>>> Dudley & Shannon McFadden <<u>dudshan@wwdb.org</u>> 11/17/2011 11:02 PM >>> I have two comments on the proposed supplemental statement of water diversion and use for 2012. My two comments both refer to Section 4d, Water Measurement, on that form; they are:

(1) regarding part b, and(2) regarding part d.

These comments are respectfully submitted by myself as a practicing water resources engineer and not by my employer.

Sincerely,

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In the proposed supplemental SWDU form, section 4d, Water Measurement

\*(1) Comment Regarding: Part b, Indicate who installed your measuring device (check all that apply)\*

Any organization can designate an employee as a "hydrographer" regardless of the qualifications of such a person. While I wish that there was, there is at present no certification or licensing means for a "hydrographer." On the other hand, the other options listed on the form do have some type of official recognition or vetting. Therefore, I suggest eliminating the title "hydrographer" as an option on this section. Someone employed under the title of "hydrographer" ought to have additional official recognition of their qualifications, such claiming AWWA certification or by asserting to follow USGS techniques. The person signing the SWDU form attests to this. Merely holding a position named "hydrographer" provides the state with no assurance.

\*(2) Comment Regarding: Part d, enter the date that your measuring device was last calibrated\*

\*\* Any measuring device cannot be trusted if is not calibrated. I think the option "unknown" should not be allowed.

Some may view this requirement as too onerous, perhaps by reading too much into the term "calibrate." Certainly, passive devices such a weir plate aren't calibrated in the same fashion as mechanical or electrical devices. But the act of installing an engineered weir by a person with appropriate qualifications is essentially the same as calibrating it. Many devices acceptable for water measurement under these regulations aren't precision devices to begin with, but a diverter can follow his/her own professional judgment and elect to trust the manufacturer. In those cases, the date the device was purchased new from the factory would serve as the calibration date. Surely this less strict application of "calibrate" falls within the legislative intent.

Therefore, I don't think it should be an option to specify "unknown" for the calibration date. A device with unknown calibration is no better than estimating. It is unfair to a diverter working to comply with the regulations, when his/her neighbor simply can check "unknown" on the form and then divert more than declared. Providing this check box on the form implies that the Board considers a device with unknown calibration to be an acceptable way to measure water.

In summary, diverters should use a calibrated device, or a new one fresh from the manufacturer, or a device carefully installed by AWWA or USGS experienced persons. Given this more generous interpretation of "calibrated" I think requiring compliance is reasonable and no "unknown" calibration date option needs to be provided.