

Statewide Water Education Action Plan



A Common Agenda for
Water Education's Role in
Achieving Sustainable Water for
Colorado by 2050

EXECUTIVE SUMMARY 2020-2025

STATEWIDE WATER EDUCATION ACTION PLAN – EXECUTIVE SUMMARY 2020-2025 TABLE OF CONTENTS

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ACKNOWLEDGMENTS

SWEAP Coalition

Natalie Brower-Kirton, Aurora Water
 Rob Buirgy*, Water Education Colorado
 Elaine Chick, Water Information Program
 Jerry Cordova, City of Colorado Springs
 Lisa Darling*, South Metro Water Supply Authority
 Casey Davenport, Colorado Watershed Assembly
 Kristen Doyle, Roaring Fork Conservancy
 Julia Gallucci, Colorado Springs Utilities
 Hillary Hamann, University of Denver
 Hannah Holm, Colorado Mesa University
 Bethany Howell, Rio Grande Watershed
 Conservation & Education Initiative
 Wade Ingle, Colorado State University Extension
 Greg Johnson*, Colorado Water Conservation Board
 Amanda Kuenzi, Mountain Studies Institute
 Kristie Nackord, Arkansas River Basin Water Forum
 Katie Navin, Colorado Alliance for
 Environmental Education
 Ellen Olson, Denver Water
 Blake Osborn*, Colorado Water Center, ThinkWater
 Jayla Poppleton*, Water Education Colorado
 Donny Roush, Denver Public Works
 Stephanie Scott, Water Education Colorado
 Jeff Sellen, Western Colorado University
 Nona Shipman, One World One Water Center
 Emily Snode-Brenneman, UCAR Center for
 Science Education
 Patrick Stanko, Community Agriculture Alliance
 Ben Wade, Colorado Water Conservation Board
 Reagan Waskom*, Colorado Water Center
 Amber Weber, PEPO, Arkansas Basin Roundtable,
 Ditch and Reservoir Company Alliance
 Lacey Williams, PEPO, South Platte & Metro Basin
 Roundtables
 Scott Williamson*, Water Education Colorado

Interviewees (in addition to Coalition members)

Barbara Biggs, Roxborough Water and
 Sanitation District
 Matt Bond, Denver Water
 Jackie Brown, Tri-State Generation and
 Transmission Association
 Aaron Citron, The Nature Conservancy
 Deb Daniel, Republican River Water
 Conservation District
 Terry Fankhauser, Colorado Cattlemen’s Association
 Russell George, Boettcher Foundation, Interbasin
 Compact Committee
 Barb Horn, Colorado Parks and Wildlife
 Peter Ismert, Environmental Protection Agency
 Sarah Johnson, Wild Rose Education
 Julie Kallenberger, Colorado Water Center

Doug Kemper, Colorado Water Congress
 Tracy Kosloff, Colorado Division of Water Resources
 Frank Kugel, Southwestern Water Conservation District
 Paul Lander, University of Colorado Boulder
 Bart Miller, Western Resource Advocates
 Molly Mugglestone, Business for Water Stewardship
 Emily Olivo, City of Fort Collins
 Greg Peterson, Colorado Agricultural
 Water Alliance
 Michael Preston, Dolores Water
 Conservancy District
 Matt Rice, American Rivers
 Nicole Seltzer, River Network
 Mark Shea, Colorado Springs Utilities
 Roy Smith, Bureau of Land Management
 Laura Spann, Southwestern Water
 Conservation District
 Lorenz Sutherland, La Junta Utilities
 Ann Terry, Special District Association of Colorado
 Lurline Underbrink-Curran, Retired Grand
 County Manager
 Garrett Varra, Varra Companies, Inc.

