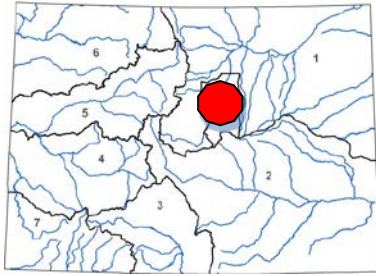




City of Englewood Acoma-Tufts Storm Drainage Improvement Project

July 2020 Board Meeting

Water Plan Grant Application



L O C A T I O N	
County/Countries:	Arapahoe
Drainage Basin:	South Platte

D E T A I L S	
Total Project Cost:	\$794,000
Water Plan Grant Request:	\$397,000
Recommended amount:	\$0
Other CWCB Funding:	\$0
Other Funding Amount:	\$0
Applicant Match:	\$397,000
Project Type(s):	Other - Engineering Design
Project Categories:	Environment and Recreation
Measurable Result:	Relieves approximately 88 properties from the potential for flooding during a 25-year or less storm water event

The City of Englewood is a Home Rule Municipality located in Arapahoe County, Colorado with a population of approximately 34,400 people. The city is located in the South Platte River Valley, east of the Front Range and directly south of central Denver with a total area of 6.6 square miles. The city provides a variety of services to citizens.

Severe flooding in a number of neighborhoods in Englewood during the summer of 2018 has brought into focus the need to reduce flood hazard in flood prone areas of the City. The city of Englewood contracted with Calibre Engineering to evaluate ways to reduce flood hazard in some of the City's affected basins. Calibre created a report that documents that evaluation and presents ways that Englewood residents can protect their homes. In addition, this website presents projects that Englewood can implement to decrease flood levels in the basins that were included in this study. One of those projects is the subject of this grant: the Acoma-Tufts Storm Water Improvement Project. In 2018, in the project area, a person lost their life due to the severe storm water event. The city wants to help alleviate the flooding in this area in order to improve the safety & wellbeing of residents. The Calibre Study performed hydraulic & hydrologic analysis to determine a project in this area that requires increasing the size of storm sewer pipes, installation of additional manholes, to improve conveyance of the storm water to the greenway at nearby Rotolo Park. This project will complete the final engineering for the project and complete preparation of plans and specifications for construction of the proposed improvements.

Staff review of the application did not show good conformity with Colorado Water Plan grant guidelines and evaluation criteria. Staff understands the value of the project, however it was not deemed a good fit with the Colorado Water Plan grant program.



Last Updated: July 2019

Colorado Water Conservation Board
Water Plan Grant Application

Instructions		
<p>To receive funding for a Water Plan Grant, applicant must demonstrate how the project, activity, or process (collectively referred to as “project”) funded by the CWCB will help meet the measurable objectives and critical actions in the Water Plan. Grant guidelines are available on the CWCB website.</p> <p>If you have questions, please contact CWCB at (303) 866-3441 or email the following staff to assist you with applications in the following areas:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> Water Storage Projects Conservation, Land Use Planning Engagement & Innovation Activities Agricultural Projects Environmental & Recreation Projects </td> <td style="width: 50%; vertical-align: top;"> Anna.Mauss@state.co.us Kevin.Reidy@state.co.us Ben.Wade@state.co.us Alexander.Funk@state.co.us Chris.Sturm@state.co.us </td> </tr> </table> <p>FINAL SUBMISSION: Submit all application materials in one email to <u>waterplan.grants@state.co.us</u> in the original file formats [Application (word); Statement of Work (word); Budget/Schedule (excel)]. Please do not combine documents. In the subject line, please include the funding category and name of the project.</p>	Water Storage Projects Conservation, Land Use Planning Engagement & Innovation Activities Agricultural Projects Environmental & Recreation Projects	Anna.Mauss@state.co.us Kevin.Reidy@state.co.us Ben.Wade@state.co.us Alexander.Funk@state.co.us Chris.Sturm@state.co.us
Water Storage Projects Conservation, Land Use Planning Engagement & Innovation Activities Agricultural Projects Environmental & Recreation Projects	Anna.Mauss@state.co.us Kevin.Reidy@state.co.us Ben.Wade@state.co.us Alexander.Funk@state.co.us Chris.Sturm@state.co.us	

