

**COLORADO**Colorado Water
Conservation Board

Department of Natural Resources

Colorado Water Conservation Board

Water Plan**Water Project Summary**

Name of Applicant	Western Resource Advocates Project-01858
Name of Water Project	Pursuing a Statewide Model Water Efficient Landscape Ordinance
Grant Request Amount	\$149,760.00
Primary Category	\$149,760.00
<i>Conservation & Land Use Planning</i>	
Total Applicant Match	\$0.00
<i>Applicant Cash Match</i>	
<i>Applicant In-Kind Match</i>	
Total Other Sources of Funding	\$187,200.00
<i>Western Resource Advocates</i>	\$37,440.00
<i>Colorado Water Conservation Board</i>	\$149,760.00
Total Project Cost	\$336,960.00

Applicant & Grantee Information

Name of Grantee: Western Resource Advocates

Mailing Address: 2260 Baseline Road, Suite 200 Boulder CO 80302

FEIN: 841,113,831

Organization Contact: Rick Trilsch

Position/Title: Vice President, Finance and
Administration

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Phone: 720-763-3723

Organization Contact - Alternate: Lindsay Rogers

Position/Title: Water Policy Analyst

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Grant Management Contact: Rick Trilsch

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Email: rick.trilsch@westernresources.org

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Grant Management Contact - Alternate: Lindsay Rogers

Position/Title: Water Policy Analyst

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Description of Grantee/Applicant

Western Resource Advocates (WRA) protects the West's land, air, and water to ensure vibrant communities exist in balance with nature.

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 40.015000
 Longitude 40.015000
 Lat Long Flag Default/Proponent headquarters: If the location cannot be defined with flags above, use location of project proponent headquarters
 Water Source The statewide model for water efficient landscape ordinance will be applicable to all of Colorado's water basins.
 Basins Arkansas; Colorado; Gunnison; Metro; Yampa/White/Green; Rio Grande; South Platte; Southwest; Nort...
 Counties
 Districts

Water Project Overview

Major Water Use Type Municipal
 Subcategory
 Scheduled Start Date - Design
 Scheduled Start Date - Construction
 Description

This Water Plan grant will support the Colorado Water Conservation Board in developing and implementing a Model Water Efficient Landscape Ordinance (Model Ordinance) to support Colorado communities in requiring or encouraging more water efficient landscaping in new and redevelopment proposals. Successful project implementation will result in reduced water demands for new developments, ultimately fostering water security and climate resiliency in Colorado.

WRA will achieve this by: 1) conducting research and comparative analysis on existing model landscape ordinances from around the western United States; 2) interviewing communities from across the state to solicit feedback on what to include in the model ordinance and how to make it most functional; 3) drafting, reviewing, and finalizing the state model ordinance using industry best practices with regional variations and flexibility for local adaptations; and 4) sharing the model standards widely with Colorado's land use planning and water conservation community and providing hands-on assistance to support communities in adopting all or part of the model ordinance.

WRA will achieve this by: 1) conducting research and comparative analysis on existing model landscape ordinances from around the western United States; 2) interviewing communities from across the state to solicit feedback on what to include in the model ordinance and how to make it most functional; 3) drafting, reviewing, and finalizing the state model ordinance using industry best practices with regional variations and flexibility for local adaptations; and 4) sharing the model standards widely with Colorado's land use planning and water conservation community and providing hands-on assistance to support communities in adopting all or part of the model ordinance.

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)
400,000	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)
300,000	Number of Coloradans Impacted by Incorporating Water-Saving Actions into Land Use Planning
	Number of Coloradans Impacted by Engagement Activity

Water Project Justification

Based on the Water Plan Framework for State of Colorado Support, this project fully meets all of the criteria for demonstrating a commitment to collaboration, addressing an identified water gap, demonstrating sustainability, and establishing the technical feasibility of water efficient landscape ordinance implementation. The project helps meet CWP conservation and land use planning goals, avoids adverse environmental impacts, and maximizes the use of water resources.

Integrated water and land use planning strategies—key among them being water efficient landscape standards—can make a significant difference in the water “footprint” of Colorado's growing population. One of the primary causes of the projected gap between Colorado's future water supply and demand is the projected population growth from 5.4 million people to as many as 8.5 million by 2050 (CWP Analysis & Technical Update; xxvii). How this growth occurs is of utmost importance in managing future water supply and demand. Colorado's Water Plan, the Analysis and Technical Update to the Water Plan, and nearly all of the Basin Implementation Plans (BIPs) emphasize the role of improved water efficiency and water conservation as important components

to reduce the municipal and industrial (M&I) gap. The plans recognize that integrating water with land use planning is critical to ensuring that any future growth occurs as water-efficiently as possible, particularly when it comes to outdoor landscapes and irrigation practices.

Colorado Water Plan:

This project is specifically designed to advance two of the Colorado Water Plan's measurable objectives: 1) "to achieve 400,000 acre-feet of municipal and industrial water conservation by 2050", noting "Every acre-foot of conserved water used to meet new demands is an acre-foot of water that does not need to come from existing uses" and 2) "that by 2025, 75 percent of Coloradoans will live in communities that have incorporated water-saving actions into land-use planning" (CWP, p. 10-5).

Related to the water conservation measurable objective, an action identified in the CWP is to: "Support local water smart ordinances: Over the next two years, the CWCB will provide trainings that support local regulatory efforts that shape the ways in which new construction interacts with water use. For example, local jurisdictions could craft landscape and irrigation ordinances, tap fees that reflect actual water uses, education or certification for landscape professionals, green infrastructure ordinances, and more stringent green construction codes that include higher-efficiency fixtures and appliances and water-wise landscapes" (CWP, p. 6-73).

This project will provide communities—that may otherwise lack the capacity or expertise—with a turnkey resource for updating and/or implementing water efficient landscaping and irrigation standards to ensure that new development is occurring as water efficiently as possible.

