

# STATE OF COLORADO

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## Colorado Water Conservation Board Department of Natural Resources

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TO: Colorado Water Conservation Board Members

John W. Hickenlooper  
Governor

FROM: Greg Johnson,  
Water Supply Planning Section

Mike King  
DNR Executive Director

DATE: May 4, 2012

Jennifer L. Gimbel  
CWCB Director

SUBJECT: **Agenda Item 20, May 15-16, 2012 Board Meeting**  
**Colorado Water for the 21<sup>st</sup> Century Roadmap Update**

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### Recommendation

This item is for information only. It is presented for discussion at this board meeting.

### Background

Please see attached letter from John Stulp, IBCC Director. Staff will present the details set forth in this updated Roadmap document.

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TO: Roundtable, IBCC, and CWCB members  
FROM: John Stulp, IBCC Director  
DATE: **5/1/2012**  
SUBJECT: **Colorado Water for the 21<sup>st</sup> Century Updated Roadmap**

John W. Hickenlooper  
Governor

John Stulp  
IBCC Director

Mike King  
DNR Executive Director

Jennifer L. Gimbel  
CWCB Director

Dear Roundtable, CWCB, and IBCC Members,

Many of you attended the Statewide Summit, where we had exciting discussions about the Portfolio Tool and future implementation efforts. Thank you all for your participation and leadership at the event.

Following the first Statewide Summit last year, I sent you a memo entitled *Colorado Water for the 21<sup>st</sup> Century Roadmap* summarizing the highlights of the Summit and outlining the path forward. The purpose of this memo is to build upon last year's roadmap and outline our future work. It takes into account the input received from the discussions at the Summit and from each of the roundtable chairs, the CWCB, and the IBCC.

### **Accomplishments Since the First Statewide Summit**

Before talking about the work that lies ahead, however, it is worthwhile to review the progress we have made in the past twelve months. These accomplishments include:

- Completion of each Basin Roundtable's Basin Report
- Implementation and/or funding of agriculture, municipal, nonconsumptive, and multi-purpose projects
- Significant progress in the development of portfolios by each of the Basin Roundtables
- Greater Basin Roundtable understanding of the trade-offs inherent in meeting Colorado's future water supply needs
- General agreement, through the portfolio development exercise, that:
  - We must plan for a variety of possible futures and thus we should continue with scenario planning.
  - There are no easy solutions or silver bullets, and we need to pursue all types of projects and methods concurrently in order to balance the tradeoffs.
  - A high success rate for the identified projects and processes statewide is critical to meet our municipal needs.
  - Conservation measures should be implemented and monitored to quantify their impact.
  - Nonconsumptive needs should be addressed.
  - Agricultural shortages should be addressed and agriculture should be preserved.
  - We need to identify specific solutions to address the 2050 water supply gap.

