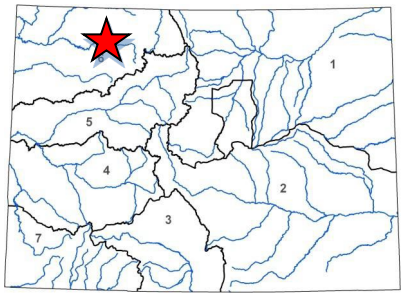
COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Water Plan Grant Application

Steamboat Springs Smart Irrigation Central Control System
City of Steamboat Springs
March 2023 Board Meeting

Lat: 40.480890
Long: -106.830560



LOCATION	
County:	Routt
Drainage Basin:	Yampa/White/Green

DETAILS	
Total Project Cost:	$2,600,000
Water Plan Grant Request:	$300,000
Funding Recommendation	**$300,000**
Other CWCB Funding:	$0
Other Funding Amount:	$1,500,000
Applicant Match:	$750,000
Project Type:	Construction
Project Category:	Conservation & Land Use
Measurable Result:	12 ac-ft water saved annually through efficient irrigation system upgrade on City owned facilities.

The City of Steamboat Springs will purchase and install a smart irrigation central control system with master valves and flow sensing to control irrigation at 49 city-owned sites including parks, greenbelts, open space, medians, facilities, and right of ways. The 2020 Water Conservation Plan adopted by the City and the Mt Werner Water and Sanitation District identifies reducing irrigation water use in city parks as a high priority conservation activity for 2020-2024 (CWCB Water Efficiency Grant, $39,100). Annual water savings are estimated to be 20% or approximately 11.83 acre-feet in the first full year. This system will allow for automatic daily water adjustments based on real-time weather and soil conditions and will automatically detect water line breaks and shut down water supply immediately.

WPG Support: *Action Areas-* Vibrant Communities- Optimize infrastructure; *BIP IPP-* Steamboat Springs Water Conservation Program; *Supporting Plan-* Steamboat Springs Water Conservation Plan- Reduction of irrigation on City parks and facilities

WPG Request:12%
Matching Funds: Steamboat Springs: $750,000; BOR WaterSMART: $1,300,000; Colorado River District: $250,000

Funding Recommendation: Staff recommends Board approval of $300,000 to the City of Steamboat Springs for the Smart Irrigation Central Control System through in the Conservation and Land Use Planning category.

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Water Plan

Water Project Summary

Name of Applicant	City of Steamboat Springs
Name of Water Project	Steamboat Springs Smart Irrigation Central Control System
Grant Request Amount	**$300,000.00**
Primary Category	$300,000.00
Conservation & Land Use Planning	
Total Applicant Match	**$750,000.00**
Applicant Cash Match	$750,000.00
Applicant In-Kind Match	$0.00
Total Other Sources of Funding	**$1,550,000.00**
WaterSMART Grant	$1,300,000.00
Colorado River District Grant	$250,000.00
Total Project Cost	**$2,600,000.00**

Applicant & Grantee Information

Name of Grantee: City of Steamboat Springs
Mailing Address: PO Box 775088 Steamboat Springs CO 80477
FEIN: 846,000,721

Organization Contact: Gary Suiter
Position/Title: City Manager
Phone: 9708718240
Email: gsuiter@steamboatsprings.net

Organization Contact - Alternate: Ginger Scott
Position/Title:
Phone: 970-871-8215
Email: gscott@steamboatsprings.net

Grant Management Contact: Gary Suiter
Position/Title: City Manager
Phone: 9708718240
Email: gsuiter@steamboatsprings.net

Grant Management Contact - Alternate: Julie Baxter
Position/Title: Water Resources Manager
Phone: 9708718267
Email: jbaxter@steamboatsprings.net

Description of Grantee/Applicant

No description provided

Type of Eligible Entity

- ☐ Public (Government)
- ☐ Public (District)

- [x] 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.
- [x] 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	40.480890
Longitude	-106.830560
Lat Long Flag	Default/Proponent headquarters: If the location cannot be defined with flags above, use location of project proponent headquarters
Water Source	Fish Creek Watershed and Yampa River
Basins	Yampa/White/Green
Counties	Routt
Districts	58-Upper Yampa River

Water Project Overview

Major Water Use Type	Municipal
Type of Water Project	Construction / Implementation
Scheduled Start Date - Design	4/1/2023
Scheduled Start Date - Construction	9/1/2023

Description

The City of Steamboat Springs will purchase and install a smart irrigation central control system with master valves and flow sensing to control irrigation at 49 city-owned sites including parks, greenbelts, open space, medians, facilities, and right of ways. This system will allow for automatic daily water adjustments based on real-time weather and soil conditions and will automatically detect water line breaks and shut down water supply immediately. Annual water savings are estimated to be 20% or approximately 11.83 acre-feet in the first full year, while also reducing costs, energy, and staff call out time. The central control system lays the groundwork to

achieve even greater water savings in the next phase when the City plans to update in-ground irrigation system components and convert some existing turf to lower water use species. The 2020 Water Conservation Plan adopted by the City and the Mt. Werner Water and Sanitation District identifies reducing irrigation water use in city parks as a high priority conservation activity for 2020-2024. More efficient water use improves the reliability of water supplies, enhances community resilience to drought and wildfire in the watershed, and helps sustain a healthy river and ecosystem.

