



**COLORADO**

**Colorado Water  
Conservation Board**

Department of Natural Resources

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**TO:** Colorado Water Conservation Board Members

**FROM:** Cole Bedford P.E., Chief Operating Officer  
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Lauren Duncan, Regional Grant Manager (Arkansas)  
Ashley Garrison, Regional Grant Manager (Colorado, Gunnison,  
Yampa/White/Green)  
Laura Spann, Regional Grant Manager (Southwest, Rio Grande)

**DATE:** September 18, 2024

## **CONSENT AGENDA ITEM: CA7a-CA7i Water Plan Grants**

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### **Staff Recommendation**

Staff recommends Board action on 3 water plan grant applications between \$50,000 and \$100,000 and 6 applications not recommended for funding as described in the following summary tables.

### **Introduction**

The 2024 Water Projects Bill (SB24-1435) appropriated \$23.3M for Water Plan Grant awards available beginning in fiscal year 2025. Water Plan Grant awards are made in two cycles during the fiscal year. The due date for the first review cycle of the 2025 fiscal year was July 1, 2024. By that date, CWCB had received 41 applications requesting \$11.4M. All applications are available for public viewing online at: <https://cwcb.colorado.gov/july-2024-water-plan-grant-applications>

The process of reviewing the applications consisted of soliciting feedback from CWCB regional and technical experts, consultations with other state agencies, dialog with the applicants, and consideration by all CWCB sections. During the process, three applicants withdrew resulting in 38 staff recommendations for consideration. The end result of the review is a portfolio of recommendations representing the strongest individual projects which collectively best advance the Colorado Water Plan. \$9.3M in awards are recommended.

Per CWCB Policy #25, grant recommendations are considered for approval in three separate groups depending on the amount recommended. Those awards above \$100,000 will be placed on the full agenda for consideration by the Board, those between \$50,000 and \$100,000 and those not recommended for funding will be placed on the consent agenda, and those below \$50,000 are considered by the CWCB Director. This consent agenda item recommends approval of 3 applications between \$50,000 and \$100,000 for a total recommended amount of \$263K. It also recommends no funding for 6 applications. These are summarized in Table 1. See attached Data Sheets for additional project details.



**Table 1: Award Recommendations between \$50,000 and \$100,000; and no award recommendations**

<b>Category</b>	<b>Number of Applications</b>	<b>Recommended</b>
Agriculture	3	\$ 95,975.00
Conservation & Land Use	1	\$ 0.00
Engagement & Innovation	3	\$ 166,574.00
Water Storage & Supply	1	\$ 0.00
Watershed Health & Recreation	1	\$ 0.00
<b>Total</b>	<b>9</b>	<b>\$ 262,549.00</b>

**Project Issues/Additional Needs:**

- All funding awards are contingent upon the applicants' ability to secure match funding.
- Grantees should adequately address CWCB staff comments to scopes of work and engineering designs (when applicable). Staff will contact each successful applicant to discuss comments and contracting procedures prior to contracting.
- All grantees should adhere to their organizational procurement policies when hiring contractors and consultants. CWCB recommends that State procurement policies be used as a guide if an organization does not have procurement policies.
- Projects should comply with the CWCB's Rules and Regulations for Regulatory Floodplains in Colorado, when applicable.



#### Agriculture

	Applicant	Project Name	Request	Recommendation	Total Project Cost	Match	Basin
7a	Colorado Canal Company	Colorado Canal Company Strategic Water Plan	\$95,975.00	\$95,975.00	\$127,975.00	25%	Arkansas
7b	Colorado Agrivoltaic Learning Center	Educating Colorado Communities on Agrivoltaics	\$100,411.20	\$0.00	\$134,497.20	25%	Arkansas; Colorado; Gunnison; Metro; Yampa/White/Green; Rio Grande; South Platte; Southwest; North Platte
7c	Colorado Agrivoltaic Learning Center	Solar Array Lands Supporting Agribusinesses (SALSA)	\$342,000.00	\$0.00	\$691,170.60	51%	South Platte

