



Colorado Water Conservation Board
Water Efficiency Grant Fund Grant Application

Water Efficiency Project Summary	
Name of Applicant	City of Fort Lupton, Colorado
Name of Grant Project	Fort Lupton Water Efficiency Plan Update 2018
WEGF Grant Request Total	\$30,000.00
In-Kind Match	\$13,827.97
Cash Match	\$12,446.96
Total Project Costs	\$56,274.93

Applicant Information	
Name of Applicant	City of Fort Lupton, Colorado
Mailing Address	130 S. McKinley Ave. Fort Lupton, CO 80621
Applicant's Organization Contact ⁽¹⁾	Leann Perino
Position/Title	Finance Director
Email	lperino@fortlupton.org
Phone	303-857-6694
Grant Management Contact ⁽²⁾	Leann Perino
Position/Title	Finance Director
Email	lperino@fortlupton.org
Phone	303-857-6694
Name of Consultant (if applicable)	Clear Water Solutions
Mailing Address	8010 South County Road 5, Suite 105 Windsor, CO 80528
Position/Title	Michelle Hatcher, Water Resource Specialist
Email	michelle@clearwatercolorado.com
Phone	970-223-3706

(1) Person with signatory authority

(2) Person responsible for creating reimbursement invoices (Invoice for Services) and corresponding with CWCB staff.



Organizations & Individuals Assisting on the Project

A list of the organizations and/or individuals including those hired or otherwise retained by the entity that will assist in the project, and a written statement of their role and contributions

Leann Perino is the Finance Director and will assist in the development of the plan as well as work with Clear Water Solutions, Inc. (CWS) to determine the financial impacts the plan update may have on the City of Fort Lupton (City).

Dustin Bowles is the City Clerk. Dustin has a good understanding of and access to information such as water use per customer category and revenues generated from each category. He will assist CWS in developing past and current history of water sales and associated revenue, nonpayment and fines.

Roy Vestal is the Public Works Director and will give, from the City's perspective, CWS advice and general direction on all aspects of the project. Roy will be paramount in the development of foundational measures that City Council and constituents within the City can adopt.

CWS will help complete a Municipal Water Efficiency Plan for the City of Fort Lupton (City). Individuals from CWS that will be involved in the project include Michelle Hatcher and Steve Nguyen, P.E.

Michelle Hatcher has worked on numerous 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.

Steve Nguyen is a Professional Engineer registered in the State of Colorado. He has twenty 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.

Type of Eligible Entity (check one)

✓	Covered Entity: as defined in Section 37-60-126 Colorado Revised Statutes Public
	Non-covered Entity
✓	State or Local Governmental Entity
	Public or Private Agency: entity whose primary purpose includes the promotion of water resource conservation. Please disclose your organizational structure and charter (or equivalent) <i>Please see attached organizational chart</i>

Type of Project (check one)

	Drought Management Plan
	Drought Management Implementation
✓	Water Efficiency Plan
	Water Efficiency Implementation



Public Education & Outreach	
Location of Entity	
Please provide the county and applicants (if needed) location identified by SWSI (Statewide Water Supply Initiative)	
Basin	South Platte River Basin

