

**DROUGHT MITIGATION PLANNING PROJECT
for Silverton and San Juan County Colorado
Submitted to The Colorado Water Conservation Board (CWCB)**

5/15/2018

Fund Application Process

a.) Eligibility Requirements

- a. See attached Resolution as proof of eligibility for Town of Silverton.
- b. Public Water System Identification Number PWSID# CO0156600

Application Submittal Requirements

1. Town of Silverton Public Works, John Sites Director 1360 Greene Street, PO Box 250 Silverton, CO 81433 phone: 970-946-6839 email: jsites@silverton.co.us

Fiscal Agent, William Tookey, San Juan County Administrator, 1557 Greene St Silverton, CO 81433 Phone: 970-387-8040 Fax: 970-387-8043 email: sanjuancounty@frontier.net

2. Jim Donovan, Emergency Manager San Juan County phone: 970-903-7039, email:oem@sanjuancountycolorado.us

Personnel

Project Manager: *Jim Donovan*, Emergency Manager, San Juan County, CO. Mr. Donovan is a skilled hazard and emergency planner. He is a Certified Emergency Manager for Colorado. Mr. Donovan has worked on water conservation issues in Arizona and conducted hydrology projects with the US Forest Service and Grand Canyon National Park. He will be the point of contact for the Drought Task Force and will be the point of contact for all aspects of the project. He is skilled at grant management and project management. He has a strong scientific background along with a strong emergency planning background. He is responsible for hazard planning in San Juan County.

Project Assistant: *Melanie Russek*, Silverton CO. Mrs. Russek is a skilled project planner and has worked for the Durango Fire Protection District, Mercy Regional Medical Center and is the Assistant Director for the Ironhorse Bicycle Classic. She is the Director of the San Juan Development Association for San Juan County. Her primary responsibility will be leading the public education development efforts.

Water Conservation Education and Public Outreach: *Deanne Gallegos*, Silverton CO., Ms. Gallegos is the Director of the Silverton Chamber of Commerce. She has

extensive corporate experience from previous employment outside of Silverton. She has been trained as a Public Information Officer through the State of Colorado. She is adept at public communication and outreach.

Research Hydrologist: *Jeff Derry*, Director, Center for Snow and Avalanche Studies. Mr. Derry has over 20 years' experience planning, managing, and executing complex scientific research projects to support industry needs, government programs and academic research throughout the world. The Center For Snow has a research hydrology basin on the top of Red Mountain Pass. His specializations include hydrology, meteorology, air quality monitoring and analysis, project management, and field operations logistics in remote settings including the North Slope of Alaska, Greenland, Antarctica, and offshore Kazakhstan. Mr. Derry has an M.S. in Watershed Science from Colorado State University with an emphasis in snow hydrology. He will be responsible for gathering the historical and relevant drought climate data.

Silverton Public Works Director: *John Sites*, Colorado Certified Water and Wastewater Facility Operator. Mr. Sites is the Public Works Director for Silverton and has the most knowledge about the system. He serves on the Steering Committee of the Animas Drinking Water Alliance (ADWA).

3. The identification of retail water delivery by the covered entity for each of the past five years (in acre feet or million gallons) and additional information characterizing past water use by sector (e.g., residential, commercial, industrial, irrigation) and source (e.g., surface water, groundwater, etc.)

The best current data the Town of Silverton has is based on a 2017 Utility Rate study.

Table 1.0 2013-2015 Number of Metered Accounts

	Total	Commercial	Senior	Residential
2013	572	96	7	468
2014	562	94	7	461
2015	562	94	7	461

The following table provides the water usage by the commercial and residential sectors.

