



Last Update: October 20, 2017

Water Efficiency Project Summary	
Name of Applicant	City of Durango
Name of Grant Project	City of Durango Drought Management Plan
WEGF Grant Request Total	\$ 30,000
In-Kind Match	\$ 1,817
Cash Match	\$ 17,930
Total Project Costs	\$ 49,747

Applicant Information	
Name of Applicant	City of Durango
Mailing Address	105 Sawyer Dr.
Applicant's Organization Contact ⁽¹⁾	Levi Lloyd
Position/Title	City Operations Director
Email	Levi.lloyd@durangogov.org
Phone	970-375-4999
Grant Management Contact ⁽²⁾	Shawna Maloy
Position/Title	Grants Coordinator
Email	Shawna.maloy@durangogov.org
Phone	970-375-5043
Name of Consultant (if applicable)	Jeff Brislawn of Wood/Amec Foster Wheeler
Mailing Address	1942 Broadway, Suite 314 Boulder, CO 80302
Position/Title	Hazard Mitigation Lead/Sr Associate
Email	jeff.brislawn@woodplc.com
Phone	303-209-3781

(1) Person with signatory authority

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



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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
Jeff Brislawn – Wood - Contracted consultant to develop drought mitigation plan. Jason Fast – City of Durango - Chief Water Plant Operator, contributor to grant application and drought management plan Shawna Maloy – City of Durango - Grants Coordinator, managing grant application process and submittal Dave Ferguson – City of Durango - Water Plant Superintendent, contributor to drought management plan Jarrod Biggs – City of Durango - Assistant Utilities Director, contributor to grant application and drought management plan Laura Rieck – City of Durango - Water Plant Operator, contributor to drought management plan

Type of Eligible Entity	
	Covered Entity: as defined in Section 37-60-126 Colorado Revised Statutes Public
	Non-covered Entity
X	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	
X	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	La Plata County, Southwest Basin



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Retail Water Delivery over Past 5 Years

All source water supplied to the City of Durango is surface water; primary source is the Florida River, and augmented in the summer from the Animas River. The table below provides detail on total treated water to distribution, billed values for residential and commercial delivery, and amounts supplied for raw water irrigation within the City service area.

Year	2013	2014	2015	2016	2017
Treated Water to Distribution (AF)	4566.36	4157.70	3385.92	3577.91	3567.59
Billed Residential (AF)	1385.32	1352.93	1406.73	1259.36	1217.32
Billed Commercial (AF)	1822.38	1831.33	1808.81	1873.37	1797.71
Raw Irrigation Water Supplied (AF)	691.72	805.27	587.21	740.69	808.31

Projections of Future Annual Retail Demand

The City of Durango's previous five years of retail demand are reflected in the table below based on the following data:

- State Demography Office Conservation Trust Fund (CTF) estimates from 2017 vintage data.
- Population associated with Extraterritorial Accounts uses a 2.33 persons per household factor based on the average of 2015 Census American Community Survey data.
- Acre Foot per year data from previously provided supply information.

COD Water System	2013	2014	2015	2016	2017
CO State Demog. CTF Pop	17673	17757	18135	18478	18518
Extraterritorial Accounts	460	471	473	484	493
PPH	2.33	2.33	2.33	2.33	2.33
Total pop.	18745	18855	19238	19605	19667
AF/Y	4566.36	4157.70	3385.92	3577.91	3567.59

The projections for the current and following four years are as follows with the following data assumptions:

- Growth factor applied to Demog. Office CTF Estimates and extraterritorial accounts is a 1.95% increase per year based on comprehensive plan information for 2010 to 2020.
- Acre feet per year in 2018 – 2022 based on three-year rolling average of per capita daily distribution.

