

CWCB DROUGHT MANAGEMENT PLAN GRANT APPLICATION SUBMITTAL REQUIREMENTS

1. Contact information of entity seeking grant:

City of Evans

Attn: Earl Smith, Director of Public Works
1100 37th Street
Evans, CO 80620
T: (970) 475-1110
F: (970) 330-3472

2. Selected firm and individuals to assist in development of Drought Management Plan:

Clear Water Solutions, Inc.

Attn: Steve Nguyen
8010 South County Road 5, Suite 105
Windsor, CO 80528
T: (970) 223-3706
F: (970) 223-3763

Clear Water Solutions, Inc. (CWS) will complete a Drought Management Plan (DMP) for the City of Evans. Individuals from CWS that will be involved in the project include Michelle Hatcher and Steve Nguyen.

Michelle Hatcher has worked on several CWCB-approved water conservation plans and has over nine years of experience in water resources planning and management. She will assist in the entire process including developing plan objectives with the stakeholder committee, assessing historical droughts and development of drought mitigation and response strategies, and provide the development of a staged drought response program. Michelle will serve as Project Manager for this DMP.

Steve Nguyen is a Professional Engineer registered in the State of Colorado. He has fifteen years of experience in the water rights and water planning arena. He has helped many clients manage their water resources including water supply, water acquisition, water usage, water conservation and drought management. Steve will assist with client management and be involved with all aspects of plan development.

City of Evans

Earl Smith is the Director of Public Works and will serve as the primary contact for the City on this project. Earl will provide general direction on all aspects of the plan including profiling the existing system, stakeholder development, historical assessment, drought vulnerability assessment, development of drought mitigation and response strategies, development of the drought stages and trigger points, plan implementation and monitoring as well as plan review and updates. His knowledge of operations and maintenance will be useful when planning potential water restriction scenarios. Earl is essential in developing a DMP for the City.

Cameron Parrott is the City Engineer. Cameron will help develop drought planning stages and select final measures and programs to be implemented. He will provide insight concerning drought impacts, including water use habits, general performance of the City's infrastructure during droughts, history of droughts and City response, and system limitations during drought.

Dawn Anderson is a civil engineer with the City of Evans. Dawn will assist Cameron with documenting drought impacts, including water use habits, general performance of the City's infrastructure during droughts, history of droughts and City response, and system limitations during drought.

Jessica Gonifas, the City's Finance Director, will provide input regarding the potential revenue impacts of drought management and implementation. Jessica will also provide valuable input on potential drought surcharges or a drought management reserve in the water fund.

Jessica Schoepner is the Public Information Officer for the City. Jessica will provide insight to the Stakeholder Committee from the water user's point of view. In addition, Jessica will assist in the development of the communication plan before and during a drought. Jessica will also help coordinate the 60-day public comment period.

Suzanne Cox is the Utility Billing Technician for the City. Suzanne has a good understanding of and access to information such as water use per customer category and revenues generated. She will assist CWS with profiling the existing system, providing historical information and water use data for the City. She will assist with all stages of plan development.

3. Identification of retail water delivery of the covered entity for past five years:

The City's average water usage for the past five years for each customer category is shown on **Table 1**. The total water usage has ranged from 2,237 to 2,527 acre-feet and averages 2,397 acre-feet.

In 2009, there was a decrease in gallons per capita per day (gpcd) for the City, which may be due in part to the water conservation plan that was completed in 2008.

Table 1: Annual Water Delivery

Customer Category		2007	2008	2009	2010	2011	Average
		(ac-ft)					
Potable	Residential	1,260	1,237	1,056	1,184	1,177	
	Multi-Family	478	479	440	485	521	
	Commercial	432	418	405	434	417	
	Irrigation	55	81	55	55	76	
	City Usage	101	93	88	55	61	
Non-Potable	Residential	118	115	105	39	42	
	Multi-Family	5	9	12	11	16	
	Commercial	43	33	29	22	31	
	City Usage	35	45	47	38	46	
	Total	2,527	2,510	2,237	2,323	2,387	2,397
	Population	17,912	18,000	18,517	18,537	18,634	
	Residential GPCD	63	61	51	57	56	58
	Total GPCD	126	124	108	112	114	117

The City of Evans water rights are managed through a diverse portfolio of supplies including CBT, Greeley-Loveland Irrigation Company, Seven Lakes, Windy Gap, and Lake Loveland. In addition, the City owns the Evans Town Ditch and Godfry Ditch which are used for non-potable irrigation. **Table 2** shows the water rights owned by the City.

Table 2: City-Owned Water Rights and Yield

		Yield (AF/Unit)		Total Yield (AF)	
Water Right Name or Source	No. of Shares or Units Owned	Average Year Yield	Dry-Year or 2002	Average Year Yield	Firm or Dry Year Annual Yield
Potable Sources					
C-BT	3,426	0.7	0.6	2398	2056
Windy Gap Project	5	60	0	300	0
Greeley-Loveland System*	127.93	10.5	0.5	1343	64
Lake Loveland System	15.75	33.1	23.6	521	372
Seven Lakes System	40.83	15	5.1	612	208
Potable Total =				5,175	2,699
Non-Potable Only Sources					
Evans Town Ditch	100%			29.3 cfs	29.3 cfs
Godfry Ditch	25			1344	667**

* The City owns 145.93 shares with some being leased back to farmers; The City uses 127.93 shares for potable and non-potable use

**1957 Yield.

Share Ownership Data Source: 2004 Windy Gap FIRMING

Yield Data Source: 2003 Tetra Tech September 8, 2003 Memo, NISP Report, & info from Staff.