Related to the land use measurable objective, the CWP states: "Encourage the use of local development tools: Through voluntary trainings in 2016, the CWCB and DOLA will encourage local governments to incorporate best management practices for water demand management, water efficiency, and water conservation into land-use decisions". A specific training topic included is "Introducing landscape and irrigation ordinances" (CWP p. 6-89).

A key component of this project will be voluntary trainings for water conservation professionals, land use planners, and elected decisionmakers on the components of the model ordinance and how to adapt and implement it in their communities. WRA will also provide one-on-one technical assistance to communities in need of additional support to adopt and implement the recommended standards.

An additional land use action described in the Plan is to: "Strengthen partnerships: To be successful in integrating land-use and water planning, the CWCB will need to partner with many different agencies and groups. Within the next year, the CWCB will establish meetings with various agencies to map out ways in which the CWCB and other agencies can work together on these issues. Non-governmental organizations, such as Keystone Center, Alliance for Water Efficiency, Western Resource Advocates, American Planning Association, and economic development councils, can advance land-use and water integration innovation and research" (CWP p. 6-90).

CWCB and the Department of Local Affairs (DOLA) have partnered to create the Water and Land Use Planning Alliance - a consortium of NGOs, municipalities, utilities, academics, and state agencies - and WRA is an active participant. We will leverage the expertise and connections within this group to garner feedback on the model ordinance, identify relevant resources, and conduct outreach to the water conservation and planning community.

In addition, WRA has previously, and will continue to, partner with additional key groups identified by the CWCB, including water providers, Colorado Municipal League, American Planning Association, DOLA, green industry

groups, Colorado WaterWise and other NGOs (CWP Section 10.2, pp. 10-5). We will collaborate with this network of partners to share the model ordinance and assist communities with implementation.

Analysis and Technical Update to the Water Plan:

The 2019 Analysis and Technical Update to the Water Plan (Technical Update) states “per capita baseline system demand has decreased from 172 to 164 gpcd – a 5 percent reduction in demands between 2008 and 2015. However, even the Technical Update’s lowest water demand estimations under a “Weak Economy” scenario predict increased water usage of 35 percent. While efforts to date to increase municipal conservation are laudable, given the State’s expected population growth of 63.5% – from 5.4 million people in 2019 to 8.5 million by 2050- in order to achieve the CWP’s conservation objectives, communities will need to take far more significant action and invest further in their water efficiency and integrated planning efforts (CWP Technical Update, p. xxvii). This model landscape ordinance initiative will provide communities with the tools and resources they need to significantly reduce landscape water demand.

Basin Implementation Plans (BIPs)

The South Platte BIP (SPBIP) includes a solution to “maintain leadership in conservation and reuse and implement additional measures to reduce water consumption rates” (SPBIP p.S-12), and calls for “enhancing water use efficiencies (conservation and reuse)” (SPBIP p. S-10). The SPBIP’s vision for meeting the east slope municipal gap includes “reaching enhanced levels of municipal conservation and reuse” (SPBIP p.1-20). The SPBIP includes 415,000 acre-feet of conservation savings between 2000 and 2050 (SPBIP Table 4-9, p.4-22). Water efficiency and conservation is a prominent theme throughout the South Platte BIP.

The Arkansas BIP lists Landscape Management as a key component of Local Conservation Planning, stating “improved landscape design, installation (including soils and irrigation), and maintenance can effectively reduce outdoor demand as turf grass expanses are replaced with engineered and managed native plantings and natural landscapes.” (Ark BIP p.192).

The Colorado BIP theme four is to “encourage a high level of basin-wide conservation” stating “although many stakeholders within the Basin have begun to embrace the importance of conservation, more conservation, efficiency and reuse efforts are needed” (COBIP p. 16). An example of how water providers are accomplishing this includes “adoption of plans that require more xeriscaping, using plants that don’t require irrigation, and reducing irrigation of remaining turf” (CO BIP p. 60).

The Gunnison BIP Principle 5 is “water conservation, demand management, and land use planning that incorporates water supply factors should be equitably employed statewide” (Gun BIP p. 43). Regarding the development of new Colorado River supplies, the BIP includes a criterion that “entities should first reach high levels of municipal and industrial water conservation as defined in SWSI 2010 prior to further development of Colorado River System water” (Gun BIP p. 42).

The Southwest BIP includes a goal to “promote wise and efficient water use through implementation of municipal conservation strategies to reduce overall future water needs” (SWBIP Table 1, p. 14). It also states “the Roundtable continues to firmly believe that conservation and reuse must be a major means to reduce demand and address future gaps and that no TMD should proceed unless high level conservation goals are achieved” (SWBIP p.102). “Recognizing that municipal demand is one of the driving forces behind agricultural dry-up and that outdoor urban irrigation is one of the highest consumptive uses of municipal water. The Roundtable agrees that before it will consider a new TMD, outdoor irrigation by water providers using agricultural buy-up and dry-up and/or pursuing a TMD should meet the higher goal of 70/30 ratio of inside to outside use of municipal water by

the year 2030” (SWBIP p. 2).

The Yampa White Green BIP states that “water conservation efforts are also included as an important component of meeting municipal demands in the basin” with a related process to “encourage municipal entities to meet some future municipal water needs through water conservation and efficiency” (YWG BIP p. 1-10).

The North Platte BIP includes a goal to “support the equitable statewide application of municipal water conservation” (NPBIP p. 18). It states, “The NPBRT supports a wide variety of water conservation methods including municipal conservation programs, strategic growth and development, and landscape limitations” (NPBIP p. 25).

Colorado’s Water Plan Framework for State of Colorado Support:

This project meets all of the Criteria for State Support listed in Colorado’s Water Plan as detailed below.

Does the project proponent demonstrate a commitment to collaboration?

