

February 24, 2014

Mr. Ben Wade Colorado Water Conservation Board 1313 Sherman Street, Room 721 Denver, CO 80203

RE: Town of Firestone Municipal Water Efficiency Plan Update Grant Application

Dear Mr. Wade:

The Town of Firestone is interested in updating their Municipal Water Efficiency Plan to guide the effective and responsible use of their water resources. As you will see in the attached planning grant application, the Town of Firestone is committed to continued effective efficiency planning strategies as outlined in the Scope of Work.

As Town Manager, I will authorize funds and staff time to dedicate towards developing this Municipal Water Efficiency Plan update. Once the Municipal Water Efficiency Plan update is in place, I will authorize funds as they become available to implement the Plan.

Clear Water Solutions, Inc. has prepared the attached planning grant application for a Municipal Water Efficiency Plan update. The total cost to complete the plan is \$45,709. The Town proposes to match a total of \$14,005, which consists of \$12,005 of in-kind services and \$2,000 cash. This equates to 30.6% of the total project. The Town requests a grant for \$31,704 from CWCB to complete the plan. We respectfully submit this request for your consideration.

Respectfully,

**Town of Firestone** 

Wes LaVanchy, Town Manager

Enclosures

# CWCB MUNICIPAL WATER EFFICIENCY PLAN UPDATE GRANT APPLICATION SUBMITTAL REQUIREMENTS

1. Contact information of entity seeking grant:

#### **Town of Firestone**

Attn: Wes LaVanchy, Town Manager 151 Grant Avenue PO Box 100 Firestone, CO 80520-0100

T: (303) 833-3291 F: (303) 833-4863

2. <u>Selected firm and individuals to assist in development of the Municipal Water</u> Efficiency Plan update:

#### Clear Water Solutions. Inc.

Attn: Steve Nguyen, P.E. 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 Municipal Water Efficiency Plan update ("Plan update") for the Town of Firestone. Individuals from CWS that will be involved in the project include Michelle Hatcher and Steve Nguyen, P.E.

Michelle Hatcher has worked on several CWCB-approved water efficiency plans and has over ten years of experience in water resources planning and management. Michelle will serve as Project Manager for this Plan update.

Steve Nguyen is a Professional Engineer registered in the State of Colorado. He has over seventeen 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 efficiency and drought management. Steve will serve as a Technical Advisor on all portions of the Plan update.

#### **Town of Firestone**

Wes LaVanchy is the Town Manager and will serve as the primary contact for the Town on this project. Wes will provide general direction on all aspects of the Plan development. Wes is essential in developing a Plan update for the Town in which the Town Board will adopt and implement.

Dave Lindsay is a Professional Engineer and serves as the Town Engineer. He will provide insight and information on the Town's infrastructure and system limitations. Dave has been with the Town since 1991 and will provide valuable insight to historical operations.

Ron Lay is the Town Finance Director and will provide input on the financial impacts of the current efficiency plan. Ron will also assist in the development of the Plan update to address any financial impacts as well as work with CWS on what the Town can afford for the Plan update.

Julie Pasillas is in charge of utility billing for the Town. She has a good understanding and access to information such as water use per customer category and revenues generated by each category. She will assist CWS with updating historical information and water use data for the Town. She will assist with all stages of Plan development.

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

The Town'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 1,665 to 2,235 acre-feet and averages 1,889 acre-feet. Any decreases in gallons per capita per day for the Town may be due in part to the current Municipal Water Efficiency Plan and a tiered rate structure that was implemented in 2008 as a result of a rate study that focused on water conservation rates.

The Town's water supply consists solely of Colorado-Big Thompson (CBT) units managed by the Northern Colorado Water Conservancy District (Northern Water). This water is treated and supplied to the Town by a wholesale water provider, Central Weld Colorado Water Conservancy District.

**Table 1: Annual Water Delivery** 

Customer	2009	2010	2011 2012		2013	Average	Source
Category							
Residential	1,094	1,325	1,268	1,420	1,186	1,259	CBT
Multi-Family	7	8	7	10	9	8	CBT
Commercial	168	189	185	206	177	185	CBT
Industrial	4	6	11	12	12	9	CBT
Parks	191	250	263	302	179	237	CBT
Open Space	125	117	129	149	121	128	CBT
Mobile Home Parks	76	99	113	138	115	108	CBT
Total	1,665	1,994	1,975	2,235	1,799	1,889	
Population	9,681	10,147	10,375	10,609	10,962	10,355	
Residential GPCD	101	117	109	120	97	109	
Total GPCD	154	175	170	188	146	167	

- 4. <u>Background characterizing the water system, potential growth and any other pertinent issues that relate to the stated evaluation criteria.</u>
  - (a) Within the last five years, Firestone has a total per capita water use that ranges from 146 to 188 gallons per capita per day with an average of 167 gallons per capita per day as shown in **Table 1**. This calculation was performed using the total billed usage and population estimates for the Town.
  - (b) Population projections used data from the 2012 Drought Management Plan for the Town and a January 2014 estimate provided by Town staff. **Table 2** shows the estimated population for the last five years, current year and the next ten years. We obtained current population data from the 2010 census, which showed a population of 10,147 for Firestone. Town staff estimate a current population of 10,962 residents. Future growth rates were obtained from staff and show a 6% growth rate from 2014 to 2016, 5% for 2017, 4% for 2018 and 3% for 2019 to 2024.

