

Outdoor Efficiency Program Recommendations

Summary:

As part of its Project Accelerator initiative, WaterNow Alliance (WaterNow) and Western Resource Advocates (WRA) supported the development of a water efficiency program for Summit County, CO. Recognizing that water efficiency is their cheapest and most feasible source of new supply, in 2018, the Summit County community, with the support of five jurisdictions including the towns of Breckenridge, Dillon and Frisco, the Copper Mountain Metropolitan District and local nonprofit partner, High Country Conservation Center (HC3), published a regional Water Efficiency Plan.

WaterNow and WRA worked with partners to put this plan into action through the development and implementation of a regional outdoor water efficiency program. The project team researched and compiled existing resources on best practices for outdoor efficiency programs, identified and conducted informational interviews with counties and cities that have adopted exemplary efficiency programs and that share similar characteristics (i.e. geography and tourism-based economies), convened stakeholder meetings, and drafted outdoor water efficiency program guidelines that incorporate outreach strategies and financing options.

This memo outlines a proposed outdoor water efficiency program for Summit County, CO, which is largely administered by the High Country Conservation Center (HC3), a local non-profit resource conservation organization, with support for local water providers and state/federal grants.

The program recommendations are a result of research conducted through informational interviews with local water providers, planners, and elected decision-makers, research on successful programs in other similar communities, and stakeholder engagement with the local water advisory group and landscape professionals. The four primary programs are: irrigation audits, outdoor efficiency rebates and incentives, landscape professional certification, and education/outreach opportunities. Each program includes recommended program design and parameters, suggested entity/entities to lead the program, outreach strategies, and a budget with identified funding opportunities. The program outlined below was designed to be piloted in Summer 2022 with an opportunity to adjust/modify in subsequent years.

Program Specifications:

A. Irrigation Audit Program

Property Type	Rebate Amount	Est. Total Cost of Audit
Single Family Residential (10 zones or less)	\$75 rebate	\$120 - \$250 / audit
Large Property – CII or Residential (10 zones or more)	\$100 rebate	\$500 - \$1,500
HOA Common Space Irrigated Areas	\$150 rebate	\$500 - \$1,500

Program Design:

1. Irrigation system must have been previously installed.
2. Audits will be conducted by local, private-sector landscape professionals that are certified to conduct irrigation audits through an EPA WaterSense labeled irrigation auditing certification program. See landscape professional certification below for more details.
3. Audits will be conducted from June – August.
4. Irrigation audit will include:
 - a. A visual inspection to pinpoint problems in the sprinkler system
 - b. Tests to measure precipitation rates
 - c. Catch can test(s) to determine distribution uniformity
 - d. Soil sample to determine root depth and soil type
5. Auditors will provide a post-audit consultation call/in-person meeting and a standardized report that includes a customized watering schedule, tips/recommendations to improve sprinkler system efficiency, and a comprehensive list of all available irrigation rebates.
6. Homeowners/property managers will schedule audits directly with certified irrigation audit professionals.
7. Audit rebates will be available on a first-come, first-serve basis according to the budget allocated for a particular town/provider.

Program Lead:

1. The Non-Profit will maintain a list of certified irrigation audit professionals with contact details available to conduct irrigation audits in participating towns/districts; the list will be available on The Non-Profit's website (as well as city/utility websites).
2. The Non-Profit will maintain a standardized audit report template required to receive rebate.
3. The Non-Profit will maintain an updated list of participating districts/towns and will communicate with certified irrigation professionals when a budget has been "spent down" for a town/district in a given year.

4. Irrigation audit professionals will submit their rebate reimbursement request forms directly to the Non-Profit along with a copy of the completed audit form & will receive payment from the Non-Profit. Thus, the homeowner will only pay for the portion of costs not covered by rebate.
5. The Non-Profit will process rebates in 4 weeks.

Targeted Outreach:

- Participating auditors will provide handouts and information about the irrigation audit program during energy audits.
- The Non-Profit and participating providers will maintain certified professional lists and audit details on websites.