Yes. The proposed project is grounded in a commitment to collaboration with Colorado communities, other Colorado NGOs, green industry representatives, and other stakeholders as demonstrated by the following elements:

- WRA will seek feedback and guidance on the model ordinance from a wide variety of stakeholders including the CO Water & Land Use Planning Alliance, water providers, land use planners, green industry representatives, and others who have been involved in developing model ordinances across the West.
- WRA will engage with many of these same stakeholders to conduct outreach and trainings on the model ordinances and to provide direct, hands-on assistance to those interested in implementing the standards.

Does the project proponent address an identified water gap?

Yes. The project will help address the State’s projected M&I gap from as much as 560,000 acre-feet to zero acre-feet by 2030 (CWP, measurable objectives). A key tactic for closing this gap is enhanced water conservation methods, and in particular, water efficient community development.

- One primary driver for the M&I gap is population growth, which means addressing demand in new development is critical for reducing this gap. Given that more than 50% of municipal water use in Colorado is typically used for outdoor landscaping, implementing water efficient local landscaping ordinances has the potential to significantly reduce municipal water demands.
- In particular, the South Platte Basin Implementation Plan, projects an M&I gap of 204,000-310,000 AF, and has identified “[b]etter coordinate[d] water and land use planning to improve water use efficiency,” as one component of closing this gap (SBBIP, p. S-13).

Does the project proponent demonstrate sustainability?

Yes. The objective of this project is to support cities to grow more sustainably and to develop community resiliency in the face of population growth and climate change. By doing so, communities reduce their need for new water supplies and protect other water users including the environment, recreation, and agricultural users. This project:

- helps avoid adverse impacts to environmental and recreational interests, and may support these interests by reducing water demand;
- helps avoid adverse impacts on agricultural and rural communities, and may support these interests by reducing water demand and the pressure to transfer water supplies;
- provides local governments with best practices, techniques, and tools necessary to integrate water and land use planning, which reduces vulnerability to drought and climate change; and
- reduces the overall risk of non-compliance with interstate compacts by reducing the need for additional water supplies by new development.

Does the project proponent establish the fiscal and technical feasibility of the project?

Yes. WRA has the technical expertise and experience to successfully carry out this project, and the requested grant funds will allow us to fully achieve the stated project objectives.

- WRA has been engaged with water and land use integration work in Colorado since 2013. This has included developing and facilitating the Land Use Leadership Alliance training program (LULA), publishing the “Integrating Water Efficiency into Land Use Planning in the Interior West: A Guidebook for Local Planners”, which includes a section of water efficient landscape ordinances, publishing “The State of Water and Land Use Planning Integration: Learning from Colorado Communities”, and organizing and facilitating several workshops, including a Colorado Municipal League sponsored water and land use workshop for decision-makers, and conservation-oriented system development charges (i.e., tap fees) workshops for Front Range communities.
- WRA has also provided direct assistance around integrated water and land use planning in Colorado since 2018. We have specifically supported two Colorado communities, the City of Centennial and the Town of Frederick, to develop water efficient landscape and irrigation standards.
- WRA will engage a consultant experienced in municipal water efficiency planning and code development to support the model ordinance development and review process.
- Installing water efficient landscapes in new development is significantly more cost-effective than retrofitting landscapes after construction is complete. Accordingly, this project will help communities be fiscally efficient in reducing water demands.
- The project will also save municipalities significant time and money in researching, developing and implementing landscape standards, especially in communities that are limited in technical and staff capacity.
- This project leverages existing funding resources and achieves the 25% match requirement.
- This project is ready to proceed upon receipt of funding.

Related Studies

- Blanchard, Jennie and C. Nolon, 2018, Integrating Water Efficiency into Land Use Planning in the Interior West: A Guidebook for Local Planners.
- South Metro Water Supply Authority, 2017, Model Regional Water Efficient Landscape and Irrigation Ordinance.

- O'Cain, Kim, 2015, Model Water Efficient Landscape Guidebook.
- Castle, A. Rugland, E., 2019, Best Practices for Implementing Water Conservation and Demand Management Through Land Use Planning Efforts. Addendum to 2012 Guidance.
- Colorado Department of Local Affairs, 2004, WaterWise Model Landscaping Ordinance. Prepared by Design Studios West Inc., James M. Knopf, The Restoration Group, HydroSystems/KDI Inc., and Gregory White.

This project is complementary to WRA's CWCB funded initiative to enable large-scale non-essential turf replacement in Colorado, the Sonoran Institute's Growing Water Smart (GWS) workshops, which are funded in part by Water Plan grants, and the City of Aspen's Water Efficient Landscape Standards project.

Taxpayer Bill of Rights

N/A

Budget and Schedule

This Statement of Work shall be accompanied by a combined Budget and Schedule that reflects the Tasks identified in the Statement of Work and shall be submitted to CWCB in excel format.

Reporting Requirements

Progress Reports: The applicant shall provide the CWCB a progress report every 6 months, beginning from the date of issuance of a purchase order, or the execution of a contract. The progress report shall describe the status of the tasks identified in the statement of work, including a description of any major issues that have occurred and any corrective action taken to address these issues.

Final Report: At completion of the project, the applicant shall provide the CWCB a Final Report on the applicant's letterhead that: (1) Summarizes the project and how the project was completed. (2) Describes any obstacles encountered, and how these obstacles were overcome. (3) Confirms that all matching commitments have been fulfilled. (4) Includes photographs, summaries of meetings and engineering reports/designs. The CWCB will pay out the last 10% of the budget when the Final Report is completed to the satisfaction of CWCB staff. Once the Final Report has been accepted, and final payment has been issued, the purchase order or grant will be closed without any further payment.