Table 2.0 Silverton Residential and Commercial Metered Water use in gallons - 2013 to 2017 (data from Town Of Silverton)

Year	Residential	Commercial	Total
2013	124,751,049	66,624,422	191,375,471
2014	73,639,481	46,284,381	119,923,862
2015	75,380,607	27,181,953	102,562,560
2016	14,815,444	7,725,595	22,541,039
2017	32,327,645	17,727,759	50,055,404

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

The Town of Silverton is located in San Juan County, just upstream of the confluence of Mineral Creek with the Animas River. Of the public water suppliers in the Animas River Watershed, the Town is the closest to the Animas River headwaters, with an elevation of 9,318 ft. The Town obtains its drinking water from three different headwater streams: Bear Creek, Boulder Creek and Galvin Creek. Bear Creek is a tributary of South Mineral Creek and Boulder Creek and the small streams are tributaries of the Animas River. The land within the watersheds of these creeks is primarily public land managed by the San Juan National Forest for Bear Creek and BLM's Tres Rios Field Office for Boulder and Galvin Creeks. There are no roads or formal trails present in either watershed, upstream of the intakes. The land cover in both drainages is largely alpine vegetation, with some spruce/fir subalpine forest.

The Bear Creek water line is transmitted through a ten-inch pipe that reduces to six inches by the time it reaches the plant. The Boulder/Galvin Creek line is transmitted through an eight-inch pipe. The water is treated by direct filtration. The system can treat 300 gallons per minute producing up to 43,200 gallons per day. Chlorination is used to insure that regulations for disinfection are met.

From the plant the water is piped to two storage tanks with a combined storage capacity of 800,000 gallons. Both tanks serve the same distribution system and draw down simultaneously with demand. Staff gages were installed at the source intakes for Bear Creek and Boulder Creek in 2017.

The water system currently has the capacity to produce 432,000 gallons per day. Current estimates by the water system indicate that the average daily demand is approximately 200,000 gallons per day, and that the average peak daily demand is approximately 300,000 gallons per day. Using these estimates, the water system has a surplus average daily demand capacity of 232,000 gallons per day and a surplus average peak daily demand capacity of 132,000 gallons per day.

The water sources have been assessed for vulnerability determined in the Animas Drinking Water Source Water Protection Plan. Susceptibility analysis is listed in the table below. Bear Creek and Boulder creek have been assessed at Moderately High Susceptibility.

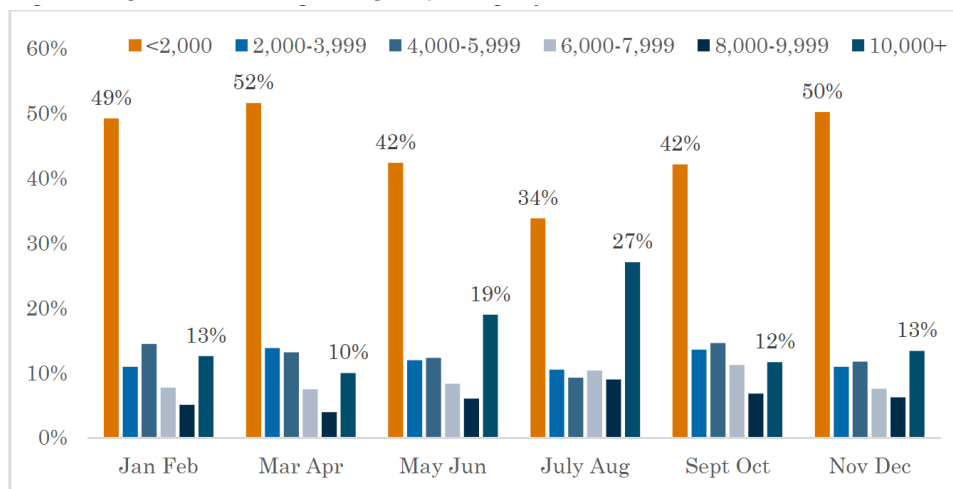
Table 3.0 Susceptibility Analysis for Town of Silverton.

Source ID #	Source Name	Source Type	Physical Setting Vulnerability Rating	Total Susceptibility Rating
156600-002	Boulder Creek / Blended	Surface Water	Moderately High	Moderately High
156600-003	Bear Creek / Blended	Surface Water	Moderately High	Moderate High
156600-004	Galvin Creek	Surface Water	Moderate	Moderate

a. Current, and if available, past per capita water use for the last five years and the basis for this calculation.

We calculated the per capita us by dividing the 2017 total usage in gallons by the current census population estimate (50,055,404) gallons/635 population census for Silverton. We estimate usage of 78,827 gallons per person annually and 215 gallons per person per day. Our calculations are similar to the published data by the USGS Water Use in the United States database <https://water.usgs.gov/watuse/>.