B. Irrigation Efficiency Rebates:

Type	Specifications	Rebate Amount	Average Cost
WaterSense-labeled Smart Irrigation Controllers	<ul style="list-style-type: none"> ● Retrofits on existing systems only ● Must have a Wi-Fi connection ● Limited to WaterSense labeled controllers 	\$75 (Residential)	\$150 (Residential)
		\$150 (CII & HOA Properties ¹)	\$1,000 (Commercial)
Flow sensors	<ul style="list-style-type: none"> ● New irrigation systems & retrofits ● List of eligible devices provided 	\$75	\$150
Soil moisture sensors	<ul style="list-style-type: none"> ● New irrigation systems & retrofits ● List of eligible devices provided. 	\$25	\$25
Rotary/high-efficiency sprinkler nozzles	<ul style="list-style-type: none"> ● Retrofits on existing systems only ● List of eligible devices provided 	\$75 (\$3 per nozzle up to \$75 and 25 nozzles)	\$3-5 per nozzle
Backflow Preventer	<ul style="list-style-type: none"> ● Retrofits to existing homes 	\$200	\$2,500

¹ CII indicates commercial, institutional, and industrial customers, and HOA abbreviates homeowners' associations.

	<ul style="list-style-type: none"> ● Allows homeowners to install automatic irrigation systems 		
Turf removal	<ul style="list-style-type: none"> ● Projects must be at least 200 square feet ● Must be replaced by low-water use, native, or xeric landscaping and/or porous hardscape ● No artificial turf ● Must follow local wildfire guidance for defensible space 	<p>\$1.50 per square ft up to \$750 (500 sq ft) for residential properties</p> <p>\$1.50 per square ft up to \$1,500 (1,000 sq ft) for HOA common spaces</p>	\$2-3 per square ft for turf removal

*Prices in the above table should be adjusted to reflect local cost estimates.

Program Design:

- If applying for a rebate for an existing irrigation system, an irrigation audit must be conducted prior to receiving the rebate (with the exception of turf removal and backflow preventors).
- In consultation with the homeowner/property manager, landscape professionals can install irrigation upgrades immediately following the audit (e.g., high efficiency nozzles).
- Homeowners/property managers, or landscape professionals acting on their behalf, may apply for the rebate.
- Turf replacement projects must be verified and approved before and after installation by the Non-Profit or the Non-Profit designee.
- Given potential regulatory challenges associated with backflow preventer permitting, water providers may choose not to offer this rebate opportunity in their service areas.
- Rebates will be offered on a first-come, first-serve basis as funds are available.
- Only the homeowner/property owner– or a landscape professional acting on their behalf – is eligible to apply for rebates (with the exception of HOA property managers).
- To receive a rebate, items and/or service must be purchased within the last six (6) months and must be used within the participating providers’ service area.
- Purchased items must be new water efficiency fixtures.
- The Non-Profit – or the Non-Profits designee – is authorized to audit all outdoor rebate submissions and can deny or return rebates if it is determined that the customer did not properly follow program guidelines.
- Rebate applicants must submit a legal copy of the receipt which clearly identifies the eligible product(s) and/or services.

- Per Internal Revenue Service requirements, applicants that receive more than \$600 in water efficiency rebates in a calendar year must submit a completed W-9 form prior to receiving a check.

Program Lead:

- The Non-Profit will maintain a list of all current irrigation efficiency rebates for each participating provider (as budget allows); list will also be available on participating town and provider webpages.
- The Non-Profit will maintain an irrigation rebate form to be completed by homeowner, property owner, or landscape professional.
- The Non-Profit will process the rebate forms and receipts.
- The Non-Profit – or the Non-Profit designee – will verify and approve turf replacement projects before and after installation and may choose to audit rebate submissions at their discretion.
- The Non-Profit will process rebates within 6-8 weeks.
- The Non-Profit will assess and consider adjustments to rebate amounts on a semi-regular basis (e.g. every two years) based on changes in average cost of service/equipment.

