

Colorado Water Conservation Board

Water Plan Grant - Statement of Work - Exhibit A

Statement Of Work	
Prepared Date:	May 15, 2023
Name of Grantee:	Western Resource Advocates
Name of Water Project:	Reducing Non-Functional Turfgrass in New Development Through Smart Land Use Planning
Funding Source:	Colorado Water Plan Grant – Conservation and Land Use Category

Water Project Overview:

Western Resources Advocates (WRA) will provide direct technical assistance, resources, and education to Colorado communities in the development of water wise landscaping standards and conservation-oriented systems that will reduce the amount of non-functional turf installed in new development, while ensuring these landscapes provide the essential social and environmental benefits upon which Colorado communities rely.

To support communities installing more water wise landscapes from the start, this proposal includes the following tasks: (1) Engagement, Education & Resource Development on Water Wise Landscaping Standards; (2) Direct Community Assistance for Water Wise Landscaping Code Adoption; (3) Update WRA's Conservation-Oriented System Development Charges Guide & Case Studies; and (4) Outreach & Education on Conservation-Oriented System Development Charges.

Project Objectives:

During the grant period, WRA expects to accomplish the following objectives:

- A significant increase in awareness among community staff and elected official about the importance of, and resources for, adopting water efficient landscape regulations across the state. This will be evident by the number of municipalities and counties who elect to implement water wise landscaping standards over the project period, including those expressing interest in receiving state or third-party financial support or technical assistance to update their landscape ordinances.
- At least 2-3 communities will adopt new or updated landscape regulations that limit the amount of irrigated turf grass in new development, among other landscape efficiency best practices. Those 2-3 communities will be supported directly by WRA, but it is hoped additional communities will adopt updated landscape regulations on their own, in part driven by WRA's work in Task 1.
- Increased awareness among water utility staff, managers, and appointed/elected leaders about the potential for implementing conservation-oriented system development charges to incentivize or require more water efficient development. This will be evident by staff reaching out to and learning from peer communities who have implemented conservation-oriented system development charges, as well as pursuing state or third-party financial support or technical assistance. Because these types of system development charges are still relatively new, one of the outcomes of this proposal will be a greater socializing and normalizing of such approaches.



• An increase in the number of water utilities adopting—or in the process of adopting conservation-oriented system development charges. WRA expects that several of the utility participants in the workshops will walk away with an action plan to develop and adopt new tap fee structures, with political support for doing so.

Tasks

Task 1 - Engagement, Education & Resource Development on Water Wise Landscaping Standards

Description of Task:

Task 1 will continue to build momentum and engagement behind the importance of limiting non-functional turf in new development and improving water wise landscaping standards in Colorado. WRA will support the development of valuable resources on best practices for communities interested in adopting water wise landscaping standards. This includes a research memo on the current state of non-functional turf limits in Front Range communities and the Department of Local Affairs' (DOLA) Model Water Efficient Landscaping Ordinance (forthcoming). WRA will also develop an extensive outreach and education campaign to share these resources and others widely with the Colorado water and land use planning community.

WRA will compile and refine its extensive database of existing research on water wise landscaping standards in Colorado into an externally facing report on the current state of water wise landscaping standards in Colorado. The report will focus specifically on the current state of landscaping standards that limit cool season turfgrass in new development and redevelopment amongst the 22+ Front Range communities that currently offer turf replacement incentive programs (or plan to in 2023). Emphasis will be placed on the importance of limiting non-functional turfgrass in new development while paying to remove turf in existing development.

This research memo will be complementary to WRA and WaterNow Alliance's 2022 "Financing the Future: How to Pay for Turf Replacement in Colorado" whitepaper which provided details on current turf replacement programs in Colorado. As of 2022, 10 of the 22 providers that offer turf replacement programs have some form of turf limits in place for new development and this report may serve as encouragement to those providers offering turf replacement funding that have yet to adopt water wise landscaping codes. It will also highlight and focus in on those communities with the strongest turf limit standards in place (e.g., the Town of Castle Rock, City of Aurora, and City of Aspen). A draft of this report will be shared with all communities with standards included in the report to ensure the standards are accurate and up to date.

WRA will also support DOLA's Model Land Use Code Update as a Technical Advisory Committee (TAC) member on water wise landscaping standards, and other related water codes. DOLA's Model Land Use Codes were last updated for municipalities in 2002 and significant advancements in best practices and technology (I.e., irrigation efficiency technology) have occurred in the past 20 years. This effort, which is being led by Mitch Hendrick, Program Manager, with support from a consultant, will kick-off in January 2022. TAC members will provide preliminary feedback to the consultant on their initial concepts and substantive review of at least two drafts of model codes. Once the codes have been published, WRA will help to share this resource widely with its networks and through outreach efforts under this task.