4. Background characterizing the water system, potential growth and any other pertinent issues that relate to the stated evaluation criteria.

- (a) Within the last five years, Evans has a total per capita water use that ranges from 108 to 126 gallons per capita per day (gpcd) with an average of 117 gpcd as shown in **Table 1**. This calculation was performed using the total billed usage and population estimates for the City.
- (b) Population projections used the 2009 City of Evans Water Conservation Plan and recent 2010 Census data from the State Demography Office. **Table 3** shows the estimated population for the last five years, current year and the next ten years. We obtained current Evans population data from the 2010 Census, which showed a population of 18,537. Future growth rates were obtained from staff and show a 6% growth rate from 2014 to 2016, 5% growth rate in 2017, 4% in 2018 and 3% for 2019 to 2021.

Table 3: Evans Population Growth

Year	Population	Growth Rate
2007	17,912	
2008	18,000	0.49%
2009	18,517	2.87%
2010	18,537	2.25%
2011	18,634	2.25%
2012	19,053	2.25%
2013	19,061	4.00%
2014	19,072	6.00%
2015	19,084	6.00%
2016	19,095	6.00%
2017	19,105	5.00%
2018	19,112	4.00%
2019	19,118	3.00%
2020	19,124	3.00%
2021	19,130	3.00%

(c) The estimated water savings goal for this DMP will be to lower the total water use by 10%-15% during a drought. This is in addition to the 13% savings goal outlined in the City's Water Conservation Plan. This can be done with a combination of short-term drought mitigation strategies and long-term water conservation measures already addressed in its water conservation plan. The City will revisit and revise this goal, as necessary, as it further analyzes the potential water savings that corresponds to the drought stages through development of this DMP. The City envisions having multiple savings goals that correspond to various drought levels.

5. Description of impacts to City during 2002-2003 Drought

The City of Evans no longer has billed water used data from 2002 due to an archiving schedule of 10 years. We were able to obtain 2003 data and reviewed previous water master plans and City documents to estimate 2002 water use. We also interviewed staff to document how the City managed during the 2002-2003 drought.

During the 2002-2003 drought, the City of Evans implemented stricter watering restrictions to reduce water use. The City also stepped up enforcement to issue warnings and fines as necessary. However, no fines were issued. Generally, citizens responded well to the messaging the City provided through water bills and its website. The City in general managed well through the last drought from a water supply standpoint. The City had some water that was dedicated before the development occurred and also actively budgeted and purchased CBT supplies in the open market starting in 1996. For these reasons, in addition to

the City's diverse water portfolio, the City managed through 2002 and 2003 fairly well.

Table 4: Evans2002/2003 Water Usage

Customer Category		2002	2003
Potable	Residential	2,171	1,543
	Multi-Family		0
	Commercial		335
	Irrigation		18
	City Usage		55
Non-Potable	Residential	38	5
	Multi-Family		0
	Commercial		31
	City Usage		2
	Total	2,209	1,989
	Population	11,913	13,113
	Residential GPCD		105
	Total GPCD	166	135

6. In this DMP, the City of Evans will perform the eight steps of drought planning as outlined in the *Drought Management Plan Guidance Document*. See **Attachment A** for the Scope of Work and **Attachment B** for a projected schedule for the DMP.
7. The City will use the grant money for completion of the DMP and will provide CWS all information, including billing and financial information, as well as staff time to successfully complete the DMP. See **Attachment C** for the breakdown of Project Fees including projected hours and rates.
8. "The Evans City Council is committed to water resource sustainability, conservation and drought management. Both staff and Council understand the needs and benefits to complete a Drought Management Plan to ensure the City is properly prepared to deal with and respond to a drought in a timely and sufficient manner to reduce economic, social and environmental impacts. We are committed to completing the Drought Management Plan in its entirety to be approved by CWCB for the grant money requested."