Water Project Summary	
Name of Applicant	City of Englewood, Colorado
Name of Water Project	Acoma-Tufts Storm Drainage Improvement Project
CWP Grant Request Amount	\$397,000
Other Funding Sources _____	\$
Other Funding Sources _____	\$
Other Funding Sources _____	\$
Applicant Funding Contribution	\$397,000
Total Project Cost	\$794,000



Last Updated: July 2019

Applicant & Grantee Information	
Name of Grantee(s)	
Mailing Address	1000 Englewood Parkway
FEIN	84-6000583
Organization Contact	Maria D'Andrea, P.E.
Position/Title	Director of Public Works
Email	mdandrea@englewoodco.gov
Phone	303-762-2506
Grant Management Contact	Maria Sobota
Position/Title	Finance Director
Email	msobota@englewoodco.gov
Phone	303-762-2514
Name of Applicant (if different than grantee)	
Mailing Address	
Position/Title	
Email	
Phone	
Description of Grantee/Applicant	
Provide a brief description of the grantee's organization (100 words or less).	
<p>The City of Englewood is a Home Rule Municipality located in Arapahoe County, Colorado with a population of approximately 34,400 people. The city is located in the South Platte River Valley, east of the Front Range and directly south of central Denver with a total area of 6.6 square miles.</p> <p>The city provides a variety of services to citizens. Englewood is home to one of the largest hospital complexes in the metro area which includes Swedish Medical Center and Craig Hospital - a top-ten nationally ranked rehabilitation hospital for spinal cord and traumatic brain injury rehabilitation.</p>	



Last Updated: July 2019

Type of Eligible Entity (check one)	
X	Public (Government): Municipalities, enterprises, counties, and State of Colorado agencies. Federal agencies are encouraged to work with local entities. Federal agencies are eligible, but only if they can make a compelling case for why a local partner cannot be the grant recipient.
	Public (Districts): Authorities, Title 32/special districts (conservancy, conservation, and irrigation districts), and water activity enterprises.
	Private Incorporated: Mutual ditch companies, homeowners associations, corporations.
	Private Individuals, Partnerships, and Sole Proprietors: Private parties may be eligible for funding.
	Non-governmental organizations (NGO): Organization that is not part of the government and is non-profit in nature.
	Covered Entity: As defined in Section 37-60-126 Colorado Revised Statutes .

Type of Water Project (check all that apply)	
	Study
	Construction
	Identified Projects and Processes (IPP)
X	Other – design of construction project

Category of Water Project (check the primary category that applies and include relevant tasks)	
	Water Storage - Projects that facilitate the development of additional storage, artificial aquifer recharge, and dredging existing reservoirs to restore the reservoirs' full decreed capacity and Multi-beneficial projects and those projects identified in basin implementation plans to address the water supply and demand gap.. <i>Applicable Exhibit A Task(s):</i>
	Conservation and Land Use Planning - Activities and projects that implement long-term strategies for conservation, land use, and drought planning. <i>Applicable Exhibit A Task(s):</i>
	Engagement & Innovation - Activities and projects that support water education, outreach, and innovation efforts. Please fill out the Supplemental Application on the website. <i>Applicable Exhibit A Task(s):</i>
	Agricultural - Projects that provide technical assistance and improve agricultural efficiency. <i>Applicable Exhibit A Task(s):</i>
X	Environmental & Recreation - Projects that promote watershed health, environmental health, and recreation. <i>Applicable Exhibit A Task(s): Engineering Design & Plan Preparation</i>
	Other Explain:

