

# EXECUTIVE SUMMARY

## Staff Proposal – Implementation Approach for Agricultural and Urban Water Use Measurement

### The Issue

The August 2000 CALFED Record of Decision recognized that appropriate measurement can play an important role in effective water management and directed the development of policies to improve measurement of water use in California.

Over the past two years, the California Bay-Delta Authority (Authority) convened an independent scientific review panel, two ad hoc stakeholder work groups, and numerous technical and public workshops to identify critical water use measurement gaps and needs related to overarching state and federal water management objectives. The findings of these efforts paint a picture of a system struggling to and falling far short in adequately assessing water use in California. Key failings include inconsistent and redundant state requirements and incomplete and incompatible measurement and reporting of crucial water use data by both local water suppliers and the State.

These failings place an unnecessary burden on local water suppliers striving to comply with oftentimes conflicting or redundant standards. More disturbingly, they undercut the State's ability to wisely manage its increasingly limited water resources and make important long-term investment decisions such as constructing new surface storage facilities.

### Summary of Proposed Actions

Authority staff has developed what it believes to be a balanced and necessary package of actions related to appropriate measurement that would collectively make important contributions to the State's overarching water management needs. Key elements include:

- *Development of database and reporting standards:* This would involve the development and maintenance of a coordinated water use database. It would also entail the development of associated data collection and reporting standards and protocols. This new data management system would combine existing reporting requirements and eliminate redundant reporting.
- *Measurement of urban service deliveries:* This would require urban water suppliers above a certain size threshold to measure service water deliveries. This requirement would affect the approximately 7% of urban water suppliers not already measuring service water deliveries. In cases where retrofitting is not locally cost effective, state grant funding would be provided.

- *Reporting of aggregate farm-gate delivery data:* This would require agricultural water suppliers above a certain size threshold to report aggregate farm-gate delivery data. This would impact all affected water suppliers, as this is a new requirement.
- *Measurement and reporting of agricultural diversions:* This would require agricultural water districts and individual diverters above a certain size threshold to measure diversions using the best available technologies and report the data annually to the State. The measurement requirement would affect about 20% of agricultural water suppliers; the increased reporting requirement would impact all affected agricultural water suppliers.
- *Measurement of crop consumption and net groundwater usage:* This would upgrade the State's methods for measuring crop consumption and net groundwater usage. This action would have no impact on locals but would drastically improve the State's ability to project water use.
- *Ongoing research and adaptive management:* The State would undertake a research and adaptive management program to ensure continued effective measurement by utilizing the latest information on emerging technologies and shifting economics.

Several of these actions – reporting of agricultural farm-gate deliveries, increasing the frequency of reporting agricultural diversion data, requiring measurement of service meter deliveries, and changing the format for reporting urban water use data – may necessitate legislation action.

### **Rationale**

While discussions to-date suggest there is support among diverse stakeholders for many of the actions called for in this proposal, some elements of this package are not supported by all stakeholder groups. Authority staff nevertheless believes this proposed package of actions is both necessary and appropriate for the following reasons:

- ***Results in meaningful change.*** The actions outlined above would dramatically improve the ability of state water managers to resolve disputes over Bulletin 160 projections and better inform decisions on future investment needs, including new storage.
- ***Represents a balanced package.*** The actions outlined above represent a significant departure from “business as usual” in both the agricultural and urban sectors and would reap benefits across all water uses. Both efforts include changes that would impact and potentially benefit all users. Both efforts would demand significant financial commitments. And both efforts

#### *Agricultural vs. Urban Water Use*

*The package proposed here does not always recommend parallel actions across agricultural and urban water use. These differences – most notable in end-user measurements – are due to important differences in the way the two systems work. Perhaps the most fundamental difference is their delivery systems. Urban water is available on-demand – a characteristic that makes it essential to track end-user deliveries with a recording measurement device. Agriculture end-users, in contrast, take their water only periodically – a practice that allows for a variety of methods (some*

would embed a significant enough shift from current policy to require legislative action (farm-gate for agriculture, service meters for urban.)

- *Minimizes impacts to locals.* The package of actions is designed to meet state needs in a manner that minimizes impacts to locals. Proposed actions include cost-effectiveness and size exemptions; in many cases, funding and technical assistance is also provided.
- *Puts forward fiscally realistic options.* Authority staff is mindful of the State's current fiscal realities and has tried to put together a cost-effective package.

### Cost Summary

The table below summarizes preliminary estimates of the costs associated with this staff proposal. Authority staff will continue to refine cost projections, as necessary, to inform future deliberations.

<b>Preliminary Cost Estimate</b>				
<b>Action</b>	<b>Ag (\$Million/year)</b>		<b>Urban (\$Million/year)</b>	
	<b>Local</b>	<b>State</b>	<b>Local</b>	<b>State</b>
Develop and maintain state database and protocols	0	0.3	0	0.3
Measure and report water sources	0.4	0	0	0
Measure and report water deliveries	0.7	0	16.7 (C. Valley purveyors)	26.0
Groundwater net usage and crop consumption	0	3.0	0	0.5
Research and adaptive management	0	1.8	0	1.8
<b>Subtotal</b>	<b>\$1.1</b>	<b>\$5.1</b>	<b>\$16.7</b>	<b>\$28.6</b>
<b>Local Subtotal</b>	<b>\$17.8</b>			
<b>State Subtotal</b>	<b>\$33.7</b>			
<b>GRAND TOTAL</b>	<b>\$51.5</b>			

### Next Steps

Authority staff intends to present a draft implementation approach to Authority advisory and decision-making bodies in the March/April 2004 timeframe. A summary of public comments on this Staff Proposal will be provided to inform these deliberations.

Following these discussions, Authority staff will work with state policymakers, as necessary, to refine the implementation approach. This approach will likely necessitate both state legislative and administrative changes.

Authority staff will continue to provide ongoing progress reports to the Authority and its advisory bodies.

**Contact Information**

For more information, or to provide additional comments, please contact Authority staff as follows:

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