X

Aden Hogan, City Manager

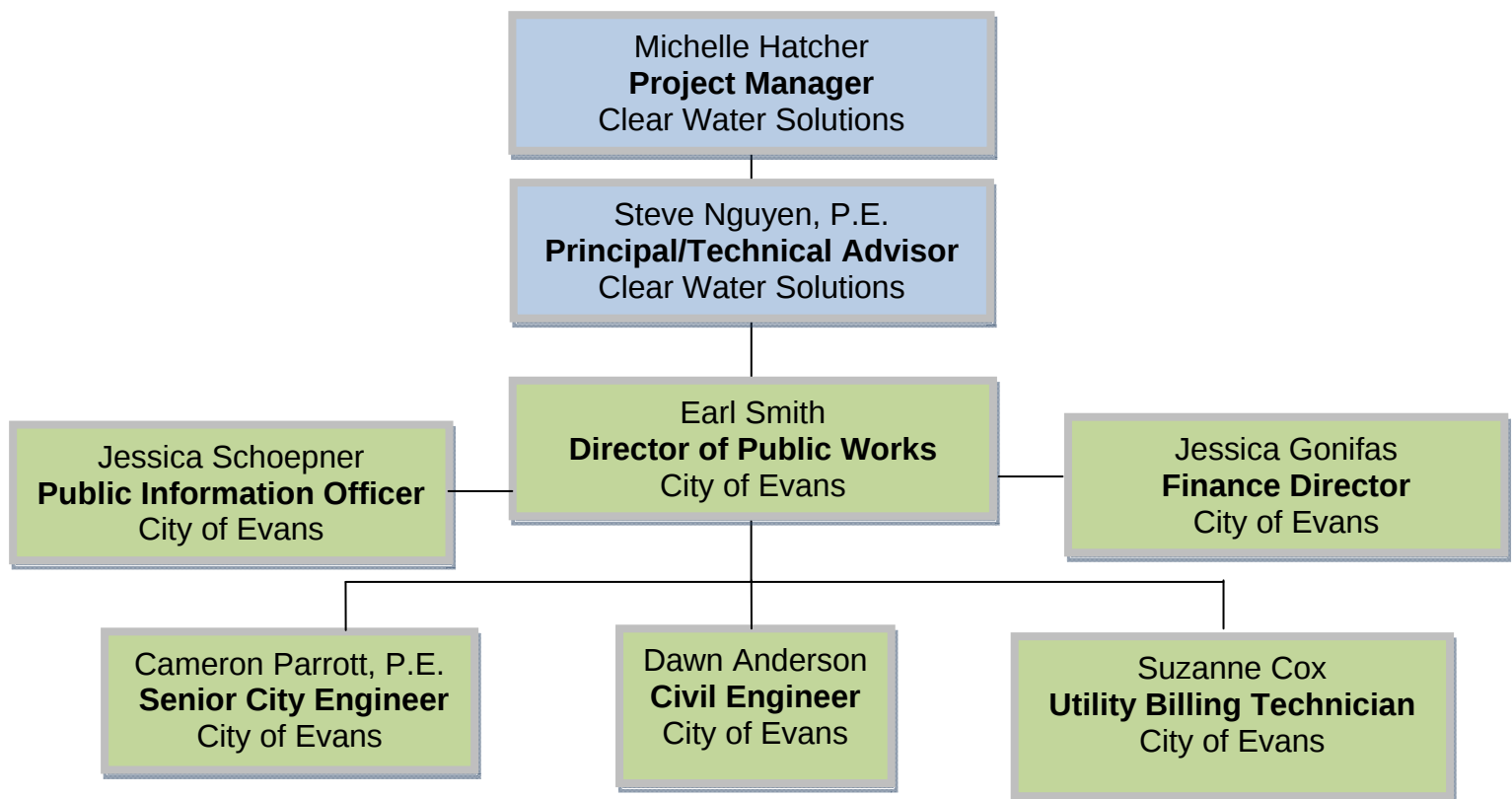
9. Description of Public Review Process

The City will publish a notice in the local newspaper and post on its website that a Draft DMP is available for the public to review and comment. The public will have a 60-day period to provide comments to the City.

Attachment A - Scope of Work City of Evans Drought Management Plan

This Scope of Work describes the work to be performed by Clear Water Solutions, Inc. (CWS) for the City of Evans. The scope outlines the tasks required to successfully complete a Drought Management Plan (DMP) in accordance with CWCB's Drought Management Plan guidelines and policies.

The scope will be completed under the following structure:



DEVELOP DROUGHT MANAGEMENT PLAN

The City is seeking grant assistance from the Office of Water Conservation and Drought Planning pursuant to the Water Conservation Act of 2004 HB04-1365 to develop a DMP. The main purpose of this DMP is to provide the City with actions and procedures for responding to a drought.

The DMP will be developed following *CWCB's Drought Management Plan Development Guidance Document, August 2010*. This document outlines the requirements needed for CWCB's approval. CWS will submit a draft DMP to the City for comments prior to a public-review period. Following the public-review process, CWS will incorporate public comments as appropriate and submit the DMP to CWCB for final approval.

Development of this DMP is divided into steps and subtasks similar to the CWCB Model Plan Template. This DMP includes all the essential items necessary for CWCB to approve the DMP.

INTRODUCTION

Purpose

The activities described under this task will provide general background on the City's existing water supply system, in addition to describing the stakeholder selection process and overall objectives of the DMP.

Approach

Kickoff Meeting with City staff to discuss overall project and gather preliminary data.

I.1 - Profile Existing System

- I.1.1 CWS, with the help of City staff, will describe the City's service area.
- I.1.2 CWS, with the help of City staff, will describe the City's existing water supplies.
- I.1.3 CWS, with the help of City staff, will describe the service area, existing water supplies and customer profiles.

