

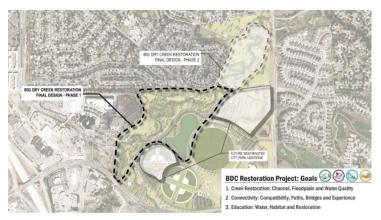
Big Dry Creek Channel Restoration-Phase 1 City of Westminster

September 2023 Board Meeting



DET	AILS	
Total Project Cost:	\$1,300,000.00	
Water Plan Grant Request:	\$650,000.00	
Recommended amount:	\$650,000.00	
Other CWCB Funding:	\$0	
Other Funding Amount:	\$325,000.00	
Applicant Match:	\$325,000.00	
Project Type:	Construction/Implementation	
Project Category:	Watershed Health & Recreation	
Measurable Results: 4,958ft of stream restored or protected; 26 acres of restored or preserved habitat; removes excess sediment contribution from erosion in Big Dry Creek		

The City of Westminster is requesting funding to restore Big Dry Creek through Westminster City Park in Westminster, Colorado, specifically, for native planting, seeding, and in-channel structures. The need for the project was identified in the 2007 City of Westminster Storm Drainage Study, the 2012 Major Drainageway Plan conceptual Design Report, and the 2018 City of Westminster Drainageway Study. Big Dry Creek through Westminster City Park is characterized by high, vertical cut banks. The channel was straightened in the past during the construction of City Park and some meanders have naturally cut off since the construction of the park. The City of Westminster evaluated the entire reach between 104th Avenue and Sheridan Boulevard and focused the design on a 0.9-mile reach.



The overall project goals include stabilizing the channel; reestablishing channel sinuosity; improving water quality, habitat, and ecological value of the reach; improving the trail system through Westminster City Park and its connectivity to the creek; and providing educational opportunities for nature and the elements of the project. Project goals will be met by realigning the channel to reclaim area and sinuosity previously lost to a water quality pond, constructing vegetated benches to support wetlands vegetation, constructing water quality

ponds, reconnecting the floodplain to the channel, adding trails, pedestrian crossings, constructing a boardwalk to connect the community to the creek, and incorporating educational spaces. Revegetation efforts will include a focus on establishing and improving a pollinator corridor through the project reach. Improving habitat for known wildlife, such as turtles, will be incorporated in the project. The project will enhance recreational experience for the park and regional trail users. Vegetation and water quality monitoring will be a critical task and measure project success.

The overall Phase 1 restoration effort is expected to cost \$13.6M. The applicant is only seeking funding for a portion of Phase 1. The applicant has secured the appropriate match funding from Mile High Flood District.

Funding Recommendation: This project is recommended for full funding of the \$650,000.00 requested.



Colorado Water Conservation Board

Water Plan

Water Project Summary

Name of Applicant	Westminster, City of	
Name of Water Project	Big Dry Creek Channel Restoration-Phase 1	
Grant Request Amount		\$650,000.00
Primary Category		\$650,000.00
Watershed Health & Recreation		
Total Applicant Match		\$325,000.00
Applicant Cash Match		\$325,000.00
Applicant In-Kind Match		\$0.00
Total Other Sources of Funding		\$325,000.00
Mile High Flood District		\$325,000.00
Total Project Cost		\$1,300,000.00

Applicant & Grantee Information		
Name of Grantee: Westminster, City of Mailing Address: 6575 West 88th Avenue, Annex West FEIN: 846,000,726	minster CO 80031	
Organization Contact: Andrew Hawthorn Position/Title: Stormwater Utility Administrator Phone: 303.658.2428	Email: ahawthor@cityofwestminster.us	
Organization Contact - Alternate: Heather Otterstetter Position/Title: Senior Engineer/Floodplain Manager Phone: 3036582370	Email: hotterst@cityofwestminster.us	
Grant Management Contact: Andrew Hawthorn Position/Title: Stormwater Utility Administrator Phone: 303.658.2428	Email: ahawthor@cityofwestminster.us	
Grant Management Contact - Alternate: Heather Otters Position/Title: Senior Engineer/Floodplain Manager Phone: 3036582370	tetter Email: hotterst@cityofwestminster.us	
Description of Grantee/Applicant		

No description provided

Type of Eligible Entity

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Public (Government) Public (District)

Public (Municipality)

- Ditch Company
- Private Incorporated
- Private Individual, Partnership, or Sole Proprietor
- Non-governmental Organization
- Covered Entity
- Other

Category of Water Project

 Agricultural Projects
Developing communications materials that specifically work with and educate the agricultural community on headwater restoration, identifying the state of the science of this type of work to assist agricultural users among others.
Conservation & Land Use Planning Activities and projects that implement long-term strategies for conservation, land use, and drought planning.