COD Water System	2018	2019	2020	2021	2022
CO State Demog. CTF Pop	18879	19247	19623	20056	20499
Extraterritorial Accounts	494	495	496	497	498
PPH	2.33	2.33	2.33	2.33	2.33
Total pop.	20030	20401	20778	21214	21660
AF/Y	3604.89	3671.57	3739.53	3818.00	3898.19



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Background Characterizing the Water System

The past five years of residential and commercial per capita annual consumption is based on our billed consumption data from each year divided by the population data for each year previously summarized in the Projections of Future Retail Demand section of this application and converted into acre foot per capita per year:

Per Capita Annual Water Use	2013	2014	2015	2016	2017
Residential (AF)	0.08	0.08	0.08	0.07	0.06
Commercial (AF)	0.10	0.10	0.10	0.10	0.09
System Total (AF)	0.18	0.18	0.18	0.17	0.15

Potential Growth – Population

The past population data and growth data is derived as provided previously in this application from a base of the 2017 vintage State Demography Office Conservation Trust Fund population estimates. The actual number of extraterritorial accounts which existed in 2017 was reduced by the annual population growth for each year from 2013 through 2016; and a 2.33 person per household value was applied to those accounts to provide a population total.

Water Population Count	2013	2014	2015	2016	2017	2018
CO State Demog. CTF Pop	17673	17757	18135	18478	18518	18879
Extraterritorial Accounts	460	471	473	484	493	494
PPH	2.33	2.33	2.33	2.33	2.33	2.33
Total pop.	18745	18855	19238	19605	19667	20030

The 2018 population adjusts the 2017 data for “CTF population” and “Extraterritorial Accounts” by a growth factor of 1.95% based on population growth trends and projections from the 2017 City of Durango Comprehensive Plan (Appendix C) to generate a total population. This same growth factor is applied to each year up to 2020, where each year thereafter is adjusted by a growth factor of 2.21% in accordance with the same Comp. Plan data.

Water Population Count	2019	2020	2021	2022	2023
CO State Demog. CTF Pop	19247	19623	20056	20499	20953
Extraterritorial Accounts	495	496	497	498	499
PPH	2.33	2.33	2.33	2.33	2.33
Total pop.	20401	20778	21214	21660	22115

Water Population Count	2024	2025	2026	2027	2028
CO State Demog. CTF Pop	21416	21889	22373	22867	23372
Extraterritorial Accounts	500	501	502	503	504
PPH	2.33	2.33	2.33	2.33	2.33
Total pop.	22581	23056	23542	24039	24547



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Estimated Water Savings Goals

The water savings goals for evaluation as part of this Drought Management Plan range on a spectrum to implement a staged drought response. As an example, a short-term interruption of supply and the associated need for water savings may range from a single day or less than two week issue (e.g. Gold King Mine Spill) all the way to the water savings needs of a sustained multi-year drought where conservation goals may be set to match supply allowances.

The plan will identify indicators to track which will inform City staff and decision makers of need to implement the various stages of drought response. An example of percentage savings on an annual basis are below, however the study will identify situations where these or other savings goals are appropriate and identify corresponding timeframes based on identified drought indicators.

COD 5 Yr.Avg To Dist. (AF)	3851.09	Savings Difference (AF)
90%	3465.98	-385.11
80%	3080.87	-770.22
70%	2695.77	-1155.33
50%	1925.55	-1925.55

Estimated Water Savings Goals - Monitoring

The City of Durango Drought Management Plan will identify in the implementation plan the protocols for various identified drought stages. Part of these protocols will include suggested methods of communication and will further be discussed with the City's public information specialists to develop materials for communication in these scenarios.

When drought stages are implemented, the use of the City's water production data sets, the monthly billing reads, as well as other tools currently in development with new Advanced Metering Infrastructure (AMI) deployment in the City will allow for capability to observe both supply demands as well as granularity of water savings by account.

These can then be further utilized to communicate with the public based on the needs identified at the time of various stage implementation.



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Drought Impacts

To date, the City of Durango has been able to manage our water supply during normal and below normal water years to meet the demands of the system. Since 2000, and even as of today where the Animas is setting daily record low flow measurements at the USGS 9th St. gauging station, the Animas River has not been subjected to a call on the river.

Between 2000 and 2018 the Florida River has had three calls on the river that have impacted the City's water supply. Two of those; 2002 and the other in 2012 resulted in a reduction of 0.75 C.F.S of the City's allocation from the Florida River. The third call in 2009 resulted in a reduction of 0.5 C.F.S. of the City's allocation from the Florida River. Each of those three occurrences the City was able to augment its water supply from the Animas River.