Retail Water Delivery over Past 5 Years																																																																																							
Please identify retail water delivery by the entity for each of the past five years (in acre feet) and additional information characterizing past water use by sector (e.g., residential, commercial, industrial, irrigation) and source (e.g., surface water, groundwater, etc.).																																																																																							
<p>The following table includes the retail water delivery in acre-feet for the various sectors within Fort Lupton.</p> <p>Past Five Years Water Delivery</p> <table border="1"> <thead> <tr> <th>Customer Class</th> <th>2012 AF</th> <th>2013 AF</th> <th>2014 AF</th> <th>2015 AF</th> <th>2016 AF</th> <th>Average AF</th> <th>Source</th> </tr> </thead> <tbody> <tr> <td>Residential</td> <td>584</td> <td>507</td> <td>498</td> <td>506</td> <td>519</td> <td>523</td> <td>Well, CBT and Windy Gap</td> </tr> <tr> <td>Commercial/Industrial</td> <td>871</td> <td>771</td> <td>934</td> <td>1,058</td> <td>970</td> <td>921</td> <td>Well, CBT and Windy Gap</td> </tr> <tr> <td>Schools</td> <td>101</td> <td>21</td> <td>102</td> <td>36</td> <td>40</td> <td>60</td> <td>Well, CBT and Windy Gap</td> </tr> <tr> <td>Multi-Family/Apartment</td> <td>147</td> <td>120</td> <td>119</td> <td>114</td> <td>115</td> <td>123</td> <td>Well, CBT and Windy Gap</td> </tr> <tr> <td>Hotel/Motel</td> <td>6</td> <td>7</td> <td>6</td> <td>6</td> <td>7</td> <td>6</td> <td>Well, CBT and Windy Gap</td> </tr> <tr> <td>City Irrigation</td> <td>364</td> <td>243</td> <td>196</td> <td>393</td> <td>234</td> <td>286</td> <td>Well and Fulton Ditch</td> </tr> <tr> <td>Hydrant Meters</td> <td>148</td> <td>25</td> <td>30</td> <td>23</td> <td>-</td> <td>57</td> <td>Well, CBT and Windy Gap</td> </tr> <tr> <td>Total</td> <td>2,221</td> <td>1,695</td> <td>1,885</td> <td>2,137</td> <td>1,884</td> <td>1,964</td> <td></td> </tr> <tr> <td>Population</td> <td>7,648</td> <td>7,728</td> <td>7,804</td> <td>7,857</td> <td>7,971</td> <td>7,802</td> <td></td> </tr> </tbody> </table>								Customer Class	2012 AF	2013 AF	2014 AF	2015 AF	2016 AF	Average AF	Source	Residential	584	507	498	506	519	523	Well, CBT and Windy Gap	Commercial/Industrial	871	771	934	1,058	970	921	Well, CBT and Windy Gap	Schools	101	21	102	36	40	60	Well, CBT and Windy Gap	Multi-Family/Apartment	147	120	119	114	115	123	Well, CBT and Windy Gap	Hotel/Motel	6	7	6	6	7	6	Well, CBT and Windy Gap	City Irrigation	364	243	196	393	234	286	Well and Fulton Ditch	Hydrant Meters	148	25	30	23	-	57	Well, CBT and Windy Gap	Total	2,221	1,695	1,885	2,137	1,884	1,964		Population	7,648	7,728	7,804	7,857	7,971	7,802	
Customer Class	2012 AF	2013 AF	2014 AF	2015 AF	2016 AF	Average AF	Source																																																																																
Residential	584	507	498	506	519	523	Well, CBT and Windy Gap																																																																																
Commercial/Industrial	871	771	934	1,058	970	921	Well, CBT and Windy Gap																																																																																
Schools	101	21	102	36	40	60	Well, CBT and Windy Gap																																																																																
Multi-Family/Apartment	147	120	119	114	115	123	Well, CBT and Windy Gap																																																																																
Hotel/Motel	6	7	6	6	7	6	Well, CBT and Windy Gap																																																																																
City Irrigation	364	243	196	393	234	286	Well and Fulton Ditch																																																																																
Hydrant Meters	148	25	30	23	-	57	Well, CBT and Windy Gap																																																																																
Total	2,221	1,695	1,885	2,137	1,884	1,964																																																																																	
Population	7,648	7,728	7,804	7,857	7,971	7,802																																																																																	



Projections of Future Annual Retail Demand

A reasonable estimate must be submitted with detailed projections of future annual retail demand for the next five years based on predicted population (provide source of data), building permits, expected new taps, and/or some other credible information

The following table has the water use projections for the next five years. These projections were based off of building permits trends and the current population. The current population is estimated at 7,971 (2016). At an estimated 40 additional housing units each year, this would bring the population up to an estimated 8,571 by 2021. Water demand is estimated to increase by 2% each year from the present. The percentage of water for each category is expected to remain approximately the same.

Estimated Future Demand

Customer Class	2017 AF	2018 AF	2019 AF	2020 AF	2021 AF
Residential	529	540	551	562	573
Commercial/Industrial	989	1,009	1,029	1,050	1,071
Schools	40	41	42	43	44
Multi-Family/Apartment	117	119	122	124	127
Hotel/Motel	7	7	7	7	7
City Irrigation	239	243	248	253	258
Hydrant Meters	0	0	0	0	0
Total	1,922	1,960	1,999	2,039	2,080
Estimated Population	8,091	8,211	8,331	8,451	8,571
Residential GPCD	58	59	59	59	60
Total GPCD	212	213	214	215	217

Background Characterizing the Water System

Current and past system wide and single family residential per capita water use for the last five years, and the basis for those calculations.

The following table has the per capita use for both system wide and residential use. Residential GPCD is calculated as the residential water use divided by the population, and Total GPCD is calculated as the total water use (all categories) divided by the population.

Per Capita Water Use

	2012 AF	2013 AF	2014 AF	2015 AF	2016 AF	Average AF
Residential Water Use	584	507	498	506	519	523
Total Water Use	2,221	1,695	1,885	2,137	1,884	1,964
Population	7,648	7,728	7,804	7,857	7,971	7,802
Residential GPCD	68	59	57	58	58	60
Total GPCD	259	196	216	243	211	225



Potential Growth – Population

Provide population for the past five years, current year and 10 year population projection served by the entity and the source of this information

The following table provides the previous five years, the current estimate for 2016, and the 10 year population projection. These estimates were obtained from the U.S. Census Bureau and confirmed with City Staff. The projections were estimated from a growth rate of approximately 40 additional houses each year with approximately three people per house for a total of 120 new residents each year or a growth rate between 1.3% – 1.5%. This is very similar to the average growth rate that Fort Lupton has seen for the last five years.