**Table 2: Firestone Population Growth** 

Year	Population	Growth Rate
2009	9,681	-
2010	10,147	2.25%
2011	10,375	2.25%
2012	10,609	2.25%
2013	10,962	3.33%
2014	11,620	6.00%
2015	12,317	6.00%
2016	13,056	6.00%
2017	13,709	5.00%
2018	14,257	4.00%
2019	14,685	3.00%
2020	15,125	3.00%
2021	15,579	3.00%
2022	16,046	3.00%
2023	16,528	3.00%
2024	17,024	3.00%

- (c) The estimated water savings goal for this Plan will be to lower the total water use by 12%. The Town will revisit and revise this goal, as necessary, as it further analyzes the potential water savings that corresponds to the development of this Plan update.
- (d) **Table 3** shows the existing and on-going water efficiency activities for the Town.

Table 3: Firestone's Existing and On-going Water Efficiency Activities

#### Conservation Measures

Voluntary watering restrictions from 10 a.m. to 6 p.m.

Toilet rebate program

Washing machine rebate program

Historic water usage provided on water bills

Water conservation page on website

Water waste ordinance

Wind and rain sensors must be installed on all new properties

Soil report must be performed on all new properties

Routine leak detection and repairs

Replace inaccurate meters

Three-tier rate structure with regular updates to rate study

Water efficient fixtures in Town buildings

Promote car washes to use re-circulation techniques

Performed irrigation audits on several Town parks

Estimates of water savings realized in the past five years through water efficiency efforts will be developed and presented in the Plan update.

(e) Adequacy stability and reliability of the entity's water system

The Town of Firestone owns and operates a water distribution network of approximately 58.5 miles of pipeline and associated facilities. Over 95% of this network was installed after 1995 and is in excellent operating condition. The remaining portion of the network is located in the historic "old town" area and was installed in the early 1970's. This older portion of the network is primarily 4", 6", and 8" diameter asbestos cement pipe. The integrity of the older pipe is adequate but system capacity evaluations have shown that over time this portion of the network needs to be replaced with larger capacity pipe to improve delivery, especially for fire suppression flows.

The pipe network installed since 1995 has been subject to design and installation in strict accordance with the Town's published criteria and standards. Meticulous adherence to these standards has helped to create a pipe network that has been virtually maintenance free. The Town has excellent maintenance staff that performs regular preventative maintenance to the system, but has been able to operate with a very minimal budget for repair and replacement of system components. Every service connection on the distribution system, regardless of use, is metered. All of the system meters are read monthly (at a minimum) so that every bit of water used within the Town is accounted for. This includes hydrant meters used by contractors that buy construction water from the Town. The water use monitoring program that the Town has

February 2014

been using for the past six years has been an integral part of the maintenance department's efforts to eliminate any level of system leakage.

Firestone currently does not operate a water treatment plant and is a wholesale purchaser of potable water. The sole supplier of treated water is the Central Weld County Water District. The Town owns 5,095 units of Colorado-Big Thompson Project water. Additional CBT water is conveyed to the Town by new development as it occurs. CBT water is transferred to Central Weld's water treatment plant at Carter Lake, outside of Berthoud. Central Weld treats and then delivers the water to Firestone through their own distribution network. Firestone has ten points of connection to Central Weld's system, each consisting of a master meter vault and appurtenances. The Town owns and operates a 1.5 million gallon water storage tank to meet peak demands and maintain pressure in the system.