Targeted Outreach:

- Irrigation auditors and other landscape professionals will provide details about relevant efficiency rebates to customers.
- Program details will be available on the Non-Profit and water providers' webpage

C. Landscape Professional Certification Training

Program Design:

- One Qualified Water Efficient Landscaper (QWEL) Training will be offered annually by the Non-Profit to up to 40 local landscape professionals and city/water provider staff. The goal will be to certify at least 20 QWEL participants each year.
- The QWEL training will be offered over three full days (or ~24 hours) and includes classroom instruction, an in-person irrigation audit, and exam.
- Training will be offered at the end of March or in April (adjust as needed to avoid scheduling during the local “peak landscaping season”).
- Training will be free, and attendees will be incentivized to participate by being publicly listed for hire on the Non-Profit and participating provider webpages. Attendees' employers will be encouraged to provide a stipend to replace lost wages during training.

Program Lead:

- The Non-Profit will enter into a working agreement with an existing QWEL Professional Certifying Organization (PCO) to administer the training. Working with

an existing PCO will reduce on-boarding fees and on-going program administration costs.

- The Non-Profit's responsibilities will include: Updating local content for the QWEL training, conducting outreach, administering the annual training, and working with the PCO to maintain the QWEL professional database and send quarterly newsletters with Continuing Education Unit (CEU) opportunities. The Non-Profit may also elect to hire a 3rd party consultant to administer the program on their behalf.

Targeted Outreach:

- Local landscape companies will encourage participation among staff and consider offering pay increases for participation.
- A database of local landscape professionals will be developed by the Non-Profit, or their consultant, and direct outreach via phone/email will be conducted

D. Customer Education & Outreach

Program Design:

Targeted education and outreach materials for the irrigation efficiency programs will be developed by the Non-Profit and conducted via the following strategies:

- Fliers provided to landscape professionals, energy auditors, and realtors to educate clients
- Social media posts from participating towns and water providers
- Local newspaper advertisements
- Water bill mailers
- Program details on the Non-Profit and participating provider webpages
- Booth at Farmers Market or other community events

In addition to targeted program outreach, providers may also elect to participate in the following opportunities:

- Recognize Imagine a Day Without Water, an annual US Water Alliance campaign through social media posts, op-eds, and blog posts
- Participate in the Wyland Foundation's Mayors Water Challenge. This event is held annually in April and is free to participating providers. Residents will be encouraged to take an online water conservation pledge and will be entered to win a variety of prizes.

Program Lead

- The Non-Profit, as part of their budget allocated from water providers per program for implementation and on-going management and outreach, will take the lead on developing outdoor efficiency program collateral. Additional costs for marketing and outreach are included below.

- Towns and water providers may elect to participate individually in the various external education and outreach programs noted above.

Program Budget & Funding Information

The draft budget outlined below is subject to change based on provider participation, funding, and feedback from participating providers. The budget is designed to allow municipalities/water providers to opt-in to various elements of the overall outdoor efficiency program. Additionally, the program and budget will be assessed following Year 1 pilot implementation and may be modified/adjusted at that time.

A. Irrigation Audit Program Budget

- Participating towns/providers will contribute a set amount to the Non-Profit annually, to be determined during the towns/providers budgeting process.
- An initial fee of \$2,000 will be contributed by each provider in Year 1 to cover program implementation costs. If City/water provider participation is limited, increased fees may be required to cover implementation costs.
- Beyond the initial fee, 35% of a provider's contribution will be allocated to audit rebates and 65% will be allocated to the Non-Profit for program administration and outreach.
- Funding not utilized will rollover to the next year.
- External funding for this program may be available through the USBR WaterSMART program and/or the CO Water Conservation Board's Water Efficiency Grants and Water Plan Grants. Grants require a 25 - 50% project funding match. If funding is received, utility contributions will be adjusted.