**\$95,975.00**

#### Conservation & Land Use

	Applicant	Project Name	Request	Recommendation	Total Project Cost	Match	Basin
7d	Deutsch Domestic Water Company, Inc	Water Efficiency and Supply Project	\$450,000.00	\$0.00	\$1,000,000.00	55%	Gunnison

**\$0.00**

#### Engagement & Innovation

	Applicant	Project Name	Request	Recommendation	Total Project Cost	Match	Basin
7e	Blue Elements	Watershed Stewards AmeriCorps Program	\$84,226.00	\$84,226.00	\$234,366.00	78%	Arkansas
7f	Grand County Water Information Network	Upper Colorado River Interactive Data Platform	\$82,348.00	\$82,348.00	\$109,800.00	25%	Colorado
7g	Cottonwood Institute	Cottonwood Institute's Colorado Water Project	\$20,000.00	\$0.00	\$42,614.00	53%	Colorado; Arkansas

**\$166,574.00**



### Water Storage & Supply

	Applicant	Project Name	Request	Recommendation	Total Project Cost	Match	Basin
7h	Town of Nederland	Town of Nederland Well Feasibility Study	\$45,394.00	\$0.00	\$64,849.00	30%	South Platte
\$0.00							

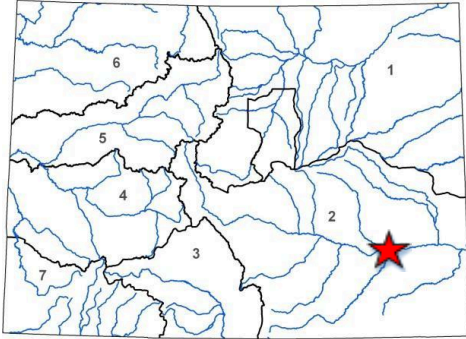
### Watershed Health & Recreation

	Applicant	Project Name	Request	Recommendation	Total Project Cost	Match	Basin
7i	Town of Lyons	Summit Riparian Restoration	\$330,569.50	\$0.00	\$661,139.00	50%	South Platte
\$0.00							





## Water Plan Grant Program Application



LOCATION	
County/Countries:	Crowley, Pueblo
Drainage Basin:	Arkansas

DETAILS	
Total Project Cost:	\$127,975.00
Water Plan Grant Request:	\$95,975.00
Recommended amount:	\$95,975.00
Other CWCB Funding:	\$0
Other Funding Amount:	\$0
Applicant Match:	\$32,000.00
Project Type:	Design & Engineering
Project Category:	Agriculture
Measurable Result:	120 Coloradans impacted by engagement activities

Colorado Water Plan Grant funding will support the development of a strategic water management plan to assess opportunities for improving and sustaining operations by modernizing infrastructure and implementing new water management strategies. The resulting plan will clarify the most effective ways to ensure the long-term sustainability of irrigated agriculture for company shareholders.

The Colorado Canal Company operates a water collection, delivery, and storage system as part of a larger system that includes the Twin Lakes Reservoir and Canal Company, Lake Meredith Reservoir, and Lake Henry Reservoir near Ordway. The proposed strategic planning project aims to evaluate the most sustainable and resilient future for the Colorado Canal Company and its shareholders, addressing challenges like aging infrastructure and the future of agricultural production in the region.

The project will include the following components: review of ditch system operations to identify water delivery service needs, survey of farm shareholders about company operations and future direction, economic analysis of current farm operations in the company service area, analysis of capital projects and operational concepts that provide water and economic benefits to the company and the development of a strategic plan to guide the company's efforts and investments.

The majority of Water Plan Grant dollars would go toward engaging farm stakeholders in the analysis of current operations, identifying capital infrastructure enhancements and developing new water management strategies to improve water deliveries and ensure economic viability for company shareholders.

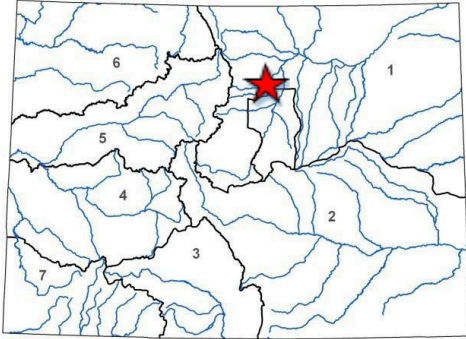
This project demonstrates a commitment to collaboration by including agricultural and municipal shareholders. Creating a strategic plan for continued farming operations in the face of multiple water challenges is in alignment with the goals of the Colorado Water Plan and the Arkansas Basin Implementation Plan. This project represents an innovative, scalable, and replicable approach to agricultural water management planning.

