



December 7, 2010

**To:** Brian Janonis, Director, City of Fort Collins Utility Department; Cc: Darin Atteberry, City Council  
**From:** Save the Poudre: Poudre Waterkeeper  
**RE:** Concerns and Recommendations regarding the City's Water Supply and Demand Management Update

Hello Director Janonis,

We have reviewed the "Scope of Work" (SOW) submitted to the Fort Collins Utility Department by AMEC concerning the "Water Supply and Demand Management Policy Update" dated August 2010. Assuming we read it correctly, we have concerns and recommendations about this SOW that we request you consider. Our organization has been contacted as a potential stakeholder in the public process of updating the policy, and our concerns relate to whether this effort will, as stated in the SOW, "effectively provide ... recommendations that address the needs of the City and public stakeholder concerns." Our potential involvement in this process hinges on whether the process is an objective and thorough undertaking.

1. We are very concerned that the policy update may not result in any substantive difference as compared to the current policy because:

a. It appears that the update declines to revisit and potentially revise the City's 50-year Drought Criteria – a key driver of the City's publicly stated need for new water storage and the main controversial issue driving the policy update. If the City does not revisit the Drought Criteria, the update will not be thorough and any revisions may not make a substantive difference. We strongly recommend that the 50-year Drought Criteria be revisited in the policy update.

b. Task 5 is to develop and present "alternative policy provisions for review and consideration." However, given the SOW, we are not clear that any substantive alternatives would be generated by this update. The SOW appears to solely define and predict water supply and demand, rather

than prescribe or suggest different or alternative water supply, demand, and storage opportunities. There does not appear to be any analysis of proposed alternative policies for:

- differing water conservation levels and xeriscaping
- differing greenness levels on the landscape
- differing drought criteria
- differing growth management opportunities promoting low-water-use high-density development versus high-water-use sprawl
- water sharing or leasing with farmers, as opposed to dam construction
- water procurement from developers – seeking senior water rights that do not require as much storage
- alternative water storage options such as gravel pits and aquifers
- a “Plan B” for meeting water supply demands without building a new, larger Halligan dam/reservoir. Ratepayers deserve to see tradeoffs and additional options because the permit for Halligan may be denied by federal regulators, or the project could be hung up in court forever resulting in exorbitant costs and delays. Further, perhaps ratepayers would simply prefer not to build a large dam across the North Fork of the Poudre that floods the canyon? (The Utility Dept’s own survey suggests that this may be ratepayers’ preference.) What is the City’s Plan B?

We recommend that the update consider the above analyses so that alternative policy options and outcomes can be clearly identified to the public, stakeholders, and policymakers.

2. We have serious concerns about the statements in the Scope of Work regarding climate change. The document clearly states that climate change along the Front Range will lead to increasing temperatures that will cause citizens to use more water. On page 4-5, the document states:

“We will also develop a range of projected increases in unit irrigation demands that would result from temperature increases as predicted by global circulation models for the City’s service area. We will develop a range of further adjustments to the 140 gpcd goal that reflect the range of projected increases in unit irrigation demands due to climate change.”

This statement above a) may not be true, and b) may represent a bias. In fact, over the past 60 years in Fort Collins, there is scientific evidence that temperatures have warmed<sup>1</sup>, and there is direct evidence from the City’s own reports that domestic water use has decreased (see attached graph and table). While warming temperatures may cause plants to need more water, scientific evidence suggesting that

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[http://climatetrends.colostate.edu/ct\\_access?plot=1&station=53005&elem=MNTM&dyrbeg=1889&dyrend=2010&cyr=1&yrbeg=1950&yrend=2010&period=calendar&incomplete=1&debug=0&proc=BOTH](http://climatetrends.colostate.edu/ct_access?plot=1&station=53005&elem=MNTM&dyrbeg=1889&dyrend=2010&cyr=1&yrbeg=1950&yrend=2010&period=calendar&incomplete=1&debug=0&proc=BOTH)


urban and suburban lawn irrigators will increase irrigation levels is not presented in this document and may not exist. We strongly recommend that this update scientifically substantiate the claim that increasing temperatures will cause urban and suburban irrigators to increase water use, or change this scope of work to reflect local evidence that climate change may cause a decrease in unit irrigation application. We support good planning; we do not support planning that may unsoundly introduce bias on decisions significantly effecting environmental resources.

In addition, instead of trying to predict an increase in water use – and thus substantiate an argument for increased water storage – due to climate change, a much better response to climate change is to increase resiliency through water conservation. Other cities such as Albuquerque, New Mexico<sup>2</sup> have dramatically increased their water conservation programs – specifically their xeriscaping programs – to prepare for climate change<sup>3</sup>. The best policy option may be to invest in very aggressive water conservation to make Fort Collins’ water supply more impervious to the potential effects of climate change. AMEC’s SOW should fully investigate this opportunity and give ratepayers and stakeholders sound scientific information for better decision-making.