Example: Town A Irrigation Audit Year 1 Irrigation Audit Program Contributions	
Initial Year 1 Implementation Fee*	\$2,000
Allocation for Audit Rebates (9-14 rebates)	\$1,050
On-going program administration & marketing	\$1,950
Total (for Town A):	\$5,000

*The Non-Profit may consider a prorated implementation fee for smaller providers.

B. Irrigation Efficiency Rebates Budget:

- The Non-Profit, on behalf of, or in partnership with, participating providers may elect to apply for state and federal grant opportunities to implement this program. Specifically:
 - WaterSMART Small Scale Water Efficiency Program: Provides up to \$75,000 to water providers interested in implementing outdoor irrigation efficiency measures.
 - *This grant requires a 50% cost share.*

- Participating towns/providers will contribute a set amount determined during their budgeting process to the Non-Profit annually.
- An initial fee of \$2,000 will be contributed by each provider in Year 1 to cover program implementation costs. If City/water provider participation is limited, increased fees may be required to cover implementation costs.
- Beyond the initial fee, 35% of a provider's contribution will be allocated to rebates and 65% will be allocated to the Non-Profit for program administration.
- Funding not utilized will rollover to the next year.
- Providers *must* participate in the irrigation audit program in order to participate in the efficiency rebates program.

Example: Town A Irrigation Efficiency Rebates Year 1 Contributions	
Initial Year 1 Implementation Fee*	\$2,000
Allocation for Irrigation Efficiency Rebates	\$3,500
On-going Program Administration	\$6,500
Total (for Town A):	\$11,500

*The Non-Profit may consider a prorated implementation fee for smaller providers.

C. Qualified Water Efficient Landscaper Training Budget

- Limited funding may be available through State Water Efficiency grants to offset program development (i.e., curriculum development in Year 1).
- Local water providers must commit to sharing the additional costs of program administration. Costs should be incorporated into the annual budgeting process and divided proportionally between participating providers based on number of connections/ratepayers. Funding must be provided in Q1 each year to the Non-Profit.

Activity	Estimated Cost
QWEL Professional Certifying Organization fees (on-going annual program fees, database administration)	\$250 - 500
QWEL Program Administration (i.e. outreach, curriculum, logistics & materials); ~150hrs*	\$6,750 - \$12,000
Course materials (printing costs, rentals, equipment, food)	\$1,500
QWEL Instructor(s)	\$5,000
Total:	\$13,500 - \$19,000

*Program administration hours/costs will likely be higher in Year 1 than in subsequent years.

D. Customer Outreach & Education Budget

- Participating providers must commit to share the costs of program marketing and outreach. Costs should be incorporated into the annual budgeting process and

divided proportionally between participating providers based on estimated number of connections/ratepayers. Funding must be provided in Q1 each year to the Non-Profit.

Year 1 Marketing & Outreach Costs*	
Graphic Designer (\$75/hr @ 40hrs)	\$3,000
Printed materials	\$1,000
Media/advertisements	\$2,000
Total	\$6,000

*Note: The Non-Profit staff time allocated to develop and disseminate marketing materials per program is incorporated in the implementation and administration fees above.

Sample Year 1 Budget for Town A

A. Irrigation Audit Program	
Initial Year 1 Implementation Fee	\$2,000
Allocation for Audit Rebates (9-14 rebates)	\$1,050
On-going program administration & marketing	\$1,950
Subtotal:	\$5,000
B. Irrigation Efficiency Rebates	
Initial Year 1 Implementation Fee	\$2,000
Allocation for Irrigation Efficiency Rebates	\$3,500
On-going Program Administration	\$6,500
Subtotal:	\$11,500
C. QWEL Program Budget (assume 3 providers participate)	
Subtotal:	\$4,500 - \$6,300
D. Customer Outreach and Education (assume 3 providers participate)	
Subtotal:	\$2,000
Total Year 1 Budget for Town A	\$23,000 - \$24,800