I.2 - Drought Mitigation and Response Planning

- I.2.1 CWS will provide a description of a drought.
- I.2.2 CWS will describe the impact of a drought on the City's water supplies.
- I.2.3 CWS will describe the purpose and benefits of drought mitigation and

response planning.

- I.2.4 CWS will describe differences between drought mitigation and response planning.

I.3 - Historical Drought Planning Efforts

- I.3.1 CWS, with help of City staff, will describe any historical planning efforts to deal with drought conditions.
- I.3.2 CWS and City staff will explain how this plan has been modified from the current drought planning efforts and will be an improvement to historical efforts.

I.4 - Drought Planning and Water Conservation

- I.4.1 CWS will discuss the difference between drought planning and water conservation planning.

STEP 1 – STAKEHOLDERS, OBJECTIVES AND PRINCIPLES

Purpose

The activities described under this task will introduce the stakeholder process and the basic objectives of the DMP.

Approach

Stakeholder Committee Meeting #1 - Kickoff project and gather information for Steps 2 and 3.

1.1 - Drought Planning Committee

- 1.1.1 CWS will define the role of the drought committee in developing the overall DMP.
- 1.1.2 In coordination with City staff, CWS will select members that will be involved as stakeholders throughout development of this DMP. A list of these members will be developed including their job titles and description of expertise.

1.2 - Objectives of DMP

- 1.2.1 In coordination with City staff, CWS will discuss the major objectives for this DMP and how these objectives fit within broader water planning efforts.

- 1.2.2 CWS and City staff will discuss how the objectives for the DMP reflect the water use priorities during a drought.
- 1.2.3 CWS and City staff will develop a list of water use priorities for the DMP.
- 1.2.4 CWS and City staff will discuss how the operating principles were incorporated into the overall DMP development and how they may be considered during implementation.

STEP 2 – HISTORICAL DROUGHT AND IMPACT ASSESSMENT

Purpose

The goal of this task is to collect historical drought information to help provide insight for future drought planning.

Approach

2.1 - Historical Assessment of Drought, Available Supplies, and Demands

- 2.1.1 CWS will collect historical information that may include streamflow data, reservoir levels, precipitation, groundwater levels, wholesale supplies, water quality issues, etc. to identify significant previous/current droughts and how they affected the City's water supplies.
- 2.1.2 CWS will describe the existing operational factors, concepts, and terms essential to public communication (i.e., firm and safe yield, drought reserves, water rights, etc.)
- 2.1.3 CWS, with the help of City staff, will outline the water demands during previous droughts, which may include per capita water demands (gpcd), demands by customer type, indoor and outdoor water usage, etc.

2.2 - Historical Drought Impact, Mitigation and Response Assessment

- 2.2.1 CWS will utilize *Worksheet A* from the guidance document to provide a list of historical and current drought related impacts.
- 2.2.2 CWS will utilize *Worksheets B and C* to provide a list of demand- and supply-side mitigation measures that were taken during previous/current droughts.
- 2.2.3 CWS will utilize *Worksheets B and C* to show the overall effectiveness of drought measures taken during previous/current droughts.

STEP 3 – DROUGHT VULNERABILITY ASSESSMENT

Purpose

The activities described under this task will provide an overview of water supply reliability and identify potential future drought impacts.

Approach

3.1 - Water Supply Reliability and Drought Management Planning

- 3.1.1 CWS will provide a summary of other water supply reliability documents, which may include raw water master plans, forecasting models, etc.
- 3.1.2 CWS will define key terms used to define water supply reliability, which may include firm yield, safe yield, etc.
- 3.1.3 CWS will describe how water supply reliability is related to drought planning.
- 3.1.4 CWS will describe other factors that could affect water quality and/or quality of water supplies or demands that are not directly incorporated into water reliability studies, such as Colorado compact call, sequential years of drought, water quality, etc.

3.2 - Drought Impact Assessment

- 3.2.1 CWS along with City staff will identify potential impacts that could occur during future droughts. *Worksheet A* may be utilized as an outline.
- 3.2.2 CWS with City staff will show the relative priority of the potential impacts. *Worksheet A* may be utilized as an outline.

STEP 4 – DROUGHT MITIGATION AND RESPONSE STRATEGIES

Purpose

The activities under this task will describe the selected drought mitigation and response strategies. Drought response measures target temporary savings through changes in customer behavior during a drought. Drought mitigation measures are taken prior to a drought to avoid or reduce the impacts from a drought.

Approach

Stakeholder Committee Meeting #2 - Gather information for Steps 4 and 5.

4.1 - Drought Mitigation Measures

- 4.1.1 CWS and City staff will develop a list of drought mitigation measures.
- 4.1.2 CWS may utilize *Worksheets B and C* to select and screen supply and demand side response strategies. *Worksheet A* may be used to develop new mitigation action steps.
- 4.1.3 CWS will describe the criteria used to select the mitigation measures.
- 4.1.4 If water conservation measures are being used as drought mitigation measures, then CWS will provide a discussion of those measures.