### The 2012 Statewide Summit and the Path Forward

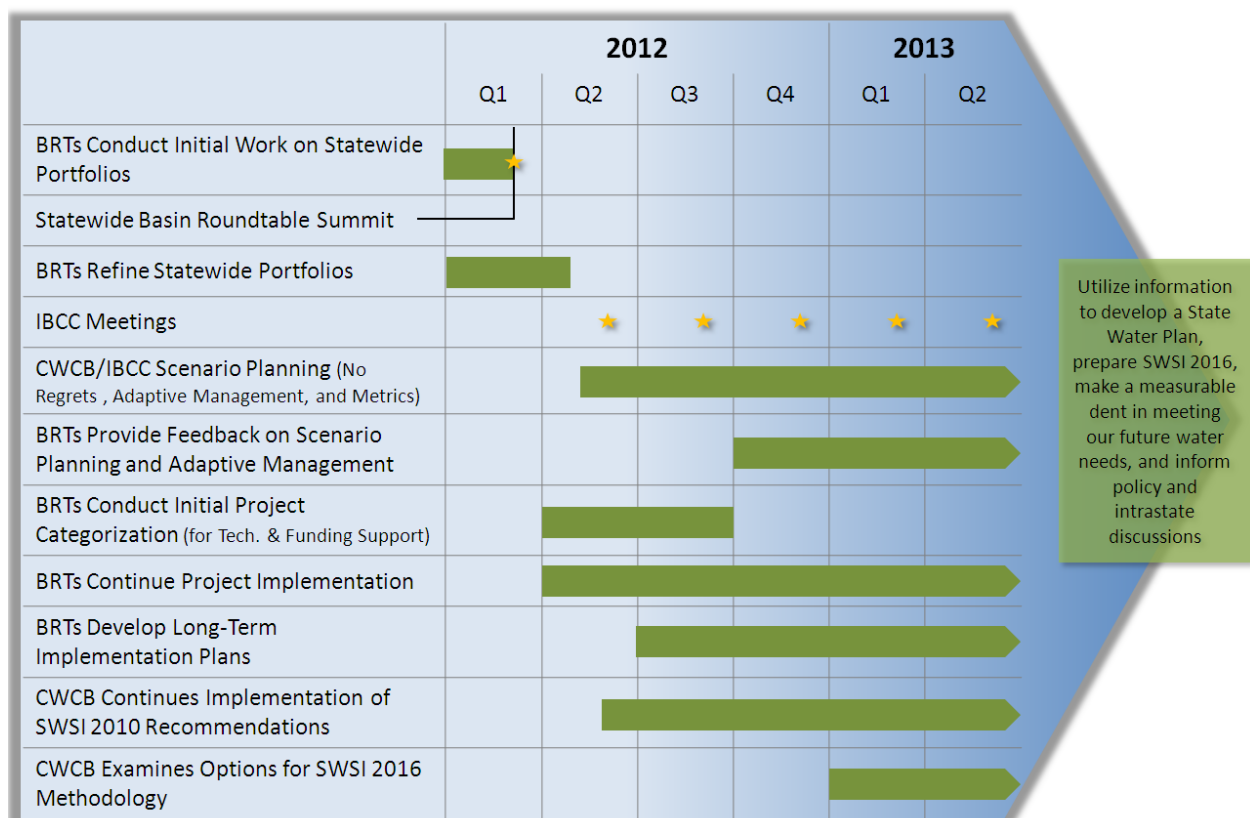
Like last year, the 2012 Statewide Summit was a success. Perhaps most important, participants seemed eager and ready to move towards implementation and start moving forward with actions that can be taken now. Participants expressed interest in getting down to specifics for how we are going to meet our future water challenges. They recognize the value of multi-purpose projects and want to move forward with implementation.

There is much to be done over the next twelve months as we move closer towards development of the State Water Plan and the Statewide Water Supply Initiative (SWSI) 2016. Colorado continues to face a significant water supply challenge and, as Governor Hickenlooper said at the Summit, building collaborative solutions is hard work and takes time. It will take a concerted effort by all parties to accomplish the important work before us over the coming months and years.

Our focus over the next twelve months will include:

1. *Portfolio Development and Scenario Planning*
2. *Implementation of Consumptive and Nonconsumptive Projects and Methods*
3. *Initiation of SWSI 2016 and the State Water Plan*

Each of these is described in more detail below and is summarized in **Figure 1**.



**Figure 1.** Water Supply Planning Process Roadmap Summary and Schedule

## **1. Portfolio Development and Scenario Planning (focus of IBCC work)**

Since June 2011 the Basin Roundtables have worked with the Portfolio and Tradeoff Tool and developed different portfolios for meeting the state's long-term water supply needs. Roundtable members have done a fantastic job developing a broad range of portfolios to address many possible future scenarios. Some of these portfolios explore different future potentials, while others represent a Basin Roundtable's values in how they would meet such a future. These portfolios will be used by the IBCC as a basis for scenario planning.