Early in the spring, after reviewing snowpack and US Drought Monitor data, it was apparent to the City of Durango that 2018 was shaping up to be the worst drought year since 2002. As of today in 2018, because of the exceptional drought classification Southwestern Colorado has been designated under by the US Drought Monitor, the Florida River supply has been subject to 17 calls as of September 24th, with 7 of those individual calls impacting the City's allocation. The City's allocation has been reduced by 1.75 C.F.S. which has required additional supply from the Animas River.

As a result of this knowledge the City of Durango staff worked with the top-four water users, City of Durango Parks, Durango 9R School District, Fort Lewis College and Hillcrest Golf Course to request and deliver a minimum of 10% water use reductions beginning in May and continuing throughout the summer. Additionally, staff identified the top-twenty users of water within the City and requested the same 10% voluntary reductions of consumption from those users. When additional calls on the Florida River curtailed the City's allotment by an additional 1 CFS above previously experienced curtailments in 2002 and 2012, the City expanded the top-four water users' reductions to 50%,

In addition to the drought conditions generally, as a result of the 416 Fire igniting on June 4th and burning for the following two months, drawing from the Animas River has also been more difficult in as silt and ash flows upon the occurrence of rain events above the burn scar have caused water quality concerns from that source. The impacts of the fire were felt throughout the community in more ways than just the water quality issue, the recreation and tourism economy in the region was negatively impacted as bookings and reservations for various activities were cancelled. Some examples of these bookings include the various raft companies which call Durango home, the fishing guide services, general visitation was limited during and after the fire due to air quality issues, and the Durango & Silverton Narrow Gauge Railroad were said to have refunded over 30,000 tickets during that period and have further been required to limit service and mitigate mudslides inhibiting the tracks near the burn area.

During these times of poor water quality, The City's management procedure has been to regularly conduct lab testing of Animas source water, and further to avoid pumping when increased turbidity is running in the river. However, with historic low flow on both available source rivers occurring nearly daily during the month of September, this management practice may be untenable if additional debris continue or in the case any other restrictions of supply occur.



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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).

Adequacy:

The City of Durango primary water source is the Florida River, and is augmented with water from the Animas River. The city has 8.92 C.F.S. direct flow rights in the Florida River, and 46.9218 C.F.S. direct flow rights in the Animas. Since 2012 the maximum single day amount the City has diverted combined from the Florida and the Animas was 20.27 C.F.S. on June 24th, 2013. That day the Animas was flowing around 250 C.F.S. and seasonal norm was 1400 C.F.S. The City was diverting its maximum allotment from the Florida River.

Stability:

The City of Durango is fortunate to have two sources of water to pull from. And senior water rights in both rivers. During normal water years the supply from the Florida and augmentation from the Animas more than satisfies the water demand for the system. The City maxes its allotment from the Florida either in May or June and maintains that max allotment until September. Water from the Animas is pumped from the Santa Rita Pump Station near downtown Durango to the Terminal Reservoir. At the Santa Rita Pump Station the City maintains three vertical turbine pumps with a capacity of 6.684 C.F.S. each. Water from the Florida is fed by gravity via a nine-mile pipeline North East of Durango to the Terminal Reservoir. However, past events have put that the stability of the two sources in question.

Reliability:

The Animas River. On August 5th of 2015 the Gold King Mine spill happened and polluted the Animas River with water laden with heavy metals from acid mine drainage. The Colorado Department of Public Health and Environment issued a moratorium on water usage from the Animas. This lasted until August 12th. This event occurred during the higher water usage months. The City was relying on only the volume in the Terminal Reservoir and the supply from the Florida River. The potential for another Gold King Mine spill still exists due to the legacy of hard rock mining in the headwaters of the Animas River. Every spring runoff the equivalent heavy metal content of a Gold King Mine spill is released into the Animas every 1-3 days, although at a lower concentration. This limits the City's willingness to pump from the Animas during spring runoff.

The Florida River. This is our primary source. Due to much of the watershed being in a wilderness area and the lack of development upstream of the City's diversion structure the water quality is of the highest quality. However, the 9 mile pipeline from our diversion to the Terminal reservoir has experienced breaks that has put the pipeline out of service for several days. The pipeline is aging and future breaks are certain. The uncertainty will be the size of the breaks and duration to repair them. Historically the City has relied on the Animas River and the Terminal Reservoir as a buffer to water supply disruptions from the Florida. The City has a capital improvement project to replace the pipeline and headgate structure. Currently engineering work is in progress on the headgate replacement.

