



COLORADO

Colorado Water
Conservation Board

Department of Natural Resources

Colorado Water Conservation Board

Water Plan

Water Project Summary

Name of Applicant	Larimer County	
Name of Water Project	Larimer County Groundwater Study	
Grant Request Amount		\$300,000.00
Primary Category		\$300,000.00
<i>Conservation & Land Use Planning</i>		
Total Applicant Match		\$100,000.00
<i>Applicant Cash Match</i>		\$50,000.00
<i>Applicant In-Kind Match</i>		\$50,000.00
Total Other Sources of Funding		\$0.00
Total Project Cost		\$400,000.00

Applicant & Grantee Information

Name of Grantee: Larimer County

Mailing Address: 200 Oak Street, Suite 3100 Fort Collins CO 80521

Organization Contact: Lesli Ellis

Position/Title: Community Planning, Infrastructure and
Resources Director

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Phone: 970-498-7690

Description of Grantee/Applicant

Larimer County is not a utility or water provider, but we manage land use and coordinate with multiple districts and cities that do provide utilities.

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	40.585300
Longitude	-105.084400
Lat Long Flag	Default/Proponent headquarters: If the location cannot be defined with flags above, use location of project proponent headquarters
Water Source	Study on groundwater aquifers located within unincorporated Larimer County's ag-urban transition areas, with a special focus on aquifer systems serving residential, commercial, and industrial development zones adjacent to Front Range communities.
Basins	South Platte
Counties	Larimer
Districts	3-Cache La Poudre River; 4-Big Thompson River

Water Project Overview

Major Water Use Type	Municipal
Type of Water Project	Planning
Scheduled Start Date - Design	1/5/2026
Scheduled Start Date - Construction	
Description	<p>Larimer County requests \$300,000 in Colorado Water Plan grant funding with \$100,000 in match for the Larimer County Groundwater Study. The study will develop comprehensive baseline groundwater information to support responsible development and long-term water resource sustainability in the County's ag-urban transition areas. The study will focus on unincorporated Larimer County lands experiencing development pressure over the next 15-30 years, emphasizing residential, commercial, and industrial zones adjacent to Front Range communities. The initial study will exclude mountain communities and properties with alluvial aquifer wells under state oversight.</p> <p>An expert engineering consultant will complete five integrated tasks: comprehensive data collection and hydrogeological mapping (in coordination with USGS, COGS, and Colorado State University); legal and policy analysis of Colorado water law and County regulations; GIS mapping of aquifer extents, development pressures, and water district boundaries; stakeholder engagement with water providers, municipalities, and state agencies; and preparation of final recommendations for groundwater management.</p>

Deliverables will include technical memoranda, GIS mapping products, legal summaries, and a comprehensive

report with recommendations for groundwater overlay zoning districts, Land Use Code updates, sustainable development guidelines, and aquifer storage strategies. All materials will be ADA compliant and written in plain language for public understanding and regulatory integration.

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)
90,000	Number of Coloradans Impacted by Incorporating Water-Saving Actions into Land Use Planning
500	Number of Coloradans Impacted by Engagement Activity
Other	

The Larimer County Groundwater Study deliverables will inform future water management decisions that will have measurable impacts, including the development of new groundwater supplies, adoption of groundwater conservation measures, and cost savings from avoided infrastructure investments in water-constrained areas.

Water Project Justification

Larimer County seeks \$300,000 in Colorado Water Conservation Board (CWCB) Colorado Water Plan grant funding with \$100,000 in match to complete a Larimer County Groundwater Study that will establish baseline data essential for responsible development decisions and long-term water resource sustainability in ag-urban transition areas. The Larimer County Water Master Plan (adopted December 2024) identified this study as a priority to address inconsistent water adequacy review processes and provide the technical foundation needed for informed well permitting decisions and Land Use Code updates in areas experiencing rapid growth pressure.

The proposed Larimer County Groundwater Study will advance the Colorado Water Plan vision for Vibrant Communities, which emphasizes that "holistic water management is essential for creating vibrant communities that balance water supply and demand needs to create a sustainable urban landscape" and calls for "planning that integrates land use and water solutions" (Colorado Water Plan, Chapter 6, p. 177). In alignment with Partner Actions focused on land use and water integration, the study will produce a comprehensive final report that includes an analysis of aquifer types, groundwater constraints and opportunities, legal frameworks, and current County policies to inform specific recommendations for groundwater overlay zoning districts, Land Use Code updates, water adequacy determination updates, sustainable development guidelines, 1041 regulation updates, and strategies for produced water management and aquifer storage and recovery (Colorado Water Plan, Chapter 6, p. 181).

The study will also advance Agency Action 1.6, which calls for communities to "use One Water strategies to achieve local goals related to meeting current and future water needs" (Colorado Water Plan, Chapter 6, p. 187). The "One Water" ethic encourages collaboration among all agencies with roles related to water resources to create a common framework for reliably managing water systems to meet public and environmental needs while reducing costs, improving resilience, and enhancing community livability. To complete the study, Larimer County will coordinate with municipalities, Northern Water, the Division of Water Resources, and local water districts to

share data, fill gaps in information, and develop a common framework for groundwater management (Colorado Water Plan, Chapter 6, p. 176 & 178).

The study will utilize multiple "Tools for Action" identified in the Colorado Water Plan, including "data collection and sharing," "land use and water planning integration," "public outreach and education," and "collaboration groups" (Colorado Water Plan, Chapter 1, p. 10).