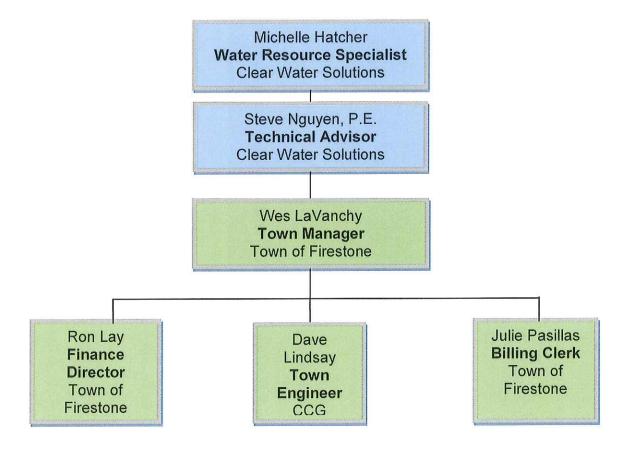
- (f) The Town of Firestone is located in the South Platte River Basin where the Statewide Water Supply Initiative (SWSI) 2010 identified a 58% gap between water needs and water supplies in the Basin by 2050. Water conservation is one method the SWSI report identified for meeting this gap.
- 5. In this Plan update, the Town of Firestone will perform the six steps of municipal water efficiency planning as outlined in the *Municipal Water Efficiency Plan Guidance Document*. See **Attachment A** for the Scope of Work and **Attachment B** for a projected schedule for the Plan.
- 6. The Town will use the grant money for completion of the Plan update and will provide CWS all information, including billing and financial information, as well as staff time to successfully complete the Plan update. See **Attachment C** for the breakdown of Project Fees including projected hours and rates.
- 7. The Town will publish a notice in the local newspaper and post on its website that a Draft Plan update is available for the public to review and comment. The public will have a 60-day period to provide comments to the Town.
- 8. "The Town Board of Firestone is committed to water resource sustainability and water efficiency. The Town intends to do its part to preserve water for future generations. Both Staff and the Board understand the needs and benefits to implement long-term water efficiency activities. We are committed to complete a Municipal Water Efficiency Plan update in its entirety to be approved by CWCB for the grant money requested."

Chad Auer. Mayor

# Town of Firestone Municipal Water Efficiency Plan Update Attachment A - Scope of Work

This Scope of Work describes the work to be performed by Clear Water Solutions, Inc. ("CWS") for the Town of Firestone. The scope outlines the tasks required to successfully complete a Municipal Water Efficiency Plan update ("Plan update") in accordance with CWCB's Municipal Water Efficiency Plan guidelines and policies.

The scope will be completed under the following structure:



# **DEVELOP MUNICIPAL WATER EFFICIENCY PLAN UPDATE**

The Town 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 Plan update. The main purpose of this Plan update is to develop a Plan that meets the CWCB requirements enabling the Town to apply for State financial assistance for subsequent projects.

The Plan update will be developed following *CWCB's Municipal Water Efficiency Plan Guidance Document, July 2012.* This document outlines the requirements needed for CWCB's approval. CWS will submit a draft Plan update to the Town for comments prior to a public-review period. Following the public-review process, CWS will incorporate public comments as appropriate and submit the Plan update to CWCB for final approval.

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

#### STEP 1 - PROFILE OF EXISTING WATER SUPPLY SYSTEM

# Purpose

The activities described under this task will provide general background on Firestone's existing water supply system.

# Approach

Meeting #1 - Kickoff meeting with Town staff to discuss overall project and gather preliminary data

# 1.1 - Overview of Existing Water Supply System

- 1.1.1 CWS, with the help of Town staff, will describe the Town's service area.
- 1.1.2 CWS, with the help of Town staff, will describe the Town's water supply sources.
- 1.1.3 CWS, with the help of Town staff, will describe the key existing facilities.

# 1.2 - Water Supply Reliability

1.2.1 CWS will provide a description of the Town's location with respect to areas of current and future water needs as identified by the Statewide Water Supply Initiative (SWSI) and other regional planning efforts.

- 1.2.2 CWS, with the help of Town staff, will describe water supply system reliability.
- 1.2.3 CWS, with the help of Town staff, will describe how excess supplies are used after meeting municipal demands.

# 1.3 - Supply-Side Limitations and Future Needs

- 1.3.1 CWS, with help of Town staff, will summarize the Town's water supply system limitations and future challenges the Town may have for planning and operating their system.
- 1.3.2 CWS and Town staff will describe how the Town intends to address water supply system limitations and future challenges.

# STEP 2 – PROFILE OF WATER DEMANDS AND HISTORICAL DEMAND MANAGEMENT

# Purpose

The activities described under this task will provide an overview of the historical water demand trends as well as the influence of historical water demand management on water use and forecasted future water demands.

# Approach

# 2.1 - Demographics and Key Characteristics of the Service Area

2.1.1 CWS will describe customer categories, service area population and other pertinent information.

### 2.2 - Historical Water Demands

- 2.2.1 CWS and Town staff will describe any limitation associated with the availability of the demand data.
- 2.2.2 CWS, with the help of Town staff, will outline total annual treated water distribution, total annual distribution of raw non-potable and reclaimed water and annual non-revenue water.
- 2.2.3 CWS and Town staff will quantify water demand by customer category including monthly and annual treated metered water use by customer category.
- 2.2.4 CWS and Town staff may analyze system wide demand by calculating and describing per capita water demands and indoor and outdoor water

usage.