Last Updated: July 2019

Location of Water Project	
Please provide the general county and coordinates of the proposed project below in decimal degrees . The Applicant shall also provide, in Exhibit C, a site map if applicable.	
County/Countries	Arapahoe County
Latitude	39°38'49"N
Longitude	104°59'31"W

Water Project Overview
<p>Please provide a summary of the proposed water project (200 words or less). Include a description of the project and what the CWP Grant funding will be used for specifically (e.g., studies, permitting process, construction). Provide a description of the water supply source to be utilized or the water body affected by the project, where applicable. Include details such as acres under irrigation, types of crops irrigated, number of residential and commercial taps, length of ditch improvements, length of pipe installed, and area of habitat improvements, where applicable. If this project addresses multiple purposes or spans multiple basins, please explain.</p> <p>The Applicant shall also provide, in Exhibit A, a detailed Statement of Work, Budget, Other Funding Sources/Amounts and Schedule.</p>
<p>Severe flooding in a number of neighborhoods in Englewood during the summer of 2018 has brought into focus the need to reduce flood hazard in flood prone areas of the City. The city of Englewood contracted with Calibre Engineering to evaluate ways to reduce flood hazard in some of the City's affected basins. They created a report, contained in a website (https://www.calibre-engineering.com/cityofenglewoodoutfallsystemsplan) which documents that evaluation and presents ways that Englewood residents can protect their homes. In addition, this website presents projects that Englewood can implement to decrease flood levels in the basins that were included in this study.</p> <p>One of those projects is the subject of this grant: the Acoma-Tufts Storm Water Improvement Project, (also referred to as S3). In 2018, in the project area, a person lost their life due to the severe storm water event. The city wants to help alleviate the flooding in this area in order to improve the safety & wellbeing of residents.</p> <p>The Calibre Study performed hydraulic & hydrologic analysis to determine a project in this area that requires increasing the size of storm sewer pipes, installation of additional manholes, to improve conveyance of the storm water to the greenway at nearby Rotolo Park.</p> <p>This project will complete the final engineering for the project and complete preparation of plans and specifications for construction of the proposed improvements.</p>

Last Updated: July 2019

Measurable Results	
To catalog measurable results achieved with the CWP Grant funds, please provide any of the following values as applicable:	
	New Storage Created (acre-feet)
	New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive
	Existing Storage Preserved or Enhanced (acre-feet)
	Length of Stream Restored or Protected (linear feet)
	Efficiency Savings (indicate acre-feet/year OR dollars/year)
	Area of Restored or Preserved Habitat (acres)
	Quantity of Water Shared through Alternative Transfer Mechanisms
	Number of Coloradans Impacted by Incorporating Water-Saving Actions into Land Use Planning
	Number of Coloradans Impacted by Engagement Activity
X	Other Explain: Relives approximately 88 properties from the potential for flooding during a 25-year or less storm water event

Water Project Justification
<p>Provide a description of how this water project supports the goals of Colorado's Water Plan, the most recent Statewide Water Supply Initiative, and the applicable Roundtable Basin Implementation Plan and Education Action Plan. The Applicant is required to reference specific needs, goals, themes, or Identified Projects and Processes (IPPs), including citations (e.g. document, chapters, sections, or page numbers).</p> <p>The proposed water project shall be evaluated based upon how well the proposal conforms to Colorado's Water Plan Framework for State of Colorado Support for a Water Project (CWP, Section 9.4, pp. 9-43 to 9-44;)</p> <p>Water Plan Goal: Stormwater best management practices, including retention and detention, can improve the quality and quantity of the supply, and water management practices could incorporate these practices for improved stormwater management, flood mitigation, air quality management, and riparian zone restoration. This project provides for both stormwater management and flood mitigation.</p> <p>Water Plan Goal: Maintain watershed health by protecting or restoring watersheds that could affect critical infrastructure. This project provides improvements to critical infrastructure within a key city watershed/drainage basin. Improvements to the detention area in Rotolo Park will enhance this amenity for the neighborhood.</p> <p>Summary of Projected Climate Changes and Potential Effects on Colorado's Water Resources –Water Infrastructure Operations (Table 4.1) Changes in the snowpack and in streamflow timing could affect reservoir operations, including flood control and storage. Changes in the timing and magnitude of runoff could affect the functioning of diversion, storage, and conveyance structures. This project would provide flood relief to more than 88 inhabited structures, most of which are residential dwellings.</p>