Water Educator Network

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Matt Bond
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 Allison Schuch
 Amber Weber
 Lacey Williams

Funders

Colorado Water Conservation Board
 ThinkWater

Coordinator

Water Education Colorado

Consultants

Conservation Impact

*Steering Committee members

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FOREWORD



Education continues to be critical as the Colorado Water Conservation Board (CWCB) works daily to implement the Colorado Water Plan with partners throughout the state to ensure a sustainable water future. To address our complex water challenges, the water plan sets forth key outreach and education objectives to achieve increased public engagement.

The Statewide Water Education Action Plan (SWEAP) is a big step towards this end. As with all water plan objectives, we invite participation from people and organizations across Colorado in this effort. The CWCB is excited to employ SWEAP outcomes and strategies to help inform ongoing updates to the Colorado Water Plan, the Basin Implementation Plans, and each Basin Roundtable's Education Action Plan.

We look forward to increased coordination and engagement with educators as we all work to focus our education efforts. With such critical and complex challenges facing our water future, now is the time to ensure our communities truly understand the importance of water in our lives.

A handwritten signature in blue ink that reads "Rebecca Mitchell". The signature is fluid and cursive.

Rebecca Mitchell
Director, Colorado Water Conservation Board



Water Education Colorado is excited to share with you Colorado's first Statewide Water Education Action Plan, or SWEAP. With the support of the Colorado Water Conservation Board and its Colorado Water Plan grant program, education specialists, water experts, and policy makers came together to craft a roadmap for the state's water education future. Through collaborative workshops, statewide outreach, and meticulous reviews and revisions, SWEAP has inspired stakeholders across the state to adopt the role of educator, helping to address Colorado's complex water challenges in the years to come.

I was privileged to be a part of the SWEAP development process. As a water community, we have always valued education as a means by which we can explain policies, projects and strategic plans to those we serve. Now I see water education and SWEAP in a much broader context, reaching fellow Coloradans of all ages, demographics and interests to enable their participation and informed decision making. SWEAP will achieve its goal of educating our youth, the greater public, and decision makers alike by using a common language and purpose.

Water Education Colorado's involvement with SWEAP does not stop now. Over the next few years, we will continue to foster and guide a collective impact model for participation in SWEAP implementation. We will have a unique role in tracking activities and progress as the plan's outcomes build to fruition, and in offering professional development and capacity-building opportunities for participating educators.

We encourage educators to use SWEAP as a guide for planning their own educational strategies to achieve positive, statewide results. We invite your input, your enthusiasm and your focus on making SWEAP a successful reality that will positively influence Coloradans' understanding of water, the most critical of our natural resources.

A handwritten signature in black ink that reads "Lisa Darling". The signature is cursive and stylized.

Lisa Darling
President, Water Education Colorado
Executive Director, South Metro Water Supply Authority

WHAT IS THE STATEWIDE WATER EDUCATION ACTION PLAN?

The Statewide Water Education Action Plan (SWEAP) is a guide for Colorado water educators working individually and collectively to realize a set of shared outcomes that align with the "Outreach, Education and Public Engagement" goals set forth in the Colorado Water Plan (CWP). Those goals focus on ensuring Coloradans have access to accurate information and are empowered to participate in stakeholder decision-making processes.

Water education is one of eight comprehensive aspects of the CWP to ensure a sustainable water supply for Colorado's growing population by 2050 in a way that respects and preserves the state's diverse values. SWEAP does not mandate local actions, rather addresses obstacles to a coordinated, more consistently defined approach that results in progress on a statewide level.

STRATEGIC FRAMEWORK

The strategic framework is the backbone of SWEAP. With a shared vision, guiding principles, and a core set of shared outcomes, individual actions will achieve the greatest possible impact - both locally and statewide. The design of the SWEAP framework is a simple logic model: actions carry out strategies to achieve outcomes toward impact. Metrics measure progress toward outcomes. The vision (for water education), guiding principles, and Critical Water Concepts define the Plan's overall context.