### Funding Recommendation:

Staff recommends full funding of \$95,975.00 to the Colorado Canal Company for the Colorado Canal Company Strategic Water Plan.



## Water Plan Grant Program Application



LOCATION	
Counties:	Statewide
Drainage Basin:	Statewide

DETAILS	
Total Project Cost:	\$134,497.20
Water Plan Grant Request:	\$100,411.20
Recommended amount:	\$0
Other CWCB Funding:	\$0
Other Funding Amount:	\$0
Applicant Match:	\$34,086.00
Project Type:	Education
Project Category:	Agricultural
Measurable Result:	700 Coloradans impacted by engagement activities

Colorado Agrivoltaic Learning Center's (CALC) Colorado Water Plan Grant application would support a one-year, statewide outreach and education campaign to share the benefits solar panels can have for agriculture by reducing water use and providing shade for crops. CALC is a Longmont-based nonprofit whose mission is to educate Coloradans about the coupling of agricultural activities and solar arrays known as agrivoltaics.

Previous research by the applicant has shown that solar panels create microclimates that may benefit agriculture by reducing water usage and keeping vegetation and livestock cooler in the summer heat. This project would facilitate the usage of solar array land that may use less water to produce agricultural products while reducing the drying up of agricultural lands underneath solar panels.

As part of their outreach campaign, CALC would host informational sessions in 32 Colorado counties to engage community organizations, local solar companies, agricultural organizations, and county agency staff about the diverse utilization of land within solar arrays.

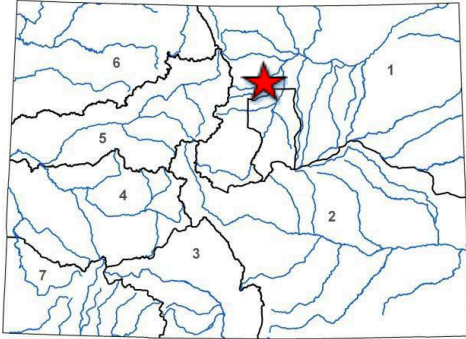
Main topics would include the science of agrivoltaics, alternative solar siting regulations, safety considerations, and best practices to enable optimal installation of agrivoltaic systems. CALC would also host a two-day educational workshop for up to 35 participants at their demonstration property, Jack's Solar Garden in Boulder County.

### Funding Recommendation:

Staff is not recommending funding to the Colorado Agrivoltaic Learning Center for Educating Colorado Communities on Agrivoltaics. The application did not score competitively against other applications in the category. The application did not clearly show the potential for this project to generate new information about water management or have a positive impact on Colorado's water supply challenges.



## Water Plan Grant Program Application



LOCATION	
<b>Counties:</b>	Boulder; Weld; Denver; Adams; Arapahoe; Morgan
<b>Drainage Basin:</b>	South Platte

DETAILS	
<b>Total Project Cost:</b>	\$691,170.60
<b>Water Plan Grant Request:</b>	\$342,000.00
<b>Recommended amount:</b>	\$0
<b>Other CWCB Funding:</b>	\$0
<b>Other Funding Amount:</b>	\$0
<b>Applicant Match:</b>	\$349,170.60
<b>Project Type:</b>	Implementation
<b>Project Category:</b>	Agricultural
<b>Measurable Result:</b>	30 Coloradans impacted by incorporating water-saving actions into land use planning; 610 Coloradans impacted by engagement activities

The Colorado Agrivoltaic Learning Center's (CALC) Colorado Water Plan Grant application would support pairing operating solar arrays with 10 Latinx or immigrant community members interested in starting agribusinesses with the arrays. CALC is a Longmont-based nonprofit whose mission is to educate Coloradans about the coupling of agricultural activities and solar arrays known as agrivoltaics.