Last Updated: July 2019

5.7 Promote Multi-Purpose Storage Projects that Enhance other South Platte Basin Solutions. Recommendations: The Metro and South Platte Basin Roundtables strongly advocate for the development of additional surface and groundwater storage, further research of aquifer storage and recovery (ASR), and investigation into additional off-channel storage and reservoir sites in the basin. This project would provide off-channel storage and increase detention capacity within Rotolo Park.

5.9 Facilitate effective South Platte communications and outreach programs that complement the state’s overall program Recommendations: Design and implement an intensive education, participation and outreach program designed to generate a lasting baseline of public awareness and support. Communication and outreach efforts through this project would educate local property owners about the state’s overall program.

Related Studies

Please provide a list of any related studies, including if the water project is complementary to or assists in the implementation of other CWCB programs.

None.

Previous CWCB Grants, Loans or Other Funding

List all previous or current CWCB grants (including WSRF) awarded to both the Applicant and Grantee. Include: 1) Applicant name; 2) Water activity name; 3) Approving RT(s); 4) CWCB board meeting date; 5) Contract number or purchase order; 6) Percentage of other CWCB funding for your overall project.

Last Updated: July 2019

None.

Taxpayer Bill of Rights

The Taxpayer Bill of Rights (TABOR) may limit the amount of grant money an entity can receive. Please describe any relevant TABOR issues that may affect your application.

None. Storm Water projects are funded from enterprise funds generated by a fee or rate on impacted properties.

Submittal Checklist

	I acknowledge the Grantee will be able to contract with CWCB using the Standard Contract .
Exhibit A	
X	Statement of Work ⁽¹⁾
X	Budget & Schedule ⁽¹⁾
X	Engineer's statement of probable cost (projects over \$100,000)
X	Letters of Matching and/or Pending 3 rd Party Commitments ⁽¹⁾
Exhibit C	
X	Map (if applicable) ⁽¹⁾
X	Photos/Drawings/Reports
	Letters of Support (Optional)
	Certificate of Insurance (General, Auto, & Workers' Comp.) ⁽²⁾
	Certificate of Good Standing with Colorado Secretary of State ⁽²⁾
	W-9 ⁽²⁾
	Independent Contractor Form ⁽²⁾ (If applicant is individual, not company/organization)
Engagement & Innovation Grant Applicants ONLY	
	Engagement & Innovation Supplemental Application ⁽¹⁾

Last Updated: July 2019

(1) Required with application.

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

Last Updated: July 2019

ENGAGEMENT & INNOVATION GRANT FUND SUPPLEMENTAL APPLICATION

Introduction & Purpose

Colorado’s Water Plan calls for an outreach, education, public engagement, and innovation grant fund in Chapter 9.5.

The overall goal of the Engagement & Innovation Grant Fund is to enhance Colorado’s water communication, outreach, education, and public engagement efforts; advance Colorado’s water supply planning process; and support a statewide water innovation ecosystem.

The grant fund aims to engage the public to promote well-informed community discourse regarding balanced water solutions statewide. The grant fund aims to support water innovation in Colorado. The grant fund prioritizes measuring and evaluating the success of programs, projects, and initiatives. The grant fund prioritizes efforts designed using research, data, and best practices. The grant fund prioritizes a commitment to collaboration and community engagement. The grant fund will support local and statewide efforts.