# 2.3 - Past and Current Demand Management Activities and Impact to Demands

- 2.3.1 In coordination with Town staff, CWS will include an estimate of the amount of water saved through previous demand management efforts.
- 2.3.2 CWS, with the help of Town staff, will list the demand management activities implemented prior to this Plan update. The list will include the date of initial implementation.
- 2.3.3 CWS will analyze the projected water savings/goals developed from previous efforts and discuss whether these projected water savings were achieved.
- 2.3.4 CWS will identify how demand management activities impacted historical demands.
- 2.3.5 CWS will discuss passive vs. active demand management savings and quantitative data that supports passive demand reductions.
- 2.3.6 CWS will discuss lessons learned on the implementation, monitoring and overall effectiveness of the historical demand management activities.

#### 2.4 – Demand Forecasts

- 2.4.1 In coordination with Town staff, CWS will identify the planning horizon for the Plan update.
- 2.4.2 CWS, with the help of Town staff, will present the unmodified forecasted water demands based on Firestone's existing water efficiency program through the planning horizon.
- 2.4.3 CWS will discuss method(s) and any assumptions used to develop the demand forecast.

# STEP 3 – INTEGRATED PLANNING AND WATER EFFICIENCY BENEFITS AND GOALS

### Purpose

The activities described under this task focus on the role that water efficiency plays in Firestone's water supply planning efforts.

# Approach

# 3.1 - Water Efficiency and Water Supply Planning

- 3.1.1 In coordination with Town staff, CWS will describe how long-term water savings garnered through water efficiency activities are incorporated into water supply planning and decision making.
- 3.1.2 CWS will present modified forecasted water demands through the planning horizon incorporating the Town's projected water savings identified in Section 4.0
- 3.1.3 CWS, if appropriate and logical, will discuss how water savings achieved through the new water efficiency plan could or could not result in the elimination, downsizing and/or postponement of certain capital improvements/water acquisitions.
- 3.1.4 CWS will state how the saved water will be used and the additional water efficiency benefits realized.

Meeting #2 – Discuss desired water efficiency goals and initial screening of water efficiency activities

# 3.2 - Water Efficiency Goals

- 3.2.1 In coordination with Town staff, CWS will provide a list of water efficiency goals for this Plan update and methods by which the success of the goals will be measured. The goals will incorporate targeted total water savings, targeted water savings by customer class and targeted water savings from system water loss control management.
- 3.2.2 CWS and Town staff will provide an explanation of how these goals were developed and designed to achieve the water efficiency benefits.
- 3.2.3 CWS and Town staff will provide an explanation of how these goals compare to the goals in the Town's former water efficiency plan and describe why goals remained the same or were changed.

#### STEP 4 - SELECTION OF WATER EFFICIENCY ACTIVITIES

# **Purpose**

The activities described under this task will present the water efficiency activities selected for implementation and describe the processes used to identify, screen and evaluate each of these activities.

# Approach

## 4.1 - Summary of Selection Process

- 4.1.1 CWS along with Town staff will provide a list of selected water efficiency activities included in the new water efficiency plan.
- 4.1.2 CWS will summarize the identification, screening and evaluation processes used to select the final activities. All of the required elements/activities will be considered. If any activities are deemed not feasible for implementation by Town staff, the proper documentation and supporting materials will be provided justifying why the activities will not be implemented.

## 4.2 - Demand Management Activities

- 4.2.1 CWS along with Town staff will provide an estimate of the amount of water that will be saved through water efficiency when the plan is implemented.
- 4.2.2 CWS with Town staff will estimate water savings from selected *Foundational Activities*.
  - 4.2.2.1 CWS and Town staff will describe current and planned metering programs, modification and/or new metering programs selected because of this water efficiency planning effort and discuss lessons learned from past metering programs.
  - 4.2.2.2 CWS and Town staff will describe the current billing system and available demand data, the frequency of billing, evaluate billing systems designed to encourage water efficiency in a fiscally responsible manner, describe modification to the data collection and billing systems as a result of this water efficiency planning effort and discuss any past lessons learned.
  - 4.2.2.3 CWS and Town staff will describe the existing water rate structure by customer category and the frequency of billing and discuss any proposed adjustments to water rates. We will also describe any lessons learned from previous water rate structure evaluations.
  - 4.2.2.4 CWS and Town staff will describe the current and planned system water loss management and control programs.
- 4.2.3 CWS with Town staff will estimate water savings from *Targeted Technical Assistance and Incentive Activities*.