The Solar Array Lands Supporting Agribusinesses (SALSA) project would subcontract with agribusinesses for a 12-month performance period, showcasing the potential of agrivoltaics. SALSA participants would receive training in agrivoltaics and water management techniques, community networking, and support from CALC to facilitate their success.

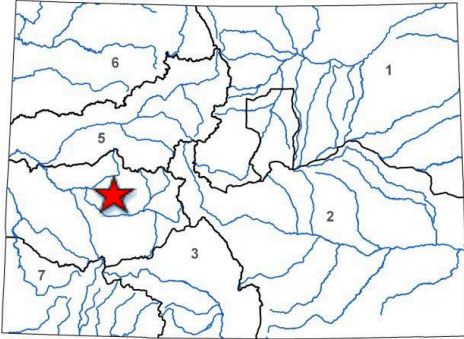
The goals of the project would be to demonstrate how agrivoltaics could provide local agribusiness opportunities, maximize land utilization, and conserve water. SALSA would increase land access for Latinx and immigrant communities, reduce the financial risk associated with starting an agribusiness, and share lessons with policymakers and stakeholders through a report and in-person visits.

In their application, CALC presented that the shade created by the solar panels may decrease evaporation rates, thereby reducing water needs for the plants and soil. Farmers may also select crops and forage suited for partial shade and likely with lower water requirements.

### Funding Recommendation:

Staff is not recommending funding to the Colorado Agrivoltaic Learning Center for Solar Array Lands Supporting Agribusinesses (SALSA). The application did not identify a Colorado water challenge to be the primary focus of the project and therefore did not score competitively against other applications in the category. The application did not clearly show the potential for this project to generate new information about water management or have a significant positive impact on Colorado's water supply challenges.

## Water Plan Grant Program Application



LOCATION	
County/Countries:	Delta
Drainage Basin:	Gunnison

DETAILS	
Total Project Cost:	\$1,000,000.00
Water Plan Grant Request:	\$450,000.00
Recommended amount:	\$0
Other CWCB Funding:	\$0
Other Funding Amount:	\$450,000.00
Applicant Match:	\$100,000.00
Project Type:	Design & Construction
Project Category:	Conservation and Land Use Planning
Measurable Result:	525 Coloradans impacted by engagement activities

The Deutsch Domestic Water Company's (DDWC) Water Plan Grant application would support seven separate water-related conservation projects and initiatives in Delta and Montrose Counties. The Deutsch Domestic Water Company is a Special Purpose Water Carrier Company serving the rural area southeast of the Town of Crawford.

The seven individual projects and initiatives are:

1. Piping a half mile of the currently unlined irrigation channel of Young Ditch
2. Installing flow measurement devices on Young Ditch
3. Replacing 100 municipal water meters with SCADA equipped instrumentation
4. Developing a turf replacement incentive program
5. Developing a smart irrigation devices incentive program
6. Developing a high-efficiency indoor appliances and fixtures incentive program
7. Installing solar panels to reduce energy costs associated with pumping

DDWC submitted a Water Plan Grant application for substantially the same scope of work for the December 1, 2023 review round. That application requested \$550,000, but was not recommended for funding because several of the projects and initiatives did not align with the Conservation and Land Use category requirements.

DDWC was awarded a \$450,000 grant through the US Bureau of Reclamation's Conservation Measures & Renewable Improvements Grant Program in February 2024. Necessary permitting associated with that grant award are currently underway. DDWC intends to cash fund \$100,000; leaving a \$450,000 shortfall which this application is intended to cover.

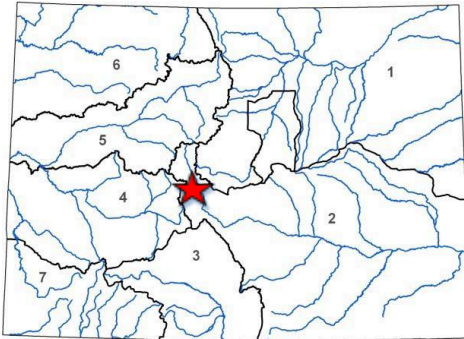
### Funding Recommendation:

Staff is not recommending funding to the Deutsch Domestic Water Company, Inc. for the DDWC Conservation Measures and Renewable Energy Improvements. The application scope of work includes seven projects and initiatives which, taken as a whole, do not align with the Conservation and Land Use category requirements.





