (established by the enactment of AB 2572 in 2004), were given up to 20 years to comply. Moreover, they were given at least one year, beyond when the meters were required, to implement volumetric pricing if they were converting from non-volume based billing to volume based billing. The same flexibility needs to be provided to Agricultural water suppliers, enabling agencies to make the necessary facility modifications, and provide time for their customers to adapt to the measurement and pricing changes.

To address these concerns, the following modifications are needed:

1. The regulation should include some non-compliance language such as 10852, or language that would allow agencies to incorporate a compliance program that could be included within the Ag Water Management Plan.
2. The regulation should include language that would make compliance with measurement exempt from CEQA.

Accuracy Standards

DWR has taken great effort to write accuracy standards that are "flexible" with the intent that over time, agencies would install more accurate, and likely, more expensive devices, allow for manufactured or in-field constructed devices, and allow for multiple measurement locations. We appreciate the effort by staff to provide these alternatives and prepare Table 1 (Device Flow Accuracy Values) as an initial assessment of available devices.

The current approach seems to rely on the premise that measurement at a location upstream of multiple customer delivery points is more accurate than at a turnout. This seems to have come from a misinterpretation of information provided earlier in the process. The concept evolved from comments made by some agencies that deliver water to rice growers, involving delivery of very high flows at the beginning of the season, followed by much lower "maintenance" flows through the remainder of the growing season. These widely ranging delivery rates provide a significant challenge for accurate measurement, particularly at the turnout. Devices that are accurate at measuring high flows at the turnout are not able to accurately measure the low maintenance flows occurring the remainder of the season. Therefore, one measurement device, located at the turnout, will not provide accurate measurement for the extreme range of flows experienced in some areas. It was noted that devices located at upstream locations could be used to accurately measure the aggregate flows,

which would fall within a narrower range relative to the selected device performance range. (The aggregate flow would then be apportioned among the downstream growers.) The point is that the aggregate measurement is “more accurate” relative to poor measurements that would otherwise need to be made at the farm delivery; however, the aggregate device is inherently no more accurate than if it were used at a single farm turnout under suitable conditions. There are likely other similar scenarios where it is not viable to measure at the turnout, but where measurement in the upstream lateral will more accurately quantify the downstream deliveries. However, it should be noted, that the lateral accuracy for the lower flows may not be any more accurate than the turnout measurements at higher flows. Enabling an upstream measurement point allows flexibility for agencies to determine the best measurement approach to meet the measurement requirements, at the least cost, while providing for the ability to measure the variety of flows accurately.

Additionally, the regulation has become overly complex to interpret. As an example, one agency provided this regulation to their field staff to see how it would be implemented and immediately questions arose as to what devices could be located at what locations and what accuracy standard from the Table 1 should be used¹. While the intent of the regulation and Table 1 was to allow for options, those removed from the A2 process and discussions, will find it difficult to select devices or structures that would comply with the requirements.

Finally, the regulation focuses inappropriately on individual device accuracy to the exclusion of addressing average device accuracy. We believe that this results from a singular focus on measurement as it relates to adoption of volumetric pricing, the assumption apparently being that every measurement device must comply with an accuracy standard to ensure equitability among customers. In our view, the degree of variability in measurement accuracy among devices is purely a supplier’s consideration, to be addressed in conjunction with customers who will demand equitability in water billing among themselves. This is how it is addressed now by many suppliers who have successfully implemented volumetric pricing. Rather than addressing individual device accuracy, the standard should apply to average accuracy among devices in order to ensure that sufficiently accurate information is reported for use for a variety of public and private purposes. As it is currently written, the regulation does not necessarily ensure that aggregate deliveries will be measured accurately.

To address this issue, it is suggested that:

1. A single suite of accuracy standards be applied, regardless of the measurement location (i.e. to either the delivery point or upstream of the delivery point), and that it enable a range of devices to be used at any location. Based on Table 1 values, it is

¹ For example, for a new manufactured device on a lateral a 3% accuracy standard is required. According to Table 1, only a magnetic or acoustic meter (\$15,000 device cost) would be acceptable. The regulation should not be so specific as to limit devices or manufacturers. Another example is Table 1 states that metergates are 2.5% -6% accurate but if opened to more than 70%, the accuracy is poor. Since most gates are opened fully during irrigation, is this meter acceptable?

suggested that the existing range of standards for the customer “delivery point” (under §597.3(a)) be used for all measurement locations.

2. The accuracy standards should apply to average device accuracy, not to individual devices.

Certification and Performance Requirements

The certification and performance requirements in the regulation are too complicated, expensive, and burdensome to water agencies, especially as it relates to reporting to DWR. Again, the purpose of measurement is to serve as a tool for water use reporting (§531.10) and implementing pricing, based in part on the quantity delivered. Additionally, as discussed numerous times in the ASC and A2 meetings, with water agencies implementing new pricing structures, based at least in part on the quantity delivered, it will in fact be the landowners and water users that will continuously monitor device accuracy and billings, not DWR through the Agricultural Water Management Plan reporting requirement. In the end, the question must be asked, who is the Certification and Performance Requirement ultimately protecting?