2013-2015 Average Residential Usage by Gallons on a seasonal basis.



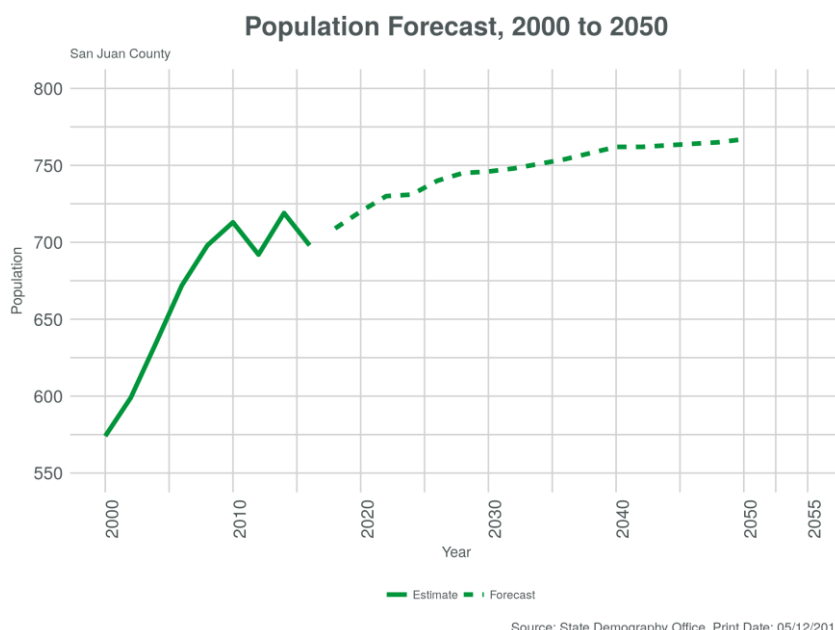
Source: 2013-2015 Town of Silverton Billing Data

b. Past, current and predicted population served by the entity and the source of this information and a timeframe for predicted population growth.

As of the 2010 census, the San Juan County population was 699, making it the least populous county in Colorado. The county seat and the only incorporated municipality in the county is

Silverton. The population growth rate is 1.7% based on the Colorado state Demographics Office. The population is expected to grow to 775 by 2050 based on natural growth rate. Population data is shown in the figure below. Data is from the US Census and the Colorado State Demographics Office.

The Census data does not capture the seasonal and transient fluctuation of the population. The primary economic driver in San Juan County is tourism. The summer months can have visitor fluctuations in the 1000's with visitor estimates up to 20,000 for summer events such as the Fourth of July. The population fluctuations can put a strain on the water system.



c. Estimated water savings goals to be achieved through implementation of the Plan

We estimate a 10% reduction in water use based on voluntary water conservation and 15-50% reduction on more restrictive water conservation measures.

5. Description of the impacts experienced by the covered entity, or state or local governmental entity, during the 2000-2003 drought including a breakdown by water use sector (e.g. municipal, commercial, industrial, irrigation, etc.) of those adverse impacts and steps taken to address 2002- 2003 drought impacts to date. Include short term and long term impacts, as well as social and economic impacts where applicable and as feasible.

Severely decreased precipitation in the fall of 2001 and winter/spring of 2002 set the stage for the summer of that year. Historically the Upper Animas River generally sees peak flows in early to mid-June of any given year with a recorded maximum flow of approximately 194 cfs in 1995. The peak flow in 2002 was 52.7 cfs. A senior water rights holder did make a call on use on the Animas River in 2002. That year, the Missionary Ridge Fire significantly impacted the Silverton economy. We estimate that the reduction in tourist visitors conversely lessened the direct impact on water usage during that year.

We have not assembled this historical data and researching the impacts of the 2002 drought will be a component of the drought management plan to be used as a benchmark.

6. Description of the Drought Mitigation Plan project development, also referred to as, the scope of work. The scope of work shall state the purpose and primary features of the Drought Mitigation Plan development project, end products to be delivered, and provide a detailed narrative of all tasks to be performed for completion of plan.

