

## **OCTOBER 6, 2015 MEETING NOTES**

### **REVIEW OF CONCEPTS - MEASUREMENT & REPORTING EMERGENCY REGULATIONS**

#### **GENERAL OVERALL COMMENTS**

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The meeting started with a good discussion of the purpose of the regulations, what data needs are unmet by the current reports and what types of questions remained unanswered by the current system. Staff described the need for both long-term management of the statewide water rights system as well as the need to have accurate and timely data for dry year/drought response. Staff also described that data availability and stream system management needs vary widely throughout the state, and that the group brought together people with a wide range of experiences. The group discussed data weaknesses, public perception and data management. The notes below reflect the input provided by participants under each of the concepts discussed.

#### **REPORTING**

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**Concept 1:** What is a reasonable period of time for diverters to organize and electronically submit the information required on the annual reports considering the need to maximize the use of the data for dry year management purposes?

#### **Meeting Notes:**

- Provisional data from USGS gages can delay submittals – possible errors in provisional data need to be corrected before submittal.
- Several speakers identified the need for adequate time to tie the diversion amounts to the water right. Dividing up diversion between multiple water rights – more difficult for complex projects.
- Some areas not physically accessible early in the year requiring a delay in reporting.
- Suggestion that the SWB consider water year reporting (Oct-Sept) instead of calendar year.
- Several speakers emphasized that return flow or consumptive use data is useful, in addition to diversion information.
- Several expressed that reporting frequency, accuracy and size requirements should depend on local watershed conditions.
- Suggestion that provisional monthly diversion data for drought response could be supplied initially followed by annual reporting with water rights specified.
  
- Overall the group felt that moving the current July 1 reporting date up would be difficult if reporting remains on a calendar year cycle.

#### **REPORTING**

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**Concept 2:** During the drought, some diverters have been required to report water use every month. Under what conditions should monthly or more frequent reporting be required?

#### **Meeting Notes:**

- Stakeholders asked what the SWB had done with the monthly data water users submitted during the past year. Was it useful? In the right format? Staff indicated it was very useful in developing water availability analysis.
- Suggestion that monthly data submittals could be more basic than the annual report submittals – monthly submittals would report amount diverted without regard to water right type.
- Require monthly data in drought emergency or when real-time data is needed.
- Data could be recorded daily or monthly but only reported when needed.

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- More frequent reporting and monitoring – in both normal and drought years – improves management of the resource.
  - Reporting frequency could be based on the size of the diversion relative to the amount of water present in the watershed.
  - Some diversion accounting will be difficult to do on a monthly basis (may be difficult to assign diversions to a specific water right, as well as distinguish stored water versus direct diversion).
- Real-time data is provisional for those relying on USGS gages.
- Could end up with two sets of conflicting diversion data if changes are made to the provisional data (e.g. rating shift).
- Real-time telemetered data valuable for drought management – not general water rights accounting.
- Smaller diversions (ditches, siphons and gravity diversions) are difficult and expensive to measure. Current reports do not account for return flows making the data less useful and resulting in an incomplete water management picture.
- Aggregate data may be sufficient for diversion reporting, but not for enforcement against an individual water right holder.
- Because of the cost of real-time measurement, there needs to be a good reason for whether and where it should be required.
- Measurement standards should be affordable.
- The “not locally cost effective” provision was overused. General suggestion that measurement should be the standard, not the exception.
- Some diverters, such as public water suppliers currently report daily diversions to the Division of Drinking Water.
- There are currently some very inexpensive metering devices available that can achieve daily and hourly needs.
  
- Real-time diversion data should be the long-term goal. Telemetry is being implemented for some large diverters currently at significant cost.

**REPORTING**

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**Concept 3:** What information should be submitted on the annual reports for diversions made under registrations for small domestic, small irrigation, or livestock stockpond use, or certificates for livestock stockpond use?

**Meeting Notes:**

- Look at standard form for small irrigation use registration as a model for other types of registrations/certifications.
- Could use the current form that is used every 5 years and just require annual submittal.
- Reporting frequency may be different based on season of diversion – ponds filled during the wet season might report less frequently than those diverting water during the dry season.
- Given the small size of these diversions, SWB should consider delaying implementation of this idea until the utility can be demonstrated.

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**REPORTING**

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**Concept 4:** Should the reporting requirements for conservation credits or alternative supply credits (Water Code Sections 1010, 1011, and 1011.5) be required on a monthly basis?

Should a water right holder be required to describe the method or device they use to determine a conservation credit or alternative supply credit?

**Meeting Notes:**

- Concern was expressed that diverters may fill in the same amount for every month on the required annual report.
- Don't want to require data that will not be useful. If there isn't a clear need, don't add to the difficulty of the reporting by requiring additional work.