Reliability is being impacted by the uncertainty resulting from increased incidence of extreme weather and drought from temperature, precipitation and hydrological variability. This uncertainty coupled with the fact that both of the City's water sources are threatened by reduced snowpack and forest fires as was demonstrated in 2018 with the 416 Fire and previously in 2002 with the Missionary Ridge Fire demonstrate the need to plan for reduced supply. The 416 Fire reduced the City's capacity to pull from the Animas River, and a fire similar to the Missionary Ridge event has the possibility of affecting both of the supply watersheds at the same time.

The City of Durango lies with in the Southwest Basin for current and future water needs as identified by the SWSI.



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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.

Goals of the project include the development of a Drought Management Plan which has been evaluated by various individuals and interested parties to determine a reasonable approach to water resource demand reduction during times of supply interruption. The parties will include various stakeholder groups within the City of Durango which represent residential, commercial, industrial, recreational, tourism and other interests.

Through the conduct of two public drought workshops, objectives will be identified, operating principles will be outlined, and water use priorities for the past, present and future will be discussed. Workshops will also discuss the drought vulnerability of the community and through the process identify the appropriate triggers for implementation of drought limitations and identify the potential impacts.

Along with workshops, there will be public review of draft plans, review by the City Council and further review by the CWCB. Once approved, public education on how the plan was developed and how the plan may impact a resident or visitor will be published and provided through various means. Finally upon completion, there will be identified procedures for future plan review and updates to allow for amendments as conditions change for both water supply and demand.

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



DIRECTOR OF OPERATIONS

Name/Title

9/28/18

Date



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Water Efficiency Grant Fund	
<u>Scope of Work</u>	
Date:	10/3/2018
Project Name:	City of Durango Drought Management Plan
Grant Applicant:	City of Durango
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: • 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.	
Objectives: (List the objectives of the project)	
The objectives of this grant request and project for the City of Durango are to develop a comprehensive Drought Management Plan which identifies the varied risks of drought on the City's water supply, identifies the ranges of severity of such drought scenarios, and identifies efforts which can be employed to both bolster supply where available and limit demand to a corresponding level. The underlying goals of this analysis are to preserve the City of Durango's essential public services during varying drought scenarios and reduce both the occurrence and severity of supply shortages when they occur. Finally, the outcomes of this project should provide malleability to be amended as conditions and circumstances change moving forward with unknown risks of increased climate variability. The City has already retained Wood (formerly Amec Foster Wheeler) through a competitive bidding process in conformance with the City's procurement practices to complete the associated scope of work. Durango in partnership with Wood are looking forward to completing the project	
Tasks	
<u>Task 1 – Grant Application</u>	
Description of Task:	
Prepare the requisite information and compile a grant application. The purpose of this task is to secure additional funding through a grant to develop the Plan. This will be completed by City Staff and reviewed by Wood staff utilizing City Funds.	
Method/Procedure:	
The City will prepare a grant application will be developed according to CWCB's memorandum pertaining to Guidelines for Financial Assistance to Develop Drought Mitigation Plans. These guidelines require the research and inclusion of background information on characterizing Durango's water system additional water demand data and information on Durango's adverse impacts experienced during the 2002-2003 drought. It is assumed that City staff will take the majority of the data gathering and grant application writing. Wood will provide an advisory and review role to the City to ensure completeness of the application and provide a detailed scope and budget.	



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Applicant Deliverable: (Describe the deliverable the applicant expects from this task)
Completed Grant Application with necessary information and review to assure a cogent and complete application and ensure the best possibility of receiving grant funding for the project.
CWCB Deliverable: (Describe the deliverable the applicant will provide CWCB documenting the completion of this task)
Completed Grant Application