Updating the City’s Water Supply and Demand Management Policy will require significant work and expense (the proposal is for ~\$130,000). In order to be useful to both ratepayers and stakeholders, it would be beneficial to see substantive alternatives offered based on sound science. We are not convinced that this update will offer any substantive alternatives, and we believe adopting our two recommendations above will yield a significantly more worthwhile product. Please let us know your response to our recommendations – your response may help us decide if we want to participate as a stakeholder.

Thank you for your consideration.

Respectfully,

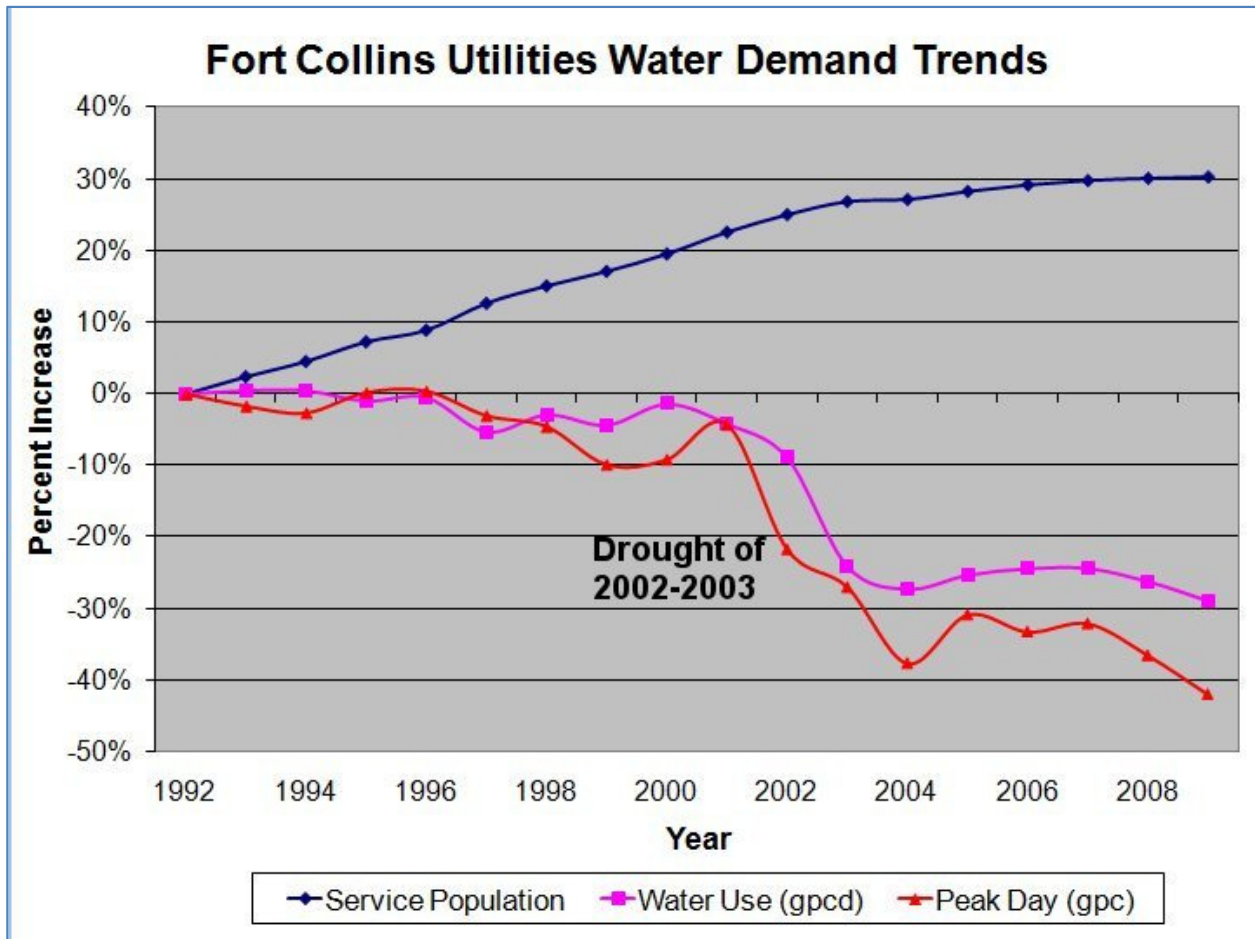


Gary Wockner, PhD, Director  
Save the Poudre: Poudre Waterkeeper  
<http://savethepoudre.org> 970-218-8310

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<sup>2</sup> <http://www.westernresourceadvocates.org/water/lifeline/lifeline.pdf> (page 18)

