SCOPE OF WORK

Conservation Demand Reduction by 2050 – "1% per year"

Project Overview

In 2004, the Colorado Water Conservation Board (CWCB) published a Statewide Water Supply Initiative (SWSI) report detailing Colorado's water supplies, existing water demands, and projected future demands. SWSI identified a so-called "Gap" in each river basin – a potential imbalance between increased future water demands and identified projects and processes to meet those demands.

Western Resource Advocates (WRA) believes that future demands are overstated by SWSI – and the newest version of SWSI, "*State of Colorado 2050 Municipal and Industrial Water Use Projections*" released in June 2009 – because the reports only incorporate "natural replacement" of toilets and fixtures in estimating future demands. In this project, WRA will refine future demands for each river basin in Colorado using current conservation programs employed by area utilities, and using a 1% per year decrease in per capita demand. This analysis will extend to the year 2050 to complement CWCB's existing research efforts.

Water conservation and efficiency can stretch existing water supplies, allowing utilities to forestall the need for expensive, controversial, and risky water supply projects. The final white paper will quantify future demand reductions achievable through conservation measures and provide a new look at the future of Colorado's water supply.

Project Team

Drew Beckwith will be the primary researcher, assisted by Bart Miller in project management.

Project Tasks

The following tasks are proposed for this project:

Task #1 – Research and compile data

WRA will collect water use data for Colorado's river basins using existing reports and information collected from water utilities.

Task #2 – Analyze conservation potential

The team will analyze the potential for conservation measures to reduce demand between 2000 and 2050. Future demands will be calculated using existing rates of water use, water use under current conservation programs employed by area utilities, and water use using a 1% per year decrease in per capita demand. A compounding 1% per year decrease in demand over 50 years is equivalent to a 40% reduction in water use.

Task #3 – Prepare summary report

All research findings and the methodology followed will be presented in a white paper.

Project Schedule

Task #1 - complete by mid-September.
Task #2 - complete by end of September.
Task #3 - draft report to CWCB for review by mid-October.

Project Budget

TASK	DESCRIPTION	TOTAL
1	Research and compile data	$ 2,250
2	Analyze conservation potential	$ 1,400
3	Prepare white paper	$ 1,150
	TOTAL FOR PROJECT	$ 4,800

TASK	DESCRIPTION	RATE	RATE
		Project Manager	Analyst
	Hourly Rate	$100	$75
		(Hrs)	(Hrs)
1	Research and compile data	0	30
2	Analyze conservation potential	5	12
3	Prepare white paper	3.25	11
	TOTAL ESTIMATED HOURS	8	53

WRA Project Budget - $4,800