Payment

Payment will be made based on actual expenditures and must include invoices for all work completed. The request for payment must include a description of the work accomplished by task, an estimate of the percent completion for individual tasks and the entire Project in relation to the percentage of budget spent, identification of any major issues, and proposed or implemented corrective actions. Costs incurred prior to the effective date of this contract are not reimbursable. The last 10% of the entire grant will be paid out when the final deliverable has been received. All products, data and information developed as a result of this contract must be provided to as part of the project documentation.

Performance Measures

Performance measures for this contract shall include the following: (a) Performance standards and evaluation: Grantee will produce detailed deliverables for each task as specified. Grantee shall maintain receipts for all project expenses and documentation of the minimum in-kind contributions (if applicable) per the budget in the Budget & Schedule Exhibit B. Per Water Plan Grant Guidelines, the CWCB will pay out the last 10% of the budget when the Final Report is completed to the satisfaction of CWCB staff. Once the Final Report has been

accepted, and final payment has been issued, the purchase order or grant will be closed without any further payment. (b) Accountability: Per Water Plan Grant Guidelines full documentation of project progress must be submitted with each invoice for reimbursement. Grantee must confirm that all grant conditions have been complied with on each invoice. In addition, per Water Plan Grant Guidelines, Progress Reports must be submitted at least once every 6 months. A Final Report must be submitted and approved before final project payment. (c) Monitoring Requirements: Grantee is responsible for ongoing monitoring of project progress per Exhibit A. Progress shall be detailed in each invoice and in each Progress Report, as detailed above. Additional inspections or field consultations will be arranged as may be necessary. (d) Noncompliance Resolution: Payment will be withheld if grantee is not current on all grant conditions. Flagrant disregard for grant conditions will result in a stop work order and cancellation of the Grant Agreement.



Last Updated: May 2021

Colorado Water Conservation Board

Water Plan Grant – Statement of Work – Exhibit A

Statement Of Work

Date:	November 30, 2021
Name of Grantee:	Western Resource Advocates
Name of Water Project:	Pursuing a Statewide Model Water Efficient Landscape Ordinance
Funding Source:	Colorado Water Plan – Conservation and Land Use

Water Project Overview:

The majority of water use in the urban sector is used for landscape irrigation, and many efforts have been made at the federal, state, and local levels to improve water efficiency for outdoor landscapes. These efforts include federal grants for turf replacement projects, state funding for irrigation efficiency upgrades, and local incentives or rebates for customers. In Colorado, more communities are pursuing yet another avenue to become more water efficient by updating landscape regulations to require or encourage more water efficient landscaping in new or redevelopment proposals. These landscape regulations can limit the amount of irrigated turf on a property, require soil amendments and specific types of irrigation systems, and mandate that plants be grouped by irrigation needs, among other standards. The challenge that many communities face—especially small- and medium-sized communities with fewer staff resources—is updating their regulations with best practices, which requires significant time and expertise. WRA has heard from many local land use planners that they are not sure where to even begin with water efficient landscape regulations.

To help overcome the challenges associated with updating local landscape regulations, this project will support the Colorado Water Conservation Board in developing a Model Water Efficient Landscape Ordinance (“Model Ordinance”). This Model Ordinance will provide local communities with specific regulation language and guidance for best practices when it comes to water efficient irrigation and landscaping. Recognizing that landscaping standards are not always conducive to a one-size-fits-all approach, the Model Ordinance will include appropriate climate and geographic information applicable to communities around the state, as well as a menu of different approaches for achieving landscape and irrigation savings that can be adopted in whole or in part by a community.

In 2004, the Department of Local Affairs published a WaterWise Model Landscaping Ordinance. While some of the recommended standards remain applicable today, over the past 15 years much progress and innovation has been made in irrigation and landscaping regulations, such that the existing standards are no longer consistent with today’s best practices. Additional efforts have been made at the regional level, such as South Metro Water Supply Authority’s 2017 [Model Landscape/Irrigation Ordinance](#), which will serve as a key resource for a statewide Model Ordinance effort.



Last Updated: May 2021

In addition to developing the Model Ordinance, an important component of this project will be to better understand how model ordinances have or have not been used in the past and why some communities choose to utilize such a model while others do not. State and regional/local model ordinances here in Colorado, Utah, and California demonstrate varying levels of adoption, so better understanding why will be essential for Colorado's Model Ordinance to be successful.

This project will include four tasks, described in more detail below: 1) Research on existing model landscape ordinances; 2) stakeholder engagement with Colorado communities; 3) development of the State Model Water Efficient Landscape Ordinance; and 4) community assistance for adoption and implementation.

Project Objectives:

The objective of this project is to develop a stakeholder supported, effective, and implementable model landscape ordinance that will greatly reduce the amount of water used to irrigate landscaping in Colorado communities. The model landscape ordinance will advance the implementation of water and land use planning integration and water conservation strategies, as identified in the Water Plan.

Once the model landscape ordinance is developed, the objective will be to provide support to Colorado communities to adopt and implement the ordinance in their land development codes and regulations. This will entail education and outreach about the existence of the ordinance, as well as technical assistance for contextualizing and adopting the ordinance. Technical assistance will not only include examining the ordinance itself, but also the necessary policy support to have the ordinance adopted (e.g., education to boards, commissions, and elected officials).



