

Drought Assessment for Recreation & Tourism: Southwestern Colorado

1. INTRODUCTION:

The 2010 Colorado Drought Mitigation and Response Plan included a Vulnerability Assessment, identifying drought vulnerabilities to individual economic sectors in Colorado. In addition to spotlighting 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 sectors. This is particularly true with the Tourism and Recreation sector, the state's second largest contributor to its economy.

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. And the potential drought impacts to its economic viability so broadly experienced around the state, staff proposes a pilot project in the Southwest Basin. After several conversations with stakeholders in the Southwest Basin and the National Drought Mitigation Center (NDMC) on concept ideas, there was general agreement that a project focusing on specific sector vulnerabilities, such as Recreation & Tourism, would be more productive if it focused in a pilot fashion on one region of the state, thus creating a framework for data collection and implementation that could be expanded to other basins.

2. PROJECT DESCRIPTION:

This Scope of Work is for phase one of a two phase Southwest Basin Pilot Project. The first phase is to conduct a scoping process for the pilot project, including the identification of tourism and recreational industries in the basin that will be evaluated for drought vulnerabilities. The scoping process will: 1) evaluate the metrics used in the State Drought Plan Vulnerability Assessment, 2) identify data and information gaps needed to improve the vulnerability assessment tool as it relates specifically to Tourism and Recreation economic sector, and 3) develop a structure for stakeholder involvement and contribution to the project. Phase I will be completed by March 30, 2012.

3. SCOPE OF WORK:

Focusing on Southwest Colorado, this project will result in: 1) an evaluation of the metrics used in the State Drought Plan Vulnerability Assessment, 2) recommendations for any additional data and information to fill gap areas so that the vulnerability assessment tool that was utilized in the 2010 Statewide Drought plan is refined to more directly incorporate the unique perspectives of the tourism and recreation sector, and 3) identification of key stakeholders and development of a structure for stakeholder involvement and contribution to all phases of the

project. The portions of the plan that the consultant will be directly responsible for are outlined below. The consultant will be evaluated based on proficiency and proven success in the necessary areas.

- 3.1 Review and evaluate recommendations from the State Drought Plan Vulnerability Assessment as related to the Tourism and Recreation Sector.
 - 3.2 Identify key stakeholders in Southwest Colorado in the Tourism and Recreation Sector.
 - 3.3 Evaluate the metrics used for assessing impacts on the Tourism and Recreation Sector in the State Drought Plan Vulnerability Assessment, including economic and societal impacts, with the input from key stakeholders.
 - 3.4 Work with stakeholders to evaluate existing data and processes and make recommendations for improving drought impacts data collection as related to tourism and recreation in the Southwest.
 - 3.5 From this, develop a strategy that outlines stakeholder involvement and contribution.
 - 3.6 Determine what is needed to develop a socio-economic impact and vulnerability assessment based on the following and other stakeholder identified metrics:
 - Visitation data
 - Sales tax revenues
 - Employment reduction
 - Lodging receipts
 - State Parks boat ramp closures and visitation reduction
 - As well as other metrics identified by the stakeholders (i.e. lift tickets) with regard to drought impacts and vulnerability indicators.
 - 3.7 Develop recommendations on how to define and assess socio-economic impacts and vulnerability that result from drought to this sector.
 - 3.8 Written scoping document clearly outlining findings and recommended next steps.
4. DELIVERABLES:
- 4.1 Final scope of work that has been vetted with stakeholders and clearly illustrates a path forward for improved drought data collection/ evaluation on tourism and recreation in the Southwest and is ready to be rolled into an RFP.
 - 4.2 List of stakeholders in SW Colorado and contact information (name, address, email, phone)
 - 4.3 Brief evaluation report that provides contextual and background information for the scoping process.

5. PROJECT ADMINISTRATION:

The Project will be under the direction of the CWCB. Dr. Deborah Thomas, Department of Geography & Environmental Sciences, University of Colorado Denver (Contractor) will make oral and written briefings to the CWCB and any advisory committees. The Contractor will also:

- 5.1 Coordinate, facilitate and participate in stakeholder engagement to develop, review and provide outreach regarding the final scoping document.
- 5.2 Prepare status reports every 2 months for the CWCB to be written and delivered at monthly meetings
- 5.3 Prepare interim presentations for the Water Availability Task Force and CWCB Board of Directors.

6. PROJECT SCHEDULE & PERFORMANCE OBJECTIVES:

The project and all components must be completed by March 30, 2012. As a result the following general benchmarks are recommended.

- Contract Award July 1, 2011
- July/Aug, 2011 identification of key stakeholders
- Aug/Sep, 2011; online survey administration
- October, 2011; stakeholder workshops
- January 1, 2012; draft scoping document to send for review to stakeholders
- January, 2012; follow up survey for prioritization of data collection for indicators
- Revision of scoping document complete by March 1, 2012
- Final deliverables by March 30, 2012.

The consultant will only be able to invoice the CWCB on a monthly basis minimally and only for completed tasks.

