

Colorado Water Conservation Board

Water Efficiency Grant Fund Grant Application

Instructions

All WEGF grant applications shall conform to Grant Guidelines. Please do not recycle previously used applications; download a current version directly from CWCB.

If you have questions, please contact CWCB staff:

Ben Wade

Ben.wade@state.co.us
303-866-3441 ext 3238

	WEGF Submittal Checklist (Required)				
✓	I acknowledge I have read and understand the WEGF Criteria and Guidelines.				
Attacl	nments				
✓	Scope of Work ⁽¹⁾ (Word – see Template)				
✓	Budget & Schedule ⁽¹⁾ (Excel Spreadsheet – see Template)				
	Letters of Support (For Public Education/Outreach Grants)				
Contr	Contracting Documents (For Public Education/Outreach Grants)				
	W-9 ⁽²⁾				
	Certificate of Insurance ⁽²⁾ (General, Auto, & Workers' Comp.)				

- (1) Required with application if applicable.
- (2) Required for contracting. While optional at the time of this application, submission can expedite contracting upon CWCB Board approval.

Water Efficiency Project Summary						
Name of Applicant	Town of Hudson,	Town of Hudson, Colorado				
Name of Grant Project	Hudson Water Efficiency Plan 2021					
WEGF Grant Request Total		\$ 20,000.000				
In-Kind Match		\$ 6,117.79				
Cash Match		\$ 27,668.32				
Total Project Costs		\$ 53,786.11				



Applicant Information					
Name of Applicant	Town of Hudson, Colorado				
Mailing Address	P.O. Box 351 Hudson, CO 80642				
Applicant's Organization Contact ⁽¹⁾	Guy Patterson				
Position/Title	Town Manager				
Email	Manager@HudsonColorado.org				
Phone	(303) 531-9311				
Grant Management Contact ⁽²⁾	Guy Patterson				
Position/Title	See above				
Email	See above				
Phone	See above				
Name of Consultant (if applicable)	Clear Water Solutions				
Mailing Address	1625 Foxtrail Drive, Suite 290 Loveland, CO 80538				
Position/Title	Michelle Hatcher, Water Resource Specialist				
Email	michelle@clearwatercolorado.com				
Phone	(970) 223-3706				

⁽¹⁾ Person with signatory authority

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

Clear Water Solutions, Inc. (CWS) will help complete a Municipal Water Efficiency Plan for the Town of Hudson (Town). 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 24 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.

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



Individuals from the Town that will be involved in the project are as follows:

Guy Patterson, the Town Manager, will serve as the primary contact for the Town on this project. He will provide insight concerning the existing water supply system, water supply reliability, historical and future water demands, water use habits of customers and provide feedback on the water efficiency activities evaluated in this Plan.

Hunter Fobare, the Public Works Director, will provide general direction and guidance on all aspects of the Plan and will aid in profiling the existing system and water supply, estimating current and future water demands, and selecting the final water efficiency activities to present to Town Council. Hunter will provide valuable insight into the Town's operations. He will also progress the public review process and adoption process of this Plan.

Jenn Wood, the Town Planner, will provide coordination between the Town's water resources managers and the land use planning department. Jen will work to ensure that this planning effort meets Town standards and conforms to the Town's Comprehensive Plan.

Charity Young, the Town Clerk, will pull together information concerning the water use data annually, monthly, by customer category, by water source, and revenue generated. She will assess the financial impacts of water efficiency activities and provide an overview of implementation costs.

	Type of Eligible Entity (check one)						
	Covered Entity: as defined in Section 37-60-126 Colorado Revised Statutes						
✓	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)						

	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 the Colorado Water Plan Technical Analysis (formerly known as SWSI)					
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.).

The following table includes the retail water delivery in acre-feet (AF) for the Town of Hudson. The total water delivery is metered by customer category. The average annual water use is 175 AF (2015-2019 avg.). The Town's water supplies are derived from C-BT and a Well owned by the Town.

