

# STATE OF COLORADO

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## Colorado Water Conservation Board Department of Natural Resources

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TO: CWCB Board Members

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DATE: July 6, 2012

SUBJECT: **Agenda Item #27, July 17-18, 2012 Board Meeting**  
**Water Supply Planning – Drought Assessment for Recreation and Tourism (DART)**

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**Staff Recommendation:** *This is an informational item only. No Board action is required.*

### **Background**

The 2010 Colorado Drought Mitigation and Response Plan included a Vulnerability Assessment, identifying drought vulnerabilities to individual economic sectors in Colorado. In addition to highlighting some of these drought vulnerabilities, the assessment helped the state to identify information and data gaps that prevent us from fully and properly assessing the full extent of drought risk within each sector. This is particularly true with the Tourism and Recreation sector, the state's second largest contributor to its economy.

### **Introduction**

Historically, the Tourism and Recreation sector has been evaluated on a limited basis for drought impacts and vulnerabilities. However, over the past decade, drought impacts to this sector have had far reaching effects. Consequently, the State Drought Plan recommended conducting a closer review of information and data that could improve our knowledge of the impacts in this sector and adopt mitigation actions to safeguard the industry and the jobs that it supports.

This sector is vital to the state's economy. Additionally, the potential drought impacts may have to economic viability is broadly experienced around the state. Therefore, CWCB contracted with the University of Colorado – Denver to conduct a pilot project in the Southwest corner of the state, creating a framework for evaluation and implementation that could be expanded to other basins/ regions. The Southwest Basin is a hot and dry region that has experienced drought frequently in recent years. Consequently, there is a high degree of awareness around drought and a strong desire, by local stakeholders, to plan for safeguarding the region from the potentially devastating effects of drought.

In additions, phase I of the Colorado River Water Availability Study illustrated the potential and significant water supply and management challenges for this basin under certain climate change

scenarios. As a result, the stakeholders in this basin are proactively seeking solutions that will mitigate the impacts of drought and climate and adapt to them.

Colorado boasts a variety of tourism and recreational opportunities; the Southwest Basin has virtually all subsets of this sector, making it the ideal geographic region to build a framework that is transferable elsewhere.

As identified in the 2010 Colorado Drought Mitigation and Response Plan Vulnerability Assessment this basin ranks relatively high in drought vulnerability for the tourism and recreation sector. This coupled with possible impacts from climate change makes it an area where resources and jobs can be protected if proactive drought mitigation efforts are adopted prior to the onset of a major drought event.

### **Methodology**

This study aimed to create a framework for understanding these interactions through a bottom-up process of stakeholder engagement, which could be easily replicated in other areas of the state or country. The framework could also be modified for use in other sectors. The study utilized both an online survey as well as in-person interviews (focus groups and one-on-one) to better understand the relationship between drought and tourism, recommendations for improved mitigation and data collections; as well as efforts already under way that are successfully reducing drought impacts. These efforts were conducted in the fall and winter of 2011.

### **Findings**

Overarching themes emerged from the focus groups and interviews, which were underscored by the responses in the survey. Importantly, the tourism/recreation sector is far from a single economic entity, particularly with regard to drought and water resources; it is nuanced and diverse in terms of operations and the ways in which it interacts with, and depends on, water resources. Not only is there a distinct seasonality of the tourism/recreation from summer to winter, but a seasonal interaction also exists, particularly with regard to precipitation interactions. For example, a dry winter not only affects the ski season, but also in turn determines run-off and impacts summer tourism.

The diversity of the tourism/recreation sector produces distinct challenges for the drought-tourism/recreation nexus, particularly for incorporating all the various types of activities into drought planning. Recreation activities, such as fishing, rafting, seem to identify more closely resource management, and by extension with water management. As a consequence, the link to drought is more readily acknowledged. On the other hand, activities that are oriented towards tourism are perhaps less directly tied to water use and thus did not embrace the link to drought as readily. For example, on more than one occasion, someone would say something along the lines of “I’m an expert in tourism, but not drought, so don’t know what I can offer”. Or, as another person phrased it, “It’s hard to see the realistic links between tourism as a business & drought planning”. Yet these are the very people who should be involved in a dialogue about drought planning for tourism and recreation because they know that sector. And, those who generally know about drought planning do not necessarily understand the complexities of tourism/recreation.

The first challenge is convincing people of the relevance of drought planning for tourism/recreation, even when small business owners or those involved in non-profits do not necessarily view this as a top-priority due to time and monetary constraints. Consequently, it is critical to demonstrate connections in concrete ways so that the benefits of participating are clear. Data and analysis that document how drought affects the tourism/recreation sector would shed light on this, unfortunately, at this time information is not compiled in a manner that the tourism and recreation sector can easily utilize or apply it.

Establishing the connection between drought and quantitative indicators such as; lowered visitations, reduced tax revenues, operating expenses, employment, or hotel visits can be a challenging task. Interestingly there is no one indicator of singular importance, but rather a combination of indicators is

preferred, with different pieces requested by various subsectors. Still centralizing this information and putting it into a digestible form for the tourism and recreation sector to use means that the data must be established and obtainable, and then compiled. Moreover, to draw the drought connection, these data would then need to be compared with drought cycles and patterns, as well as seasonality, examining trends rather than cross sections of information.

While the diversity of the tourism and recreation sector makes collection of quantitative data more complex, it is precisely the diversity in this sector that provides the greatest potential for adaptive capacity. A theme repeated throughout the focus groups and related to economic diversification was ensuring a business or community is not tied to any one revenue generating activity. This enables visitors to partake in a wide array of activities even if their anticipated is not available due to drought. For example, if a person cannot raft due to low water levels, then they can mountain bike, horseback ride or hike. Also revealed during the focus groups is that drought, or dry weather, can be a positive for some activities. Several cited examples included Mesa Verde, hiking, or camping. In the view of one participant, “visitor’s don’t really care about drought in terms of impacts on the eco-system, that doesn’t drive their decision making & it does not result in a long-term planning effect; rather it is ‘what are the conditions right now’ in the specific area that I want to visit. It is that point that a visitor will decide to book travel (and activity), not the other way around.” Ultimately, it is incumbent for the community to market and communicate multiple options, and to coordinate strategies for attracting visitors when drought occurs. This requires deliberate planning, establishing decision points as a business or community, based upon precipitation conditions related to operations.

The survey, focus groups, and interviews all indicate that drought planning within the context of tourism/recreation has a lot of room for improvement. Identifying underlying vulnerabilities provides an opportunity for planning for multiple hazards and purposes. Important elements of this include:

- 1) Increase awareness of the link between tourism/recreation –drought
- 2) Improve metrics and assessment methods for understanding the interconnections over time
- 3) Establish case study models showcasing success stories & strategies of businesses that have survived tough times
- 4) Respect local processes and priorities through stakeholder engagement
- 5) Attract tourism/recreation to drought planning processes
- 6) Create strategies and recommendations for the tourism/recreation sector for improved drought preparedness, response, mitigation and recovery
- 7) Establish small granting programs for strategic drought planning and mitigation at the local level across all types of activities in this sector

The framework developed in association with this project can be utilized to both identify areas of vulnerability as well as identify adaptive capacities that exist to address areas of concern. This information can then be used to develop a strategic approach to drought preparedness that ensures increased communication among all players and most importantly improved community vitality and reduced vulnerability. This framework, along with the findings of the study will be presented.