Tasks
<u>Task 2 – Public Workshops</u>
Description of Task:
Two public drought committee workshops will be held during the drought plan development process to obtain stakeholder feedback necessary to develop an effective plan. While these will be open to the public the primary attendees at the workshop will be the City staff and key stakeholders. The workshops will be accomplished with an interactive, collaborative stakeholder process for incorporating the diverse operational and managerial knowledge of Durango staff responsible for mitigating and responding to drought along with one or two members of the City Council and the City's Utilities Commission. This will be completed by City Staff and Wood using a combination of City and CWCB Grant Funding.
Method/Procedure:
Wood will work with Durango to organize and facilitate the following two Drought Committee workshops: • Drought Committee Workshop #1: The first workshop will focus on the Drought Committee's role and obtaining feedback on the following key elements of the Plan: planning objectives, operating principles, and water use priorities; historical and current drought impacts; drought vulnerability; drought mitigation and response strategies; and preliminary feedback on drought stages and triggers. • Drought Committee Workshop #2: The second workshop will focus on finalizing the drought stages, trigger points and response targets; developing the staged drought response program; a general framework for public outreach and messaging during droughts; and developing a strategy for the Plan implementation and drought monitoring. This task also includes correspondence with one Durango staff point of contact to coordinate the Drought Committee workshops and debrief on each meeting.
Applicant Deliverable: (Describe the deliverable the applicant expects from this task)
• Meeting Agendas, Power point presentations, and associated handouts for the workshops. • Meeting Summaries



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Tasks
CWCB Deliverable: (Describe the deliverable the applicant will provide CWCB documenting the completion of this task)
Meeting summaries from the drought workshops.

Tasks
Task 3 – Development of Draft Drought Management Plan
Description of Task:
Wood will work closely with Durango staff and the Drought Committee to develop an effective Plan that will provide an appropriate level of guidance for Durango to plan and manage water supplies during water short periods. This will be completed by City Staff and Wood using a combination of City and CWCB Grant Funding.
Method/Procedure:
The plan will be developed according to the template provided in CWCB's Municipal Drought Management Plan Guidance Document which provides a drought plan framework and content. The drought planning process consists of the following eight drought planning steps. These steps are illustrated in the following figure and summarized below. Step 1: Stakeholders and Plan Objectives and Principles – Step 1 focuses on the preliminary steps necessary to initiate the development of a drought management plan. Wood will provide guidance on developing a planning team (Drought Committee), securing stakeholder involvement, and developing plan objectives and operating principles. It will be important to identify water use priorities in this step, e.g. essential uses for the health and safety of the community vs outdoor irrigation. This will be a topic of discussion at Drought Committee Workshop #1. Step 2: Historical Drought and Impact Assessment – Step 2 will consist of an evaluation of the severity of historic droughts and corresponding effects on Durango's water supply system and service area demands. Information gathered during the grant preparation in Task 1 will provide a baseline for this step. This step also includes the identification of specific drought-related impacts and an evaluation of historic drought mitigation measures and response strategies. This information will be useful for the screening and selection of future drought mitigation and response strategies in Step 4. Step 3: Drought Vulnerability Assessment – Durango Staff and Wood will review of water supply reliability planning efforts as information from water supply reliability planning may be useful in identifying drought trigger mechanisms and response targets in Step 5. This step also includes the identification of potential drought impacts and perceived severity of impacts and builds on the historic drought impact information uncovered in Step 2. This information will be used when identifying drought mitigation and response strategies in Step 4. Step 4: Drought Mitigation and Response Strategies – Wood will facilitate a process at Drought Committee Workshop #2 to review a range of potential mitigation and response strategies with Durango staff and the Drought Committee. Drought mitigation is to be



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Tasks

implemented prior to a drought to avoid and/or reduce potential future drought impacts. The preliminary list of mitigation strategies will be developed using CWCB's Drought Management Guidance Document and accompanying worksheets, as well as incorporation of Durango's water supply reliability and conservation planning efforts. The preliminary mitigation list will be screened and further refined using the following criteria: technical feasibility, perceived benefits, cost effectiveness, public acceptance, and environmental considerations.

Initial drought response strategies will be identified with further refinement in Step 6 in accordance with individual drought stages (severity). These could include supply and demand-sided response strategies and would take into account the City's water conservation planning. This step also includes guidance for the development of a public education and awareness strategy.