Past Five Years Retail Water Delivery (AF)

Customer Class	2015	2016	2017	2018	2019	Average	Source
Residential	112	110	111	115	117	113	
Multi-Family	6	6	6	3	3	4	
Commercial	39	47	43	43	50	46	C-BT, Well 11133-R-R
Mobile Home Parks	10	7	11	15	14	12	
Total (AF)	166	169	171	176	184	175	

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



Projections of Future Annual Retail Demand

The following table has the water use projections for the next five years. These projections were based on historical and projected water use data. The current population is estimated at 1,982 (2020). Water demand is projected to increase by 2.5% per year, based on the estimated population growth. These projected demand figures do not consider the re-opening of the Hudson Correctional Facility, whose future is unknown at this time. This is a preliminary estimate that will be refined in the Water Efficiency Plan.

Estimated Future Demand (AF)

Customer Class	2020	2021	2022	2023	2024
Residential	120	122	126	129	132
Multi-Family	3	3	3	3	4
Commercial	51	52	53	55	56
Mobile Home Parks	15	15	15	16	16
Total (AF)	188	193	198	203	208
Estimated Population	1,982	2,032	2,082	2,134	2,188

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 gallons per capita per day (GPCD) is calculated as the residential water use in gallons divided by 365 days per year and divided by the population. Total GPCD is calculated as the total potable water use (all categories) in gallons divided by 365 days per year and divided by the population.

Per Capita Water Use

Item	2015	2016	2017	2018	2019	Average (2015- 2019)
Residential and Multi-Family Water Use (AF)	118	115	117	118	120	117
Total Water Use (AF)	166	169	171	176	184	175
Population	1,585	1,591	1,657	1,832	1,891	1,743
Per Capita - Residential (GPCD)	66	65	63	57	57	60
Per Capita - Total (GPCD)	94	95	92	86	87	90



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 population data for the previous five years, the current estimate for 2020 and the 10-year population projection. The 2015 through 2019 estimates were obtained from the State Demography Office. The 2020 population was estimated by Town staff. The projections (beginning in 2021) were estimated from a growth rate of approximately 2.5% per year as estimated by Town staff.

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

Year	Population	Change in Population	Population Growth
2015	1,585	-	-
2016	1,591	6	-
2017	1,657	66	-
2018	1,832	175	-
2019	1,891	59	-
2020	1,982	91	2.50%
2021	2,032	50	2.50%
2022	2,082	51	2.50%
2023	2,134	52	2.50%
2024	2,188	53	2.50%
2025	2,242	55	2.50%
2026	2,299	56	2.50%
2027	2,356	57	2.50%
2028	2,415	59	2.50%
2029	2,475	60	2.50%
2030	2,537	62	2.50%

Estimated Water Savings Goals

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

Hudson'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 17.5 acre-feet per. 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.



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 staff, Town 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.

Hudson will also monitor money spent on the selected conservation measures and programs. Individual customer water use can be tracked for rebates, which will involve customer's water use prior to installation, verification of installation, and post-installation water use. Customer category water use will be monitored for programs such as a water rate study.

Many of the costs evaluated in the cost-benefit analysis include annual costs for follow up. This will allow staff to specifically set aside time to monitor and evaluate the success of the conservation measures and programs. Expenditures for conservation will be documented by staff and reported to the Town Council on a regular basis. The Town will prepare an annual report summarizing the monitoring efforts for the water efficiency activities that have been implemented and that are ongoing. This will be presented to Town Council annually, so they can evaluate the success of the program.

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).

Hudson's supplies come from two sources: Colorado-Big Thompson Project (C-BT) water and shallow alluvial groundwater. Hudson also owns deep aquifer groundwater, which is currently used for augmentation. The multiple sources provides the Town diversity and redundancy, which is important for any water provider. The annual C-BT quota (or yield) can range from 50% (0.5 AF per unit) to 100% (1.0 AF per unit), meaning the Town receives an annual yield that can fluctuate from 50% to 100% year-to-year. The price per unit of C-BT has increased significantly over time as water supplies along the Front Range have become more competitive, making it challenging to acquire new units to sustain growth.