- 4.2.3.1 CWS and Town staff will describe the selected water efficiency activities focused on the utility/municipal facilities and describe the implementation plan for each activity within the utility/municipal facility customer category. Additionally CWS will evaluate the potential costs and benefits of the selected activities. If any activities have been implemented prior to this Plan update, CWS will provide past performance indicators and any lessons learned from past implementation.
- 4.2.3.2 CWS and Town staff will describe the selected water efficiency activities focused on the largest water users and describe the implementation plan for each activity within the targeted customer category. Additionally CWS will evaluate the potential costs and benefits of the selected activities. If any activities have been implemented prior to this Plan update, CWS will provide past performance indicators and any lessons learned from past implementation.
- 4.2.3.3 CWS and Town staff will describe the selected water efficiency activities focused on the largest water users and describe the implementation plan for each activity within the targeted customer category. Additionally CWS will evaluate the potential costs and benefits of the selected activities. If any activities have been implemented prior to this Plan update, CWS will provide past performance indicators and any lessons learned from past implementation.
- 4.2.3.4 CWS and Town staff will describe the selected water efficiency activities focused on the remainder of the service area and/or on specific customer categories and describe the implementation plan for each activity within the targeted customer category. Additionally CWS will evaluate the potential costs and benefits of the selected activities. If any activities have been implemented prior to this Plan update, CWS will provide past performance indicators and any lessons learned from past implementation.
- 4.2.4 CWS with Town staff will detail *Ordinance and Regulatory Activities* selected for implementation and estimate water savings for those selected.
  - 4.2.4.1 CWS and Town staff will describe the regulations selected to target the general service area and/or specific customer categories and describe the implementation plan for the regulation(s) selected and targeted customer categories.

    Additionally CWS will evaluate the potential costs, benefits and

- challenges to adopt the selected activities. If any activities have been implemented prior to this Plan update, CWS will provide information and any lessons learned from past implementation.
- 4.2.4.2 CWS and Town staff will describe the regulations selected for new construction and describe the implementation plan for the regulation(s) selected and targeted customer categories.

  Additionally CWS will evaluate the potential costs, benefits and challenges to adopt the selected activities. If any activities have been implemented prior to this Plan update, CWS will provide information and any lessons learned from past implementation.
- 4.2.4.3 CWS and Town staff will describe the regulations selected for existing building stock (e.g. point of sales ordinance) and describe the implementation plan for the regulation(s) selected and targeted customer categories. Additionally CWS will evaluate the potential costs, benefits and challenges to adopt the selected activities. If any activities have been implemented prior to this Plan update, CWS will provide information and any lessons learned from past implementation.
- 4.2.5 CWS with Town staff will detail *Educational and Outreach Activities* selected for implementation and estimate water savings for those selected.
  - 4.2.5.1 CWS and Town staff will describe the selected one-way education activities (one-way education information is conveyed to the public without tracking or specific follow-up) and the plan to implement said activities within the targeted customer category. Additionally CWS will evaluate the potential costs and benefits to adopt the selected activities. If any activities have been implemented prior to this Plan update, CWS will provide information and any lessons learned from past implementation.
  - 4.2.5.2 CWS and Town staff will describe the selected two-way education activities (two-way education information is conveyed to the public with feedback provided by the public) and the plan to implement said activities within the targeted customer category. Additionally CWS will evaluate the potential costs and benefits to adopt the selected activities. If any activities have been implemented prior to this Plan update, CWS will provide information and any lessons learned from past implementation.
  - 4.2.5.3 CWS and Town staff will describe the selected three-way education activities (three-way education providers actively engage customers in developing and implementing the water

efficiency plan) and the plan to implement said activities within the targeted customer category. Additionally CWS will evaluate the potential costs and benefits to adopt the selected activities. If any activities have been implemented prior to this Plan update, CWS will provide information and any lessons learned from past implementation.

Meeting #3 – Second screening of demand management activities and final selection of activities for implementation. This meeting will also include discussion on implementation and monitoring.

#### STEP 5 - IMPLEMENTATION AND MONITORING PLAN

## **Purpose**

The activities under this task will address the activities and coordination necessary to implement the Plan update and monitor the overall effectiveness of the updated water efficiency plan.

## Approach

# 5.1 - Implementation Plan

- 5.1.1 CWS and Town staff will develop and discuss the actions, timeline and coordination necessary to implement the selected water efficiency activities. CWS will provide a list of selected activities, anticipated period of implementation, actions necessary to implement each activity (including goals) and estimated water provider costs (and avoided costs).
- 5.1.2 CWS and Town staff will discuss how reductions in water use could impact revenue and actions taken to help mitigate negative impacts.

# 5.2 - Monitoring Plan

- 5.2.1 CWS and Town staff will develop and describe the data collection and assessment activities necessary to monitor the effectiveness of the water efficiency plan. CWS will include a monitoring plan that includes steps used to monitor the Plan update.
- 5.2.2 CWS will include a list of demand data to be collected during the monitoring period/process and a list of other relevant data specific to the implementation of the activities.
- 5.2.3 CWS will include a summary of the process to communicate monitoring and evaluation results to decision-makers, including the frequency of communication. Frequency of data collection will also be specified.