4.2 - Supply-Side Response Strategies

- 4.2.1 CWS may utilize *Worksheet B* to develop a list of supply-side response strategies and specific measures that will be taken.
- 4.2.2 CWS will describe the criteria used to select the mitigation measures.

4.3 - Demand-Side Response Strategies

- 4.3.1 CWS may utilize *Worksheet C* to develop a list of demand-side response strategies and specific measures that will be taken.
- 4.3.2 CWS will describe the criteria used to select the mitigation measures.

4.4 - Drought Public Information Campaign

- 4.4.1 CWS may utilize *Worksheet D* to outline the information for the public drought campaign such as: target audience, communication tools for relaying information, specific key information to convey and opportunities for future synergies.
- 4.4.2 CWS with City staff may develop prescript messages to be delivered to the public throughout the various stages of drought, if a public information campaign is selected.

STEP 5 – DROUGHT STAGES, TRIGGER POINTS AND RESPONSE TARGETS

Purpose

The activities described under this task will present the drought stages, trigger points and response targets. These tasks will be incorporated into a drought declaration and response effort.

Approach

5.1 - Drought Stages, Trigger Points and Response Targets

- 5.1.1 CWS will present the drought stages and, if applicable, corresponding drought trigger points and response targets. *Worksheet E* may be used to present this information.
- 5.1.2 CWS will explain how each drought stage corresponds to the severity of the drought and the amount of water that needs to be saved, if applicable.

5.2 - Drought Declaration and Predictability

- 5.2.1 CWS will discuss the nature of weather in Colorado and the challenges for detecting drought early.
- 5.2.2 CWS with City staff will develop a final list of drought indicators and how they reflect current water supply conditions.
- 5.2.3 CWS will describe why the drought triggers were selected as opposed to other possible triggers.
- 5.2.4 CWS will discuss how drought indicators, triggers and other pertinent data are incorporated into the decision making process.
- 5.2.5 CWS will discuss how the drought indicators should be monitored and the frequency and any other critical times to monitor.

Stakeholder Committee Meeting #3- present proposed drought stages to get feedback

Meet with City Board to present proposed drought stages to get feedback

STEP 6 – STAGED DROUGHT RESPONSE PROGRAM

Purpose

The activities described under this task outline the drought response measures that correspond to each drought stage developed under Step 5.

Approach

- 6.0.1 CWS will present the supply- and demand-side response measures, by drought stage, and may utilize *Worksheets F and G*.
- 6.0.2 CWS will present a summary table of the drought response measures including the drought stages, trigger points and response targets. *Worksheet H* may be utilized for this task.
- 6.0.3 CWS will present the staged public drought campaign along with the drought stages, if the provider decides to do a public drought campaign. This may be included in an appendix if appropriate.
- 6.0.4 CWS will develop a staged drought program with input from City staff and Board along with the stakeholder committee.

STEP 7 – IMPLEMENTATION AND MONITORING

Purpose

The activities described under this task will outline full implementation of the DMP which includes: mitigation plan, drought indicator monitoring, drought declaration protocol, implementation and enforcement of the staged drought response program, revenue planning and continued monitoring of the DMP and revising when necessary.

Approach

7.1 - Mitigation Action Plan

- 7.1.1 CWS with City staff will list the drought mitigation actions to be performed. *Worksheet I* may be utilized.
- 7.1.2 CWS with City staff will outline the steps necessary to implement each mitigation action. *Worksheet I* may be utilized.
- 7.1.3 CWS with City staff will set milestone deadlines for the DMP. *Worksheet I* may be utilized.
- 7.1.4 CWS with City staff will outline the entities and/or staff responsible for administering the mitigation action. *Worksheet I* may be utilized.

7.2 - Monitoring of Drought Indicators

- 7.2.1 CWS will outline the drought data that is to be monitored on an annual

and seasonal basis.

7.2.2 CWS will detail the frequency of the monitoring schedule.

7.2.3 CWS will outline the entities and/or staff responsible for drought monitoring.

7.3 - Drought Declarations

7.3.1 CWS will present the trigger points and/or drought indicator data to be used by staff to evaluate drought conditions.

7.3.2 CWS will outline the decision makers responsible for declaring a drought and corresponding drought stages where applicable.

7.3.3 CWS will discuss the importance of declaring a drought in a timely manner as well as addressing the timing of when the decision makers and the general public will be informed.

7.3.4 CWS will outline the entities and/or staff responsible for announcing drought declaration to the public.

7.4 - Implementation of Staged Drought Response Program

7.4.1 CWS, with City staff, will outline the entities and/or staff responsible for administering the staged drought response program.

7.4.2 CWS, with City staff, will outline the staff responsible for administering the public drought campaign.

7.4.3 CWS, along with City staff, will outline the coordination and communication between various entities and City staff.

7.5 - Enforcement of Staged Drought Response Program

7.5.1 CWS, along with City staff, will decide what enforcement policies are appropriate for each stage of drought. *Worksheet G and H* may be used to present this information.

7.5.2 CWS, along with City staff, will decide the level of monitoring/patrolling necessary for each stage of drought.

7.5.3 CWS, along with City staff, will outline how the enforcement information will be conveyed to the public if deemed appropriate.