City and Water Service Area Population (Past, Present, and Future)

Year	Total City Population (also Water Service Area)	Change in Population	Population Growth
2011	7,551	174	2.4%
2012	7,648	97	1.3%
2013	7,728	80	1.0%
2014	7,804	76	1.0%
2015	7,857	53	0.7%
2016	7,971	114	1.5%
2017	8,091	120	1.5%
2018	8,211	120	1.5%
2019	8,331	120	1.5%
2020	8,451	120	1.4%
2021	8,571	120	1.4%
2022	8,691	120	1.4%
2023	8,811	120	1.4%
2024	8,931	120	1.4%
2025	9,051	120	1.3%
2026	9,171	120	1.3%



Estimated Water Savings Goals

Estimate water savings goals to be achieved through implementation of the Plan in acre feet and as a percentage.

Fort Lupton's estimated water savings goal for this Plan will be to lower the per capita water use by 10%. This savings would translate to be an average of over 200 acre-feet per year or a total of nearly 1,650 acre-feet over the seven year (2018 – 2024) planning period. The City will revisit and revise this goal, as necessary, as it further analyzes the potential water savings that corresponds to the development of this Plan.

Estimated Water Savings Goals - Monitoring

Indicate how the activities will be monitored to estimate actual water savings during Project implementation (Implementation & Public Education/Outreach Projects)

The success of the stated goals and activities will be measured through the monitoring of metering, billing, and other data. For the activities that are more difficult to quantify (e.g. public education programs), overall and per capita demand data will be used to estimate savings.

Feedback from City Staff, City Council, and community members will also be solicited to determine the popularity, reception, and effectiveness of the various activities and efforts. Where possible, lessons learned and other feedback will be recorded.

Adequacy, Stability, and Reliability

Explain the adequacy, stability, and reliability of the entity's water system and provide the entities location with respect to areas of current and future water needs as identified by the Statewide Water Supply Initiative (SWSI).

Fort Lupton supplies come from Colorado-Big Thompson (C-BT), Windy Gap, wells, and Fulton Ditch water. The current water supply is adequate to meet the City's needs. The City's diverse water portfolio provides a reliable and stable water source.

Fort Lupton is located in the South Platte River Basin where the Statewide Water Supply Initiative (SWSI) 2010 identified a 58 percent gap between water needs and water supplies in the Basin by 2050.

Outreach Goals & Efforts

Identify the groups, individuals, organizations and/or institutions that will be included within the education and outreach efforts to be proposed as the Project.



COLORADO

Colorado Water
Conservation Board

Department of Natural Resources

Outreach Goals & Efforts

Identify the specific goals of the Project (e.g., identify target audience(s) to reach, policy changes, outcomes of educational efforts, etc.) with respect to promoting the benefits of water resource conservation and water efficiency through education and outreach activities. Make note of how the goals of the Project tie to the mission and objectives of the CWCB and its programs (Colorado Water Plan/Basin Implementation Plans), as appropriate.

Identify in detail the specific activities and tasks to be funded with the Water Efficiency Grant Program monies, including all meetings, workshops, fairs, printings, mailings and all other tasks and activities that will be used to promote the benefits of water resource conservation and water efficiency.

Fort Lupton would like to target both Residential and Commercial customers in their outreach efforts.

One of the major goals and benefits with the City's efforts it to delay the need of future water acquisition to supply increased population growth.

One of the specific areas that the City would like to investigate is improving the meters and meter system. They are hoping that a more efficient meter system would allow for faster leak detection.

The City hopes to utilize additional CWCB Implementation Grant money for outreach efforts and conservation measures implemented for its citizens.

Signature of an individual with the authority to commit the resources of the entity seeking Water Efficiency Grant program monies.