Step 5: Drought Stages, Trigger Points, and Response Targets – Identification of drought stages and corresponding drought trigger points and response targets will occur in this step, based on information gathered during the planning process in the previous steps. These may be specific criteria adhered to during a drought or simply guidelines that Durango can incorporate into the drought monitoring and response efforts. Typically these trigger points are based on a combination of supply indicators such as reservoir storage, snowpack, streamflow and drought indices. It will be important to note that the drought trigger points are only general guidelines and that multi-year droughts could require a significant modification to the drought triggers based on the duration and severity of the drought. Staff historical experience managing the City's water supply system will also be taken into account.

Step 6: Staged Drought Response Program – This step will entail development of the specific drought response measures for each drought stage using the response strategies developed in Step 4. These response measures should describe the actions that Durango and customers will need to take to reduce water demand and enhance water supplies during each individual drought stage. Specific supply-side and demand-side measures will be identified with the goal of conserving the available supplies during the drought. Items for consideration will include water restrictions, reservoir management, water rights management, and public awareness campaigns. Initial input for the plan from this step and Step 5 will be developed through facilitation at Drought Committee Workshop #2.

Step 7: Implementation and Monitoring – Implementation of the drought management plan will be covered in this step, which includes an action plan for: mitigation; monitoring of drought indicators; drought declaration protocol; implementation and enforcement of the staged drought response program; revenue planning; and monitoring of the drought response effort.

Step 8: Plan Review and Updates – A formal processes to review, approve, and update the drought management plan will be established and captured in the document. This may include a public review process, review and approval by Durango City Council, adoption of necessary policy, and a plan for future updates

A first draft of the Plan for review by Durango staff and the Drought Committee Based will be developed based on the information developed in the eight step process. The specific format of Durango's Plan and content will be consistent with the CWCB Municipal Drought Management Plan Guidance Document and Sample Plan.

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



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First Draft of the plan for review by the City of Durango Staff and Drought Committee.
CWCB Deliverable: (Describe the deliverable the applicant will provide CWCB documenting the completion of this task)
The first draft of the plan reviewed by Durango Staff and the Drought Committee. This is also expected to include the 50% completion report outlining the four criteria of feedback to the CWCB.

Tasks
<u>Task 4 – Review Process</u>
Description of Task:
Several draft reviews of the Plan are necessary for Durango to officially adopt a final Plan and receive Plan approval from CWCB. This includes more than 60-days for public review to review plan elements and provide feedback on the draft Plan. This will be completed by City Staff and Wood using a combination of City and CWCB Grant Funding.
Method/Procedure:
The City, with input from the consultant, will develop a single page fact sheet in support of the public review process. The public review period will consist of advertisement of the Plan on Durango’s website. The Plan and fact sheet will be posted on Durango’s website and the public will be encouraged to provide comments. Additionally, the City and Wood will develop a brief PowerPoint presentation summarizing the Drought Management Plan to support a presentation to the City Council. Five drafts of the plan will be developed to address applicable comments from the following reviews: • First Draft for Drought Committee and Durango Staff Review • Second Draft for the Public Review • Third Draft for the Durango City Council Review and approval • Fourth Draft for the CWCB Review • Final Plan
Applicant Deliverable: (Describe the deliverable the applicant expects from this task)
Each of the previously mentioned drafts for staff, public, city council and finally CWCB Review; culminating in the final plan.
CWCB Deliverable: (Describe the deliverable the applicant will provide CWCB documenting the completion of this task)



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CWCB Deliverables will include the appropriate draft of the plan for CWCB Review, the 75% progress report outlining the four criteria of feedback to the CWCB and the project completion report per CWCB requisite needs.

Budget and Schedule

Budget: 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.

Schedule: 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.

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.)

Final Deliverable: 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.



