



COLORADO

**Colorado Water
Conservation Board**

Department of Natural Resources

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TO: Colorado Water Conservation Board Members

FROM: Greg Johnson
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DATE: July 20, 2017

AGENDA ITEM: 29. Statewide Water Supply Initiative Update

Staff recommendation: This item is informational only, with no Board action requested.

Background:

Work is underway to update the Statewide Water Supply Initiative with a focus on data and analysis to serve as the technical foundation for future refinements to the Basin Implementation Plans (BIPs) and Colorado's Water Plan. The update will serve two primary purposes:

1. Provide a consistent statewide framework for examining future water supply and demand under different scenarios
2. Provide tools and data for Basin Roundtables to use in updating their BIPs and developing detailed local solutions to identified gaps.

Since this is the first time that SWSI is performed in the context of Colorado's Water Plan and the Basin Implementation Plans, this SWSI update will be very different from previous versions. SWSI 2010 was a relatively straightforward update of the original 2004 SWSI analysis and therefore did not focus on methodology refinement. In addition to complementing CWP and the BIPs, this SWSI update is also tasked with including a number of new approaches and additions, such as quantifying a scenario planning approach, providing a more detailed and scientifically rigorous hydrologic modeling approach, and addressing agricultural, environmental, and recreational gaps. As a result, the first step in this SWSI update involves reviewing and refining the methodology for how each of the analyses will be performed.

The methodology development process started with a review of previous SWSI methods for each subject area along with other pertinent studies and approaches. This review is being well documented in a draft technical memo for each of the methodologies that recommends the most appropriate approach for the current SWSI update. The draft documentation will be presented at the board meeting prior to distribution to the Technical Advisory Groups (TAGs), with meetings anticipated for September. We are using the TAG process to get stakeholder feedback and ensure that the new methodologies are scientifically sound, effective, and appropriate. TAG participants are encouraged to compile feedback from other roundtable members and local constituents. The TAG review will focus on technical issues including: key concepts and assumptions, data sources, and fatal flaws.



Due to the new scenario planning approach, the SWSI update will result in a much more scientifically rigorous and complex analysis. This approach will focus on hydrologic modeling to enable more detailed site-specific analyses of impacts to water resources throughout the state. The modeling will also help provide more consistency across the subject matter areas. The result will be a wealth of data on impacts or “hydrologic gaps” at specific locations under each of the five planning scenarios. This approach will leverage the State’s considerable investment in Colorado’s Decision Support System (CDSS) tools and also incorporate other modeling tools as appropriate.

Due to data gaps, consistency issues, and roundtable feedback concerning planned projects (i.e. IPPs), the analysis will not interpret or include projects in the modeling analysis, and consequently will not calculate an “infrastructure gap” similar to prior SWSIs. (The infrastructure gap was a basinwide and statewide calculation that subtracted the supply of planned projects from projected new demands.) Instead, the SWSI update will prepare Roundtables for the forthcoming BIP updates by working towards compiling and standardizing project information. This will then give Basin Roundtables the opportunity to further evaluate projects in more detail in their forthcoming BIP updates, with appropriate decisions about the details and assumptions concerning the modeling of specific projects.

CWCB staff will give a status report on the update of the Statewide Water Supply Initiative (SWSI).