Project Plan

The Plan developed will address subsections 6d.(2) and 6d.(4) of section 37-60-126.5, of the Colorado Revised Statutes. The work period will occur over 12 weeks from the start of the contract. Throughout the Project Plan the team will refer to the Municipal Drought Management Plan Guidance Document and the Drought Planning worksheets available in the Colorado Water Conservation Board Drought Planning Toolbox.

(1) Stakeholders and Plan Objectives and Principles –This step identifies the necessary persons and expertise to be involved in the Drought Planning Process. We have already formed a Silverton San Juan County Drought Task Force that will conduct the planning, securing stakeholder involvement, and develop the plan objectives and operating principles. We anticipate that the Task Force will meet on a monthly basis through the project period.

The Drought Task Force has had a kick off meeting that was initiated by the Director Of Public Works. The Drought Task Force is comprised of the Town Director of Public Works, Town Manager, Town Community Relations Director, San Juan Development Association, and Director of the Center for Snow and Avalanche Studies, Director of the Chamber of Commerce, County Road and Bridge, County Emergency Manager, Director of Public Health and the County Administrator. The Drought Task Force may expand in size and expertise as deemed necessary.

The task force has three purposes. First, the team supervises and coordinates development of the plan. Second, the team implements the plan actions. Third, the team evaluates and maintains the plan.

The Drought Task Force will be on an as needed basis. At a minimum, the team will meet to determine drought triggers, review and comment on the plan and meet to implement actions once triggers have been met. A core team will be formed that performs the work outlined in the work plan.

(2) Historical Drought and Impact Assessment – Climate data will be gathered for 1976-77 and 2002-2003. Interviews will be conducted with persons who lived through those drought periods and what the community and government response was to the incident. Newspaper articles will be gathered from the San Juan County Historical Archive, the Silverton Standard and the Durango Herald for that time period. An emphasis will be placed on determining how stressed the water system was at that time.

(3) Drought Vulnerability Assessment – The team will review the water supply reliability and planning efforts for the Silverton water system. A regional Source Water Protection Plan has been developed by the Animas Drinking Water Alliance so long term planning efforts have been initiated. The Vulnerability Assessment will examine social, economic and societal impacts of drought conditions.

(4) Drought Mitigation and Response Strategies – The team will research and review what communities of a similar size have done to mitigate drought incidents. The team will use the Colorado Water Board Drought Planning Toolbox as an information source for developing response strategies. The team will develop and implement a public education and awareness strategy that will be implemented through the summer months.

(5) Drought Stages, Trigger Points, and Response Targets – Drought stages will be defined and identified with corresponding trigger points and desired response targets. The criteria will start with voluntary stages and awareness messaging on water conservation to more defined water conservation targets.

(6) Staged Drought Response Program – The response program will be developed after the stages, trigger points and response targets have been defined. The program will have a strong community education program. The community education program will create stakeholder buy in to the response.

(7) Implementation and Monitoring – Once steps 1 through 6 have been completed the team will begin Implementation of the drought management plan. An action plan will be developed 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. A web based drought monitoring information dashboard will be developed that will have a team portal and a community portal.

(8) Plan Review and Updates – The final stage of the planning process will involve developing a formal review, approval and update schedule of the drought management plan. The Drought Management Plan will be submitted to the Silverton Town Board and the San Juan County Board of Commissioners for approval. After approval locally we will submit the plan to the State for approval.

Grant Product Deliverables

- 1) Drought Mitigation Plan
- 2) Local Drought Taskforce of engaged stakeholders
- 3) Water Conservation Education Program

Table 4.0 A 12 week timeline of the Drought Mitigation Plan objectives.

Week	1 and 2	3 and 4	5 and 6	7 and 8	9 and 10	11 and 12
(1) Stakeholders and Plan Objectives and Principles						
(2) Historical Drought and Impact Assessment						
(3) Drought Vulnerability Assessment						
(4) Drought Mitigation and Response Strategies						
(5) Drought Stages, Trigger Points, and Response Targets						
(6) Staged Drought Response Program						
(7) Implementation and Monitoring						
(8) Plan Review and Updates						

7. A detailed budget identifying all costs associated with the Drought Mitigation Plan development project, including but not limited to hours spent on plan development (in-kind and cash), hourly wages, materials, and resources needed.