COLORADO

Colorado Water
Conservation Board

Department of Natural Resources

Water Efficiency Grant Fund

BUDGET & SCHEDULE

Date: 9/26/19

Project Name: City of Durango Drought Management Plan

Applicant: City of Durango - Utilities Department

Task No.	Description	Start Date ⁽¹⁾	End Date	Consultant (Provide hours & hourly rate) ²			Matching Funds (Cash & In-kind) ²		WEGF Grant Request	Total
				Staff (see key below)	Hours	Sub Total	Cash	In-Kind		
1.1	Grant Application Preparation	9/14/2018	9/28/2018							
	Jarrod Biggs - Assistant Utilities Director							\$ 772	\$0	\$772
	Jason Fast - Chief Water Treatment Operator							\$ 595	\$0	\$595
	Shawna Maloy - Grant Specialist							\$ 250	\$0	\$250
1.2	Consultant Grant Application Review	10/1/18	10/3/18	Bl	8	\$ 1,200	\$ 1,200		\$0	\$1,200
2.1	Grant Submission									
2.2	Grant Funding									
3.0	Drought Committee Meetings									
	Coordination and debrief on two workshops			Bl	12	\$ 1,800	\$ 644		\$1,156	\$1,800
	Drought Committee Workshop #1 (See #4.1)	10/24/18	12/19/18	Bl; Le	36	\$ 6,440	\$ 2,306		\$4,134	\$6,440
	Drought Committee Workshop #2 (See # 4.6)	1/2/19	3/6/19	Bl; Le	36	\$ 6,440	\$ 2,306		\$4,134	\$6,440
4.0	Plan Development									
4.1	Intro, Stakeholders and Objectives	10/24/18	12/19/18	Bl; Bo	6	\$ 730	\$ 261		\$469	\$730
4.2	Historical Drought and Impact Assessment	10/25/18	12/19/18	Bl; Bo	12	\$ 1,120	\$ 401		\$719	\$1,120
4.3	Drought Vulnerability Assessment	11/21/18	1/16/19	Bl; Ch; Bo; Le	30	\$ 3,360	\$ 1,203		\$2,157	\$3,360
4.4	Drought Mitigation and Response Strategies	1/23/19	3/6/19	Bl; Bo	20	\$ 2,660	\$ 952		\$1,708	\$2,660
4.5	Drought Stages, Trigger Points and Response Targets	2/6/19	4/3/19	Bl; Bo; Le	40	\$ 6,140	\$ 2,198		\$3,942	\$6,140
4.6	Staged Drought Response Program	2/20/19	4/17/19	Mc; Bl; Bo; Le	40	\$ 5,340	\$ 1,912		\$3,428	\$5,340
4.7	Implementation and Monitoring	3/20/19	4/17/19	Bl	4	\$ 600	\$ 215		\$385	\$600
4.8	Formal Plan Approval and Updates	3/20/19	4/23/19	Bl	2	\$ 300	\$ 107		\$193	\$300
5.0	Review Process									
5.1	First Draft for City Staff and Committee Review	4/17/19	5/14/19	Mc; Bl; Ch; Bo; Le; Ad.	48	\$ 5,870	\$ 2,101		\$3,769	\$5,870
5.2	Second Draft for Public Review; Fact Sheet	5/15/19	6/11/19	Mc; Bl	11	\$ 1,680	\$ 601		\$1,079	\$1,680
5.3	Third Draft for Board Review	6/12/19	6/25/19	Mc; Bl; Bo;	11	\$ 1,510	\$ 541		\$969	\$1,510
5.4	Fourth Draft for CWCB Review	6/26/19	7/26/19	Bl	4	\$ 600	\$ 215		\$385	\$600
5.5	Final Draft	7/26/19	8/2/19	Bl; Ad.	6	\$ 820	\$ 294		\$526	\$820
5.6	25%, 50%, and 95% Progress Reports	- Throughout -		Bl; Ad.	10	\$ 1,320	\$ 473		\$847	\$1,320
6.0	Grant Management and Closeout									
	Shawna Maloy - Grant Specialist	8/2/19	8/9/19					\$ 200		\$200
Total					244	\$47,930	\$17,930	\$1,817	\$30,000	\$49,747

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

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

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).

Last Update: October 20, 2017



COLORADO

Colorado Water
Conservation Board

Department of Natural Resources

Water Efficiency Grant Fund

BUDGET & SCHEDULE

Date: 9/26/19

Project Name: City of Durango Drought Management Plan

Applicant: City of Durango - Utilities Department

Consultant Costs

Code	Personnel	Cost
Mc	McGregor - Principal	\$ 180
Bl	Brislaw - Project Mgr.	\$ 150
Ch	Chambers - GIS Specialist	\$ 75
Bo	Bosher - Planner	\$ 65
Le	Leeper - Sr. Proj. Engineer	\$ 180
Ad.	Admin.	\$ 60

See additionally: Amec Foster Wheeler - Proposal for Drought Management Plan (November 3, 2016)