## STATE OF COLORADO

## **Colorado Water Conservation Board Department of Natural Resources**

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TO: Colorado Water Conservation Board Members

FROM: Greg Johnson,

Water Supply Planning Section

DATE: May 4, 2012

SUBJECT: Agenda Item 19, May 15-16, 2012 Board Meeting

**Scenario Planning** 



John W. Hickenlooper Governor

Mike King

DNR Executive Director

Jennifer L. Gimbel CWCB Director

## Recommendation

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

## **Background**

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 an excellent 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.

Starting at the May 31st 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.