The regulation should be simplified to allow a variety of ways to determine the accuracy of the devices. For example, literature accuracies could be used to determine the potential device accuracy. Table 1 is a good example of a literature search to evaluate the appropriateness of the various devices in the field. Alternatively, a typical device could be certified, and if that device were installed in multiple locations, that single certification could apply to all locations. Additionally, since there will now be volumetric calculations, agencies should be allowed to use volume variations as a method to evaluate device performance not random selection of devices and landowner questions/complaints.

As an example regarding complexity, 597.4(a)(iii) states,”the supplier may develop its own sampling plan using accepted statistical calculations for determining a sample size required to achieve a 95 percent confidence interval of +/- 0.1 on the proportion of devices meeting the accuracy standard.” We do not understand what this means or how it is to be implemented?

The regulation should not be unnecessarily burdensome to “demonstrate” compliance. It should, instead, be developed to meet the measurement requirement, leaving the individual Agricultural water supplier the flexibility to develop certification and performance criteria to meet their individual agency and customer needs. Compliance should be evaluated and summarized in the Agricultural Water Management Plan.

To address these concerns, while still meeting the intent of the legislation, the regulation should be modified to:

1. Allow Agricultural water suppliers to develop their own sampling plan using accepted statistical theory, or other methodology which provides verification of accuracies.
2. Allow Agricultural water suppliers to summarize the devices used and how they comply with the regulation in their Agricultural Water Management Plans rather than submitting all certification documentation in the plan.
3. Certification by a registered Professional Engineer appears to be excessive for in-field verification, if the individuals have been properly trained in the use of the field testing equipment. If it is determined through implementation that using trained staff is not sufficient, individual agencies will implement additional measures, or adjustments to their practices to address the issue and meet the need.
4. Allow Agricultural water suppliers to document in their Agricultural Water Management Plan how they are complying with the requirements.
5. Suggest that Agricultural water suppliers maintain compliance records for a period of 5 years.

**Example Timeline for Implementation of
SBX7-7 Measurement and Pricing**

Date	Action
May 2011	Final Measurement Regulation available. Evaluation of existing facilities.
June – July 2011	Prepare design, location, and specifications for meter locations, include in budget, identify funding source
Jun – Aug	Develop pricing alternatives
Aug, 2011	Hold Budget meetings with Landowners, receive comments
Sep 1, 2011	Set Final 2011-2012 Annual Budget
Nov –Dec, 2011	Hold Landowner/Public Meetings on Rate Structure
January 1, 2012	Begin 45 day mandatory Prop 218 Notice period
Jan 15 – Mar 1, 2012	Begin 6 week construction period
Feb 15, 2012	Hold Final Proposition 218 Hearing, Set Rates
March 1, 2012	2012 Water applications/payments due
March 1, 2012	Begin irrigation season
July 31, 2012	Date set forth in 10608.48(a)

Note – The above example timeline is an attempt to illustrate the various actions needed before implementation is complete. It does not include CEQA, which if required, could take substantial time to complete before construction can be

implemented. The example clearly shows that there is not sufficient time to implement the required actions before the July 31, 2012 deadline.

USBR Water Conservation Plans

SBx7-7 re-implements Water Code section 10828. Section 10828, subdivision (b), states that any Agricultural water supplier that must submit a water conservation plan to USBR pursuant to either CVPIA or RRA need not comply with the scheduling requirements under SBx7-7, but should instead comply with the scheduling requirements in the CECS. Under the CECS scheduling requirements, a “contractor” must submit a revised water conservation plan every five years. (See Section 8 of the 2008 CECS.) The CECS further provides that a “contractor” must use the most recently adopted CECS when submitting a new or revised water conservation plan. (*Emphasis added.*) An argument may be made under the plain language of section 10828, in conjunction with the criteria set forth in the CECS scheduling requirement, that an Agricultural water supplier submitting a water conservation plan is effectively required to use the most recently adopted CECS. A supplier attempting to satisfy both USBR requirements and DWR requirements under the current draft language of CCR 597.1(h) would be unable to do so because DWR requirements, referencing only the 2008 CECS, will likely be different than the USBR requirements, which change based on revisions made to the CECS.

As a solution, we respectfully suggest DWR remove subdivision (h) of CCR 597.1 in its entirety, as that section merely confuses what is already clearly addressed in Water Code section 10828, or, alternatively, revert to the draft language, which mirrors the requirements under section 10828 of the Water Code.