WRA will develop and implement an extensive education and outreach campaign to bring attention to the importance of adopting water wise landscaping standards and how communities can undertake this effort. The audience for this campaign will include: water utility staff and managers, City/County managers, land use planners and community development directors, elected/appointed local leaders, developers, and landscape professionals. The outreach campaign will include at least 4 presentations at conferences, meetings, webinars, or other events, as well as newsletter articles, blogs and other communications. In addition to supporting CWCB outreach efforts on water wise landscaping (as requested), WRA will use its network of



partners to expand its reach including: Colorado WaterWise, Rocky Mountain Chapter AWWA, WaterNow Alliance, Northern Water Conservancy District, Alliance for Water Efficiency, American Water Resources Association, American Planning Association Colorado Chapter, Sonoran Institute, Urban Land Institute, Colorado Municipal League, etc.

During this outreach campaign, WRA will build the case for why communities should consider adopting strong water wise landscaping standards that—among other things—limit non-functional turfgrass in new development. This will include an overview of water and cost savings potential and important co-benefits such as the creation of pollinator habitat, reduced emissions from lawn mowing, and reduced maintenance post-establishment. WRA will also share existing resources for communities interested in updating their landscaping standards (e.g., South Metro Water Supply Authorities Model Water Efficient Landscape Ordinance) as well as the new resources in development once available (i.e., WRA's research memo on turf limits and DOLA's Model Land Use Codes). WRA will engage with communities that have recently adopted water wise landscaping standards to share details about their experience, successes, challenges, and lessons learned with others interested in adopting new standards. WRA recognizes that there are perceived and real unintended consequences that communities are concerned about when it comes to water wise landscaping standards lity, increased urban heat island from limited living materials, protecting urban tree canopy, and landscape maintenance needs, and WRA plans to address these concerns and questions through its presentations and case studies.

Method/Procedure:

- 1. WRA will draw on existing research to develop a professionally designed, externally facing report on the current state of cool season turf limitation standards amongst Colorado communities that offer turf replacement programs.
- 2. WRA will assist with the scoping and review of DOLA's Model Land Use Code update process, as it relates to water wise landscaping standards.
- 3. WRA will develop and implement a widespread education and outreach campaign to share existing and new resources for Colorado communities on adopting water wise landscaping standards and case studies on those communities have successfully adopted standards (including those communities supported under Task 2).

Deliverable:

Report on the current state of turf limits in Colorado; a memo summarizing WRA's education/outreach presentations including: event and organization name, date, audience type, audience numbers, synopsis of presentation topic, and PowerPoint slides or other collateral (if applicable); and access to DOLA's updated Water Efficient Landscaping Ordinance (though WRA is not solely responsible for the timely development of DOLA resources).

Tasks

Task 2 - Direct Community Assistance for Water Wise Landscaping Code Adoption

Description of Task:

While Task 1 will be critical to growing momentum behind the importance of reducing irrigated turfgrass in new development and the best practices for doing so, many Colorado communities still lack the capacity and expertise to develop these standards internally. Under Task 2, WRA will provide hands-on technical assistance to 2-3 Colorado communities to develop and adopt new water wise landscaping standards for new



development and redevelopment. WRA has significant prior expertise researching and supporting the development of water wise landscaping standards in Colorado to draw on to support this task. WRA will utilize existing resources like South Metro Water Supply Authority's Model Landscaping Ordinance and WRA's own landscaping code research databases of ~25 different communities across Colorado, as well as the resources developed during Task 1 (WRA's state of turf limits in Colorado report and DOLA's updated Water Efficient Landscape Ordinance).

Additionally, given the City of Aurora and the Town of Castle Rock's recent success in establishing strong nonfunctional turf limits, WRA will review these codes in detail and connect with these communities directly to learn more about their code development and adoption process. While the direct assistance projects will take a comprehensive look at updated water wise landscape codes (e.g., soil amendments, irrigation efficiency, etc.), WRA will specifically emphasize the importance of reducing non-functional irrigated turfgrass in new development and encourage partner communities to follow Aurora and Castle Rock's lead.

WRA has provided direct water conservation and integrated planning policy assistance to a number of Colorado communities, including development of water wise landscaping standards. While each community will be different, direct assistance tasks will likely include: sharing research on best practices and model standards from across Colorado and the West, robust stakeholder engagement including planners, water utility staff, elected officials, developers, landscape professionals, and community members, drafting of new and amended landscape code language, and support in shepherding the ordinance through the Council adoption process.