Name/Title

Date



Water Efficiency Grant Fund	
<u>Scope of Work</u>	
Prepared Date:	July 10, 2018
Project Name:	Fort Lupton Water Efficiency Plan Update 2018
Grant Applicant:	City of Fort Lupton, Colorado
<p>The scope of work shall state the purpose and primary features of the project, end products to be delivered, clear timelines and provide a detailed narrative of all tasks to be performed for completion of plan. (Timelines must include 50 and 75% progress reports and final plan submission.) Each task within the scope of work must:</p> <ul style="list-style-type: none">• Be numbered• Contain a detailed description of work to be performed• Identify those responsible for performing the task• Identify funding sources, such as; grant monies, entity funds, in-kind services, and cash contributions, necessary to complete the task.	
<p>Clear Water Solutions, Inc. (CWS) will be assisting to update the Municipal Water Efficiency Plan (Plan) for the City of Fort Lupton (City or Fort Lupton). The main purpose of this Plan is to guide the effective and responsible uses of the City's water resources. A secondary purpose of this effort is to develop a Plan that meets the CWCB requirements enabling Fort Lupton to apply for State financial assistance for subsequent projects further empowering the City to establish water saving programs that might not be possible otherwise.</p> <p>The primary features or sections of this Plan will include the following:</p> <ol style="list-style-type: none">1. Introduction & Profile of Existing Water Supply System2. Profile of Water Demands and Historical Water Efficiency Activities3. Integrated Planning and Water Efficiency Benefits and Goals4. Selection of Water Efficiency Activities5. Implementation and Monitoring Plan6. Adoption of New Policy, Public Review, and Formal Approval <p>Each of these sections and the steps to accomplish them is described in more detail within the Task sections within the Scope of Work.</p> <p>During the course of the Plan, CWS will provide 50% and 75% progress reports as well as a final Plan. The Colorado Water Conservation Board will receive an electronic pdf version of the final Plan. Fort Lupton will receive both an electronic pdf version as well as a number of bound hard copies of the Plan.</p> <p>Timelines are listed within the Task sections within this Scope of Work as well as in the included Excel spreadsheet.</p>	
Objectives: (List the objectives of the project)	



1. **Provide an overall view of Fort Lupton’s water supply system that includes past uses, customer categories, and non-revenue water. This will also likely include indoor/outdoor use, trends, and other beneficial data.**
2. **Help Fort Lupton to evaluate previous water efficiency activities, benefits from those activities, and lessons learned.**
3. **Develop activities and steps within the Plan that will help Fort Lupton achieve lasting, long-term improvements in water efficiency and conservation. One of the greatest benefits would be reducing overall per capita water demands.**
4. **Develop activities that will compliment other planning efforts and goals of Fort Lupton, its City Council, Staff, businesses, residents, and other stake holders.**

Tasks
Provide a detailed description of each task using the following format:
<u>Task 1 – Introduction and Profile Existing Water Supply System</u>
Description of Task: The activities described under this task will provide general background on Fort Lupton’s existing water supply system.
Meeting #1 - Kickoff meeting with City staff to discuss overall project and gather preliminary data (estimated date: July 20, 2018)
<u>1.1 – Overview of Existing Water Supply System</u>
1.1.1 CWS, with the help of City staff, will describe the City’s service area.
1.1.2 CWS, with the help of City staff, will describe the City’s water supply sources.
1.1.3 CWS, with the help of City staff, will describe the key existing facilities.
<u>1.2 – Water Supply Reliability</u>
1.2.1 CWS will provide a description of the City’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 City staff, will describe water supply system reliability.
1.2.3 CWS, with the help of City staff, will describe how excess supplies are used after meeting municipal demands.
<u>1.3 – Supply-Side Limitations and Future Needs</u>
1.3.1 CWS, with help of City staff, will summarize the City’s water supply system limitations and future challenges the City may have for planning and operating their system.
1.3.2 CWS and City staff will describe how the City intends to address water supply system limitations and future challenges.



Tasks			
Budget for Task 1:			
Total (in-kind)	Matching Funds (cash)	WEGF Grant Request	Total
\$ 2,885.12	\$ 1,580.54	\$ 3,809.46	\$ 8,275.12
Estimated timeline for Task 1: Start Date: July 20, 2018 End Date: September 20, 2018 (with ongoing revisions as information becomes available or is clarified)			
Method/Procedure:			
Much of this task will be done through email exchanges for data and other information. Plan framework will be established, and information will begin to be input into spreadsheets, tables, charts, and the main body of the Plan. Meeting #1 (Kickoff meeting) will also help establish relationships as well as gather additional needed data and other information. A large percentage of the information needed during this task may have already been gathered during the Grant Application process.			
Applicant Deliverable: (Describe the deliverable the applicant expects from this task)			
No specific deliverables: <ul style="list-style-type: none">Fort Lupton will participate in Meeting #1. CWS will provide a meeting agenda and supporting documents. Fort Lupton will be providing CWS with various data and information. If needed or requested, CWS can provide Fort Lupton the progress of the Plan at the end of Task 1.			
CWCB Deliverable: (Describe the deliverable the applicant will provide CWCB documenting the completion of this task)			
No specific deliverable: <ul style="list-style-type: none">If needed or requested, CWS can provide CWCB the progress of the Plan at the end of Task 1.If at the end of Task 1, it appears that the Plan is progressing significantly different than originally estimated, then CWS will provide CWCB (and copy Fort Lupton) with an updated schedule.			

Tasks
Provide a detailed description of each task using the following format:
<u>Task 2 - Profile of Water Demands and Historical Water Efficiency Activities</u>
Description of Task: 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.