Budget

Position	Name	Amount	Explanation
Project Manager	Jim Donovan	\$12,500	\$50 an hour; 250 hours estimated work time; Overall project management, research and plan development; Responsible for deliverables and overall project.
Project Assistant	Melanie Russek	\$3,600	\$30 an hour; Assisting with assigned tasks; Will be lead on Public Outreach and education program
Public Outreach	Deanne Gallegos	\$990	\$30 an hour; Will assist on public outreach program and public messaging.
Hydrology	Jeff Derry	\$1,500	Research hydrologist; will assist with historical drought data collection and technical assistance on developing a monitoring system for source water.
Travel Costs		\$900	Publication materials (print outs, social media, digital media for education purposes).
		\$19,490	Request to Colorado Water Board
Public Works Director	John Sites	3100	The Public Works Director will provide technical information on the water system and aid with all aspects of the project. He will provide 62 in hours as an in kind match.
Silverton Community Relations	Lisa Branner	1600	The Silverton Community Relations Director will provide 32 hours as an in kind match.
Public Health Director	Becky Joyce	480	The San Juan County Public Health Director will provide 10 hours as an in kind match. She will focus on the plan review and ensure public health issues are covered in outreach materials.
Print and digital materials		\$1,100	Cash match
MATCH		\$5,440	25% match is provided
PROJECT TOTAL		\$26,030	

8. The signature of an individual with the authority to commit the resources of the entity seeking the grant.

Will A. Toohy Administrator
Name/Title

5/23/18
Date

TO BE PROVIDED

9. Description of the Plan Public Review Process that will be implemented, pursuant to section 6e of the CWCB-approved *Guidelines for the Office to Review and Evaluate Drought Mitigation Plans Submitted by Covered Entities and Other State or Local Governmental Entities*, including the period of time the draft plan will be made publicly available, the method of public notice, and the process for soliciting public comments.

The Public Review Process will take 3 steps: 1) The Drought Task Force will complete the plan and it will stay in "draft" form until adopted. 2) A public meeting and workshop will be hosted by the Drought Task Force introducing the plan and soliciting feedback. The Draft plan will be posted in the following public spaces: the Silverton Chamber of Commerce, Silverton Public Library, Silverton Town Hall and the San Juan County Courthouse. A digital version will be posted on the Silverton Town website and the San Juan County website. Public feedback will be sought for a period of 1 month. Comments will be integrated into the final document. 3) The Plan will then be submitted for approval by the Town of Silverton, Board of Trustees and the San Juan County Commissioners.

We anticipate this process to occur in September and October of 2018.

NOTE: The match is not on the grant amount requested but rather on the total Drought Mitigation Plan development project budget. (e.g. Total cost for Plan project = \$20,000. The minimum 25% match required for the Plan project = \$5,000. Therefore, the maximum grant request for the Plan project = \$15,000.)



Water Efficiency Grant Fund	
<u>Scope of Work</u>	
Prepared Date:	5/18/2018
Project Name:	Drought Mitigation Plan for Silverton Colorado
Grant Applicant:	Jim Donovan, oem@sanjuancountycolorado.us
<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>Scope of Work</p> <p>The Plan developed will address subsections 6d.(2) and 6d.(4) of section 37-60-126.5, of the Colorado Revised Statutes. The work period will occur over 12 weeks from the start of the contract. Throughout the Project Plan the team will refer to the Municipal Drought Management Plan Guidance Document and the Drought Planning worksheets available in the Colorado Water Conservation Board Drought Planning Toolbox.</p> <ol style="list-style-type: none">(1) Stakeholders and Plan Objectives and Principles(2) Historical Drought and Impact Assessment(3) Drought Vulnerability Assessment(4) Drought Mitigation and Response Strategies(5) Drought Stages, Trigger Points, and Response Targets(6) Staged Drought Response Program(7) Implementation and Monitoring(8) Plan Review and Updates <p>Project Deliverables</p> <ol style="list-style-type: none">1. Drought Mitigation Plan2. Local Drought Taskforce of engaged stakeholders3. Water Conservation Education Program	

Objectives: (List the objectives of the project)

There are 3 objectives of the drought management plan for the Silverton community:

- 1) Effectively address the needs of the community during times of water supply shortage while systematically enacting efforts to reduce demand to maximize current available water supplies.
- 2) Reduce the social, societal and economic impacts of drought on the community.
- 3) Create an effective drought emergency preparedness, response and recovery process that is adaptive, repeatable and measurable.