7.5.4 CWS, along with City staff, will decide who is responsible for the

administration effort and approving exceptions to the enforcement policy.

7.6 - Revenue Implications and Financial Budgeting Plan

- 7.6.1 CWS will discuss how the reduction of water use can lead to loss of revenue and provide financial hardship.
- 7.6.2 CWS and City staff will analyze what financial resources may be necessary to implement the response programs such as the public drought campaign or stated drought response program. CWS will also evaluate if any additional funds may be necessary to intensify drought monitoring efforts.
- 7.6.3 CWS, along with City staff, will develop strategies to address potential revenue losses and determine the general timing for implementing these strategies.

7.7 - Monitoring Plan Effectiveness

- 7.7.1 CWS, along with City staff, will outline the data to be collected during a drought such as: demand data, lessons learned, conditions of the water supply system during the drought (e.g., reservoir levels), public perceptions and the general response to a drought, and the administrative staged drought response program (e.g., number of citations issued).
- 7.7.2 CWS, along with City staff, will outline the staff responsible for data collection, evaluation and recommendations on DMP improvements.

Stakeholder Committee Meeting #4 - Committee reviews draft plan and provides comments.

STEP 8 – FORMAL PLAN APPROVAL AND UPDATES

Purpose

The activities described under this task will address the public review and formal approval process for the necessary ordinance(s) and agreement(s) of the DMP.

Approach

8.1 - Public-Review Process

- 8.1.1 CWS and the City will publish a notice in the local newspapers and make a draft plan publically available for a 60-day comment period.

- 8.1.2 If members of the community are involved in the drought committee, a description of their involvement will be provided by CWS.
- 8.1.3 CWS and the City will outline the public-review process and describe how the public will be able to access the DMP.

8.2 - Adoption of Ordinances and Official Agreements

- 8.2.1 CWS and City staff will summarize the ordinances or policies necessary to implement this DMP and may include policy changes in order to facilitate the formal declaration of a drought; implement and enforce the staged drought response program and public drought campaign; and adopt revenue changes.
- 8.2.2 City staff will provide official agreements with other entities for drought-related coordination, if needed.
- 8.2.3 CWS will provide copies of official Ordinances or Agreements if they are developed.

8.3 - Drought Management Plan Approval

- 8.3.1 CWS, along with City staff, will describe the governmental body that either approves or adopts the DMP.
- 8.3.2 CWS, along with City staff, will provide the date of the approval or adoption of the final DMP.
- 8.3.3 CWS will provide a copy of the official approval/adoption.

8.4 - Periodic Review and Update

- 8.4.1 CWS, along with City staff, will discuss the frequency of when they hope to update the DMP and provide an anticipated date for the next update. CWCB recommends a DMP update every five years.
- 8.4.2 CWS, along with City staff, will provide an anticipated date for the next update.
- 8.4.3 CWS, along with City staff, will provide the staff member(s) responsible for initiating the next DMP update and collecting the appropriate data.

Meeting with City Council to present draft plan.

STEP 9 – SUGGESTED APPENDICES

9.0.1 Official copies of adopted ordinances(s) and/or official agreement(s)

9.0.2 Copy of Plan approval documents

REQUIREMENTS

1. City Council and staff will review a final draft of the DMP and provide comments.
2. CWS will incorporate the City's comments prior to the public-review process.
3. Public comments will be solicited and incorporated into the DMP as necessary.
4. The City will formally adopt the final DMP.
5. CWS will submit the final DMP to CWCB.
6. CWCB will review final DMP.

DELIVERABLES

CWS will submit the following:

- Monthly invoices to the City with brief progress reports.
- Submit 25%, 50% and 75% progress reports to CWCB.
- Three meetings with staff and City Council.
- Four meetings with Stakeholder Committee.
- Provide draft DMP to the City for comments prior to submission to CWCB.
- Final DMP submitted electronically to CWCB with all comments, including public input.
- Ten hard copies of the final DMP submitted to the City after CWCB's final approval.

ATTACHMENT B

Project Schedule

City of Evans Drought Management Plan

Task	Date
CWCB approves grant and PO issued	6/30/2012
Kick-off meeting with Stakeholder Committee for Goal Development	7/22/2012
Submit 25% progress report to CWCB	8/9/2012
Submit 50% progress report to CWCB	8/31/2012
Submit 75% progress report to CWCB	9/29/2012
Submit draft plan to staff for review and comment	11/2/2012
Staff provides comment from review	11/16/2012
Submit draft report to City Council for review	11/23/2012
Present draft report at City Council meeting and collect comments	12/12/2012
Notify public of draft plan in paper and website	12/17/2012
Public review period (60 days)	12/18/2012 - 2/17/2013
City provides public input comments to CWS	2/18/2013
CWS incorporates public comments	2/21/2013
City Council formally adopts final report	2/27/2013
CWS submits final report to CWCB	3/1/2013
CWCB approves final report	up to 90 days