WRA has connected with several Colorado communities that have expressed interest in receiving WRA's support on updating their landscaping standards including: The City of Longmont, the City & County of Broomfield, the City of Alamosa, and the City of Lakewood.

WRA will also solicit interest from communities for technical assistance during Task 1 and through continued partnership with WaterNow Alliance's Project Accelerator program and the Sonoran Institute's Growing Water Smart Technical Assistance Program. One or more of these direct assistance programs could fall under the Project Accelerator program, which would allow the team to benefit from support from both WRA and WaterNow staff.

Once new standards have been adopted by each community, WRA will conduct outreach and education to share successes and lessons learned with other Colorado communities in order to continue to build momentum towards a transition to water wise landscaping in new development throughout Colorado. This outreach may include news articles or op-eds in local papers, presentation opportunities for City staff and leaders at conferences or other events, and more.

Method/Procedure:

Direct assistance projects will be undertaken in several phases:

- 1. WRA will identify and select 2-3 Colorado communities interested in adopting robust water wise landscaping standards to support through the code development and adoption process. Communities will receive up to 250 hours of technical assistance over a 6–9-month period. Projects will be staggered throughout the 2-year grant period, however all projects will kick-off by June 2023 to ensure the project team has sufficient time to work with a community through the Council adoption process.
- 2. WRA will develop a Memorandum of Understanding (MOU) and project brief with each selected community to align on community and project team responsibilities and the project timeline.
- 3. WRA will support each community through the code development and adoption process including (but not limited to): sharing research and best practices, robust stakeholder engagement through various



avenues, drafting and reviewing new and amended code language, and providing support throughout the Council adoption process.

4. For those communities that WRA has supported on water wise landscaping standards during the grant period, WRA will share these community successes – along with ordinance language and any other relevant collateral - widely through existing Colorado water and land use planning networks and will identify opportunities for community partners to share their experiences through presentations at conferences, webinars, etc. It is important to note that the adoption of new codes/ordinances can take longer than expected, and the final adoption may occur outside the time period of this grant proposal.

Deliverable:

For each of the communities receiving direct assistance, WRA will provide a completed Memorandum of Understanding (MOU), project scope and timeline, adopted landscaping ordinances, and any other relevant deliverables or collateral developed in support of these projects (e.g., research memos, community survey results, news articles, etc.) to the CWCB.

Tasks

Task 3 - Update WRA's Conservation-Oriented System Development Charges Guide & Case Studies

Description of Task:

WRA will produce an updated version of the original 2015 "<u>A Guide to Developing Conservation-Oriented</u> <u>Water System Development Charges</u>" that will be made freely available to Colorado communities and water utilities. WRA will partner on this task with Raftelis Financial Consultants Inc. (Raftelis), the financial consultant for the original guide with significant hands-on expertise in working with cities to study, design, and implement conservation-oriented water rates and tap fees. The guide's narrative will be updated to reflect new and modified tap fee structures and options, as well as incorporating research on the state of conservation-oriented tap fees in Colorado and how these fee structures may influence housing type, affordability and location. This research is currently being conducted by Benji Smith, a PhD candidate at the Wharton School who is compiling research from 2000 to present on tap fee structures throughout the Front Range and analyzing their impact on local housing market conditions. WRA has connected with Benji on this research and anticipates the paper will be published in Q1 2023.

The new guide will also provide updates to the original case studies, including more long-term lessons learned and data on water demand reductions, as well as at least 2-3 case studies from communities who have adopted conservation-oriented tap fees since 2018. Potential new Colorado case studies may include: City of Evans, City of Windsor, Town of Erie, City of Fort Collins, Johnstown, and Rangeview metropolitan district. While new case studies will primarily be from Colorado communities and water providers, the project team will consider including additional case studies from other states if there are innovative practices that Colorado communities may find valuable. For example, since 2002 the City of Santa Fe, NM, has carried out a successful water demand offset program for new development including the creation of a water bank to hold conservation credits.

Task 4, described below, will include conducting outreach and education on the update guide, as well as providing technical support and training through tap fee workshops.