The grant fund is divided into two tracks: engagement and innovation. The Engagement Track supports education, outreach, communication, and public participation efforts related to water. The Innovation Track supports efforts that advance the water innovation ecosystem in Colorado.

Application Questions

*The grant fund request is referred to as “project” in this application.

Overview (answer for both tracks)
In a few sentences, what is the overall goal of this project? How does it achieve the stated purpose of this grant fund (above)?
Who is/are the target audience(s)? How will you reach them? How will you involve the community?
Describe how the project is collaborative or engages a diverse group of stakeholders. Who are the partners in the project? Do you have other funding partners or sources?



Last Updated: July 2019

Overview (answer for both tracks)
Describe how you plan to measure and evaluate the success and impact of the project?
What research, evidence, and data support your project?
Describe potential short- and long-term challenges with this project.

Please fill out the applicable questions for either the Engagement Track or Innovation Track, unless your project contains elements in both tracks. If a question does not relate to your project, just leave it blank. Please answer each question that relates to your project. Please reference the relevant documents and use chapters and page numbers (Colorado's Water Plan, Basin Implementation Plan, PEPO Education Action Plan, etc.).

Engagement Track
Describe how the project achieves the education, outreach, and public engagement measurable objective set forth in Colorado's Water Plan to "significantly improve the level of public awareness and engagement regarding water issues statewide by 2020, as determined by water awareness surveys."
Describe how the project achieves the other measurable objectives and critical goals and actions laid out in Colorado's Water Plan around the supply and demand gap; conservation; land use; agriculture; storage; watershed health, environment, and recreation; funding; and additional.
Describe how the project achieves the education, outreach, and public engagement goals set forth in the applicable Basin Implementation Plan(s).

Last Updated: July 2019

Describe how the project achieves the basin roundtable's PEPO Education Action Plans.

Innovation Track
Describe how the project enhances water innovation efforts and supports a water innovation ecosystem in Colorado.
Describe how the project engages/leverages Colorado's innovation community to help solve our state's water challenges.
Describe how the project helps advance or develop a solution to a water need identified through TAP-IN and other water innovation challenges. What is the problem/need/challenge?
Describe how this project impacts current or emerging trends; technologies; clusters, sectors, or groups in water innovation.

Last Updated: July 2019

Colorado Water Conservation Board
Water Plan Grant - Exhibit A

Statement Of Work

Date:	January 30, 2020
Name of Grantee:	City of Englewood, Colorado
Name of Water Project:	Acoma-Tufts Storm Water Improvement Project
Funding Source:	City of Englewood

Water Project Overview:

This project would complete the final engineering and plan & specification preparation for a critical storm water infrastructure project in the city. More than 6,800 feet of existing storm sewer pipe along with 900 feet of box culvert would be upgraded to a larger diameter to facilitate storm water drainage and reduce impacts of flooding on private property. The final engineering and plan preparation would allow the city to use more funds for construction of the improvements.

Project Objectives:

- This project will:
- Relieve more than 88 properties from the potential for flooding during a 25-year or less storm event
 - Provide increased capacity to the city's storm sewer system
 - Channel storm water to the natural drainageway
 - Improve detention capacity within Rotolo Park
 - Reduce surface & nuisance flooding in the project area

Last Updated: July 2019

Tasks	
Task 1 – Final Engineering Design	
Description of Task:	
Complete a hydraulic & hydrologic analysis of the sub-basin to verify preliminary pipe dimensions. Complete final engineering, permitting, environmental review and geotechnical analysis of the project area.	
Method/Procedure:	
The city’s Design and Construction Standards, along with CDOT Specifications and Urban Drainage Criteria will be utilized.	
Deliverable:	
Final engineering report detailing summary of detailed hydraulic & hydrologic analysis for project area/sub-basin with pipe dimensions, project limits & constraints, utility conflicts, and other factors affecting final design along with recommendations for	



Last Updated: July 2019

Tasks	
Task 2 – Construction Plan Preparation	
Description of Task:	
The final plans and specifications for the project will be prepared based upon the final engineering work completed in Task 1.	
Method/Procedure:	
The city’s Design and Construction Standards, along with CDOT Specifications and Urban Drainage Criteria will be utilized.	
Deliverable:	
<ul style="list-style-type: none">• Bid-ready final engineering design plans and specifications for the entire project• Engineer’s Estimate of Probable Construction Cost	

Repeat for Task 3, Task 4, Task 5, etc.