Tasks

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 City staff will describe any limitation associated with the availability of the demand data.
- 2.2.2 CWS, with the help of City 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 City staff will quantify water demand by customer category including monthly and annual treated metered water use by customer category.
- 2.2.4 CWS and City staff will 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 City 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 City staff, will list the demand management activities implemented prior to this Plan. 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.

2.4 – Demand Forecasts

- 2.4.1 In coordination with City staff, CWS will identify the planning horizon for the Plan.
- 2.4.2 CWS, with the help of City staff, will present the unmodified forecasted water demands based on Fort Lupton'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.

Budget for Task 2:

Total (in-kind)	Matching Funds (cash)	WEGF Grant Request	Total
\$ 3,394.24	\$ 2,530.62	\$ 6,099.38	\$12,024.24



Tasks
Estimated timeline for Task 2: Start Date: July 20, 2018 End Date: November 2, 2018 (with ongoing revisions as information becomes available or is clarified)
Method/Procedure: Much of this task will be done through email exchanges for data and other information. Information will continue to be input into the Plan. Meeting #1 (Kickoff meeting) will have provided some of this information needed for this task. Data will be filtered, analyzed, and incorporated into tables and charts to illustrate the various elements of Task 2. Other methods and procedures are discussed within the descriptions of Task 2 descriptions above.
Applicant Deliverable: (Describe the deliverable the applicant expects from this task)
No specific deliverable: <ul style="list-style-type: none">Fort Lupton will continue providing CWS with various data and information. If needed or requested, CWS can provide Fort Lupton the progress of the Plan at the end of Task 2.
CWCB Deliverable: (Describe the deliverable the applicant will provide CWCB documenting the completion of this task)
No specific deliverable: <ul style="list-style-type: none">If needed or requested, CWS can provide CWCB the progress of the Plan at the end of Task 2.If at the end of Task 2, it appears that the Plan is progressing significantly different than originally estimated, then CWS will provide CWCB (and copy Fort Lupton) with an updated schedule.

Tasks
Provide a detailed description of each task using the following format:
<u>Task 3 - Integrated Planning and Water Efficiency Benefits and Goals</u>
Description of Task:
<u>3.1 – Water Efficiency and Water Supply Planning</u> 3.1.1 In coordination with City staff, CWS will describe how long-term water savings garnered through water efficiency activities are incorporated into water supply planning and decision making.



Tasks

- 3.1.2 CWS will present modified forecasted water demands through the planning horizon incorporating the City'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 City staff, CWS will provide a list of water efficiency goals for this Plan 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 City staff will provide an explanation of how these goals were developed and designed to achieve the water efficiency benefits.
- 3.2.3 CWS and City staff will provide an explanation of how these goals compare to the goals in the City's former water efficiency plan and describe why goals remained the same or were changed.

Budget for Task 3:

Total (in-kind)	Matching Funds (cash)	WEGF Grant Request	Total
\$ 1,774.90	\$ 1,841.52	\$ 4,438.48	\$ 8,054.90

Estimated timeline for Task 3:

Start Date: July 20, 2018

End Date: December 8, 2018 (with ongoing revisions as information becomes available or is clarified)

50% Progress Report: December 8, 2018

Method/Procedure:

Much of this task will be done through email exchanges for additional data and other information. Information will continue to be input. Meeting #1 (Kickoff meeting) will have provided some of this information. Meeting #2 (Goals and Screening meeting) will provide additional information and data. Data will continue be filtered, analyzed, and incorporated into tables and charts to illustrate the various elements of Task 3. Other methods and procedures are discussed within the descriptions of Task 3 Descriptions above.

Applicant Deliverable: (Describe the deliverable the applicant expects from this task)



Tasks
<ul style="list-style-type: none">Fort Lupton will participate in Meeting #2. CWS will provide a meeting agenda and supporting documents. Some of those documents may include graphs and charts that will be part of the Plan.Fort Lupton will also be copied on the progress report email sent to CWCB. That email will have a 50% Progress Report attached to it indicating the Plan has reached the 50% completion stage.
CWCB Deliverable: (Describe the deliverable the applicant will provide CWCB documenting the completion of this task)
<ul style="list-style-type: none">CWS will send CWCB a progress report email. That email will have a 50% Progress Report attached to it indicating the Plan has reached the 50% completion stage. The Progress Report will included some of the information, data, and illustrations that will also be part of the Plan.The 50% Progress Report will also include those elements requested by CWCB within this SOW Template:<ul style="list-style-type: none">the success of meeting previously identified goals and objectivesobstacles encounteredpreliminary findings or accomplishmentspotential need for revisions to the scope of work and timelinesIf at the end of Task 3, it appears that the timing of the Plan is progressing significantly different than originally estimated, then CWS will provide CWCB with an updated schedule that will be attached to the Progress Report.