ITEMS OF WORK	CWS		CWS		City of Firestone Staff (In-Kind)												Labor Total	Expense Total	Grand Total	Cash Contribution	CWCB Grant Request
	Michelle Hatcher		Steve Nguyen		Public Works Director		City Engineer		Civil Engineer		Finance Director		Public Information		Billing Clerk						
	HOURS \$120	SUB TOTAL	HOURS \$150	SUB TOTAL	HOURS \$67.42	SUB TOTAL	HOURS \$56.82	SUB TOTAL	HOURS \$35.12	SUB TOTAL	HOURS \$47.42	SUB TOTAL	HOURS \$31.89	SUB TOTAL	HOURS \$21.75	SUB TOTAL					
Introduction																					
I.1 Profile Existing System	2	\$240	1	\$150	1	\$67	1	\$57		\$0		\$0		\$0		\$0	\$514		\$514		\$390
I.2 Drought Mitigation & Response Planning	2	\$240	1	\$150	1	\$67	1	\$57		\$0		\$0		\$0		\$0	\$514		\$514	\$250	\$140
I.3 Historical Drought Planning Efforts	1	\$120	1	\$150	1	\$67	1	\$57		\$0		\$0		\$0	2	\$44	\$438		\$438		\$270
I.4 Drought Planning and Water Conservation	1	\$120	1	\$150		\$0		\$0		\$0		\$0		\$0		\$0	\$270		\$270		\$270
Kick-off meeting with City Staff	4	\$480	3	\$450	2	\$135	2	\$114	2	\$70	2	\$95	2	\$64	2	\$44	\$1,451		\$1,451		\$930
Sub-Total	10	\$1,200	7	\$1,050	5	\$337	5	\$284	2	\$70	2	\$95	2	\$64	4	\$87	\$3,187	\$0	\$3,187	\$250	\$2,000
Step 1 - Stakeholders and Plan Objectives and Principles																					
1.1 Drought Planning Committee	2	\$240	1	\$150	2	\$135	2	\$114		\$0	1	\$47		\$0		\$0	\$686		\$686		\$390
1.2 Objectives of Drought Management Plan	2	\$240	1	\$150	2	\$135	2	\$114	1	\$35	1	\$47	1	\$32	2	\$44	\$796		\$796		\$390
Drought Planning Committee Meeting #1	4	\$480	3	\$450	2	\$135	2	\$114	2	\$70	2	\$95	2	\$64	2	\$44	\$1,451		\$1,451		\$930
Sub-Total	8	\$960	5	\$750	6	\$405	6	\$341	3	\$105	4	\$190	3	\$96	4	\$87	\$2,933	\$0	\$2,933	\$0	\$1,710
Step 2 - Historical Drought and Impact Assessment																					
2.1 Historic Assessment of Drought, Supplies & Demands	16	\$1,920	1	\$150	4	\$270	2	\$114	2	\$70	2	\$95	1	\$32	2	\$44	\$2,694		\$2,694	\$250	\$1,820
2.2 Historical Drought Impact, Mitigation & Response Assessment	24	\$2,880	1	\$150	4	\$270	2	\$114	2	\$70	2	\$95	1	\$32	2	\$44	\$3,654		\$3,654		\$3,030
Sub-Total	40	\$4,800	2	\$300	8	\$539	4	\$227	4	\$140	4	\$190	2	\$64	4	\$87	\$6,348	\$0	\$6,348	\$250	\$4,850
Step 3 - Drought Vulnerability Assessment																					
3.1 Water Supply Reliability & Drought Management Planning	8	\$960	4	\$600	4	\$270	1	\$57	1	\$35	2	\$95	2	\$64	2	\$44	\$2,124		\$2,124	\$250	\$1,310
3.2 Drought Impacts Assessment	8	\$960	4	\$600	4	\$270	1	\$57	1	\$35	2	\$95	2	\$64	2	\$44	\$2,124		\$2,124		\$1,560
Sub-Total	16	\$1,920	8	\$1,200	8	\$539	2	\$114	2	\$70	4	\$190	4	\$128	4	\$87	\$4,247	\$0	\$4,247	\$250	\$2,870
Step 4 - Drought Mitigation and Response Strategies																					
4.1 Drought Mitigation Measures	4	\$480	2	\$300	2	\$135	1	\$57	1	\$35	1	\$47	2	\$64	1	\$22	\$1,140		\$1,140	\$250	\$530
4.2 Supply-side Response Strategies	16	\$1,920	4	\$600	4	\$270	1	\$57	1	\$35	1	\$47	2	\$64	1	\$22	\$3,015		\$3,015		\$2,520
4.3 Demand-side Response Strategies	16	\$1,920	4	\$600	4	\$270	1	\$57	1	\$35	1	\$47	2	\$64	1	\$22	\$3,015		\$3,015		\$2,520
4.4 Drought Public Information Campaign	8	\$960	4	\$600	4	\$270	1	\$57	1	\$35	1	\$47	4	\$128	1	\$22	\$2,118		\$2,118		\$1,560
Sub-Total	44	\$5,280	14	\$2,100	14	\$944	4	\$227	4	\$140	4	\$190	10	\$319	4	\$87	\$9,287	\$0	\$9,287	\$250	\$7,130
