



**Colorado Water Conservation Board**

**Water Plan**

**Water Project Summary**

Name of Applicant	Colorado State University	
Name of Water Project	South Platte River Basin Salinity Study	
Grant Request Amount		<b>\$464,361.49</b>
Primary Category		\$464,361.49
<i>Agricultural Projects</i>		
Total Applicant Match		<b>\$77,394.64</b>
<i>Applicant Cash Match</i>		
<i>Applicant In-Kind Match</i>		\$77,394.64
Total Other Sources of Funding		<b>\$77,395.00</b>
<i>Itasca/Colorado Corn</i>		\$20,843.00
<i>Northern Water</i>		\$15,000.00
<i>South Metro Water Supply Authority</i>		\$15,000.00
<i>Denver Water</i>		\$12,000.00
<i>Borland Endowment</i>		\$14,552.00
Total Project Cost		<b>\$619,151.13</b>

**Applicant & Grantee Information**

Name of Grantee: Colorado State University  
 Mailing Address: 2002 Campus Delivery Fort Collins CO 80523  
 FEIN: 846,000,545

Organization Contact: Timothy Gates  
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**Description of Grantee/Applicant**

No description provided

### Type of Eligible Entity

- 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 40.274167  
Longitude -103.865556  
Lat Long Flag  
Water Source South Platte River  
Basins Metro; South Platte  
Counties  
Districts

### Water Project Overview

Major Water Use Type Agricultural  
Type of Water Project Planning  
Scheduled Start Date - Design 7/1/2024  
Scheduled Start Date - Construction  
Description

The proposed project addresses the following research questions: (1) Just how severe and variable is salinization of water and land resources across the South Platte River Basin (SPRB)? and (2) Where and how

should further investigation be focused to refine understanding of the problem and to support a search for solutions? The project is envisioned as part of a multi-year research effort consisting of a problem characterization stage followed by a search for solutions stage. The aim of this three-year Phase 1 of the Problem Characterization stage is to build off previously existing information to design and embark on a coordinated field data collection effort to better describe and define the salinity problem in relation to issues identified in collaboration with stakeholders. Data to be collected and analyzed will include groundwater depths and salinity, salt concentrations and loads in streams and canals, and soil salinity. Analytical and statistical methods will be applied to the gathered data to (a) gain a preliminary sense of the nature of salinity and its severity in relation to beneficial water uses within representative regions across the SPRB, and (b) to determine the need for additional and refined field data to adequately characterize the salinity problem.

### 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)  
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)  
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  
2,700,000 Number of Coloradans Impacted by Engagement Activity  
Other  
No additional measurable results provided

### Water Project Justification

This proposal is submitted to the Colorado Water Plan Grant program as an agricultural project. It addresses the serious water quality issue of salinity with a special focus on irrigated agriculture, which markedly is influenced by and in turn influences the whole watershed. Thus, the project serves the interest of two Water Plan action areas: robust agriculture and thriving watersheds. From a broader perspective, the collaborative tasks outlined below are concerned with the following Colorado Water Values: (a) a productive economy; (b) a strong environment with healthy watersheds, rivers, streams, and wildlife; and (c) an informed public with solutions that are sustainable and resilient to changing conditions. These goals also are congruent with the aims and interests of the South Platte Basin Roundtable, the Metro Basin Roundtable, and the South Platte Salinity Stakeholder Group who formally support this proposal.

### Related Studies

Colorado Agricultural Experiment Station project (2022 - 2025) on "Characterizing Agro-Environmental Threats from Salinity in the South Platte River Basin"  
Colorado Corn project on "South Platte Basin Salinity Study"  
CWCB Seed Grant project (2023 - 2024) "Using Remote Sensing Data to Highlight Salinization Patterns Across an Irrigated River Basin in Relation to Contributing Factors"

## Taxpayer Bill of Rights

No Tax Bill of Rights provided