**REQUIRED MEASUREMENT**

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**Concept 5:** When a diverter exercises multiple water rights at the same point of diversion, should the diversion threshold be determined by the quantity of water diverted under each individual right or the combined diversion amount under all of the rights? The combined water rights could include permits, licenses, claims made under Statements, registrations, and certificates.

**Meeting Notes:**

- Threshold based on the combined diversion prevents the loophole of a water user claiming individual rights that are all below the threshold.
- Diversion amounts from the same source or for a specific place of use should be considered together for the threshold.
- Need to account for technology and cost.
- The PUC currently requires water suppliers to measure each point of diversion.

**REQUIRED MEASUREMENT**

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**Concept 6:** When a diverter has multiple points of diversion, should the diversion threshold be determined by the quantity of water diverted from each individual point of diversion or the combined diversion amount from all of the points of diversion?

**Meeting Notes:**

- Total diversion should be used when looking at the threshold.
- Tie the diversion amount to the place of use.

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**REQUIRED MEASUREMENT**

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**Concept 7:** Should measuring devices or methods be required for holders of small irrigation registrations? Should measuring devices be required for holders of domestic registrations, livestock registrations, small irrigation registrations, or stock pond certificates?

**Meeting Notes:**

- The value of measuring the small diverters needs to be determined by the cost of measurement and the benefit of the information reported.
- Small irrigation diversions can be a significant impact in small or environmentally sensitive areas, such as coastal streams. Perhaps measurement should be tied to watershed characteristics.
- Where inexpensive measurement solutions are available, they should be used.
- It is unclear what the benefit of measurement is for some small domestic and stock ponds. Measurement may be warranted in specific areas based on local conditions.
- Consider allowing measurement methods that are less expensive or less accurate for these types of small uses.

**REQUIRED MEASUREMENT**

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**Concept 8:** Should measuring devices or methods that are approved as meeting the existing requirements of other state and federal agencies be grandfathered in?

**Meeting Notes:**

- Current measurement requirements include:
  - FERC license requirements.
  - PUC has requirements (General Order 103a, and Title 22)
  - BOR contractors – devices installed and maintained by the Bureau.
  - DWR has significant regulatory process – consider if SWB could adopt a state standard.
  - USGS has rigorous standards.
- Given the number of current governmental measuring standards, the group suggested review of the requirements and grandfathering in devices as much as possible.

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**REQUIRED MEASUREMENT**

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**Concept 9:** Should the measurement requirement apply to all diversion over 10 acre-feet per year with an allowance for exceptions, subject to approval, for diversions up to 25 acre-feet per year?

Should the regulation specifically carve out watersheds or circumstances in which a 25 acre-foot threshold would apply? If so, in what areas of the state, or under what circumstances, should the diversion threshold be established at 25 acre-feet per year?

**Meeting Notes:**

- No one requirement may fit all situations.
- Timelines for compliance should consider the size of diversion and the characteristics of the watershed that the diversion is located in.
- Staggered implementation of the measurement requirements could lead to increased compliance.
- The application of the measurement requirement should consider the difficulty and cost in installing measuring devices and the relative size of the diversion to the watershed.
- The size of a diversion doesn't always relate to the cost of the measurement device.
- Different accuracy standards should be considered for smaller diversions.
- Should evaluate measurement methods commonly used by water diverters and determine if they are sufficiently accurate, and if not, why not.

**COMPLIANCE AND ALTERNATIVES**

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**Concept 10:** Collaborative measurement may provide for greater efficiency. What should the process be for submitting, reviewing, approving, and evaluating a collaborative measurement plan?

**Meeting Notes:**

- Collaborative measurement must allow for determination of what the individual water users are diverting, and under which water right.
- Water users should be encouraged to work together. Staff should have the ability to work with diverters to implement collaborative solutions.
- Give deputy director authority to determine what is acceptable based on plans submitted to the SWB.
- Need flexibility in the regulation to allow for collaborative processes to develop over time.
- Need to be careful so that useful information is not lost when water users go to combined measurement.
- Changing points of diversion can be an expensive and time-consuming process, and the permitting process must be considered for a variety of collaborative types of measurements.
- Need to set criteria for collaborative measurement that ensure goals are met.

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**COMPLIANCE AND ALTERNATIVES**

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**Concept 11:** Under what circumstances would strict compliance with the measurement requirements be considered infeasible, unreasonably expensive, unreasonably affect public trust uses, or result in the waste or unreasonable use of water?