Engagement & Innovation Activities
Activities and projects that support water education, outreach, and innovation efforts. Please fill out the Supplemental Application on the website.
Watershed Restoration & Recreation

Projects that promote watershed health, environmental health, and recreation.

□ Water Storage & Supply

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.

Location of Water Project		
Latitude	38.891206	
Longitude	-105.061667	
Lat Long Flag	Precise coordinates: Project coordinates are readily definable and precisely define the	
	location of the project	
Water Source	Big Dry Creek	
Basins	Metro	
Counties	Jefferson	
Districts	2-South Platte: Denver Gage to Greeley	

Water Project Overview

Major Water Use Type Type of Water Project Scheduled Start Date - Design Scheduled Start Date - Construction Description

Construction / Implementation

The project entails restoring Big Dry Creek through Westminster City Park. The need for the project was identified in a 2007 City of Westminster Strom Drainage Study, a 2012 Major Drainageway Plan conceptual Design Report, and a 2018 City of Westminster Drainageway Study. Big Dry Creek in the project reach is characterized by high, vertical cut banks that are actively eroding. The City of Westminster evaluated the entire reach between 104th Avenue and Sheridan Boulevard and focused the design on a 0.9-mile reach, termed Phase 1.

1/1/2024

The project goals include stabilizing the channel, reestablishing channel sinuosity, improving water quality and

habitat, and improving the trail system through Westminster City Park. The project goals will be met by realigning the channel to reclaim the area with the water quality pond, constructing vegetated benches to support wetlands vegetation, constructing water quality ponds, reconnecting the floodplain, adding trails, crossings, and a boardwalk to connect the community to the creek, and incorporating education spaces. Revegetation will include plantings that support pollinators to create a "pollinator highway" through the park.

Where the channel will be realigned, a multistage channel section will be established to support a variety of vegetation zones. Riffles and pools will be incorporated in the proposed reach, for grade control and bed form diversity.

Measurable Results

New Storage Created (acre-feet) New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive Existing Storage Preserved or Enhanced (acre-feet) New Storage Created (acre-feet) 4,958 Length of Stream Restored or Protected (linear feet) Length of Pipe, Canal Built or Improved (linear feet) Efficiency Savings (dollars/year) Efficiency Savings (acre-feet/year) Area of Restored or Preserved Habitat (acres) 26 Quantity of Water Shared through Alternative Transfer Mechanisms or water sharing agreement (acre-feet) Number of Coloradans Impacted by Incorporating Water-Saving Actions into Land Use Planning 100,000 Number of Coloradans Impacted by Engagement Activity Other Removes excess sediment contribution due to erosion from Big Dry Creek

Water Project Justification

The project will improve watershed health and habitat in the Big Dry Creek project reach. The project meets the following goals from the Colorado Water Plan (CWP) and South Platte Basin Implementation Plan (BIP):

- Thriving Watersheds (CWP) and Protect and Enhance Watershed Function (BIP): The project will improve the water quality and function by reconnecting the floodplain, creating riffles and pools to improve habitat and natural stream function, laying back and vegetating vertical cut banks to reduce erosion and create habitat, improving riparian habitat, and restoring and enhancing native vegetation.

- Vibrant Communities (CWP) and Protect and Enhance Recreational Attributes, Maintain and Promote Reuse, and Broaden South Platte Communications, Outreach and Education Programs (BIP): The project includes trails that will provide increased connectivity to the creek along with classroom/outdoor education spaces that offer platforms for nature and climate education; a demonstration garden will highlight native species and planting design that encourages water-wise choices that also create habitat.

- Resilient Planning (CWP) and Protect and Enhance Environmental Attributes (BIP): Climate education and nature play are put center-stage, climate resilience and habitat restoration are celebrated in the design, reconnecting the floodplain and incorporating vegetated benches. Riffle pool bed form diversity will allow the creek to adapt and respond to storm events without the further degradation of vertical banks.

- Robust Agriculture (CWP) and Maintain and Promote Reuse (BIP): The existing reclaimed water pond in City Park will be modified to meet State of Colorado requirements and promotes the reuse of water, preserving additional water for agricultural uses. The Westin Pond, which provides water quality and detention, has a permanent water surface without a water right. It will be removed and replaced with a vegetated pond that will no longer store water and will provide better water quality treatment.

Related Studies

City of Westminster 2018 Drainageway Study; April 17, 2019; Enginuity Engineering Solutions. Big Dry Creek Major Drainageway Plan Conceptual Design Report; March 2012; Wright Water Engineers. 2007 City of Westminster Storm Drainage Study; 2007; Muller Engineering.

Taxpayer Bill of Rights

None