

# STATE OF COLORADO

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## Colorado Water Conservation Board

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TO: Colorado Water Conservation Board Members

FROM: Taryn Hutchins-Cabibi, Drought/Climate Specialist  
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Office of Water Conservation & Drought Planning

DATE: September 2, 2010

SUBJECT: **Agenda Item #16, September 14-15, 2010 Board Meeting**  
**Approval of State Drought Mitigation and Response Plan**

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### Staff Recommendation

Staff recommends that the CWCB Board approve and forward to the Colorado Division of Emergency Management, the 2010 revised Colorado Drought Mitigation and Response Plan.

### Background

The State of Colorado has revised the existing State Drought Mitigation and Response Plan in compliance with state and federal regulations, including FEMA requirements for natural hazard mitigation planning. CWCB staff will present the major findings and recommendations of the planning effort, which began over a year ago. This presentation builds on previous presentations given at the September 2009 & May 2010 Board meetings.

The revision process has resulted in a State Drought Plan that uses state of the art planning techniques to prepare Colorado for drought. The plan development process streamlined the state's response to drought and developed a host of tools for local water providers to prepare for drought events. The revised plan also outlines a step by step procedure to respond to drought; mitigation efforts that will help the state and local communities reduce impacts from drought; and includes a groundbreaking vulnerability assessment of various sectors affected by drought statewide.

The new plan not only plays a role in maintaining eligibility for FEMA disaster relief funding, but also enables counties to determine their vulnerability to drought within each of the examined sectors.

Additionally, the state modernized the mechanisms used for monitoring drought by updating the calculation for the Surface Water Supply Index (SWSI) and re-evaluating other statewide indices used for monitoring. This improved system will help reduce impacts and increase response time.

Furthermore, this Plan, for the first time, addressed how potential impacts from climate change may influence drought frequency and duration. This work built off the work done for the Colorado River Water Availability Study. This information is provided within the plan. However, no planning or mitigation efforts have been altered as a result of the information.

The Colorado Drought Mitigation and Response Plan underwent a 30-day public comment period, and all comments submitted have been integrated and addressed where appropriate. This Plan is the result of an extensive stakeholder process, significant public input and feedback from nearly all sections of the CWCB, as well as multiple other state agencies.

Following CWCB Board approval, the Plan will be forwarded to the Colorado Division of Emergency Management for incorporation into the State's Natural Hazard Mitigation Plan, which will be submitted to the Governor and FEMA for further approval.

### **Supporting Documentation**

Please refer to the Revised 2010 Draft Mitigation and Response Plan which can be accessed through the CWCB website at...

<http://cwc.state.co.us/water-management/drought>

To assist you in navigating through this large document we have also attached the executive summary of the main mitigation plan and the Table of Contents.



## State of Colorado Drought Mitigation and Response Plan Executive Summary

The Colorado Drought Mitigation and Response Plan (Plan) was developed to provide an effective and systematic means for the State of Colorado to reduce the impacts of water shortages over the short or long term. The Plan outlines a mechanism for coordinated drought monitoring, impact assessment, response to emergency drought problems, and mitigation of long term drought impacts. There are three major components of the plan: mitigation, response and vulnerability assessment. The mitigation component of the Plan conforms with the Standard State Hazard Mitigation planning requirements of the Disaster Mitigation Act of 2000 and serves as the Base Plan. Included is a description of the process used to prepare the Plan and a profile of the drought hazard in Colorado, including the nature of impacts and probability of occurrence. A detailed vulnerability assessment discusses the past and potential impacts to Colorado's economy, environment, state assets, and water providers. The vulnerability assessment is covered in detail in Annex B, and summarized in Sections 3.3-3.5 of the Plan. The mitigation strategy outlines the goals of the Plan and specific action items intended to meet those goals. Many of these mitigation actions are ongoing and can occur during drought and non-drought times. A capability assessment describes the State's plans, policies, and procedures in place that already help manage and reduce drought impacts. The Plan describes funding sources that can be used to implement local mitigation projects and plans and a description of the process for implementation, monitoring and evaluating the Plan.

The response component of the Plan is detailed in Annex A and includes monitoring, assessment, and response. This Annex guides State and partner agency response actions during times of drought. Monitoring is ongoing and accomplished by regular meetings of the Water Availability Task Force (WATF). This task force is comprised of Colorado's water supply specialists from state, local, and federal governments, as well as experts in climatology and weather forecasting. This task force monitors snowpack, precipitation, reservoir storage, and streamflow and provides a forum for synthesizing and interpreting water availability information. When the WATF determines that drought conditions are reaching significant levels the Governor is notified and activation of the Plan is recommended.

When Annex A is activated, assessment begins with activation of the relevant Impact Task Forces (ITFs). These task forces convene to determine existing or potential impacts within specific sectors. Impact Task Forces include Municipal Water, Wildfire, Agricultural Industry, Tourism, Wildlife, and Energy. Assessment coordination is handled by the Drought Task Force. This task force is comprised of directors from the Departments of Natural Resources, Agriculture and Local Affairs, and chairpersons of the WATF and the Impact Task Forces. They review reports from the WATF and ITFs, aggregate impact assessments and projections, evaluate overall conditions, develop recommendations for drought response, and make timely reports to leadership, the media, the response agencies, and others. The response process consists of several lead state agencies that participate in the Governor's Disaster Emergency Council (GDEC). The GDEC is comprised of senior management and ensures the coordination of drought response activities.

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## **Annexes**

***Annex A – Drought Response Plan***

***Annex B – Drought Vulnerability Assessment Technical Information***

***Annex C – Climate Change Implications***

***Annex D – Drought Monitoring Indices***

## **Appendices**

***Appendix A – Drought Mitigation and Response Planning Committee***

***Appendix B – Actions Taken to Reduce Drought Impacts in Previous Droughts***

***Appendix C – Drought Mitigation Capabilities Summary***

***Appendix D – References***

***Appendix E – Definitions and Acronyms***