# STEP 6 – ADOPTION OF NEW POLICY, PUBLIC REVIEW AND FORMAL APPROVAL

## **Purpose**

The activities described under this task address the public review and formal adoption process.

## Approach

#### 6.1 – Public Review Process

6.1.1 CWS will describe the public review process and how the public accessed the Plan update. Additionally, CWS will summarize the public comments received, how the comments were addressed and details of the meetings held during the Plan development process.

# 6.2 - Local Adoption and State Approval Process

6.2.1 CWS will discuss the formal process for Plan adoptions.

#### 6.3 - Periodic Review and Update

6.3.1 CWS and Town Staff will summarize the process that will occur to facilitate the update of the Plan update and the anticipated timing of plan updates. CWS will include steps used to review and revise the Plan update, the process of how monitoring results will be incorporated into updated plans and the anticipated date of the next water efficiency plan update.

Meeting #4 - Meeting with Town Board to present draft plan

#### REQUIREMENTS

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

#### **DELIVERABLES**

CWS will submit the following:

- Monthly invoices to the Town with brief progress reports.
- Submit 50% and 75% progress reports to CWCB.
- Four meetings with Staff and/or Town Board.
- Provide draft Plan update to the Town for comments prior to submission to CWCB.
- Final Plan update submitted electronically to CWCB with all comments, including public input.
- Ten hard copies of the final Plan update submitted to the Town after CWCB's final approval.

# **ATTACHMENT B**

# **Project Schedule**

Town of Firestone Municipal Water Efficiency Plan Update

Task	Date				
Grant application submitted to CWCB	2/27/2014				
CWCB approves grant and PO issued	5/5/2014				
Kick-off meeting with Town staff	5/7/2014				
Submit 50% progress report to CWCB	6/9/2014				
Submit 75% progress report to CWCB	7/14/2014				
Submit draft plan to staff for review and comment	8/4/2014				
Staff provides comment from review	7/23/2014				
Submit draft report to Town Board for review	8/13/2014				
Present draft report at Town Board meeting and collect comments	8/27/2014				
Notify public of draft plan in paper and website	8/28/2014				
Public review period (60 days)	10/27/2014				
Town provides public input comments to CWS	10/28/2014				
CWS incorporates public comments	11/3/2014				
Town Board formally adopts final report	11/12/2014				
CWS submits final report to CWCB	11/13/2014				
CWCB approves final report	up to 90 days				

