

STATE OF COLORADO

Colorado Water Conservation Board

Department of Natural Resources

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TO: Colorado Water Conservation Board Members

John W. Hickenlooper
Governor

FROM: Becky Mitchell, Chief
Water Supply Planning Section

Mike King
DNR Executive Director

DATE: January 14, 2013

Jennifer L. Gimbel
CWCB Director

SUBJECT: **Agenda Item 27, January 28-29, 2013 Board Meeting**
Water Supply Planning Section – Overview of State Water Planning

Staff Recommendation

This is an informational agenda item. Staff will provide the Board with an overview of a range of approaches to water planning and engage the Board in a discussion of key elements considered in the development of statewide water plans. The information presented comes from a review and summary of state water plans from across the nation, but focuses on the western U.S. The presentation will include why states complete state water plans, approaches to planning efforts, common elements of state water plans, and lessons learned from other state water planning efforts.

Background Information

State water planning is increasingly recognized as a vital foundational element to provide for the economic welfare and environmental health of a state, and to help ensure a high quality of life for its citizens. The CWCB has actively engaged in a variety of statewide water planning efforts for several decades. Most recently the completion of the Statewide Water Supply Initiative (SWSI) 2010 established several recommendations and key findings to help Colorado address its current and future water needs. As the CWCB seeks to implement these recommendations to address Colorado's water needs, and to begin a 2016 update to SWSI along with a state water plan, there are several options and priorities to consider. A closer look at how other states are approaching statewide planning will illustrate a variety of approaches, providing the Board with an additional frame of reference to consider as Colorado moves its planning efforts forward.

Discussion

In reviewing state planning efforts there are unique challenges and trends that tend to follow the major geographic regions of the country. Eastern states have tended to focus more on aging infrastructure and water quality, but recent droughts have brought a greater emphasis on water supply. In the central U.S. we see a combination of approaches to address the same challenges observed in the east, as well as a focus on flood control and navigation. After reviewing these trends it is apparent that a closer look at other western states is most applicable and useful to the Board. With this in mind, a review was completed for 19 "western" states (which align well with the member states of the Western States Water Council and Western Governors Association).

The attached table is a summary of these state's water planning efforts. The table highlights the following planning elements:

- State/Regional Planning Status
- Scope of Water Resources Planning and Management
- Alternatives Analysis
- Water Resources Planning and Management Planning Process
- Partnerships, Stakeholder and Public Involvement Process
- Governance Issues
- Budget Considerations
- Plan Development

The Statewide Water Supply Initiative reports contain many elements of state water plan efforts completed by other states. Staff will explore these similarities during the presentation.