Last Updated: May 2021

Tasks
Task 1 – Research on Existing Model Landscape Ordinances
<p>Description of Task:</p> <p>WRA will identify and collate existing model landscape ordinances from around the western United States. This will include both state and regional examples. Examples will be entered into a database where they can be compared for what is included in each (e.g., turf limitations, irrigation requirements, hydrozones). In addition to developing a clearinghouse for model ordinances, WRA will also reach out to appropriate stakeholders where these model ordinances have been developed to garner feedback, lessons learned, and any recommended modifications. This will also include an understanding of the level of adoption for the model ordinance within the jurisdiction for which it was developed. WRA may also reach out to specific communities within those jurisdictions to understand why the model ordinance was—or was not—adopted.</p> <p>To ensure WRA has a comprehensive understanding of best practices in developing model standards, we will also collate information from exemplary Colorado landscape standards (e.g. the Town of Castle Rock and the City of Aspen).</p>
<p>Method/Procedure:</p> <p>Existing model landscape ordinances will be identified by querying WRA’s network and those of partner groups, internet research, and a review of any relevant databases or reports. Example model landscape ordinances already identified include those developed by Department of Local Affairs, South Metro Water Supply Authority, California Department of Water Resources, and Jordan Valley Water Conservancy District in Utah. Once identified, the model ordinances will be collated in a database such that model ordinances will be easily comparable.</p> <p>Once a model ordinance is identified and included in the database, WRA will contact individuals involved in the creation and/or implementation of the ordinance to garner feedback and lessons learned. Questions will revolve around the levels of adoption, feedback from municipal or county staff, any updates or changes expected, and recommendations. Additionally, WRA will contact municipal or county staff within the jurisdiction for the model ordinance to understand their perspective on the model ordinance, and why they have or have not adopted it into local codes and regulations.</p>
<p>Deliverable:</p>



Last Updated: May 2021

A spreadsheet database with all identified model landscape ordinances and other exemplary local landscape standards in Colorado, as well as a brief summary memo of the interviews and lessons learned for Colorado.

Tasks
Task 2 – Stakeholder Engagement with Colorado Communities
Description of Task: WRA will reach out to a variety of Colorado communities and organizations across the state to understand what would be important to include in a state model ordinance, and what would make it useful (or not). WRA will describe what a model ordinance could include, and solicit feedback on the utility of such a model ordinance. If a model ordinance could be useful, WRA will ask specific topical questions for what should be included (e.g., turf limitations, irrigation requirements, hydrozones) and why. This task will also be useful in learning the different regional interests when it comes to landscape regulations (e.g., Front Range, eastern plains, mountain towns, West Slope). If a model ordinance does not seem of interest to a community, it will still be helpful to understand why and potentially learn other avenues for supporting communities in improving outdoor water efficiency.
Method/Procedure:



Last Updated: May 2021

WRA's previous and current projects and engagements have led to a robust network of water providers, land use planners, green industry professionals and other municipal and county staff across the state (e.g., Water and Land Use Planning Alliance). WRA will utilize this network to solicit feedback from 10-20 Colorado communities and associated organizations on the development of a state model landscape ordinance. For example, WRA will work with Christy Wiseman at DOLA to have a discussion of a model ordinance during a Planning Alliance meeting. Additional organizations that will be targeted include the Colorado River District, Special Districts Association, Colorado Municipal League, Colorado WaterWise, Denver Water, Aurora Water, Colorado Springs Utilities, Fort Collins Utilities, Northwest Colorado Council of Governments, Colorado Water Congress, American Planning Association Colorado Chapter, among others. In particular, WRA will collaborate with WaterNow Alliance, who has requested CWCB Water Plan Grant funding for a Project Accelerator that would gather input from Northern Water allottees on their needs and priorities for different types of model ordinances (i.e. green stormwater infrastructure, recycled water, landscape standards, etc.). WRA will utilize WNA/Northern Water's findings to inform the model landscape ordinances, and conduct additional stakeholder engagement with Northern allottees as needed.

Deliverable:

A brief summary memo of the interviews, including recommendations and lessons learned.

Tasks

Task 3 – Develop State Model Landscape Ordinance

Description of Task:

WRA, in collaboration with the CWCB, will work with a consultant to develop a state model landscape ordinance. Utilizing lessons learned from both Tasks 1 and 2, the Model Ordinance will be regionally appropriate for Colorado landscapes and greatly reduce the amount of water used for outdoor irrigation in new developments and redevelopments. The Model Ordinance will be based on industry best practices, while providing flexibility for the community to determine specific requirements within the model ordinance that are best suited for their community (e.g., limiting irrigated turf to 10-30% of total landscaped area allows the community to decide which specific percentage limitation to apply).

Method/Procedure:

Last Updated: May 2021

Building upon the results of Tasks 1 and 2, WRA will work with CWCB staff and contract with a consulting firm with landscape regulation experience and expertise to develop the Model Ordinance. WRA has spoken with Element Water Consulting about this concept and they have expressed interest in partnering. WRA will facilitate the development of the Model Ordinance and work with the consultant to ensure all lessons learned and recommendations from Tasks 1 and 2 are incorporated into the model ordinance. WRA will ensure CWCB staff is able to provide feedback on the model ordinance, and will solicit input from key stakeholders involved in Tasks 1 and 2. WRA and the consultant will also ensure that the model ordinance is relevant and appropriate for communities across the state, considering climate, soil types, elevation, diverse development types, etc.

Deliverable:

A final, professionally-designed state model landscape ordinance applicable to all Colorado communities. WRA will work with CWCB to discuss formatting and accessibility (e.g., adding the model ordinance to the appropriate CWCB webpage).

Tasks

Task 4 – Community Assistance for Adoption and Implementation

Description of Task:

Once the model ordinance is developed, WRA will support CWCB in dissemination, education, and outreach around the model ordinance. This will include sharing the model ordinance directly with municipalities, counties, and water providers, as well as providing education and outreach at relevant conferences, meetings, and workshops. If requested by community staff, WRA will present the model ordinance to appropriate entities (e.g., elected officials) to discuss the benefits and importance of adopting the model ordinance.