**Meeting Notes:**

- Diffuse inflow and flow from small streams into reservoirs or other systems can be difficult to measure.
- If a measuring device is not practical, diverters should have the ability to propose an alternative method.
- Reporting should allow for exemptions and alternate methods. Current reporting forms do not allow an explanation of what methodologies are being used.
- Guidelines should be developed for determining what is too expensive or infeasible, given different situations and different public trust needs.
- Exemptions should not become the standard.
- SWB should create the benchmark and then water users should propose alternatives that reasonably meet objective. A process should be developed for the SWB to determine if the alternative is acceptable.
- Rate of diversion to storage can be difficult to determine and may be a circumstance where alternatives can be considered.
- Time should be built into the regulation to allow for the installation of measurement devices that may be subject to permit requirements of other agencies (CDFW/ACE).

**COMPLIANCE AND ALTERNATIVES**

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**Concept 12:** What reasonable alternatives should be considered for complying with the measuring device requirements if strict compliance is infeasible for the reasons state above?

**Meeting Notes:**

- Alternatives should be tied to the need for the accurate information or the impact of the diversion on the watershed.
- Consider a sliding scale for measurement accuracy based on watershed characteristics and the relative size of the diversion to the overall amount of instream flow.
- Need to understand that field accuracy will be different than lab accuracy for most measurement devices. Flow meters are fairly standard, but many other types of measurement must account for field installation.
- Measurement by any device or method should be both accurate and repeatable.
- Look at existing methods which are commonly used.
- Need a process for people to submit reasonable alternatives which includes the relative factors to be considered, including accuracy and repeatability.

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**INSTALLATION OF MEASURING DEVICES**

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**Concept 13:** Under the new legislation, the measurement requirements could go into effect on or after January 1, 2016. What is a reasonable amount of time for diverters to install measuring devices?

**Meeting Notes:**

- The regulation should say when measurement needs to be verified and installed.
- Some particular types of measurement will take time to implement (e.g. gages on streams, devices with permitting issues, devices with associated rating curves).
- Should consider allowing for interim and longer term plans to come into compliance.
- People should report what device or method they are using.
- Implementation could be staggered based on size of diversion or location (priority watersheds).
- Need a year or two to get water users up to speed. Will take time to educate the water users.
- Some water diverters may have special challenges such as PUC approval.

**INSTALLATION OF MEASURING DEVICES**

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**Concept 14:** Should any specific groups of water right holders be allowed additional time to install a measuring device?

**Meeting Notes:**

- (See answers to concept 13)

**INSTALLATION OF MEASURING DEVICES**

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**Concept 15:** What types of professionals or other individuals should be allowed to install or maintain a water measuring device?

**Meeting Notes:**

- Concern that regulations will create a cottage industry with additional costs to diverters. Suggested that the SWB wait and see if we need to specify credentials at a later date.
- Certification process should not add cost or burden to the water user that is not appropriate.
- Ranch managers or other field staff could be capable of installing many of the measurement devices. If needed, performance certification by a licensed engineer after a specific implementation time frame could be used.
- One alternative is to require certification of installation/accuracy based on the size of diversion, with larger diversions requiring additional assurance of installation and accuracy performance.
- Installation form could be signed under penalty of perjury to ensure compliance.
- Auditing could be used as a means of verifying compliance.
- Different measurement methods may have a different certification process.
- Regulations should give the diverter latitude in how to comply.
- SWB could require certification by a professional when device/method appears suspect.
- Some diversion points are easier/more accurate to measure (open channel versus full pipe flow).

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**INSTALLATION OF MEASURING DEVICES**

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**Concept 16:** Should a certification process be required for existing measuring devices (installed prior to January 1, 2016) to ensure they meet reasonable accuracy standards?

**Meeting Notes:**

- (See answers to concept 15)

**INSTALLATION OF MEASURING DEVICES**

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**Concept 17:** What types of professionals or other individuals should be allowed to certify the accuracy of and evaluate the implementation of measuring device alternatives?

**Meeting Notes:**

- (See answers to concept 15)

**OTHER KEY ISSUES**

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**Concept 18:** What other key issues you would like to see addressed in the regulations?

Do you have any other thoughts or comments related to the measurement and reporting requirements authorized under Senate Bill 88?

**Meeting Notes:**

- SB88 language on hourly reporting is onerous. Look to other states to see how they implement measurement. Arizona requires data to be retained for three years, but not necessarily submitted unless requested.
- Hourly data is a problem when only provisional data is available.
- Change in storage (or diversion from storage) not practical/useful on an hourly rate when there is no more seasonal inflow.
- Several stakeholders represent a variety of diverters with varying levels of experience. Consider getting focus group feedback. Public education and outreach for the regulation development and implementation.
- Several stakeholders offered to provide future input or testing of forms during regulation development and implementation.
- Measurement/monitoring can help water users gain a better understanding of their diversion/water right.