#### ATTACHMENT C

#### Project Fee Estimate

Town of Firestone Municipal Water Efficiency Plan Update

		CWS	CWS		Town of Firestone Staff (In-Kind)												CWCB
		Michelle Hatcher		Steve Nguyen		Town Manager		Town Engineer		Finance Director		ng Clerk	Labor	Expense	Grand	Cash	Grant
ITEMS OF WORK	HOURS	SUB	HOURS	SUB	HOURS	SUB	HOURS	SUB	HOURS	SUB	HOURS \$26.20	SUB	Total	Total	Total	Contribution	Request
	\$140	TOTAL	\$170	TOTAL	\$87.41	TOTAL	\$112.5	TOTAL	\$59.74	TOTAL	\$20.20	TOTAL					
Introduction I.1 Introduction - Refer to Guidance Document Template	4	\$560.00	4	\$170.00		\$0.00		\$0.00		\$0.00		\$0.00	\$730.00		\$730.00	¢250.00	\$480.00
'	4	\$560.00 \$560.00	3	\$170.00 \$510.00	2	\$0.00 \$174.82	2	\$0.00 \$225.00	_	\$119.48	2	\$0.00 \$52.40	\$730.00 \$1,641.70		\$1,641.70	\$250.00	\$480.00
Kick-off Meeting with Town Staff (Meeting #1)	8	\$360.00 \$1,120.00	3 4	\$510.00 \$ <b>680.00</b>	2	\$174.82	2	\$225.00 <b>\$225.00</b>	2	\$119.48 \$119.48	2	\$52.40 <b>\$52.40</b>		¢0.00		\$250.00	\$1,070.00 <b>\$1,550.00</b>
Sub-Total Step 1 - Profile of Existing Water Supply System	0	\$1,120.00	4	\$080.00		\$174.62		\$225.00		\$119.46		\$52.4U	\$2,371.70	\$0.00	\$2,371.70	\$250.00	\$1,550.00
	2	\$280.00	4	\$170.00	1	\$87.41	4	\$112.50		\$0.00		\$0.00	\$649.91		\$649.91	\$250.00	\$200.00
1.1 Overview of Existing Water Supply System	2	\$280.00	1	\$170.00 \$170.00	1	\$87.41	1	\$112.50 \$112.50		\$0.00		\$0.00 \$0.00	\$649.91 \$649.91		\$649.91 \$649.91	\$250.00	\$200.00 \$450.00
1.2 Water Supply Reliability	2	\$280.00	1	\$170.00 \$170.00	1	\$87.41	1	\$112.50 \$112.50		\$0.00		\$0.00	\$649.91 \$649.91		\$649.91 \$649.91		
1.3 Supply-Side Limitations and Future Needs  Sub-Total	6	\$280.00 <b>\$840.00</b>	3	\$170.00 <b>\$510.00</b>	3	\$262.23	3	\$112.50 \$337.50	0	\$0.00 \$0.00	0	\$0.00 <b>\$0.00</b>	\$049.91 \$ <b>1,949.73</b>	\$0.00	\$049.91 \$ <b>1,949.73</b>	\$250.00	\$450.00 <b>\$1,100.00</b>
Step 2 - Profile of Water Demands and Historical Demand Management	0	\$840.00	3	\$510.00	3	\$262.23	3	\$337.50	U	\$0.00	U	\$0.00	\$1,949.73	\$0.00	\$1,949.73	\$250.00	\$1,100.00
· ·		<b>#200.00</b>	2	¢240.00	4	CO7 44	1	£440.50	4	\$59.74	2	<b>¢</b> E2.40	<b>\$022.05</b>		<b>\$022.05</b>	¢250.00	¢270.00
Demographics and Key Characteristics of the Service Area     Historical Water Demands	2 16	\$280.00	2 4	\$340.00	4	\$87.41 \$349.64	4	\$112.50 \$450.00		\$59.74	8	\$52.40 \$209.60	\$932.05 \$3,929.24		\$932.05	\$250.00	\$370.00
	16	\$2,240.00	4	\$680.00	4	\$349.64 \$349.64	4	\$450.00 \$450.00	2	\$0.00 \$119.48	8	-	\$3,929.24 \$3,943.92		\$3,929.24 \$3.943.92		\$2,920.00 \$2,920.00
2.3 Past and Current Demand Management Activities and Impact to Demands 2.4 Demand Forecasts		\$2,240.00	2	\$680.00	2		4		2		4	\$104.80			\$3,943.92 \$2,189.62		. ,
Sub-Total	8 <b>42</b>	\$1,120.00	12	\$340.00	11	\$174.82 <b>\$961.51</b>		\$450.00	3	\$0.00 <b>\$179.22</b>	18	\$104.80 <b>\$471.60</b>	\$2,189.62 <b>\$10.994.83</b>	¢0.00	. ,	\$250.00	\$1,460.00 <b>\$7.670.00</b>
Step 3 - Integrated Planning and Water Efficiency Benefits and Goals	42	\$5,880.00	12	\$2,040.00	11	\$901.51	13	\$1,462.50	3	\$179.22	16	\$471.00	\$10,994.83	\$0.00	\$10,994.83	\$250.00	\$7,670.00
	8	£4.400.00	4	ФС00 00	2	\$174.82	4	\$450.00		\$0.00	4	\$104.80	¢0 500 60		<b>#</b> 0 <b>F</b> 00 <b>C</b> 0	\$250.00	¢4 550 00
3.1 Water Efficiency and Water Supply Planning	0	\$1,120.00	3	\$680.00	2		4 2		_		2		\$2,529.62		\$2,529.62	\$250.00	\$1,550.00
Water Efficiency Plan Update Meeting #2	4	\$560.00	-	\$510.00	4	\$174.82	2	\$225.00	2	\$119.48	2	\$52.40	\$1,641.70		\$1,641.70		\$1,070.00