Method/Procedure:



Updating the guide will be undertaken in several phases:

- WRA will research and identify any additional communities that have adopted innovative, conservation-oriented tap fee structures since 2018. This research will focus primarily on Colorado communities but will also include other Colorado River Basin states. Upon identifying at least 2-3 new case studies, WRA will interview relevant staff to learn about the tap fee adoption and implementation process, as well as any data/metrics on success and relevant lessons learned.
- Additionally, WRA will contact all the original case study communities from the 2015 and 2018 guide to learn about any updates to their tap fee structure, and additional data/metrics on success and new lessons learned. These case studies are: Aurora Water, Castle Rock Water, City of Fountain, Little Thompson Water District, and City of Westminster.
- With the support of Raftelis, the original guide will be reviewed and updated to ensure the methodologies and implementation considerations reflect current best practices when it comes to conservation-oriented tap fees. The research conducted by Benji Smith, described above, will also be incorporated into the guide.
- Once the above research, outreach, and analysis is complete, WRA will produce an updated, professionally designed Guide, both in print and digital versions.

Deliverable:

A final, professionally designed, updated Conservation-Oriented System Development Charges Guide available to all Colorado communities, both in print and digital forms. WRA will work with CWCB to discuss formatting and accessibility (e.g., adding the guide to the appropriate CWCB webpage), as well as hosting the digital version of the guide on WRA's website.

Tasks

Task 4 - Outreach & Education on Conservation-Oriented System Development Charges

Description of Task:

Once the Guide update is complete, WRA will work with the CWCB and other relevant organizations (e.g., Colorado WaterWise, Rocky Mountain Section AWWA, the CO Water & Land Use Planning Alliance, Urban Land Use Institute, Northern Water, and others) to ensure that communities are aware of the guide and any associated resources to help with adoption and implementation (e.g. Project Accelerator, Growing Water Smart Technical Assistance, etc.). Significant outreach through various events, meetings, newsletters, and through WRA's network will ensure that the Guide will be available to communities interested in learning more.

Concurrent with this widespread outreach, WRA will work with Raftelis to conduct at least one hands-on workshop on conservation-oriented tap fee adoption. Similar workshops were conducted with the release of the original Guide and addendum from 2015-2018, with participating communities expressing that they received significant benefit from the workshop. These workshops provide an opportunity for relevant staff and decision-makers to understand how tap fees work, how they can incentivize water efficient development, how they are developed for the financial health of the utility, and how impacted stakeholders may view their adoption (e.g., developers/builders). The workshop(s) will also provide an opportunity for participants to learn from their peers and identify common themes, questions, concerns, and possibilities, in addition to understanding various stakeholder perspectives such as utility finance managers, utility demand planners, property buyers, elected/appointed officials, and others. Cities and water providers will



be encouraged to attend with several members of their local teams (e.g., elected officials, planners, and utility staff).

Method/Procedure:

WRA will conduct outreach during at least 2 relevant meetings, conferences, and workshops, as well as through WRA's various networks (e.g., Colorado WaterWise, Water and Land Use Planning Alliance, Rocky Mountain Section AWWA). WRA will also work with CWCB to make sure the Guide is available on the state's website and disseminated through appropriate and relevant channels.

Additionally, WRA will plan, organize, and facilitate at least one workshop designed to help municipal and water provider staff understand how conservation-oriented tap fees may be implemented in their communities, including lessons learned from their peers. For each workshop, WRA will:

- Plan all workshop logistics, including venues, catering, and required materials.
- Recruit participants to join a workshop. Some of this recruitment will occur during the outreach component of this Task 4, as well as earlier tasks where WRA is engaging with communities. The total number of participants will depend on levels of interest; based on previous workshops, WRA expects 25-50 total participants per workshop.
- Create an agenda and secure relevant speakers with expertise on tap fees, as well as case study presentations. Depending on demand and interest, WRA may target specific geographic regions and will tailor agendas/speakers for those areas (e.g., Northern's or Southwestern's service areas, southern Front Range).
- Solicit evaluations from workshop participants.
- Provide each participant with all relevant materials, including the updated tap fee guide.

A potential workshop agenda includes:

- 1. Welcome and Introductions
- 2. Tap Fees in Your Community
 - a. Peer to peer exchange
- 3. Water Demand Management through Tap Fees
 - a. Case study presentation and Q&A
- 4. Finance and Revenue Panel
 - a. Best practices on setting tap fees
- 5. Developer/Builder Panel
- 6. Priority Issues: Topics of Interest
 - a. Peer to peer exchange
- 7. Report out from Priority Issue Session
- 8. Identification of Needs and Next Steps

Deliverable:

A brief summary memo of the outreach conducted, including the dates and names of specific conferences or workshops where the updated Guide was presented.

A brief summary memo that includes each workshop agenda, participant list, and participant evaluations or feedback.



Tasks

Task 5 - Project Management Activities

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:

- 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.

Reporting Requirements

Progress Reports: The applicant shall provide the CWCB a progress report every six 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 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 B. 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 six 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.