In addition to education and outreach, WRA will provide technical assistance to communities interested in adopting the model ordinance. This technical assistance will include working with the planning department and other staff to identify exactly how the model ordinance will be tailored for that community (e.g., exact percentage of turf maximum, landscape water budget) and shepherding the ordinance through the Council adoption process



Last Updated: May 2021

Method/Procedure:

WRA will distribute the model ordinance by setting up meetings with relevant staff to discuss the opportunities and interest in adopting the ordinance. This will be specifically targeted towards the communities interviewed in Task 2. WRA will also organize at least two presentations, panels, or sessions to present the model ordinance at water and land use planning workshops, conferences, and/or meetings (e.g., APA Colorado annual conference, Colorado Municipal League annual conference). More broadly, WRA will share information about the model ordinance through our network of partners and listservs. For example, WRA will work with Northern Water staff to ensure all member agencies within Northern Water's jurisdiction are made aware of the model ordinance and that the model landscape ordinance is included as a resource in the ordinance library developed by Northern Water and WaterNow Alliance

WRA will provide technical assistance to 2-3 communities interested in adopting the model ordinance. Once a community interested in the model ordinance is identified, WRA will work with the appropriate staff to determine what specifics of the model ordinance should be adopted. If necessary, WRA will assist the communities in facilitating stakeholder meetings to solicit input from a wide range of individuals. This could include green industry representatives, water providers, developers, and others. Once the ordinance is drafted, WRA will provide the necessary policy support to begin the ordinance adoption process. This could include presenting to various boards, commissions, and elected officials about the importance of the ordinance. Finally, WRA will also help the community identify various external funding sources and support available if the community is interested in developing additional related programs or standards (e.g., CWCB Water Plan Grants, DOLA technical assistance).

Deliverable:

A brief written summary of the education and outreach activities, technical assistance provided to Colorado communities (and adopted landscaping standards).

Tasks

Task 5 – Project Management Activities



Last Updated: May 2021

Description of Task:
WRA will be responsible for ensuring all project work is being completed in an efficient manner and consistent with the project budget. WRA will manage and coordinate work with the consultant. WRA will ensure all project invoicing and reporting (including six-month Progress Reports and a Final Report) are consistent with CWCB requirements.
Method/Procedure:
<ul style="list-style-type: none">• WRA will manage the consultant.• WRA will develop and submit project invoices to the CWCB and will pay the consultant.• WRA will provide the CWCB with a Progress Report every six months.• WRA will provide the CWCB with a Final Report at the end of the project.
Deliverable:
Progress Reports every six months, and a Final Report at the end of the project.

Budget and Schedule

This Statement of Work shall be accompanied by a combined Budget and Schedule that reflects the Tasks identified in the Statement of Work and shall be submitted to CWCB in excel format.



Last Updated: May 2021

Reporting Requirements

Progress Reports: The applicant shall provide the CWCB a progress report every 6 months, beginning from the date of issuance of a purchase order, or the execution of a contract. The progress report shall describe the status of the tasks identified in the statement of work, including a description of any major issues that have occurred and any corrective action taken to address these issues.

Final Report: At completion of the project, the applicant shall provide the CWCB a Final Report on the applicant's letterhead that:

- Summarizes the project and how the project was completed.
- Describes any obstacles encountered, and how these obstacles were overcome.
- Confirms that all matching commitments have been fulfilled.
- Includes photographs, summaries of meetings and engineering reports/designs.

The CWCB will pay out the last 10% of the budget when the Final Report is completed to the satisfaction of CWCB staff. Once the Final Report has been accepted, and final payment has been issued, the purchase order or grant will be closed without any further payment.

Payment

Payment will be made based on actual expenditures and must include invoices for all work completed. The request for payment must include a description of the work accomplished by task, an estimate of the percent completion for individual tasks and the entire Project in relation to the percentage of budget spent, identification of any major issues, and proposed or implemented corrective actions.

Costs incurred prior to the effective date of this contract are not reimbursable. The last 10% of the entire grant will be paid out when the final deliverable has been received. All products, data and information developed as a result of this contract must be provided to as part of the project documentation.

Performance Measures

Performance measures for this contract shall include the following:

(a) Performance standards and evaluation: Grantee will produce detailed deliverables for each task as specified. Grantee shall maintain receipts for all project expenses and documentation of the minimum in-kind contributions (if applicable) per the budget in Exhibit C. Per Grant Guidelines, the CWCB will pay out the last 10% of the budget when the Final Report is completed to the satisfaction of CWCB staff. Once the Final Report has been accepted, and final payment has been issued, the purchase order or grant will be closed without any further payment.

(b) Accountability: Per Grant Guidelines full documentation of project progress must be submitted with each invoice for reimbursement. Grantee must confirm that all grant conditions have been complied with on each invoice. In addition, per Grant Guidelines, Progress Reports must be submitted at least once every 6 months. A Final Report must be submitted and approved before final project payment.

(c) Monitoring Requirements: Grantee is responsible for ongoing monitoring of project progress per Exhibit A. Progress shall be detailed in each invoice and in each Progress Report, as detailed above. Additional inspections or field consultations will be arranged as may be necessary.

(d) Noncompliance Resolution: Payment will be withheld if grantee is not current on all grant conditions. Flagrant disregard for grant conditions will result in a stop work order and cancellation of the Grant Agreement.



COLORADO

Colorado Water
Conservation Board

Department of Natural Resources

Colorado Water Conservation Board

Water Plan Grant - Exhibit C Budget and Schedule

Prepared Date: November 23, 2021

Name of Applicant: Western Resource Advocates

Name of Water Project: Pursuing a Statewide Model Water Efficient Landscape Ordinance

Project Start Date: May 2022

Project End Date: June 2024

Task No.	Task Description	Task Start Date	Task End Date	Grant Funding Request	Match Funding	Total
1	Research on Existing Model Landscape Ordin	May-22	Nov-22	\$17,280	\$4,320	\$21,600
2	Stakeholder Engagement with Colorado Com	Aug-22	Dec-22	\$21,960	\$5,490	\$27,450
3	Develop State Model Landscape Ordinance	Dec-22	Aug-23	\$46,160	\$11,540	\$57,700
4	Community Assistance for Adoption and Imp	Aug-23	Jun-24	\$56,640	\$14,160	\$70,800
5	Project Management Activities	May-22	Jun-24	\$7,720	\$1,930	\$9,650
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
Total				\$149,760	\$37,440	\$187,200