Step 5 - Drought Stages, Trigger Points & Response Targets																					
5.1 Drought Stages, Trigger Points and Response Targets	32	\$3,840	6	\$900	4	\$270	4	\$227		\$0		\$0	4	\$128	1	\$22	\$5,386		\$5,386	\$250	\$4,490
5.2 Drought Declaration and Predictability	16	\$1,920	4	\$600	4	\$270	4	\$227		\$0		\$0	4	\$128	1	\$22	\$3,166		\$3,166		\$2,520
Drought Planning Committee Meeting #2	4	\$480	3	\$450	2	\$135	2	\$114	2	\$70	2	\$95	2	\$64	2	\$44	\$1,451		\$1,451		\$930
Sub-Total	52	\$6,240	13	\$1,950	10	\$674	10	\$568	2	\$70	2	\$95	10	\$319	4	\$87	\$10,003	\$0	\$10,003	\$250	\$7,940
Step 6 - Staged Drought Response Program																					
6.1 Supply- & Demand-Side Response Measures by Drought Stage	4	\$480	4	\$600	4	\$270	2	\$114	1	\$35	1	\$47	2	\$64	1	\$22	\$1,631		\$1,631	\$250	\$830
6.2 Summary table of Drought Stages, Trigger Points, etc.	4	\$480	4	\$600	4	\$270	2	\$114	1	\$35	1	\$47	2	\$64	1	\$22	\$1,631		\$1,631		\$1,080
6.3 Public Information Campaign Plan by Drought Stage	4	\$480	4	\$600	4	\$270	2	\$114	1	\$35	1	\$47	4	\$128	1	\$22	\$1,695		\$1,695		\$1,080
Sub-Total	12	\$1,440	12	\$1,800	12	\$809	6	\$341	3	\$105	3	\$142	8	\$255	3	\$65	\$4,958	\$0	\$4,958	\$250	\$2,990
Step 7 - Implementation & Monitoring																					
7.1 Mitigation Action Plan	4	\$480	2	\$300	4	\$270	1	\$57	1	\$35	4	\$190	1	\$32	1	\$22	\$1,385		\$1,385	\$250	\$530
7.2 Monitoring of Drought Indicators	2	\$240	2	\$300	2	\$135	2	\$114	1	\$35	1	\$47	1	\$32	2	\$44	\$946		\$946		\$540
7.3 Drought Declaration	2	\$240	2	\$300	2	\$135	2	\$114	1	\$35	1	\$47	1	\$32	2	\$44	\$946		\$946		\$540
7.4 Implementation of Staged DRP	2	\$240	2	\$300	2	\$135	2	\$114	1	\$35	1	\$47	1	\$32	2	\$44	\$946		\$946		\$540
7.5 Enforcement of Staged DRP	8	\$960	2	\$300	4	\$270	4	\$227	1	\$35	4	\$190	1	\$32	2	\$44	\$2,057		\$2,057		\$1,260
7.6 Revenue Implications & Financial Budgeting Plan	8	\$960	2	\$300	2	\$135	2	\$114	2	\$70	8	\$379	2	\$64	2	\$44	\$2,065		\$2,065		\$1,260
7.7 Monitoring of Plan Effectiveness	2	\$240	1	\$150	2	\$135	2	\$114	2	\$70	2	\$95	2	\$64	2	\$44	\$911		\$911		\$390
Drought Planning Committee Meeting #3 (post draft review)	4	\$480	3	\$450	2	\$135	2	\$114	2	\$70	2	\$95	2	\$64	2	\$44	\$1,451		\$1,451		\$930
Sub-Total	32	\$3,840	16	\$2,400	20	\$1,348	17	\$966	11	\$386	23	\$1,091	11	\$351	15	\$326	\$10,708	\$0	\$10,708	\$250	\$5,990
Step 8 - Plan Review and Updates																					
8.1 Public Review Process	8	\$960	4	\$600	4	\$270	1	\$57	2	\$70	2	\$95	4	\$128	4	\$87	\$2,266		\$2,266	\$250	\$1,310
8.2 Adoption of Ordinances & Official Agreements	4	\$480	2	\$300	3	\$202	3	\$170	1	\$35	1	\$47	1	\$32	2	\$44	\$1,311		\$1,311		\$780
8.3 Drought Management Plan Approval	4	\$480	2	\$300	2	\$135		\$0		\$0		\$0		\$0		\$0	\$915		\$915		\$780
8.4 Periodic Review & Update	1	\$120	1	\$150	1	\$67		\$0		\$0		\$0		\$0		\$0	\$337		\$337		\$270
Council Meeting - Present draft to City Council	4	\$480	4	\$600	3	\$202	2	\$114	2	\$70	2	\$95	2	\$64	2	\$44	\$1,668		\$1,668		\$1,080
Sub-Total	21	\$2,520	13	\$1,950	13	\$876	6	\$341	5	\$176	5	\$237	7	\$223	8	\$174	\$6,497	\$0	\$6,497	\$250	\$4,220
Step 9 - Suggested Appendices																					
9.1 Official copies of Adopted Ordinances & Agreements																					