## Water Plan Grant Program Application



LOCATION	
County/Countries:	Chaffee, Lake, Fremont
Drainage Basin:	Arkansas

DETAILS	
Total Project Cost:	\$234,366.00
Water Plan Grant Request:	\$84,226.00
Recommended amount:	\$84,226.00
Other CWCB Funding:	\$0
Other Funding Amount:	\$0
Applicant Match:	\$150,140.00
Project Type:	Capacity Building
Project Category:	Engagement and Innovation
Measurable Result: 6,000 Coloradans impacted by monitoring and engagement activities, 152 miles of stream impacted through stewardship, 300 ac impacted through restoration	

Colorado Water Plan Grant funds will support Blue Element's Watershed Stewards AmeriCorps Program, aimed at building a skilled and diverse water workforce through internships. The grant will supplement current AmeriCorps stipends with a \$600 monthly housing allowance per member, improving recruitment and retention of participants who work with water-focused organizations in the Arkansas Valley.

The program addresses challenges in attracting and retaining water professionals due to low stipends and high living costs. By providing housing support, this grant enables the program to sustain and grow the water workforce in alignment with Colorado Water Plan goals. Previous funding from Serve Colorado supports the program's basic stipends, but additional resources are needed for housing.

Grant funds will be used for housing allowances for AmeriCorps members, supporting Watershed Education, Stewardship, and Water Quality Monitoring teams. This funding enhances member retention, recruitment, and training, leading to stronger community engagement, watershed health initiatives, and water quality monitoring.

Success will be measured by improved recruitment and retention, increased community outreach, enhanced water quality monitoring, and career progression of program alumni. Evaluation methods include participant surveys, activity logs, and tracking professional outcomes.

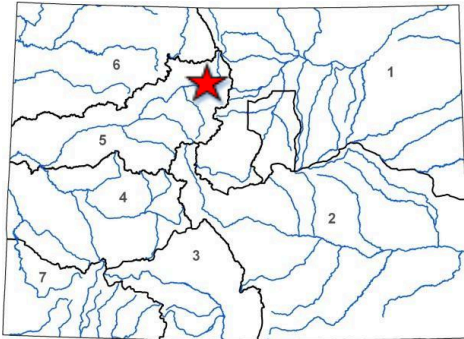
Partners include Serve Colorado, Greater Outdoors Colorado, and the Colorado Department of Public Health and Environment, which provide funding and support. Local schools, watershed groups, and water organizations host and mentor program participants, facilitating community education and engagement.

### Funding Recommendation:

Staff recommends full funding of \$84,226.00 to Blue Elements for the Watershed Stewards AmeriCorps Program.



## Water Plan Grant Program Application



LOCATION	
County:	Grand
Drainage Basin:	Colorado

DETAILS	
Total Project Cost:	\$109,800.00
Water Plan Grant Request:	\$82,348.00
Recommended amount:	\$82,348.00
Other CWCB Funding:	\$0
Other Funding Amount:	\$6,450.00
Applicant Match:	\$21,002.00
Project Type:	Engagement
Project Category:	Engagement and Innovation
Measurable Result:	Engagement from over 20 membership organizations and water users throughout Grand County

This project proposes to develop and publish a web platform to make Upper Colorado River water resources data easily accessible. The platform will link directly to existing public and private datasets from the US Geological Survey, Colorado Department of Public Health and Environment, Northern Water, and others. Water Plan Grant funding would support technical efforts to design the platform, education and outreach, and project management costs.

The Grand County Water Information Network (GCWIN) was established in 2004 to enable better decision-making through science-based water quality monitoring, information-sharing and educational programming in Grand County. GCWIN currently operates five programs: stream temperature monitoring along the Fraser and Colorado Rivers, water clarity monitoring of Grand Lake and Shadow Mountain Reservoir, temperature and specific conductivity in the Three Lakes region, macroinvertebrate monitoring, and River Watch.