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)
	Length of Stream Restored or Protected (linear feet)
	Efficiency Savings (dollars/year)
12	Efficiency Savings (acre-feet/year)
	Area of Restored or Preserved Habitat (acres)
	Quantity of Water Shared through Alternative Transfer Mechanisms or water sharing agreement (acre-feet)
38,000	Number of Coloradans Impacted by Incorporating Water-Saving Actions into Land Use Planning
	Number of Coloradans Impacted by Engagement Activity

Other

No additional measurable results provided

Water Project Justification

The Steamboat Springs Smart Irrigation Central Control System creates immediate water savings through installing water efficiency technology and lays the groundwork for even greater water savings with subsequent projects at City parks and facilities to update aging in-ground irrigation components, reduce non-essential turf, and demonstrate water-efficient “yampascaping” gardens. The Yampa-White-Green Basin Roundtable voted to recommend the Steamboat Springs Smart Irrigation Central Control System for a Colorado Water Plan grant at their November 9, 2022 meeting. This project implements goals and actions identified in State, regional, and local water plans.

Colorado Water Plan (2023 draft) – The project furthers the vision for Vibrant Communities in the Colorado Water Plan and exemplifies a key partner action by a local community to implement strategies for Meeting Future Water Needs, Wise Water Use, and Healthy Lands (p.6-4). The project is an example of an on-the-ground tool to meet water needs through a municipal water efficiency and conservation program (p.5-23). The Smart Irrigation Central Control System invests in water efficiency technology and infrastructure to realize long-term water savings in outdoor use in the municipal sector (p.6-8). “Municipal Water Conservation” is key to our State becoming more drought resilient (p.3-15) and the City is committed to planning for resilient water supplies and demonstrating waterwise landscapes).

The City is in the process of updating the landscaping regulations in the Community Development Code to integrate water efficiency requirements, which achieves another partner action highlighted in the water plan for addressing low water use landscapes in local land use codes. Addressing outdoor water use at City parks and facilities is necessary to show the public that we are “practicing what we preach” and applying the same types of waterwise landscaping and irrigation practices that we will soon be encouraging and requiring of the private sector.

Yampa-White-Green Basin Implementation Plan (BIP) – Key concerns for the Yampa Basin are population growth and meeting future water needs. Strong municipal conservation measures are noted as an important way to help address this situation (p.20). The BIP Goal 5 to 'Identify and address municipal and industrial water shortages' identifies the specific objective to 'Encourage municipal entities to meet some future municipal water needs through water conservation and efficiency.' The project also creates opportunities for demonstration projects that can be used as an educational tool for smart irrigation systems and waterwise irrigation practices (p.16 Objective 9). Overall, reducing the City's consumptive outdoor water usage during peak irrigation season demand leaves more water in the river for other beneficial uses, advancing many of the goals of the BIP.

Education Action Plan
The Yampa-White-Green Basin Roundtable's 2021 Education Action Plan identifies critical topics for education and outreach including "Drought and how to adapt" and "Water Supply Gaps and the Colorado Water Plan". This project improves irrigation efficiency and lays the groundwork for other water conservation programs on city-owned parks and facilities, creating ideal educational opportunities that are open and accessible to the public. The EAP also discusses the importance of educating on the recommendations from the Yampa Integrated Water Management Plan, which includes a goal to partner with the community on irrigation infrastructure upgrades.

Related Studies

The City of Steamboat Springs and Mt Werner Water and Sanitation District completed a Water Supply Master Plan adopted in 2019. The first recommendation of the Water Supply Master Plan is that the City and District focus on implementing conservation to achieve water savings as well as other community and environmental benefits.

The City and District then applied for and received a grant in from the CWCB in 2019 to update the city's water efficiency plan. The subsequent Water Conservation Plan adopted in 2020 identifies the need to develop a plan for reducing irrigation on City parks and facilities that includes water audits of parks, implementing recommendations for improving irrigation efficiency with consideration of the latest technology for smart controlled systems, prioritizing areas for turf replacement, and promoting new low water use landscaping.

The Water Conservation Plan has a goal to capitalize on the opportunity for the City and District to lead by example, conserving water and demonstrating responsible stewardship of the environment. This includes improving efficiency of the water distribution systems and maximizing efficient use of water at City and District facilities and parks. This project also advances the goals of the Water Conservation Plan for educating the community, saving treated water, reducing costs and water use at City facilities, and ensuring a reliable water supply.

The Water Conservation Plan identifies reducing irrigation water use in city parks as a high priority conservation activity for 2020-2024. At the Steamboat Springs City Council work session on water conservation on April 12, 2022, Council agreed with staff's recommendation that improving efficiencies in the irrigation of parks is one of three highest priorities for the City's water conservation program to focus on in 2022-2023.

Communities across the Colorado River system must reduce their water usage to mitigate the current water crisis. The Yampa River provides about one-third of Colorado's contribution to the Colorado River. The City of Steamboat Springs has a variety of decreed water rights that are used to meet their customers' water demands. These rights include a mix of pre- and post-Colorado River Compact water rights. City parks and facilities are high water users and improving our water efficiency is an impactful action that we can take now to help meet Colorado River Compact obligations. Outdoor irrigation is our opportunity for the greatest water savings.

Taxpayer Bill of Rights
The City of Steamboat Springs “debruced” in 1997, so TABOR will not affect this project or grant.