Larimer County will integrate across action areas to advance a multi-benefit and collaborative approach to the groundwater study (Colorado Water Plan, Chapter 6, p. 195). The study will benefit the:

- Local government/planning sectors by providing essential groundwater data and policy tools to inform land use codes, zoning decisions, and responsible development guidelines.
- Water providers by delivering baseline groundwater information to support water adequacy determinations and long-term infrastructure planning decisions.
- Agricultural sector by recommending policies and tools that help preserve agricultural water rights and maintain farming viability through conservation easements and development transfer programs.
- Real estate and development sectors by establishing clear groundwater adequacy guidelines and constraints in different areas.
- Larimer County residents and businesses by improving water literacy and ensuring informed community participation in long-term water sustainability decisions.

The proposed Larimer County Groundwater Study will advance the South Platte Basin Implementation Plan's Strategic Vision, which calls for:

- Meeting the Municipal Supply Gap: The study will provide essential groundwater baseline data and water adequacy assessment tools that will help municipal water providers identify reliable groundwater sources and develop sustainable supply strategies to meet growing Front Range demands, supporting the basin's goal to "maximize development of native South Platte supplies" and "maintain and promote municipal and industrial conservation and efficiency" (Colorado Water Plan, Chapter 6, p. 122).
- Protecting Irrigated Agriculture: The study will recommend policy tools such as Transfer of Development Rights programs and groundwater conservation easements that help keep water tied to agricultural land, directly supporting the basin's goal to "maintain and improve irrigated agriculture" and addressing challenges from "urbanization and permanent transfer of agricultural supplies for municipal and industrial use" that threaten to decrease irrigated lands and impact the agricultural economy (Colorado Water Plan, Chapter 4, p. 122).
- Protecting and Enhancing Watersheds: The study will provide comprehensive groundwater mapping and analysis that supports integrated watershed management by identifying groundwater-surface water interactions, informing sustainable land use planning decisions, and establishing baseline conditions that protect watershed function in ag-urban transition areas where development pressure poses the greatest risk to watershed health.
- Implementing Projects: The study will deliver actionable policy recommendations, GIS mapping tools, and stakeholder engagement frameworks that provide the foundation for implementing future water supply projects, land use planning initiatives, and collaborative water management efforts, fulfilling the basin's emphasis on moving from planning to concrete project implementation while ensuring new projects consider groundwater sustainability and multi-purpose benefits.

Education Action Plan Integration: Stakeholder engagement will be central to the study. Public workshops and coordination with groundwater-dependent entities will improve community understanding of groundwater resources. The study will align with Education Action Plan equity and communication goals by producing all deliverables in plain language with ADA-compliant accessibility features and conducting inclusive public workshops that engage diverse community members.

By supporting informed land use decisions, protecting agricultural water resources, and enhancing community

water literacy, this project will advance the core objectives of Colorado's Water Plan while serving as a model for other rapidly growing areas across the state.

Related Studies

The proposed Larimer County Groundwater Study will implement recommendations from within the Larimer County Water Master Plan. Adopted in December 2024, the Larimer County Water Master Plan is a comprehensive strategy to address population growth and climate change impacts through protecting watersheds from wildfire threats, improving water conservation and efficiency, aligning land use with water resources, enhancing collaboration among water providers, and promoting public education. Strategy 4: Water Security in the Water Master Plan aims to improve and clarify the process for determining whether new developments will have adequate and secure water supplies in the future. Currently, the county reviews water adequacy letters from multiple water providers, but there is little consistency in the information provided and limited baseline data about groundwater resources and limitations. A robust groundwater study is needed to ensure responsible decision-making as population growth drives development pressures and an increase in requests for drilling wells in the ag-urban transition areas. Page 25 of the Water Master Plan identifies the following actions:

- Create consistency between water providers in the information provided to the County during the development review process;
- Involve water provider stakeholders in future zoning discussions.
- Identify approved but unbuilt projects affected by current water moratoriums and collaborate with providers to address the issue.
- Start a conversation with research institutions like the US Geological Survey (USGS), Colorado Geological Survey (COGS), and Colorado State University (CSU) about groundwater supply mapping and analysis.

The project team will follow the Water Master Plan's recommendations and collaborate with USGS, COGS, and Colorado State University to help establish the baseline data for the study. The study will help achieve the desired lasting impacts listed in the Water Master Plan, which include better alignment of land use plans with water needs, improved coordination with water providers related to zoning changes, and alignment with state statutes around water adequacy requirements.

The study will also build upon the Larimer County Regional Water Existing Conditions Report (Brendle Group, 2022). This precursor study provided foundational water resource data that informed the Water Master Plan development and documented that Larimer County has 13,090 water wells, with that number expected to increase as water demand continues to grow.

Study findings will inform updates to the Larimer County Land Use Code and provide essential data for implementing the Colorado Water Plan and Water Master Plan's broader goals of aligning land use with water resources and protecting water supplies for future generations. Stakeholder engagement for the study will complement the CWCB's engagement programs, including the Climate & Water Workshops, by promoting water resiliency literacy and engagement.

Taxpayer Bill of Rights

Larimer County has voter authorization to receive and expend state grants without TABOR spending limitations. In 1999, Larimer County was authorized by voters to retain and spend revenues under the TABOR limitation ("de-Brucing") without raising taxes.