Colorado Water Conservation Board

Water Plan Grant - Detailed Budget Estimate

Fair and Reasonable Estimate

Prepared Date:November 23, 2021

Name of Applicant:Western Resource Advocates

Name of Water Project:Pursuing a Statewide Model Water Efficient Landscape Ordinance

Timeframe	Item	Hourly Rate	# Hours	Sub-total	Direct Costs	Task Total	CWCB Water Plan Funds	Matching Funds (In-
Task 1 - Research on Existing Model Landscape Ordinances								
	Water Policy Analysts	\$ 125.00	150	\$ 18,750.00			\$ 15,000.00	\$ 3,750.00
	Program Director	\$ 170.00	5	\$ 850.00			\$ 680.00	\$ 170.00
	Consultant	\$ 200.00	10	\$ 2,000.00			\$ 1,600.00	\$ 400.00
SUBTOTALS:				\$ 21,600.00		\$ 21,600	\$ 17,280	\$ 4,320
Task 2 - Stakeholder Engagement with Colorado Communities								
	Water Policy Analysts	\$ 125.00	150	\$ 18,750.00			15000	\$ 3,750.00
	Program Director	\$ 170.00	10	\$ 1,700.00			1360	\$ 340.00



Colorado Water Conservation Board
131 Sherman Street Room 718
Denver, CO 80203

November 22, 2021

Dear Review Committee:

The City of Centennial is pleased to submit this letter in support of Western Resource Advocates' Pursuing a Statewide Model Water Efficient Landscape Ordinance application for the Colorado Water Conservation Board's Water Plan Grant in the category of Conservation & Land Use. The model landscape ordinance will support Centennial and other Colorado communities seeking water efficient landscaping and irrigation practices in new or redevelopment proposals.

Centennial supports the goal of this project to increase landscape water efficiency and community resiliency in Colorado. The City has first-hand experience working with Western Resource Advocates (WRA), and WaterNow Alliance, through the Project Accelerator initiative. WRA was integral to developing a set of land development code recommendations for Centennial - primarily focused on water efficient landscape and irrigation best practices - which are currently under review by the City. The project included an audit of the City's municipal code, interviews with staff, research on other Colorado communities' water efficiency standards, stakeholder engagement with water providers and green industry representatives, a set of 14 land development code recommendations, and a presentation of these recommendations to Centennial's City Council.

This project is directly aligned with the Colorado Water Plan's conservation and land use planning objectives. By adopting a water efficient landscape ordinance, cities can better integrate their water and land use planning and reduce per capita water demand. The project team has demonstrated the necessary skills and dedication to successfully and fully execute the proposed model landscape ordinance project. Thank you for your consideration of this funding request.

Sincerely,

Mayor Stephanie Piko



401 LOCUST STREET • P.O. BOX 435 • FREDERICK, CO 80530-0435

PHONE: (720) 382-5500 • FAX: (720) 382-5520

FREDERICKCO.GOV

November 18, 2021

Colorado Water Conservation Board
131 Sherman Street Room 718
Denver, CO 80203

Dear Review Committee:

The Town of Frederick is pleased to submit this letter of support on behalf of Western Resource Advocates' application for the Colorado Water Conservation Board's Water Plan Grant in the category of Conservation & Land Use to develop a Statewide Model Water Efficient Landscape Ordinance. The model landscape ordinance will support Colorado communities in requiring or incentivizing more water efficient landscaping and irrigation practices in new or redevelopment proposals.

The Town of Frederick wholeheartedly supports the efforts of Western Resource Advocates to create a model ordinance to serve municipalities. As more Colorado residents acknowledge the need for water conservation, providing them with consistent landscaping rules becomes even more critical. This effort will help municipalities have base information to draw from enabling a reasonable course to adoption. The model ordinance will support Frederick's elected officials' strategic goal of updating the existing land use code to include water conservation.

This project is directly aligned with the Colorado Water Plan's conservation and land use planning objectives. By adopting a water efficient landscape ordinance, cities can better integrate their water and land use planning and reduce per capita water demand in the face of climate change and population growth.

We are confident that the project team has the necessary skills and dedication to successfully and fully execute the proposed model landscape ordinance project. Thank you for your consideration of this funding request.

Sincerely,

Jennifer Simmons, AICP
Planning Director

Built on What Matters.



November 24, 2021

Colorado Water Conservation Board
131 Sherman Street Room 718
Denver, CO 80203

Dear Review Committee:

The City of Greeley is pleased to submit this letter in support of Western Resource Advocates' Pursuing a Statewide Model Water Efficient Landscape Ordinance application for the Colorado Water Conservation Board's Water Plan Grant in the category of Conservation & Land Use. The model landscape ordinance will support Greeley and other Colorado communities in requiring or incentivizing more water efficient landscaping and irrigation practices in new or redevelopment proposals.

Greeley supports the goal of this project in helping improve landscape water efficiency and community resiliency throughout Colorado. Ongoing droughts, water supply limitations, and climate change make it even more important that communities become more efficient in their outdoor use. Importantly, though, there should not be a one size fits all approach as every community is different. WRA's goal of making the model ordinance applicable across the state ensures this approach.

This project is directly aligned with the Colorado Water Plan's conservation and land use planning objectives. By adopting a water efficient landscape ordinance, cities can better integrate their water and land use planning and reduce per capita water demand in the face of climate change and population growth.

Having worked with WRA on numerous projects, we are confident that the project team has the necessary skills and dedication to successfully and fully execute the proposed model landscape ordinance project. Thank you for your consideration of this funding request.

Sincerely,

A handwritten signature in blue ink, appearing to read "Adam Jokerst".