The IBCC's scenario planning will use the following steps:

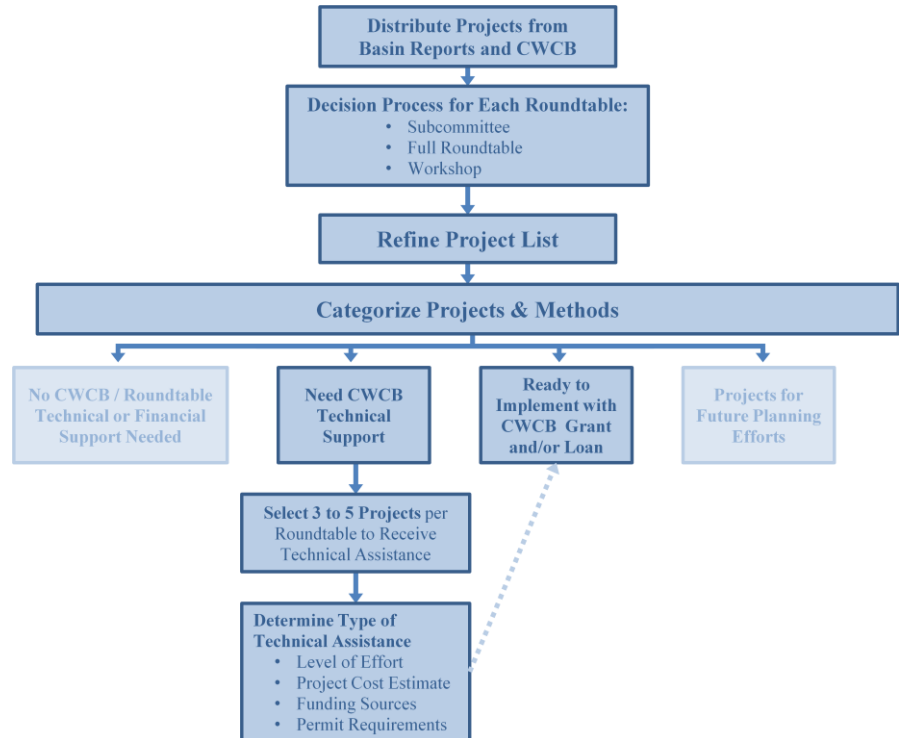
- **IBCC Portfolio and Scenario Work:** Starting at the May 31<sup>st</sup> IBCC meeting, the IBCC will use the Basin Roundtables' portfolio work as they begin to complete scenario planning and adaptive management. The IBCC will first narrow the Basin Roundtables' portfolios into a smaller set of portfolios that address a range of different scenarios. Initial metrics will be used to evaluate how these portfolios perform under different scenarios. From this smaller set of portfolios, the IBCC will be able to identify a set of "no regrets" implementation strategies that will be useful in meeting our needs no matter what future emerges in the year 2050. Implementation of these strategies in the near term will be important. Next, the IBCC will work towards developing adaptive management triggers that will indicate which scenario Colorado is approaching at any given time in the future. Based on the triggers and portfolio work, an adaptive management framework will be developed, which will identify under what conditions a future portfolio and its projects and methods should be pursued. Additional evaluation metrics are an important part of the adaptive management framework to assess portfolios and the specific projects and methods that they may include. Evaluation metrics that will be considered include nonconsumptive needs, supply reliability, agricultural economics, and cost of implementation. In order to apply many of these metrics, additional specificity for how each strategy will be implemented is needed. This is likely to include analysis on a range of projects, methods, and risk management strategies.
- **Roundtable Feedback:** During the summer and fall of 2012, Basin Roundtables will have opportunities to provide feedback on the IBCC's scenario planning work.
- **Continued Cross-Basin Discussions on Statewide Issues:** CWCB and the IBCC will work with Basin Roundtables and constituencies to continue addressing cross-basin issues such as increasing consumptive and nonconsumptive IPP success rates, conservation, alternative agricultural transfer methods, storage, risk management, and the development of new water supplies.

## **2. Implementation of Consumptive and Nonconsumptive Projects and Methods (focus of Basin Roundtable work)**

As the Basin Roundtables' portfolio work wraps up, Basin Roundtables are ready to focus on the strategic implementation of consumptive and nonconsumptive projects that meet the needs outlined in each Basin Roundtable's "Basin Report." Basin Roundtable members have already seen the nonconsumptive projects and methods request from the IBCC. This memo includes those recommendations and broadens implementation to include consumptive needs.