3.2 Water Efficiency Goals	8 <b>20</b>	\$1,120.00	4	\$680.00		\$349.64	8	\$225.00	4	\$119.48 <b>\$238.96</b>	8	\$52.40	\$2,546.52	<b>to oo</b>	\$2,546.52	#050.00	\$1,800.00
Sub-Total Step 4 - Selection of Water Efficiency Activities	20	\$2,800.00	11	\$1,870.00	8	\$699.28	8	\$900.00	4	\$238.96	8	\$209.60	\$6,717.84	\$0.00	\$6,717.84	\$250.00	\$4,420.00
, ·	3	£420.00	4	¢470.00	4	CO7 44	4	£440.50	4	ΦEO 74	4	<b>POC 20</b>	<b>¢075.05</b>		<b>075 05</b>	¢250.00	<b>#240.00</b>
4.1 Summary of Selection Process 4.2 Demand Management Activities	30	\$420.00 \$4,200.00	8	\$170.00 \$1,360.00	4	\$87.41 \$349.64	4	\$112.50 \$450.00	2	\$59.74 \$119.48	4	\$26.20 \$104.80	\$875.85 \$6.583.92		\$875.85 \$6,583.92	\$250.00	\$340.00 \$5,560.00
Water Efficiency Plan Update Meeting #3	4	\$4,200.00 \$560.00	3	\$1,360.00 \$510.00	2	\$349.64 \$174.82	2	\$450.00 \$225.00	2	\$119.48	2	\$104.80 \$52.40	\$6,583.92 \$1,641.70		\$6,583.92		\$5,560.00
Sub-Total	37	\$5,180.00	12	\$2,040.00	7	\$611.87	7	\$225.00 <b>\$787.50</b>	5	\$298.70	7	\$183.40	\$1,641.70 \$ <b>9,101.47</b>	\$0.00	\$1,641.70 \$9,101.47	\$250.00	\$6,970.00
Step 5 - Implementation and Monitoring Plan	3/	\$5,160.00	12	\$2,040.00		φ011.07		\$767.50	3	\$290.7U		φ103.40	\$9,101.47	\$0.00	<b>\$9,101.47</b>	\$250.00	\$6,970.00
5.1 Implementation Plan	8	\$1,120.00	4	\$680.00	4	\$349.64	4	\$450.00	2	\$119.48	4	\$104.80	\$2,823.92		\$2,823.92	\$250.00	\$1,550.00
5.2 Monitoring Plan	8	\$1,120.00	4	\$680.00	4	\$349.64	4	\$450.00	2	\$119.48	4	\$104.80	\$2,823.92		\$2,823.92	\$250.00	\$1,800.00
Sub-Total	16	\$2,240.00	8	\$1,360.00	8	\$699.28	8	\$900.00	4	\$238.96	8	\$209.60	\$5,647.84	\$0.00	\$5,647.84	\$250.00	\$3,350.00
Step 6 - Adoption of New Policy, Public Review and Formal Approval	10	Ψ2,270.00	-	ψ1,300.00		ψ033.20	-	φ300.00	-	φ230.30	-	φ203.00	ψυ,υτι.υτ	φυ.υυ	ψυ,υτι.υτ	φ230.00	φυ,υυυ.υυ
6.1 Public Review Process	2	\$280.00	1	\$170.00	2	\$174.82	1	\$112.50		\$0.00	4	\$104.80	\$842.12		\$842.12	\$250.00	\$200.00
6.2 Local Adoption and State Approval Process	1	\$560.00	4	\$680.00	1	\$87.41	1	\$112.50		\$0.00	1	\$26.20	\$1,466.11		\$1,466.11	Ψ230.00	\$1,240.00
6.3 Periodic Review and Update	1	\$140.00	1	\$170.00	1	\$87.41	'	\$0.00		\$0.00	2	\$52.40	\$449.81		\$449.81		\$310.00
Board Meeting - Present draft to Board	4	\$560.00	3	\$170.00 \$510.00	2	\$174.82	2	\$225.00	2	\$119.48	2	\$52.40 \$52.40	\$1,641.70		\$1,641.70		\$1,070.00
Sub-Total	11	\$1,540.00	9	\$1,530.00	6	\$524.46	4	\$450.00	2	\$119.48	9	\$235.80	\$4,399.74	\$0.00	\$4,399.74	\$250.00	\$2,820.00
General Project Expenses	, , ,	ψ1,040.00		ψ1,000.00		ψυΣ-7.7U	7	φ+00.00		\$115.70	J	Ψ200.00	ψ4,000.1 <b>4</b>	ψυ.υυ	ψ <del>1,000.7</del>	Ψ200.00	Ψ2,020.00
Reproduction of Reports - 10 copies x \$100/copy + 3 hours x \$70/hr														\$1,210.00	\$1,210.00		\$1,210.00
Travel - 4 meetings x \$0.62/mi x 66 mi														\$163.68	\$163.68		\$163.68
Submit 2 progress reports	6	\$840.00	2	\$340.00			1	\$112.50			1	\$26.20	\$1,318.70	<b>4.00.00</b>	\$1,318.70		\$1,180.00
Final incorporation of CWCB comments	6	\$840.00	4	\$680.00	2	\$174.82	1	\$112.50		\$0.00	1	\$26.20	\$1,833.52		\$1,833.52	\$250.00	\$1,270.00
Sub-Total	12	\$1,680.00	6	\$1,020.00	2	\$174.82	2	\$225.00	0	\$0.00	2	\$52.40	\$3,152.22	\$1,373.68	\$4,525.90	\$250.00	\$3,823.68
TOTAL FEE	152	\$21,280,00	65	\$11,050.00	47	\$4,108.27	47	\$5,287,50	20	\$1,194.80	54	\$1,414.80	\$44,335.37	\$1,373.68	\$45,709.05	\$2,000,00	\$31,703.68
IUIAL FEE	152	<b>⊅∠1,∠80.00</b>	00	\$11,050.00	4/	<b>Φ4,108.27</b>	41	<b>⊅</b> 5,∠δ1.50	20	φ1,194.80	54	φ1,414.8U	<b>Φ44,333.37</b>	<b>Φ1,373.08</b>	<b>Φ40,709.05</b>	φ∠,000.00	φ31,/U3.68