Tasks
Provide a detailed description of each task using the following format:
<u>Task 4 - Selection of Water Efficiency Activities</u>
Description of Task: 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.
<u>4.1 – Summary of Selection Process</u> <ul style="list-style-type: none">4.1.1 CWS along with City 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 City staff, the proper documentation and supporting materials will be provided justifying why the activities will not be implemented.
<u>4.2 – Demand Management Activities</u> <ul style="list-style-type: none">4.2.1 CWS along with City staff will provide an estimate of the amount of water that could be saved through water efficiency when the Plan is implemented.4.2.2 CWS with City staff will estimate water savings from selected <i>Foundational Activities</i>.<ul style="list-style-type: none">4.2.2.1 CWS and City 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.



Tasks

- 4.2.2.2 CWS and City 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 City 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 City staff will describe the current and planned system water loss management and control programs.
- 4.2.3 CWS with City staff will estimate water savings from *Targeted Technical Assistance and Incentive Activities*.
 - 4.2.3.1 CWS and City 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, CWS will provide past performance indicators and any lessons learned from past implementation.
 - 4.2.3.2 CWS and City 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, CWS will provide past performance indicators and any lessons learned from past implementation.
 - 4.2.3.3 CWS and City 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, CWS will provide past performance indicators and any lessons learned from past implementation.
 - 4.2.3.4 CWS and City 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, CWS will provide past performance indicators and any lessons learned from past implementation.
- 4.2.4 CWS with City staff will detail *Ordinance and Regulatory Activities* selected for implementation and estimate water savings for those selected.
 - 4.2.4.1 CWS and City 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



Tasks

implemented prior to this Plan, CWS will provide information and any lessons learned from past implementation.

4.2.4.2 CWS and City 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, CWS will provide information and any lessons learned from past implementation.

4.2.4.3 CWS and City 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, CWS will provide information and any lessons learned from past implementation.

4.2.5 CWS with City staff will detail *Educational and Outreach Activities* selected for implementation and estimate water savings for those selected.

4.2.5.1 CWS and City 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, CWS will provide information and any lessons learned from past implementation.

4.2.5.2 CWS and City 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, CWS will provide information and any lessons learned from past implementation.

4.2.5.3 CWS and City 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, CWS will provide information and any lessons learned from past implementation.

Budget for Task 4:

Total (in-kind)	Matching Funds (cash)	WEGF Grant Request	Total
\$ 2,524.46	\$ 3,641.99	\$ 8,778.01	\$14,944.46

Estimated timeline for Task 4:

Start Date: July 20, 2018

End Date: February 22, 2019 (with ongoing revisions as information becomes available or is clarified)

75% Progress Report: February 22, 2019



Tasks
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.
Method/Procedure:
Much of this task will continue be done through email exchanges for any additional data and other information needed. Information will continue to be input into Plan. Other sections may be updated as new information is received. Meetings #1 & #2 may have provided some of this information. Meeting #3 will provide the water efficiency activities and a final selection of those activities chosen. Implementation and monitoring plans will also be discussed. Data will continue be filtered, analyzed, and incorporated into tables and charts to illustrate the various elements of Task 4. Other methods and procedures are discussed within the descriptions of Task 4 Descriptions above.
Applicant Deliverable: (Describe the deliverable the applicant expects from this task)
<ul style="list-style-type: none">• Fort Lupton will participate in Meeting #3. CWS will provide a meeting agenda and supporting documents. Some of those documents may include additional graphs and charts that will be part of the Plan.• Fort Lupton will also be copied on the progress report email sent to CWCB. That email will have a 75% Progress Report attached to it indicating the Plan has reached the 75% completion stage. The Progress Report will included some of the information, data, and illustrations that will also be part of the Plan.
CWCB Deliverable: (Describe the deliverable the applicant will provide CWCB documenting the completion of this task)
<ul style="list-style-type: none">• CWS will send CWCB a progress report email. That email will have a 75% Progress Report attached to it indicating the Plan has reached the 75% completion stage. The Progress Report will included some of the information, data, and illustrations that will also be part of the Plan. The Progress report will also indicate the tasks that are completed.• The 75% Progress Report will also include those elements requested by CWCB within this SOW Template:<ul style="list-style-type: none">○ the success of meeting previously identified goals and objectives○ obstacles encountered○ preliminary findings or accomplishments○ potential need for revisions to the scope of work and timelines• If at the end of Task 4, it appears that the timing of the Plan is progressing significantly different than originally estimated, then CWS will provide CWCB with an updated schedule that will be attached to the Progress Report.

Tasks
Provide a detailed description of each task using the following format:
<u>Task 5 - Implementation and Monitoring Plan</u>
Description of Task: The activities under this task will address the activities and coordination necessary to implement the Plan and monitor the overall effectiveness of the water efficiency plan.



Tasks

5.1 – Implementation Plan

- 5.1.1 CWS and City 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 City 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 City 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.
- 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.

