

# 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

Bill Ritter, Jr.  
Governor

FROM: Eric Hecox  
Water Supply Planning

James Martin  
DNR Executive Director

DATE: January 26, 2010

Jennifer L. Gimbel  
CWCB Director

SUBJECT: **Agenda Item 10, January 26-27, 2010 Board Meeting**  
Colorado Water Supply Future Update

Dan McAuliffe  
CWCB Deputy Director

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### Staff Recommendation

This is an *information* item and Board action is not required.

### Background

At the March 2009 Board Workshop staff discussed the initial development of a "Portfolio Tool." The purpose of this tool is to examine the trade-offs between different combinations of strategies for meeting Colorado's 2050 municipal and industrial water supply needs. Since the March workshop staff has worked with Colorado's water stakeholders to refine the Portfolio Tool and build portfolios for the mid-demand/mid-supply scenario. We have explored different combinations of IPP success, Conservation, New Supply Development, and Agricultural Transfers.

The December 2009 IBCC meeting involved work in small groups to develop portfolios for the mid-demand/mid-supply scenario. Although the portfolios developed by each group were somewhat different, they all had common elements. These common elements included reducing or minimizing agricultural transfers, an increment of new supply development in the Colorado River system, increasing the success rate of the IPPs, and increased conservation.

During this agenda item, staff will discuss the development of the Portfolio Tool and present the common elements of the mid-demand/mid-supply portfolios. Staff will also discuss the schedule for technical work associated with the consumptive and non-consumptive needs assessments and the outline for the final report (see attached). Staff will solicit Board feedback on these items.

The following definitions are important for this agenda item:

- *Scenarios* – Different future conditions. Each scenario represents a different, but plausible, representation of circumstances that would result in differing statewide consumptive and nonconsumptive water demand and water supply. The IBCC is considering 5 different scenarios.

- *Portfolios* – Combinations of strategies which collectively meet statewide water demands. Portfolios can be developed for each future scenario.
- *Strategies* – Broad categories of solutions for meeting Colorado’s consumptive and nonconsumptive water supply needs. Through its Visioning Process the IBCC identified a set of Demand Side Strategies and Supply Side Strategies and began developing conservation, agricultural transfers, and new water supply development strategies.
- *Projects and Methods* – Specific actions which help implement each strategy. For example a water project helps implement a new water supply development strategy, a rotational fallowing program helps implement an agricultural transfer strategy, and a block rate pricing program helps implement a conservation strategy. Each Basin Roundtable is responsible for proposing projects and methods to meet their consumptive and nonconsumptive needs.

## **Annotated Report Outline**

### **Update to the Basin Needs Assessments and Projects and Methods to Meet Basin Needs 11-24-09**

Fact Sheet

Executive Summary

#### Section 1 Introduction

1.1 Introduction to the Interbasin Compact Process [*Use June 2009 draft reports and historic annual reports, website, education and outreach efforts, and legislation to complete this section*]

1.1.1 Overview of the Water for the 21<sup>st</sup> Century Act

1.1.2 Basin Roundtable Process

1.1.3 Interbasin Compact Committee (IBCC)

1.1.4 Water Supply Reserve Account (WSRA)

1.2 CWCB History and Mission [*Update from SWSI 1 Report*]

1.2.1 Fundamental Goals

1.2.2 Structure, Authority, and Role of the Board

1.3 Background on Colorado Water Resources [*Update from SWSI 1 Report*]

1.3.1 Colorado River, Gunnison River, Yampa/White/Green Rivers, and Dolores/San Juan/San Miguel Rivers

1.3.2 South Platte River, Republican River, and North Platte River

1.3.3 Arkansas River

1.3.4 Rio Grande

1.4 Colorado Water Law [*Summarize and update from SWSI 1 Report*]

1.5 Acknowledgements [*Include list of CWCB Board Members, Basin Roundtable, and IBCC*]

1.6 Overview of Report [*Will summarize report contents*]

#### Section 2 Nonconsumptive Needs Assessments

2.1 Overview of Nonconsumptive Needs Assessment Process [*Update from Focus Area Mapping Report and Annual Report*]

2.2 Focus Area Mapping [*Update from Focus Area Mapping Report*]

2.2.1 Methodology

2.2.2 Results

2.3 Summary of Nonconsumptive Needs by Focus Area [*If quantification or other needs are defined as part of Task 1.2.2 of current Task Order they will be summarized here at the basin level*]

#### Section 3 Consumptive Needs Assessments

3.1 M&I Consumptive Needs [*Update from Demands to 2050 Report; Response to comments; and BNDSS*]

3.1.1 Future Population Projections

3.1.1.1 2050 Population Projection Methodology

3.1.1.2 2050 Population Projection Results

3.1.2 Future M&I Water Demands

3.1.2.1 2050 M&I Water Demands Methodology

3.1.2.2 2050 M&I Water Demands Results

3.1.3 M&I Consumptive Needs Summary

3.2 Agricultural Consumptive Needs [*Section will be based on results from Task 1.3 of current Task Order*]

3.2.1 Agricultural Demand Methodology

3.2.2 Agricultural Demand Results

Section 4 Projects and Methods to Meet Basin Needs

4.1 Projects and Methods to Meet M&I Consumptive Needs [*Summary of information from BNDSS and Basin Roundtable task orders/reports*]

4.2 Projects and Methods to Meet Nonconsumptive Needs [*Will be based on Task 1.2 work and BNDSS*]

4.3 Consumptive Gap Analysis [*Will be based on Task 1.1, 1.3 and 1.4 work*]

4.3.1 Consumptive Gap Analysis Methodology

4.3.1.1 M&I Gap Analysis

4.3.1.2 Agricultural Shortages

4.3.2 Consumptive Gap Analysis Results

4.3.2.1 M&I Gaps

4.3.2.2 Agricultural Shortages

Section 5 Water Availability [*Will be based on CRWAS Phase 1 results and will need to be coordinated with Water Information Section and CRWAS contractor*]

Section 6 Portfolios and Strategies to Address the M&I Gap

6.1 Portfolios to Address the M&I Gap [*Summary of IBCC discussions to date*]

6.2 Strategies [*This will be a summary of work completed through 1<sup>st</sup> quarter 2010*]

6.2.1 Agricultural Transfers

6.2.2 Conservation [*From Conservation Section*]

6.2.3 Colorado River System [*Update current info with Green Mountain and Blue Mesa*]

6.3 Evaluation of Portfolios and Strategies [*This will be a summary of work completed through 1<sup>st</sup> quarter 2010*]

Section 7 Findings and Recommendations [*Will be updated from Section 11 from the SWSI report*]