Tasks

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

Task 1 -Assemble Stakeholders and Identify Plan Objectives and Principles

Description of Task:

This step identifies the necessary persons and expertise to be involved in the Drought Planning Process. We have already formed a Silverton San Juan County Drought Task Force that will conduct the planning, securing stakeholder involvement, and develop the plan objectives and operating principles. We anticipate that the Task Force will meet monthly through the project period.

The Drought Task Force has had a kick off meeting that was initiated by the Director Of Public Works. The Drought Task Force is comprised of the Town Director of Public Works, Town Manager, Town Community Relations Director, San Juan Development Association, Director of the Center for Snow and Avalanche Studies, Director of the Chamber of Commerce, County Road and Bridge, County Emergency Manager, Director of Public Health and the County Administrator. The Drought Task Force may expand in size and expertise as deemed necessary.



Tasks
Method/Procedure:
<p>The task force has three purposes. First, the team supervises and coordinates development of the plan. Second, the team implements the plan actions. Third, the team evaluates and maintains the plan.</p> <p>The Drought Task Force will be on an as needed basis. At a minimum, the team will meet to determine drought triggers, review and comment on the plan and meet to implement actions once triggers have been met. A core team will be formed that performs the work outlined in the workplan.</p>
Applicant Deliverable: (Describe the deliverable the applicant expects from this task)
<p>An assembled team of stakeholders ready to implement the plan on a local level.</p>
CWCB Deliverable: (Describe the deliverable the applicant will provide CWCB documenting the completion of this task)
<p>Sign in sheets can be provided as documentation of the Task Force meetings.</p>

Tasks
Provide a detailed description of each task using the following format:
<u>Task 2 - Historical Drought and Impact Assessment</u>
Description of Task:
<p>Climate data will be gathered for 1976-77 and 2002-2003. These years will be used as benchmarks for drought years for the Silverton San Juan County water system. Climate and historical account data will be gathered in order to determine drought impacts during those time periods.</p>



Tasks
Method/Procedure:
<p>Data will be gathered from the USGS National Water Information System, the Colorado State Climate Office and the NRCS Snotel database and other relevant data sources. Stream flow data will be captured in a tabular and graphical format.</p> <p>Interviews will be conducted with persons who lived through those drought periods and what the community and government response was to the incident.</p> <p>Newspaper articles will be gathered from the San Juan County Historical Archive, the Silverton Standard and the Durango Herald for that time period. An emphasis will be placed on determining how stressed the water system was at that time.</p>
Applicant Deliverable: (Describe the deliverable the applicant expects from this task)
<p>A historical record capturing climate data and societal data will be section of the final plan. The record will contain a written narrative and the climate data in both tabular and graphical format.</p>
CWCB Deliverable: (Describe the deliverable the applicant will provide CWCB documenting the completion of this task)
<p>A historical record capturing climate data and societal data will be section of the final plan. The record will contain a written narrative and the climate data in both tabular and graphical format.</p>

Tasks
Provide a detailed description of each task using the following format:
<u>Task 3 Drought Vulnerability Assessment</u>
Description of Task:
<p>The team will review the water supply reliability and planning efforts for the Silverton water system. A regional Source Water Protection Plan has been developed by the Animas Drinking Water Alliance so long term planning efforts have been initiated. The Vulnerability Assessment will examine social, economic and societal impacts of drought conditions.</p>
Method/Procedure:



Tasks
<p>The assessment will take the following steps.</p> <ol style="list-style-type: none">1) Analyze the drought history or profile (past and future)2) Evaluate the impacts of drought3) Investigate the underlying drought vulnerabilities and factors that cause drought impacts and trends4) Review current policies in place5) Develop risk management strategies
Applicant Deliverable: (Describe the deliverable the applicant expects from this task)
<p>The Vulnerability Assessment will be comprised of a database of climate, societal and historical information that will be used a monitoring tool to assess drought conditions over time.</p>
CWCB Deliverable: (Describe the deliverable the applicant will provide CWCB documenting the completion of this task)
<p>The primary deliverable will be the Vulnerability Assessment documented in the plan. The separate database file will be provided as well.</p>

Tasks
Provide a detailed description of each task using the following format:
<u>Task 4 Drought Mitigation and Response Strategies</u>
Description of Task:
<p>The team will research and review what communities of a similar size have done to mitigate drought incidents. The team will use the Colorado Water Board Drought Planning Toolbox as an information source for developing response strategies.</p>
Method/Procedure:



Tasks
The team will develop and implement a public education and awareness strategy that will be implemented through the Summer months.
Applicant Deliverable: (Describe the deliverable the applicant expects from this task)
A water conservation and public information awareness campaign that will accompany the Drought Mitigation Plan.
CWCB Deliverable: (Describe the deliverable the applicant will provide CWCB documenting the completion of this task)
Example materials of the educational outreach campaign will be provided.

Tasks
Provide a detailed description of each task using the following format:
<u>Task 5</u> - Drought Stages, Trigger Points, and Response Targets
Description of Task:
Drought stages will be defined and identified with corresponding trigger points and desired response targets. The criteria will start with voluntary stages and awareness messaging on water conservation to more defined water conservation targets.
Method/Procedure:



Tasks
<p>Drought stages will be defined based on stakeholder brainstorming sessions and analyzing the historical climate data. From the climate data trigger points will be assigned to indicate the switch for each stage.</p> <p>Response targets will be calculated for each stage and water conservation target.</p>
Applicant Deliverable: (Describe the deliverable the applicant expects from this task)
The final plan will have a section that documents the stages, trigger points and response targets defined.
CWCB Deliverable: (Describe the deliverable the applicant will provide CWCB documenting the completion of this task)
The final plan will have a section that documents the stages, trigger points and response targets defined.

Tasks
Provide a detailed description of each task using the following format:
<u>Task 6</u> - Staged Drought Response Program
Description of Task:
<p>The response program will be developed after the stages, trigger points and response targets have been defined. The program will have a strong community education program. The community education program will create stakeholder buy in to the response.</p>
Method/Procedure:



Tasks
The Drought Response Program will be the implementation of the stages, trigger points and response targets and the public education program.
Applicant Deliverable: (Describe the deliverable the applicant expects from this task)
A section of the final plan will document the drought response program.
CWCB Deliverable: (Describe the deliverable the applicant will provide CWCB documenting the completion of this task)
The final plan will have a section that documents the drought response program.

Tasks
Provide a detailed description of each task using the following format:
<u>Task 7 - Implementation and Monitoring</u>
Description of Task:
Once steps 1 through 6 have been completed the team will begin Implementation of the drought management plan.



Tasks
Method/Procedure:
An action plan will be developed 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. A web based drought monitoring information dashboard will be developed that will have a team portal and a community web portal.
Applicant Deliverable: (Describe the deliverable the applicant expects from this task)
The Implementation and Monitoring components will be documented in the final plan.
CWCB Deliverable: (Describe the deliverable the applicant will provide CWCB documenting the completion of this task)
The final plan will have a section that documents the Implementation and Monitoring components.

Tasks
Provide a detailed description of each task using the following format:
<u>Task 8 - Plan Review and Updates</u>
Description of Task:
The final stage of the planning process will involve developing a formal review, approval and update schedule of the drought management plan. The Drought Management Plan will be submitted to the Silverton Town Board and the San Juan County Board of Commissioners for approval. After approval, locally we will submit the plan to the State for approval.
Method/Procedure:



Tasks

The Plan Review will take the following steps.

- 1) Made available for public input and review in public locations and on the web.
- 2) Integrate public comments.
- 3) Submitted to Town Board for approval
- 4) Submitted to County Commissioners for approval
- 5) Submitted to the State for approval
- 6) An update schedule will be included in the plan

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

The Plan Review and Update section will be included in the final plan.