The Town 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. A Water Efficiency Plan will help the Town reduce the long-term future water demands and manage water resource during anticipated growth.



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.

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.

One of the major goals and benefits with the Town's efforts is to delay the need of future water acquisition to supply increased population growth. Specifically, Hudson wants to allow planned development and growth to continue without exceeding the Town's ability to provide adequate water supply. Configuring new development to reduce its water footprint will in turn provide enhanced ability to absorb new growth, meet community priorities, and contribute to better resiliency of existing supplies without sacrificing quality and desirability.

The Town hopes to utilize additional CWCB Implementation Grant money to develop water efficiency activities and programs.

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

Name/Title

Town Manager

10 · /6 · 26

Date



Water Efficiency Grant Fund					
Scope of Work					
Date: November 30, 2020					
Project Name: Hudson Water Efficiency Plan					
Grant Applicant: Town of Hudson, Colorado					

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 dates.) Each task within the scope of work must:

- 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.
- Include estimated dates for progress reports and the final report.

The main purpose of this Municipal Water Efficiency Plan (Plan) is to guide the effective and responsible uses of the Town's water resources. A secondary purpose of this effort is to develop a Plan that meets the CWCB requirements enabling Hudson to apply for State financial assistance for subsequent projects further empowering the Town to establish water saving programs that might not be possible otherwise. Clear Water Solutions, Inc. (CWS) will be assisting to update the Plan for the Town of Hudson (Town *or* Hudson).

The primary features or sections of this Plan will include the following:

- 1. Introduction & Profile of Existing Water Supply System
- 2. Profile of Water Demands and Historical Water Efficiency Activities
- 3. Integrated Planning and Water Efficiency Benefits and Goals
- 4. Selection of Water Efficiency Activities
- 5. Implementation and Monitoring Plan
- 6. Adoption of New Policy, Public Review, and Formal Approval

Each of these sections and the steps to accomplish them is described in more detail within the Task sections within the Scope of Work.

During the course of the Plan, Hudson 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.

Timelines are listed within the Task sections within this Scope of Work as well as in the included Excel spreadsheet.

Objectives: (List the objectives of the project)



- 1. Provide an overall view of Hudson'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. Evaluate previous water efficiency activities, benefits from those activities, and lessons learned.
- 3. Develop activities and steps within the Plan that will help Hudson 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 Hudson, its Town Council, Staff, businesses, residents, and other stake holders.

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

Task 1 - Introduction and Profile Existing Water Supply System

Description of Task: The activities described under this task will provide general background on Hudson's existing water supply system.

Meeting #1 - Kickoff meeting with Town staff to discuss overall project and gather preliminary data (estimated date: January 5, 2021)

1.1 - Overview of Existing Water Supply System

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

1.2 – Water Supply Reliability

- 1.2.1 Hudson will provide a description of the Town's location with respect to areas of current and future water needs as identified by the Analysis & Technical Update to the CO Water Plan and other regional planning efforts.
- 1.2.2 Town staff and CWS will describe water supply system reliability.
- 1.2.3 Town staff and CWS will describe how excess supplies are used after meeting municipal demands.

1.3 – Supply-Side Limitations and Future Needs

- 1.3.1 Town staff and CWS, 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 Town staff and CWS will describe how the Town intends to address water supply system limitations and future challenges.



Budget for Task 1:								
Total	Matching Funds	WEGF Grant Request	Total					
(in-kind)	(cash)							
\$989.97	\$3,514.53	\$2,540.47	\$7,044.97					

Estimated timeline for Task 1: Start Date: December 29, 2020

End Date: February 9, 2021 (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:

- Hudson will participate in Meeting #1. CWS will provide a meeting agenda and supporting documents.
- Hudson will be providing CWS with various data and information. If needed or requested, CWS can provide Hudson 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:

• If needed or requested, Hudson 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 Hudson will provide CWCB with an updated schedule.

Tasks

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

Task 2 - Profile of Water Demands and Historical Water Efficiency Activities

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.