7. RESOURCE LIST:

- Colorado Drought Mitigation and Response Plan
<http://cwcbweblink.state.co.us/weblink/0/doc/145453/Electronic.aspx?searchid=8b0c8c76-e047-4f46-8e09-7237713bddeb>
- Colorado Drought Mitigation and Response Plan – Vulnerability Assessment: Drought Vulnerability Assessment Technical Information <http://cwcb.state.co.us/water-management/drought/Documents/StateDroughtMitPlan2010/Annex%20BChapter1-4.pdf>
- Colorado Drought Mitigation and Response Plan – Vulnerability Assessment: Recreation
<http://cwcbweblink.state.co.us/weblink/0/doc/145453/Electronic.aspx?searchid=8b0c8c76-e047-4f46-8e09-7237713bddeb>
- Potential Partners:

Division of Wildlife, State Parks, Colorado Tourism Office, DOI- National Parks, BLM, USDA- Forest Service, Mountain Studies Institute, Ft. Lewis College, NCAR, NIDIS, NDMC, University of Colorado, Tribal Communities, Ski Areas – Telluride, Silverton, DMR, Telluride Foundation, River Rafting Association, local chamber of commerce, Colorado Hotel/Motel Association, U.S. Department of Labor, CU School of Business, Golf Industry associations.

Principal Investigator(s): Deborah Thomas			
Department: Geography			
Project Period: July 1, 2011- March 30, 2012			
Project Title: Drought Assessment for Recreation & Tourism: Southwestern Colorado			
	Year 1	Justification	Corresponding Task
Senior Personnel			
P.I. - Acad Yr			
P.I. - Summer	\$9,014	1 month of Deb Thomas' time (summer)	Coordinate project, project administration, Tasks 3.1-3.8
Co-P.I. - Acad Yr		in-kind contribution of time during academic year of 80 hours (total \$5,769)	
Co-P.I. - Summer			
Co-P.I. - Acad Yr			
Co-P.I. - Summer			
TOTAL, Senior Personnel Salaries	\$9,014		
Other Personnel			
Full Time Professional Staff (i.e., Full Time PRA)			
Faculty part-time 0.75 - 0.99 FTE			
Faculty, part-time 0.5 FTE - 0.74 FTE			
Professional Staff, part-time 0.75 - 0.99 FTE			
Professional Staff, part-time 0.5 - 0.74 FTE			
Professional Staff, part-time < .50 FTE (PRA ONLY)			
Professional Staff and Faculty, part-time <.50 FTE (not PRA)			
Classified Staff			
Graduate Assistant(s) (Enrolled)	\$6,000	20 weeks at 15 hours/week at \$20/hour	Assist with tasks 3.1-3.8
Graduate Assistant(s) (Unenrolled - summer)	\$1,405	4.65 weeks at 15 hours/week at \$20/hour	Assist with tasks 3.1-3.8
Undergraduate Assistant(s) (Enrolled)			
Undergraduate Assistant(s) (Unenrolled - summer)			
TOTAL, Salaries of Other Personnel	\$7,405		
	\$16,419		
Fringe Benefits			
Full-Time Faculty (28%)	\$2,524		
Professional Staff - full time (29%)	\$0		
Faculty, part-time 0.75 - 0.99 FTE - (29%)	\$0		
Faculty, part-time 0.5 FTE - 0.74 FTE (30%)	\$0		
Professional Staff, part-time 0.75 - 0.99 FTE (30%)	\$0		
Professional Staff, part-time 0.5 - 0.74 FTE (31%)	\$0		
Professional Staff, part-time < .50 FTE (PRA ONLY) (9%)	\$0		
Professional Staff and Faculty, part-time <.50 FTE (not PRA) (\$0		
Classified Staff (30%)	\$0		
Students Enrolled (1%)	\$60		
Students Unenrolled (2%)	\$28		
TOTAL, Fringe Benefits	\$2,612		
TOTAL, Salary & Fringe	\$19,031		
Travel			
Domestic	\$600	Olga Wilhelmi and Deb Thomas travel to Durango for facilitating focus groups	In support of Task 3.4 and 3.5
Foreign			
TOTAL, Travel Costs	\$600		
	Year 1		
Other Direct Costs (included in MTDC)			
Materials and Supplies	\$1,500	Purchase of Online Survey Services for 2 surveys; increase level of participation with call-in options for meetings;	Tasks 3.4, 3.5, and 3.6
Publication/Page Charges/Dissemination			
Consultants			
Subcontract	\$20,420	Includes:	
Computer Software		\$15,920 which represents 4 weeks of Olga Wilhelmi's time with NCAR overhead of 50%)	Tasks 3.1-3.8
Rental Equipment Fees		\$4500, for organizing and supporting focus groups for Marcie Demmy Bidwell (includes 20% overhead)	Tasks 3.4 and 3.5
Other			
TOTAL, Other Direct Costs (in MTDC)	\$21,920		
Other Direct Costs (not included in MTDC)			
Permanent Equipment (over \$5,000)			
Capital Expenditures			
Rental Costs	\$500	location for the focus group	Task 3.4 and 3.6
Participant Support Costs:			
-- Stipends	\$0		
-- Travel	\$1,000	\$50/person for 20 participants	Task 3.4 and 3.6
-- Subsistence	\$0		
-- Other	\$600	food for the 2 focus groups	Task 3.4 and 3.6
Tuition - 7% increase as per Admissions advice			
Stipends			
Other (fees)			
TOTAL, Other Direct Costs (not in MTDC)	\$2,100		
Modified Total Direct Costs (MTDC)*	\$43,151		
Total Direct Costs	\$43,651		
Indirect Costs (26%)	\$11,219		
TOTAL PROJECT COSTS	\$54,870		