Budget for Task 5:

Total (in-kind)	Matching Funds (cash)	WEGF Grant Request	Total
\$ 1,241.01	\$ 973.54	\$ 2,346.46	\$ 4,561.01

Estimated timeline for Task 5:

Start Date: July 20, 2018

End Date: March 10, 2019 (with ongoing revisions as information becomes available or is clarified)

Method/Procedure:

At this point the Plan will be getting close to the final stages. Remaining details will be clarified through emails and phone calls. Remaining information will be added to the Plan. Other sections may be updated as new information is received. Meetings #3 (as well as previous meetings) will have provided much of this information. Remaining data and information will continue be filtered, analyzed, and incorporated into tables and charts to illustrate the various elements of Task 5. Other methods and procedures are discussed within the descriptions of Task 5 Descriptions above.

Applicant Deliverable: (Describe the deliverable the applicant expects from this task)

No specific deliverable:

- Fort Lupton will provide CWS with remaining data and information not provided previously or in Meeting #3. If needed or requested, CWS can provide Fort Lupton the progress of the Plan at the end of Task 5.

CWCB Deliverable: (Describe the deliverable the applicant will provide CWCB documenting the completion of this task)



Tasks

No specific deliverable:

- If needed or requested, CWS can provide CWCB the progress of the Plan at the end of Task 5.
- If at the end of Task 5, it appears that the Plan is progressing significantly different than originally estimated, then CWS will provide CWCB (and copy Fort Lupton) with an updated schedule.

Tasks

Provide a detailed description of each task using the following format:

Task 6 - Adoption of New Policy, Public Review, and Formal Approval

Description of Task: The activities described under this task address the public review and formal adoption process.

6.1 – Public Review Process

- 6.1.1 CWS will describe the public review process and how the public accessed the Plan. Additionally, CWS will summarize the public comments received, how the comments were addressed, and details of the meetings held during the Plan development process.
- 6.1.2 The public review process is as follows:
 - City Council and Staff will review a draft of the Plan and provide comments.
 - CWS will incorporate the City's comments prior to the public review process.
 - The public will be notified that the Plan is available for review. The public will have at least 60 days to review and comment on the Plan.
 - Comments will be solicited and incorporated into the Plan as necessary.
 - The City will formally adopt the final Plan.
 - CWS will submit the final Plan to CWCB.
 - CWCB will review the final Plan and provide written notification of approval, conditional approval (with minor changes), or disapproval with modifications. Conditions for approval were addressed, and the official approval was received on October 10, 2017.

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

Budget for Task 6:

Total (in-kind)	Matching Funds (cash)	WEGF Grant Request	Total
\$ 2,008.24	\$ 1542.42	\$ 3,717.58	\$7,268.24



Tasks
<p>Estimated timeline for Task 6: Start Date: July 20, 2018 <i>Note: This span of time includes several review periods:</i></p> <ul style="list-style-type: none">• City Staff Review (from 14 – 30 days)• City Council Review (approx. 14 days)• Public Review (at least 60 days)• CWCB Review (up to 90 days) <p>End Date: October 13, 2019 (with ongoing revisions as information becomes available or is clarified)</p> <p>Meeting #4 - Meeting with City Council to present draft Plan</p>
<p>Method/Procedure:</p> <p>At this point the Plan will nearly be finished. If anything remains, details will be clarified through emails and phone calls. Remaining information will be added to the Plan. Other sections may be updated as new information is received.</p> <p>Feedback may be received during Meeting #4 (presentation to City Council). The public will also have an opportunity to give feedback during the 60-day public review period. Comments and feedback received by the City during that time will be incorporated into the Plan. Other methods and procedures are discussed within the descriptions of Task 6 Descriptions above.</p>
<p>Applicant Deliverable: (Describe the deliverable the applicant expects from this task)</p> <ul style="list-style-type: none">• Fort Lupton will participate in Meeting #4. CWS will provide a PowerPoint presentation and any supporting documents. Some of the data, tables, and charts may be part of the Plan.• CWS will provide Fort Lupton with an electronic version of the draft Plan that can be posted on the City's website.• Once CWCB has issued the official Letter of Approval, CWS will create for Fort Lupton both an electronic pdf version as well as bound hard copies of the Plan. These versions of the Plan will include CWCB's approval documents.
<p>CWCB Deliverable: (Describe the deliverable the applicant will provide CWCB documenting the completion of this task)</p> <ul style="list-style-type: none">• CWS will send CWCB the final Plan that the City of Fort Lupton's City Council has approved and adopted.<ul style="list-style-type: none">○ The Plan will include a cover letter with City of Fort Lupton's letterhead and also include:<ul style="list-style-type: none">▪ Name and contact information▪ Organizations and individuals assisting with the Plan▪ Quantified annual retail water delivery.▪ Identified population served by retail water delivery.▪ A review of the activities completed▪ An estimate of actual water savings realized▪ Any other information that is relevant to the Board's record of the Project and future use of the Project outcomes.▪ Dates of public comment period▪ Signature with authority to commit resources of submitting entity▪ <i>Note: Several of the above items will also be included within the main body of the Plan.</i>○ The Plan will not be completely finalized until CWCB has reviewed it. If any components of the Plan need to be added or modified, those will be addressed, and CWCB will review the changes and updates.○ The Plan will be finalized once CWCB has issued its official Letter of Approval.