- 2.1 Demographics and Key Characteristics of the Service Area
 - 2.1.1 Hudson will describe customer categories, service area population, and other pertinent information.
- 2.2 Historical Water Demands



- 2.2.1 Town staff and CWS will describe any limitation associated with the availability of the demand data.
- 2.2.2 Town staff and CWS 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 Town staff and CWS will quantify water demand by customer category including monthly and annual treated metered water use by customer category.
- 2.2.4 Town staff and CWS will analyze system wide demand by calculating and describing per capita water demands and indoor and outdoor water usage.

<u>2.3 – Past and Current Demand Management Activities and Impact to Demands</u>

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

2.4 - Demand Forecasts

- 2.4.1 Town staff and CWS will identify the planning horizon for the Plan.
- 2.4.2 Town staff and CWS will present the unmodified forecasted water demands based on Hudson's existing water efficiency program through the planning horizon.
- 2.4.3 Hudson 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				
\$1,310.42	\$5,734.69	\$4,145.31	\$11,190.42				

Estimated timeline for Task 2: Start Date: December 29, 2020

End Date: March 8, 2021 (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:

Hudson will continue providing CWS with various data and information. If needed or requested,
 CWS can provide Hudson 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:

- If needed or requested, Hudson 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 Hudson will provide CWCB (and copy Hudson) with an updated schedule.

Tasks

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

Task 3 - Integrated Planning and Water Efficiency Benefits and Goals

Description of Task:

3.1 - Water Efficiency and Water Supply Planning

- 3.1.1 Town staff and 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 Hudson 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 Hudson, 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 Hudson 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 Town staff and 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 Town staff and CWS will provide an explanation of how these goals were developed and designed to achieve the water efficiency benefits.
- 3.2.3 Town staff and CWS will provide an explanation of how these goals compare to the goals in the Town's previous 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
\$1,254.20	\$4,077.55	\$2,947.45	\$8,279.20

Estimated timeline for Task 3: Start Date: December 29, 2020

End Date: April 5, 2021 (with ongoing revisions as information becomes available or is clarified)

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)

- Hudson 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.
- Hudson 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)

- Hudson 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:
 - o the success of meeting previously identified goals and objectives
 - o obstacles encountered
 - o preliminary findings or accomplishments
 - o potential need for revisions to the scope of work and timelines
- If at the end of Task 3, it appears that the timing of the Plan is progressing significantly different than originally estimated, then Hudson 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:



Task 4 - Selection of Water Efficiency Activities

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.

4.1 – Summary of Selection Process

- 4.1.1 Town staff and CWS will provide a list of selected water efficiency activities included in the new water efficiency plan.
- 4.1.2 Hudson 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 Town staff and CWS will provide an estimate of the amount of water that could be saved through water efficiency when the Plan is implemented.
- 4.2.2 Town staff and CWS will estimate water savings from selected Foundational Activities.
 - 4.2.2.1 Town staff and CWS 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 Town staff and CWS 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 Town staff and CWS 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 Town staff and CWS will describe the current and planned system water loss management and control programs.
- 4.2.3 Town staff and CWS will estimate water savings from *Targeted Technical Assistance and Incentive Activities*.
 - 4.2.3.1 Town staff and CWS 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. Hudson will evaluate land use planning and low water use landscapes for water efficiency measures. Additionally Hudson will evaluate the potential costs and benefits of the selected activities. If any activities have been implemented prior to this Plan, Hudson will provide past performance indicators and any lessons learned from past implementation.