- **Short-Term Basin Roundtable Implementation:** In the short term, Basin Roundtables should identify projects and methods in their basins that meet an identified consumptive and/or nonconsumptive need and can get underway in the near future. Basin Roundtables are encouraged to utilize the State Water Supply Reserve Account (WSRA) funding cycle in September of 2012 and March of 2013 to move projects forward. To help encourage this, the grant application deadline has been shortened to be due the 1<sup>st</sup> of the month prior to a CWCB Board meeting month (e.g., applications for September will be due August 1<sup>st</sup> and applications for March will be due February 1<sup>st</sup>). Note that this is consistent with CWCB's loan program deadlines. Support for initiating on-the-ground consumptive and nonconsumptive projects and methods includes the following:

- Roundtable Project Categorization: Roundtables should continue to identify and categorize which projects and methods meet their nonconsumptive and consumptive needs. This may include starting to work with the project proponents to determine if there are ways the Basin Roundtable can help move the project or method forward (see **Figure 2**).



**Figure 2.** Projects and Methods Implementation Process

- CWCB Coordination Support: During the spring and summer of 2012, CWCB staff can help Basin Roundtables organize workshops with project proponents to identify projects and methods that meet their identified needs and are either ready to move forward or need some additional technical support. Projects that meet multiple needs are highly encouraged. CWCB staff will also help coordinate and integrate requested implementation discussions.
- CWCB Technical Support: If projects need technical support, CWCB and the technical team can help a limited number of consumptive and nonconsumptive projects or methods prepare for a grant and/or loan application. This may include concepts for design, cost estimates, an analysis of the needed permits, etc.
- Funding Projects: As part of moving projects forward, the Basin Roundtables should look at utilizing a variety of funding sources to help implement the consumptive and nonconsumptive projects and methods that meet the needs outlined in the Basin Reports. CWCB funding sources include the WSRA, Loan, and Water Efficiency Grant funds. CWCB has also launched a joint grant/loan program to help facilitate moving needed consumptive projects forward. In addition, CWCB is coordinating more closely with several other CWCB nonconsumptive grant programs, such as the Healthy Rivers Fund and the Watershed Restoration Fund, to facilitate accomplishing nonconsumptive projects and methods. CWCB funds should be leveraged with other federal and non-governmental organization funding sources as well.
- Long-Term Basin Roundtable Implementation Plans: At the same time, CWCB will support Basin Roundtables and potential project proponents in developing long-term implementation plans that address “gap” areas that have no identified project or method to meet the needs identified in the Basin Reports. For much of this effort, the Basin Roundtables will continue to work with their local constituencies to identify ways the region will meet future consumptive and nonconsumptive needs, and additional workshops with local experts and project proponents will be supported. These plans may include:

- Project or method description( including location) and need
- Initial cost estimates
- Promotion of multi-beneficial projects
- Potential partners and project proponents

### **3. SWSI 2016 (focus of CWCB work) and the State Water Plan**

The CWCB is on a 6-year planning cycle for assessing Colorado's long-term consumptive and nonconsumptive water needs with a scheduled update to SWSI in 2016. Upcoming work related to SWSI includes:

- Adoption of the SWSI 2010 recommendations work plan
- Implementation of the 16 SWSI 2010 recommendations
- Evaluation of the SWSI 2016 approach and methodology with the involvement of the CWCB, IBCC, and the Basin Roundtables
- SWSI 2016 development
- Finalization of SWSI 2016

In addition, the Governor asked that a State Water Plan be developed based on the scenario/portfolio work, SWSI, and other work described above. This effort will be a partnership between the CWCB, IBCC, Department of Natural Resources (DNR), the Basin Roundtables, and other stakeholders who come together as a state to collaboratively address Colorado's water supply challenges.

To accomplish all that we have set out, it will be important that the IBCC and Basin Roundtable process operate as efficiently and effectively as possible. Since its inception seven years ago, the state's water supply planning process has grown organically. As we move forward, it will be important to continually examine our process to make sure we have the operational and organizational structure that will best enable us to achieve our goals.

This year's precipitation level is an increasingly urgent reminder of the importance of our task. Thank you once again for your continued commitment to Colorado's water supply planning process and for all you are doing to build a secure water future for all Coloradans. Together we can make a measurable dent in addressing our future water needs.