Tasks

Budget and Schedule
<p><u>Budget:</u> This Scope of Work and Schedule shall be accompanied by a Budget that reflects the Tasks identified in the Scope of Work and Schedule and shall be submitted to CWCB in an excel format.</p> <p><u>Schedule:</u> This Scope of Work and Budget shall be accompanied by a Schedule that reflects the Tasks identified in the Scope of Work and Budget and shall be submitted to CWCB in an excel format.</p>

Reporting Requirements
<p><u>Reporting:</u> The applicant shall provide the CWCB a Progress Report at 50% & 75% completion of the project. The Progress Report shall address the following:</p> <ul style="list-style-type: none">• the success of meeting previously identified goals and objectives• obstacles encountered• preliminary findings or accomplishments• potential need for revisions to the scope of work and timelines <p>(The CWCB may withhold reimbursement until satisfactory Progress Reports have been submitted.)</p> <p><u>Final Deliverable:</u> At the completion of the project, the applicant shall provide the CWCB a final report on the applicant's letterhead including a review of the activities completed, an estimate of actual water savings realized (for covered entities), and other information that is relevant to the Board's record of the Project and future use of the Project outcomes.</p> <p>The CWCB will withhold the last 10% of the grant request until the Final Report is completed to the satisfaction of CWCB staff. Once the Final Report has been accepted, and final payment has been issued, the purchase order or contract will be closed without any further payment.</p>

**COLORADO**Colorado Water
Conservation Board

Department of Natural Resources

Water Efficiency Grant Fund**BUDGET & SCHEDULE****Prepared Date:** July 10, 2017**Project Name:** Fort Lupton Water Efficiency Plan Update 2018**Applicant:** City of Fort Lupton

Task No.	Description	Start Date ⁽¹⁾	End Date	Consultant - Michelle Hatcher (\$160/hour) ²		Consultant - Steve Nguyen (\$190/hour) ²		Finance Director - Leann Perino (Cash & In-kind) ²		Billing Clerk - Dustin Bowles (Cash & In-kind) ²		Public Works Director - Roy Vestal (Cash & In-kind) ²		WEGF Grant Request	Total
				Hours	Sub Total	Hours	Sub Total	Cash	In-Kind	Cash	In-Kind	Cash	In-Kind		
1	Introduction and Profile Existing Water Supply System	7/20/2018	9/20/2018	23	\$3,680.00	9	\$1,710.00	\$526.85	\$1,562.86	\$526.85	\$337.45	\$526.85	\$984.81	\$3,809.46	\$8,275.12
2	Profile of Water Demands and Historical Water Efficiency Activities	7/20/2018	11/2/2018	48	\$7,680.00	5	\$950.00	\$843.54	\$1,683.08	\$843.54	\$436.70	\$843.54	\$1,274.46	\$6,099.38	\$12,024.24
3	Integrated Planning and Water Efficiency Benefits and Goals	7/20/2018	12/8/2018	25	\$4,000.00	12	\$2,280.00	\$613.84	\$841.54	\$613.84	\$238.20	\$613.84	\$695.16	\$4,438.48	\$8,054.90
4	Selection of Water Efficiency Activities	7/20/2018	2/22/2019	61	\$9,760.00	14	\$2,660.00	\$1,214.00	\$1,202.20	\$1,214.00	\$337.45	\$1,214.00	\$984.81	\$8,778.01	\$14,944.46
5	Implementation and Monitoring Plan	7/20/2018	3/10/2019	16	\$2,560.00	4	\$760.00	\$324.51	\$540.99	\$324.51	\$178.65	\$324.51	\$521.37	\$2,346.46	\$4,561.01
6	Adoption of New Policy, Public Review, and Formal Approval	7/20/2018	10/13/2019	21	\$3,360.00	10	\$1,900.00	\$514.14	\$841.54	\$514.14	\$297.75	\$514.14	\$868.95	\$3,717.58	\$7,268.24
	General Project Expenses	7/20/2018	10/13/2019	-	\$1,146.96	-	-	\$112.11	-	\$112.11	-	\$112.11	-	\$810.63	\$1,146.96
Total				194	\$32,186.96	54	\$10,260.00	\$4,148.99	\$6,672.21	\$4,148.99	\$1,826.20	\$4,148.99	\$5,329.56	\$30,000.00	\$56,274.93