Last Updated: July 2019

Budget and Schedule

This Statement of Work shall be accompanied by a combined Budget and Schedule that reflects the Tasks identified in the Statement of Work and shall be submitted to CWCB in excel format.

Reporting Requirements

Progress Reports: The applicant shall provide the CWCB a progress report every 6 months, beginning from the date of issuance of a purchase order, or the execution of a contract. The progress report shall describe the status of the tasks identified in the statement of work, including a description of any major issues that have occurred and any corrective action taken to address these issues.

Final Report: At completion of the project, the applicant shall provide the CWCB a Final Report on the applicant's letterhead that:

- Summarizes the project and how the project was completed.
- Describes any obstacles encountered, and how these obstacles were overcome.
- Confirms that all matching commitments have been fulfilled.
- Includes photographs, summaries of meetings and engineering reports/designs.

The CWCB will pay out the last 10% of the budget when 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 grant will be closed without any further payment.

Payment

Payment will be made based on actual expenditures and must include invoices for all work completed. The request for payment must include a description of the work accomplished by task, an estimate of the percent completion for individual tasks and the entire Project in relation to the percentage of budget spent, identification of any major issues, and proposed or implemented corrective actions.

Costs incurred prior to the effective date of this contract are not reimbursable. The last 10% of the entire grant will be paid out when the final deliverable has been received. All products, data and information developed as a result of this contract must be provided to CWCB in hard copy and electronic format as part of the project documentation.

Performance Measures

Performance measures for this contract shall include the following:

(a) Performance standards and evaluation: Grantee will produce detailed deliverables for each task as specified. Grantee shall maintain receipts for all project expenses and documentation of the minimum in-kind contributions (if applicable) per the budget in Exhibit B. Per Water Plan Grant Guidelines, the CWCB will pay out the last 10% of the budget when 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 grant will be closed without any further payment.

(b) Accountability: Per Water Plan Grant Guidelines full documentation of project progress must be submitted with each invoice for reimbursement. Grantee must confirm that all grant conditions have been complied with on each invoice. In addition, per Water Plan Grant Guidelines, Progress Reports must be submitted at least once every 6 months. A Final Report must be submitted and approved before final project payment.

Last Updated: July 2019

Performance Measures

(c) Monitoring Requirements: Grantee is responsible for ongoing monitoring of project progress per Exhibit A. Progress shall be detailed in each invoice and in each Progress Report, as detailed above. Additional inspections or field consultations will be arranged as may be necessary.

(d) Noncompliance Resolution: Payment will be withheld if grantee is not current on all grant conditions. Flagrant disregard for grant conditions will result in a stop work order and cancellation of the Grant Agreement.



Colorado Water Conservation Board

**Water Plan Grant - Exhibit B
 Budget and Schedule**

Prepared Date: January 22, 2020

Name of Applicant: City of Englewood, Colorado

Name of Water Project: Acoma-Tufts Storm Water Improvement Project

Project Start Date: March 2020

Project End Date: March 2021

Task No.	Task Description	Task Start Date	Task End Date	Grant Funding Request	Match Funding	Total
1	Final Engineering Design	3/1/2020	9/1/2020	\$300,685	\$300,685	\$601,370
2	Plan Preparation	9/1/2020	3/1/2021	\$95,600	\$95,600	\$191,200
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
Total				\$396,285	\$396,285	\$792,570