This project will integrate over 9 million lines of data currently available in the Ambient Water Quality Monitoring System (AWQMS) database. Data include stream temperature, air temperature, sediment, macroinvertebrates, water quality, and lake clarity. The AWQMS platform provides a secure repository to store and organize data, and the data is publicly accessible, but it is challenging to query, view, and utilize the data. The new Data Platform will fulfill GCWIN's mission to organize and share data in a comprehensive, user-friendly format. This Data Platform streamlines access to a complete dataset, customizable for users to inform water management decisions in the Upper Colorado River watershed.

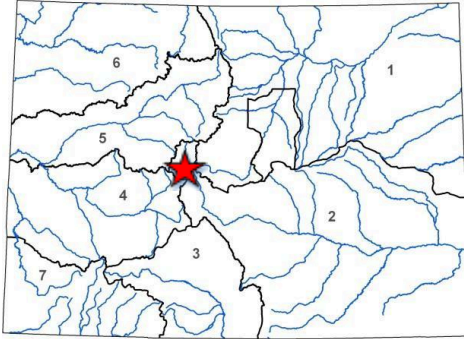
The project will:

1. Develop a cloud-based platform with a GIS map interface that is publicly available.
2. Serve as a repository and access point for data, reports, and education.
3. Integrate information for select parameters such as summary statistics, comparisons between water years, and automation of reports.
4. Customize visualizations to illustrate measurements, calculations, and/or analytics. These visualizations will be adjustable so users can view datasets of interest.
5. Educate users on how to use the Data Platform. Integrate its use in various public platforms and stakeholder groups.
6. Include future capabilities of the Data Platform to meet evolving needs.

### Funding Recommendation:

Staff recommends full funding of \$82,348.00 to Grand County Water Information Network for the Upper Colorado River Interactive Data Platform.

## Water Plan Grant Program Application



LOCATION	
County/Countries:	Lake, Summit, Chaffee
Drainage Basins:	Colorado, Arkansas

DETAILS	
Total Project Cost:	\$42,614.00
Water Plan Grant Request:	\$20,000.00
Recommended amount:	\$0.00
Other CWCB Funding:	\$0
Other Funding Amount:	\$14,200.00
Applicant Match:	\$8,414.00
Project Type:	Education
Project Category:	Engagement and Innovation
Measurable Result:	45 Coloradans impacted by engagement activities

The Colorado Water Plan Grant would support Cottonwood Institute's Colorado Watershed Project, which provides 45 Denver-area youth with immersive, five-day environmental service programs in Summit County. The grant would help fund educational trips focused on water quality sampling at Clinton Creek and revegetation efforts along the East Fork Arkansas River. The program aims to deepen students' understanding of Colorado's watershed issues while building leadership and environmental stewardship skills.

The project would be intended to address the need for youth education and engagement in water conservation and watershed management. By exposing students to hands-on conservation work and service learning, the program would foster understanding of local water issues and prepare the next generation of environmental stewards.

Success would be measured by the number of youth participants (45), the completion of water quality sampling and revegetation projects, and the development of students' leadership and environmental stewardship skills. Evaluation methods would include participant feedback, project completion reports, and skill assessments.

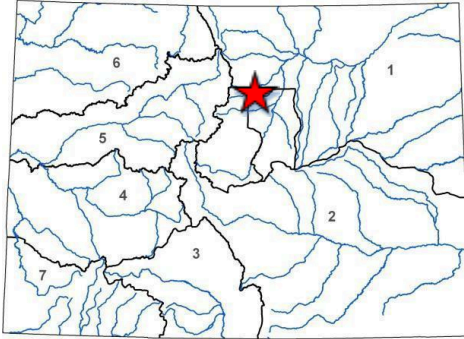
Project partners include Lincoln Hills Cares and RiseUp Community High School, which would provide additional funding and participant support. These partners would help facilitate the service learning projects, leadership activities, and outdoor education components of the program.

### Funding Recommendation:

Staff is not recommending funding to the Cottonwood Institute for the Cottonwood Institute's Colorado Watershed Project. The application was incomplete, in part, due to a misunderstanding over the difference between the Engagement and Innovation Category of the Water Plan Grant Program and the Public Education, Participation & Outreach (PEPO) Grant Program. As submitted, the project scope, approach, and partner collaboration lacked clarity.