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

The final plan will have a section that documents the Plan Review and Updates components.

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 25%, 50% & 75% completion of the project.

The 25% Progress Report will be submitted on July 15, 2018

The 50% Progress Report will be submitted on August 15, 2018

The 75% Progress Report will be submitted on September 15, 2018

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.)



Reporting Requirements

Final Deliverable: At the completion of the project (April 2019), 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.

Last Update: October 20, 2017



COLORADO
Colorado Water
Conservation Board
Department of Natural Resources

Water Efficiency Grant Fund

BUDGET & SCHEDULE

Prepared Date: 5/18/2018

Project Name: Drought Mitigation Plan for Silverton Colorado

Applicant: San Juan County

Task No.	Description	Start Date ⁽¹⁾	End Date	Project Manager (\$50/hr)		Project Assistant (\$30/hr)		Education & Public Communication Specialist (\$30/hr)		Research Hydrologist (\$50/hr)		Public Works Director (\$50/hr)		Community Relations Specialist (\$40/hr)		Town Administrator (\$55/hr)		Public Health Director (\$40/hr)		Matching Funds		WEGF Grant Request	Total
				Hours	Sub Total	Hours	Sub Total	Hours	Sub Total	Hours	Sub Total	Hours	Sub Total	Hours	Sub Total	Hours	Sub Total	Hours	Sub Total	Cash	In-Kind		
1	Stakeholders and Plan Objectives and Principles	6/1/18	8/30/18	20	\$ 1,000	10	\$ 300	7	\$ 210	7	\$ 350	10	\$ 500	7	\$ 280	10	\$ 550	7	\$ 280	\$ -	\$1,610	1,860.00	\$ 3,470.00
2	Historical Drought and Impact Assessment	6/1/18	8/30/18	30	\$ 1,500	25	\$ 750	0	\$ -	21	\$ 1,050	7	\$ 350	0	\$ -		\$ -	0	\$ -	\$ -	\$350	3,300.00	\$ 3,650.00
3	Drought Vulnerability Assessment	6/1/18	8/30/18	45	\$ 2,250	10	\$ 300	1	\$ 30		\$ -	7	\$ 350	1	\$ 40		\$ -	0	\$ -	\$ -	\$390	2,580.00	\$ 2,970.00
4	Drought Mitigation and Response Strategies	6/1/18	8/30/18	45	\$ 2,250	10	\$ 300	1	\$ 30		\$ -	7	\$ 350	1	\$ 40		\$ -	0	\$ -	\$ -	\$390	2,580.00	\$ 2,970.00
5	Drought Stages, Trigger Points, and Response Targets	6/1/18	8/30/18	45	\$ 2,250	10	\$ 300	1	\$ 30		\$ -	9	\$ 450	1	\$ 40		\$ -	0	\$ -	\$ -	\$490	2,580.00	\$ 3,070.00
6	Staged Drought Response Program	6/1/18	8/30/18	45	\$ 2,250	35	\$ 1,050	21	\$ 630		\$ -	8	\$ 400	20	\$ 800		\$ -	0	\$ -	\$ -	\$1,200	3,930.00	\$ 5,130.00
7	Implementation and Monitoring	6/1/18	8/30/18	10	\$ 500	10	\$ 300	1	\$ 30		\$ -	7	\$ 350	1	\$ 40	1	\$ 55	1	\$ 40	\$ -	\$485	830.00	\$ 1,315.00
8	Plan Review and Updates	6/1/18	4/30/19	10	\$ 500	10	\$ 300	1	\$ 30	2	\$ 100	7	\$ 350	1	\$ 40	1	\$ 55	2	\$ 80	\$ -	\$525	930.00	\$ 1,455.00
	MATERIALS (Printing, paper)																			\$1,000		\$0.00	\$1,000.00
	Indirect - Grant Admin & Travel Costs																			\$ 100		\$900.00	\$1,000.00
Total				250	\$ 12,500	120	\$ 3,600	33	\$ 990	30	\$ 1,500	62	\$ 3,100		\$1,280	12	\$ 660	10	\$ 400	\$ 1,100	\$5,440	\$19,490	\$26,030