- 4.2.3.2 Town staff and CWS 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 Hudson will evaluate the potential costs and benefits of the selected activities. If any activities have been implemented prior to this Plan, Hudson will provide past performance indicators and any lessons learned from past implementation.
- 4.2.3.3 Town staff and CWS 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 Hudson will evaluate the potential costs and benefits of the selected activities. If any activities have been implemented prior to this Plan, Hudson will provide past performance indicators and any lessons learned from past implementation.
- 4.2.3.4 Town staff and CWS 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 Hudson will evaluate the potential costs and benefits of the selected activities. If any activities have been implemented prior to this Plan, Hudson will provide past performance indicators and any lessons learned from past implementation.
- 4.2.4 Town staff and CWS will detail *Ordinance and Regulatory Activities* selected for implementation and estimate water savings for those selected.
 - 4.2.4.1 Town staff and CWS 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. Hudson will evaluate landscape design and land use planning rules. Additionally Hudson will evaluate the potential costs, benefits and challenges to adopt the selected activities. If any activities have been implemented prior to this Plan, Hudson will provide information and any lessons learned from past implementation.
 - 4.2.4.2 Town staff and CWS will describe the regulations selected for new construction and describe the implementation plan for the regulation(s) selected and targeted customer categories. Additionally Hudson will evaluate the potential costs, benefits and challenges to adopt the selected activities. If any activities have been implemented prior to this Plan, Hudson will provide information and any lessons learned from past implementation.
 - 4.2.4.3 Town staff and CWS 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 Hudson will evaluate the potential costs, benefits and challenges to adopt the selected activities. If any activities have been implemented prior to this Plan, Hudson will provide information and any lessons learned from past implementation.
- 4.2.5 Town staff and CWS will detail *Educational and Outreach Activities* selected for implementation and estimate water savings for those selected.
 - 4.2.5.1 Town staff and CWS 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 Town staff and CWS 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 Town staff and CWS 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				
\$1,038.73	\$8,175.41	\$5,909.59	\$15,123.73				

Estimated timeline for Task 4: Start Date: December 29, 2020

End Date: May 24, 2021 (with ongoing revisions as information becomes available or is clarified)

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 to 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)

- Hudson 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.
- Hudson 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 include 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)

- Hudson 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:
 - o the success of meeting previously identified goals and objectives
 - o obstacles encountered
 - o preliminary findings or accomplishments
 - o 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 Hudson 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:

Task 5 - Implementation and Monitoring Plan

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.



5.1 - Implementation Plan

- 5.1.1 Town staff and CWS 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 Town staff and CWS 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 Town staff and CWS 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 Hudson 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 Hudson 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
\$705.84	\$2,182.43	\$1,577.57	\$4,465.84

Estimated timeline for Task 5:

Start Date: December 29, 2020

End Date: June 21, 2021 (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:

 Hudson will provide CWS with remaining data and information not provided previously or in Meeting #3. If needed or requested, CWS can provide Hudson 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)

No specific deliverable:

- If needed or requested, Hudson 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 Hudson) 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 The Town will describe the public review process and how the public accessed the Plan. Additionally, Hudson 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:
 - Town Council and Staff will review a draft of the Plan and provide comments.
 - Town staff will incorporate the Town'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 Town will formally adopt the final Plan.
 - Hudson 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.

6.2 – Local Adoption and State Approval Process

6.2.1 Hudson will discuss the formal process for Plan adoptions.



6.3 - Periodic Review and Update

6.3.1 Town staff will summarize the process that will occur to facilitate the update of the Plan and the anticipated timing of Plan updates. Hudson 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			
\$818.63	\$3,983.71	\$2,879.61	\$7,681.95			

^{*}Includes general project expenses.

Estimated timeline for Task 6: Start Date: December 29, 2020

End Date: May 2, 2022 (with ongoing revisions as information becomes available or is clarified)

Meeting #4 - Meeting with Town Council to present draft Plan

Method/Procedure:

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.

Feedback may be received during Meeting #4 (presentation to Town Council). The public will also have an opportunity to give feedback during the 60-day public review period. Comments and feedback received by the Town during that time will be incorporated into the Plan. Other methods and procedures are discussed within the descriptions of Task 6 Descriptions above.

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

- Hudson 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 Hudson with an electronic version of the draft Plan that can be posted on the Town's website.
- Once CWCB has issued the official Letter of Approval, CWS will create for Hudson 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.