Comparison of State Water Plans in the West

NAME OF STATE	ALASKA	ARIZONA	CALIFORNIA	COLORADO	HAWAII	IDAHO	KANSAS	MONTANA	NEBRASKA	NEVADA	NEW MEXICO	NORTH DAKOTA	OKLAHOMA	OREGON	SOUTH DAKOTA	TEXAS	UTAH	WASHINGTON	WYOMING
NAME OF STATE AGENCY	Alaska Department of Natural Resources	Arizona Department of Water Resources	California Department of Water Resources	Colorado Water Conservation Board	Department of Land and Natural Resources, Commission on Water Resource Managment	Idaho Department of Water Resources and Idaho Water Resource Board	Kansas Water Office	Department of Natural Resources and Conservation, Montana Water Resources Division	Nebraska Department of Natural Resources	Department of Conservation and Natural Resources, Nevada Divisions of Water Resources	Office of the State Engineer: Interstate Stream Commission	North Dakota State Water Commission	Oklahoma Water Resources Board	Oregon Water Resources Department	South Dakota Department of Environment and Natural Resources, Board of Water and Natural Resources	Texas Water Development Board	Utah Department of Natural Resources, Division and Board of Water Resources	Washington Department of Ecology	Wyoming Water Development Commission
STATE/REGIONAL PLANNING STATUS																			
Is there a comprehensive state-wide water resources plan?	No	Yes	Yes	Yes, not identified as a "plan"	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes - implementation focus	Yes	Yes	Yes - Locally focused	Yes
Is there published vision, mission, goals or objectives for water resources of the state?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SCOPE OF WATER RESOURCES PLANNING AND MANAGEMENT (Does the state plan or regional plans include...?)											In regional reports								
Consideration of external forces or trends?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
Socioeconomic projections (population or other demographic characteristics)?	No	Yes	Yes	Yes	Yes?	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes
Current and future water needs quantified (demand)	No	Yes	Yes	Yes	Yes?	Yes	Yes	?	No	Yes dated	Yes	Yes	Yes	No	Yes focused	Yes	Yes	Yes at local level	Yes
Water demand for M&I?	No	Yes	Yes	Yes	Yes?	Yes	Yes	?	No	Yes dated	Yes	Yes	Yes	No	Yes focused	Yes	Yes	Yes at local level	Yes
Additional breakdown of M&I demands?	No	?	?	Yes	Yes?	Yes	Yes	?	No	Yes	Yes	?	Yes	No	No	Yes	Yes	Yes at local level	Yes
Water demand for Ag?	No	Yes	Yes	Yes	Yes?	Yes	Yes	?	No	Yes	Yes	Yes?	Yes	No	No	Yes	Yes	Yes at local level	Yes
Water demand for in-stream (environmental needs)?	Yes on case by case basis	No?	Yes qualitative	Yes	Yes Qualitative	Yes	Yes	Yes	Yes	Yes but not fully developed program?	Yes	?	No - evaluating	Yes	considered	Yes	Yes	Yes at local level	Yes
Current and future water supplies?	No		Yes	Yes	No	Yes	Yes	Yes?	Yes	Not fully developed	Yes	Yes not sure on level of detail	Yes Refining	No	Yes	Yes	Yes	Yes at local level	Yes
Surface water availability component?	No	Yes	?	Yes	No	Yes	Yes	Yes?	Yes		Yes		Yes	No		Yes	Yes	Yes at local level	Yes
Groundwater availability component?	No	Yes	?	Yes but not quantified	Yes	Yes under further development	Yes	Yes	Yes		Yes		Yes	No		Yes	Yes	Yes at local level	Yes
Water quality component	No	No	Yes	Ensure Beneficial use	Yes	Ensure Beneficial use	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes at local level	Yes
Compartmentalized planning	Yes	No?	Yes and No	Yes	Yes and No	?	No?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Gap analysis between supply and demand state level	No	Yes		Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes at local level	Yes
Gap analysis between supply and demand watershed level	No			Yes	Yes	Yes	Yes	Yes	No	?	Yes	Yes?	Refining	No	No	Yes	Yes	Yes at local level	Yes
Gap analysis between supply and demand regional level	No	Yes		Yes	Yes	Yes	Yes	Yes	No	?	Yes	Yes?	Refining	No	Yes	Yes	Yes	Yes at local level	Yes
Gap analysis between supply and demand at local level	No			Yes County Level	No	Yes	Yes	Yes	No	?	Yes	Yes?	Refining	No	Yes	Yes	Yes	Yes at local level	Yes
Hydrologic variability included	No		Yes	Yes	No	Yes	No	No?	?	?	Yes	?	Yes	Yes	Yes	Yes	Yes	Yes at local level	Yes
Climate change considerations included	Yes Qualitative	Qualitative	Yes	Qualitative	Yes	Qualitative	?	No?	?	?	Yes	?	Yes	Proposed	Not yet	Yes	Evauating	Yes	Evaluating
ALTERNATIVES ANALYSIS	No									Conceptual Only all alternatives				For below answers - Yes but not part of overall state plan	Project Specific				
Conservation	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Project Specific	Yes	Yes	Yes	Yes
Reuse	No	Yes	Yes	Yes	Yes	Yes	Yes	No?	No	No	Yes	No?	Yes	Yes	Project Specific	Yes	Yes	Yes	Yes
Conjunctive use	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes?	Yes	?	Project Specific	Yes	Yes	Yes	Yes
Transfers (both temporary and permanent)	No	Yes	Yes	Yes	No?	Yes	No?	Yes	Yes	No	Yes	Yes	Yes	?	Project Specific	Yes	Yes	Yes	Yes
New storage	No	Yes	Yes	Yes	No?	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Project Specific	Yes	Yes	Yes	Yes

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NAME OF STATE AGENCY	Alaska Department of Natural Resources	Arizona Department of Water Resources	California Department of Water Resources	Colorado Water Conservation Board	Department of Land and Natural Resources, Commission on Water Resource Managment	Idaho Department of Water Resources and Idaho Water Resource Board	Kansas Water Office	Department of Natural Resources and Conservation, Montana Water Resources Division	Nebraska Department of Natural Resources	Department of Conservation and Natural Resources, Nevada Divisions of Water Resources	Office of the State Engineer: Interstate Stream Commission	North Dakota State Water Commission	Oklahoma Water Resources Board	Oregon Water Resources Department	South Dakota Department of Environment and Natural Resources, Board of Water and Natural Resources	Texas Water Development Board	Utah Department of Natural Resources, Division and Board of Water Resources	Washington Department of Ecology	Wyoming Water Development Commission
Regulating water use (e.g..., permits)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
BUDGET CONSIDERATIONS																			
Governor's priority areas	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?
State budget areas	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?
State budget priorities	No	Yes	Yes	Yes	Yes	Yes	Yes	?	?	?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes?	Yes
Water infrastructure funding	No	Yes	Yes	Yes	No	Yes	Yes	Yes	?	?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes?	Yes
PLAN DEVELOPMENT																			
Plan Revision Timetable	No	Yes	Yes	Ongoing	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
Plan Implementation Strategy	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes?	Yes
Monitoring Strategy	No	Yes	Yes	Qualitative	Not formal	Qualitative	Yes	Not formal	Yes	No	Yes	Yes not formal	Yes	No	Yes	Yes	Yes	Yes	Yes