## Water Plan Grant Program Application



LOCATION	
County:	Boulder
Drainage Basin:	South Platte

DETAILS	
Total Project Cost:	\$64,849.00
Water Plan Grant Request:	\$45,394.00
Recommended amount:	\$0
Other CWCB Funding:	\$0
Other Funding Amount:	\$0
Applicant Match:	\$19,455.00
Project Type:	Study
Project Category:	Water Storage & Supply
Measurable Result:	None

The Town of Nederland (the Town) is requesting funding to complete a feasibility study to determine if reestablishing decreed alluvial wells on Middle Boulder Creek could supplement their existing raw water supply. The application described Colorado Water Plan Grant funding which would support the Town and its consultants to establish monitoring wells and conduct water quality, level, and yield testing.

At times of low flow in Middle Boulder Creek, the Town has struggled to meet its full raw water demand from the existing surface diversion, having to resort to using a temporary pump in the creek. In addition to the surface diversion, the Town's decreed augmentation plan allows water to be taken from several alluvial wells, which were originally drilled in the 1960s. These alluvial wells have not been maintained, do not have pumps, and are currently inoperable.

The Town and its consultants plan to install three monitoring wells within 200 feet of the old wells. These monitoring wells would assess whether a production well on the Town's property could supply sufficient yield and water quality to meet its needs. The study would determine if the Town can conjunctively use both surface water and groundwater to meet their supply gap, which is expected to grow with future population growth.

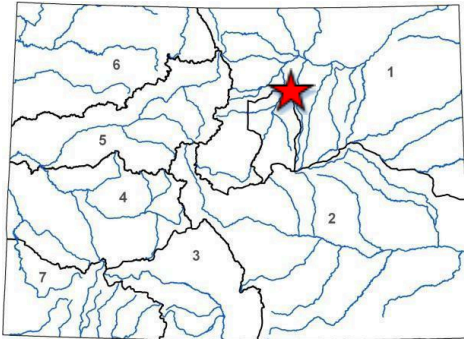
Match funding would be provided by the Town of Nederland.

### Funding Recommendation:

Staff is not recommending funding to the Town of Nederland for the Town of Nederland Well Feasibility Study. The proposed project does not meet the Water Plan Grant Water Storage and Supply category criteria, as the study would not lead to the development of a new source of raw water supply, rather, the replacement of existing, failing infrastructure.



## Water Plan Grant Program Application



LOCATION	
County:	Boulder
Drainage Basin:	South Platte

DETAILS	
Total Project Cost:	\$661,139.00
Water Plan Grant Request:	\$330,569.50
Recommended amount:	\$0
Other CWCB Funding:	\$0
Other Funding Amount:	\$0
Applicant Match:	\$330,569.50
Project Type:	Construction
Project Category:	Watershed Health & Recreation
Measurable Result:	400 linear feet of streambank restored

The Town of Lyons is requesting funding for the construction phase to restore 400 linear feet of streambank in Lyons Valley Park located along the St. Vrain Creek. Colorado Water Plan Grant funding would support construction costs including mobilization, excavation, erosion control, seeding, and shrub and tree planting.

Many communities in north-central Colorado, including Lyons, were impacted by significant flooding in September 2013. Among these impacts was streambank erosion on St. Vrain Creek through the Town. The 400-foot reach that is the subject of this grant request was identified in the Emergency Watershed Protection Program undertaken after the 2013 flood. At that time, however, the reach was privately owned and the owner opted out of participation. The property has since been acquired by the Town of Lyons.

In September 2023, the Town of Lyons submitted a Water Plan Grant request of \$75,000 to undertake a planning and design effort to restore the 400-foot reach of eroded streambank. That request was recommended by Staff and approved by the Board in September 2023. This funding request for the construction phase of the effort is intended as a continuation of the planning and design work.

Match funding for construction would be provided by the Town of Lyons.

### Funding Recommendation:

Staff is not recommending funding to the Town of Lyons for the Summit Riparian Restoration. CWCB is funding the design phase of this project and has yet to review and comment on the design, a required deliverable for the design scope. Furthermore, this project did not meet the Water Plan Grant Watershed Health and Recreation category criteria, as it has not exemplified broad-based involvement or demonstrated sufficient commitment to collaboration.