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

- Hudson will send CWCB the final Plan that the Town Council has approved and adopted.
 - The Plan will include a cover letter with Town of Hudson's letterhead and also include:
 - 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 CWCB'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
- Note: Several of the above items will also be included within the main body of the Plan.
- 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.
- o The Plan will be finalized once CWCB has issued its official Letter of Approval.

Reporting Requirements

Reporting: The applicant shall provide the CWCB a Progress Report at 50% & 75% completion of the project. The Progress Report shall address the following:

- 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

(The CWCB may withhold reimbursement until satisfactory Progress Reports have been submitted.)

<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.

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.



Water Efficiency Grant Fund

BUDGET & SCHEDULE

Date: November 30, 2020

Project Name: Hudson Water Efficiency Plan 2021

Applicant: Town of Hudson

Task No.	Description	Start Date ⁽¹⁾	End Date	Consultant - Michelle Hatcher (\$185/hour)2		Consultant - Steve Nguyen (\$200/hour)2		Public Works Director (Cash & In-kind)2		Town Planner (Cash & In-kind)2		Town Manager (Cash & In-kind)2		Town Clerk (Cash & In-kind)2		WEGF Grant Request	Total
				Hours	Sub Total	Hours	Sub Total	Cash	In-Kind	Cash	In-Kind	Cash	In-Kind	Cash	In-Kind		
1 1	Introduction and Profile Existing Water Supply System	12/29/2020	2/9/2021	23	\$4,255.00	9	\$1,800.00	\$1,049.48	\$263.04	\$585.75	\$225.00	\$927.45	\$302.88	\$951.85	\$199.05	\$2,540.47	\$7,045
2	Profile of Water Demands and Historical Water Efficiency Activities	12/29/2020	3/8/2021	48	\$8,880.00	5	\$1,000.00	\$1,712.44	\$526.08	\$955.78	\$112.50	\$1,513.32	\$353.36	\$1,553.15	\$318.48	\$4,145.31	\$11,190
3	Integrated Planning and Water Efficiency Benefits and Goals	12/29/2020	4/5/2021	25	\$4,625.00	12	\$2,400.00	\$1,217.60	\$306.88	\$679.59	\$225.00	\$1,076.02	\$403.84	\$1,104.34	\$318.48	\$2,947.45	\$8,279
4	Selection of Water Efficiency Activities	12/29/2020	5/24/2021	61	\$11,285.00	14	\$2,800.00	\$2,441.27	\$219.20	\$1,362.57	\$187.50	\$2,157.40	\$353.36	\$2,214.17	\$278.67	\$5,909.59	\$15,124
5	Implementation and Monitoring Plan	12/29/2020	6/21/2021	16	\$2,960.00	4	\$800.00	\$651.70	\$219.20	\$363.74	\$75.00	\$575.92	\$252.40	\$591.08	\$159.24	\$1,577.57	\$4,466
6	Adoption of New Policy, Public Review, and Formal Approval	12/29/2020	5/2/2022	21	\$3,885.00	10	\$2,000.00	\$1,020.01	\$263.04	\$569.31	\$75.00	\$901.41	\$201.92	\$925.13	\$278.67	\$2,469.15	\$6,704
	General Project Expenses	12/29/2020	-	-	\$978.32	-	-	\$169.57	\$0.00	\$94.64	\$0.00	\$149.85	\$0.00	\$153.79	\$0.00	\$410.47	\$978
Total				194	\$36,868.32	54	\$10,800.00	\$8,262.07	\$1,797.44	\$4,611.39	\$900.00	\$7,301.36	\$1,867.76	\$7,493.50	\$1,552.59	\$20,000.00	\$53,786.11

⁽¹⁾ Start Date for funding under \$50K ~ 30 Days from Application Submittal; Start Date for funding over \$50K ~ 30 Days from Board Approval.

Project may begin as soon as the grantee enters contract/purchase Order

CWCB will withhold the last 10% of the entire grant budget until the Final Report (Deliverable) is completed and accepted (per the WEGF Criteria & Guidelines).

⁽²⁾ Please insert additional columns if needed for additional staff working on project.