<sup>3</sup> <http://www.abcwua.org/content/view/73/63/>



Above: 1992-2009 Water Use Trends. Source: City of Fort Collins Water Utility

Below: 1960-2009 Water Use Trends. Source: City of Fort Collins Water Utility

### Historic Treated Water Use

Year	Service Area Population (1,000)	Annual Precip (inches)	Total Water Use (Ac-ft)	Total Water Use (MG)	Average Day Use (MGD)	Peak Day Use (MGD)	Average Use per Person (gpcd)
1960	27.5	10.0	8,590	2,799	7.6	-	278
1961	28.5	28.4	6,718	2,189	6.0	17.0	210
1962	29.8	13.2	8,756	2,853	7.8	18.0	262
1963	31.5	12.0	8,799	2,867	7.9	17.0	249
1964	34.1	8.1	9,553	3,113	8.5	17.5	249
1965	38.2	16.2	8,446	2,752	7.5	17.0	197
1966	40.9	7.3	10,491	3,419	9.4	17.5	229
1967	42.7	21.3	8,623	2,810	7.7	16.0	180
1968	45.1	13.3	10,207	3,326	9.1	17.0	201
1969	46.9	17.7	10,330	3,366	9.2	17.0	197
1970	48.4	14.3	11,257	3,668	10.0	27.1	208
1971	50.8	14.0	12,048	3,926	10.8	28.4	212
1972	54.2	9.9	14,007	4,564	12.5	27.7	230
1973	56.4	14.1	14,358	4,679	12.8	31.7	227
1974	59.3	11.6	16,810	5,478	15.0	34.3	253
1975	60.4	17.1	15,186	4,948	13.6	35.9	224
1976	61.7	10.6	15,160	4,940	13.5	35.7	219
1977	64.2	12.2	15,216	4,958	13.6	32.8	212
1978	67.1	14.9	16,426	5,352	14.7	36.7	219
1979	70.3	22.1	14,168	4,617	12.6	36.0	180
1980	73.7	14.9	17,339	5,650	15.4	40.1	209
1981	76.5	14.1	16,280	5,305	14.5	38.0	190
1982	77.1	21.1	15,594	5,081	13.9	40.1	181
1983	78.5	19.5	16,865	5,495	15.1	40.7	192
1984	81.8	14.7	17,995	5,864	16.0	40.7	196
1985	85.0	16.4	20,424	6,655	18.2	44.2	215
1986	87.5	12.0	22,848	7,445	20.4	49.3	233
1987	90.9	14.8	25,808	8,410	23.0	54.9	247 <sub>1</sub>
1988	92.4	15.4	29,619	9,651	26.4	53.8	255 <sub>1</sub>
1989	93.6	12.9	29,302	9,548	26.2	60.6	247 <sub>1</sub>
1990	95.9	17.3	28,508	9,289	25.5	58.6	231 <sub>1</sub>
1991	97.2	14.1	27,680	9,020	24.7	55.9	220 <sub>1</sub>
1992	99.0	20.7	26,405	8,604	23.5	45.6	204 <sub>1</sub>
1993	101.4	17.3	25,731	8,384	23.0	52.5	194 <sub>1</sub>
1994	103.5	13.4	27,986	9,119	25.0	54.4	211 <sub>1</sub>
1995	106.2	20.2	24,763	8,069	22.1	55.5	181 <sub>1</sub>
1996	107.8	14.7	27,923	9,099	24.9	51.5	203 <sub>1</sub>
1997	111.5	24.8	26,907	8,768	24.0	58.9	188 <sub>1</sub>
1998	113.9	16.5	28,694	9,350	25.6	59.3	196 <sub>1</sub>
1999	115.9	20.7	27,620	9,000	24.7	53.7	185 <sub>1</sub>
2000	118.3	11.3	31,594	10,295	28.2	55.9	212 <sub>1</sub>
2001	121.3	12.3	30,621	9,978	27.3	55.8	199 <sub>1</sub>
2002	123.7	9.3	29,457	9,599	26.2	51.4	183 <sub>1</sub>
2003	125.5	18.2	25,410	8,280	22.6	46.9	154 <sub>1</sub>
2004	125.8	18.1	24,501	7,984	21.8	42.3	146 <sub>1</sub>
2005	126.9	16.2	26,076	8,497	23.3	50.1	155 <sub>1</sub>
2006	127.8	11.2	28,441	9,268	25.4	48.9	172 <sub>1</sub>
2007	128.4	13.7	27,192	8,860	24.2	47.5	162 <sub>1</sub>
2008	128.7	13.8	25,633	8,352	22.8	44.3	153 <sub>1</sub>
2009	128.9	21.9	22,683	7,391	20.2	37.1	135 <sub>1</sub>

<sup>1</sup> Average use per person does not include large contractual water use.