Adam Jokerst, PE
Deputy Director, Water Resources

ELEMENT Water Consulting, Inc.
P.O. Box 140785
Denver, CO 80214
303.481.2365
www.elementwaterinc.com



November 10, 2021

Colorado Water Conservation Board
1313 Sherman Street, Room 718
Denver, CO 80203

RE: Water Plan Grant Application for Statewide Model Water Efficient Landscape Ordinance

Dear Review Committee:

ELEMENT Water Consulting (ELEMENT) is pleased to submit this letter in support of Western Resource Advocates' application to the Colorado Water Conservation Board for a Colorado Water Plan Grant in the category of Conservation & Land Use to develop a Statewide Model Water Efficient Landscape Ordinance. This model ordinance will support Colorado communities in requiring or incentivizing more water efficient landscaping and irrigation practices in new development and/or redevelopment proposals.

ELEMENT is interested in partnering with Western Resource Advocates to support this project. ELEMENT has worked with a number of cities and towns in Colorado to update their landscape and irrigation standards to incorporate water efficiency practices. We also provided technical services to the South Metro Water Supply Authority to develop its Model Regional Water Efficient Landscape and Irrigation Ordinance in 2017, which included a robust stakeholder engagement process. ELEMENT and Western Resource Advocates have successfully worked together in the past, including on a project to support the Town of Frederick in developing updated landscape standards. We feel the project team has the requisite experience to develop a comprehensive, implementable statewide model ordinance and that the model ordinance would be of value to capacity-limited Colorado communities interested in developing smart water efficiency standards.

This project directly aligns with the Colorado Water Plan conservation and land use planning objectives. By adopting a water efficient landscape ordinance, communities can better integrate their water and land use planning and significantly reduce per capita water demand in the face of climate change and population growth. We are confident that the project team has the necessary skills and dedication to successfully and fully execute the proposed model landscape ordinance project. Thank you for your consideration of this funding request.

Sincerely,

A handwritten signature in blue ink that reads "Beorn Courtney".

Beorn Courtney
President
Element Water Consulting



November 23, 2021

Colorado Water Conservation Board
131 Sherman Street Room 718
Denver, CO 80203

Dear Review Committee:

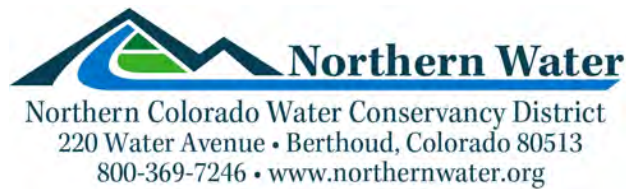
The City of Aspen is pleased to submit this letter of support on behalf of Western Resource Advocates' application pursuing a Statewide Model Water Efficient Landscape Ordinance application for the Colorado Water Conservation Board's Water Plan Grant in the category of Conservation & Land Use. This model landscape ordinance will support Colorado communities in requiring or incentivizing more water efficient landscaping and irrigation practices in future development.

The City of Aspen has been at the forefront of reducing water demand for landscape irrigation in Colorado. In June of 2017, the city adopted its Water Efficient Landscape Standards, which included a variety of best practices of water wise landscaping and irrigation practices. Element Water supported the city in developing and implementing these standards and we've since had the opportunity to share the standards and our lessons learned from implementing the program with other Colorado communities. We're very interested in seeing more Colorado communities – both in the Front Range and our neighbors in the Roaring Fork Valley – adopt water efficient landscaping regulations.

This project is directly aligned with the Colorado Water Plan's conservation and land use planning objectives. By adopting a water efficient landscape ordinance, cities can better integrate their water and land use planning and reduce per capita water demand in the face of climate change and population growth. We are confident that the project team has the necessary skills and dedication to execute the proposed model landscape ordinance project successfully and fully. Thank you for your consideration of this funding request.

Sincerely,

Tyler Christoff, Utilities Director



November 19, 2021

Colorado Water Conservation Board
131 Sherman Street Room 718
Denver, CO 80203

RE: Letter of Support for Western Resource Advocates

Dear Review Committee:

Northern Water is pleased to submit this letter of support on behalf of Western Resource Advocates' application for the Colorado Water Conservation Board's Water Plan Grant in the category of Conservation & Land Use to develop a Statewide Model Water Efficient Landscape Ordinance. The model landscape ordinance will support Colorado communities in requiring or incentivizing more water-efficient landscaping and irrigation practices in new or redevelopment proposals.

Northern Water is particularly interested in this project because we are exploring the development of a model water-efficient ordinance library that will be made available to our allottees. The model ordinance library intends to assist and educate our allottees on ways to implement their own water-efficient codes. Potential focus areas for the model ordinance library include water-efficient landscapes, gray water, green infrastructure, and drought-ready construction.

This model ordinance library will be developed through a stakeholder-driven process. The contents will be determined based on our allottees' needs and priorities. This process is similar to what WRA is proposing, leading to obvious areas of collaboration and leveraging of each other's efforts. Further, because our library will include landscape regulations, we see an excellent opportunity to include the state model ordinance in our library once developed and assist in its promotion to our allottees.

This project is directly aligned with the Colorado Water Plan's conservation and land use planning objectives. By adopting a water-efficient landscape ordinance, cities can better integrate their water and land use planning and reduce per capita water demand in the face of climate change and population growth.

We are confident that the project team has the necessary skills and dedication to execute the proposed model landscape ordinance project successfully and thoroughly. I appreciate your consideration of this funding request.

Sincerely,
Signed by:

Darren Nowels

269711F182D64C8...
Darren Nowels, Water Efficiency Planner
Northern Water



Letters of Matching 3rd Party Commitments

Western Resource Advocates (WRA) is providing a cash match of \$37,440.

Committed Matching Funds

Funds have been committed by the following organizations.

- Western Resource Advocates - \$37,440