SUSTAINABLE WATER 2050

COLORADO WATER PLAN COMPREHENSIVE SOLUTIONS

WATER EDUCATION, OUTREACH, AND PUBLIC ENGAGEMENT

STRATEGIC FRAMEWORK

VISION

Coordinated, well-funded, and impactful education, outreach, and public engagement achieving measurable outcome by 2025

2025 IMPACT

Coloradans are engaged in well-informed community discourse and decision making regarding balanced water solutions, and are empowered to take thoughtful action regarding critical water challenges facing the state and their communities.

Critical Water Concepts | Guiding Principles

| AWARENESS OUTCOMES | KNOWLEDGE OUTCOMES | BEHAVIOR CHANGE OUTCOMES | SYSTEMS CHANGE OUTCOMES |
|---|--------------------|--------------------------|-------------------------|
| Metrics | Metrics | Metrics | Metrics |
| Strategies | Strategies | Strategies | Strategies |
|  BASIN & LOCAL ACTIONS (to be developed in response to local needs and audiences) | | | |

VISION

Coordinated, well-funded, and impactful education, outreach, and public engagement achieving measurable objectives in water education by 2025 that contribute to sustainable water by 2050.

IMPACT

By 2025, Coloradans are engaged in well-informed community discourse and decision-making regarding balanced water solutions, and are empowered to take thoughtful action regarding critical water challenges facing the state and their communities.

CRITICAL WATER CONCEPTS

The following concepts represent foundational understandings for water education throughout Colorado. This is a working list of concepts. More details and supporting materials are available on the SWEAP website.

- The physical and chemical properties of water are unique and constant.
- Water is essential for life, our economy, and a key component of healthy ecosystems.
- Water is a scarce resource, limited and variable.
- Water cycles naturally through Colorado's watersheds, often intercepted and manipulated through an extensive infrastructure system built by people.
- The quality and quantity of water, and the timing of its availability, are all directly impacted by human actions and natural events.
- Water is a public resource governed by water law.



Photo Credit: Roaring Fork Conservancy



Photo Credit: Heather Dutton



Photo Credit: Water Education Colorado

GUIDING PRINCIPLES

The following principles are implicit throughout this Plan and should guide the work of Colorado water educators participating in the Plan's implementation. These principles are essential to meeting SWEAP outcomes effectively and equitably.

Balanced and reflective of tradeoffs

Water educators will strive to incorporate information into educational experiences that examines diverse perspectives as well as trade-offs for any given decision/action to the environment, public health, government, economies, and more.

Supportive of the Colorado Water Plan vision

Water educators will equip and empower the people of Colorado so that they can contribute to informed decision making and forward progress on solutions that ultimately result in success for Colorado Water Plan objectives.

Objective and fact-based

Water educators will advance informed decisions and sustainable solutions by striving to present fair, objective, and instructionally sound information.

Achieved with strong partnerships and collaboration

Water educators will take a collaborative approach and seek to establish and maintain partnerships when pursuing a strategy to achieve shared outcomes.

Using a watershed approach

River basins and watersheds within Colorado serve as geographically defined organizing units for education, collaboration and study. Water educators recognize that incorporating a watershed context is foundational to teaching the Critical Water Concepts in this Plan.

Accessible, engaging, and striving for equity

Because all Coloradans are directly affected by water-related decisions, water educators will take an inclusive and equitable approach and will regularly evaluate strategies for their degree of success within marginalized communities. In addition, water education materials and professional development opportunities will incorporate culturally responsive practices.

Implemented across Colorado

Water educators will ensure that water education is accessible across the geographic range of Colorado. Water educators will strive to make content accessible and relevant in the communities in which they work and identify opportunities to reach underrepresented areas.

Adaptive and iterative in response to changing conditions

Implementation of strategies across Colorado and the effectiveness of those strategies in meeting statewide outcomes will be measured and reported by participating entities at regular intervals. Subsequent updates to this Plan will address gaps and new opportunities.



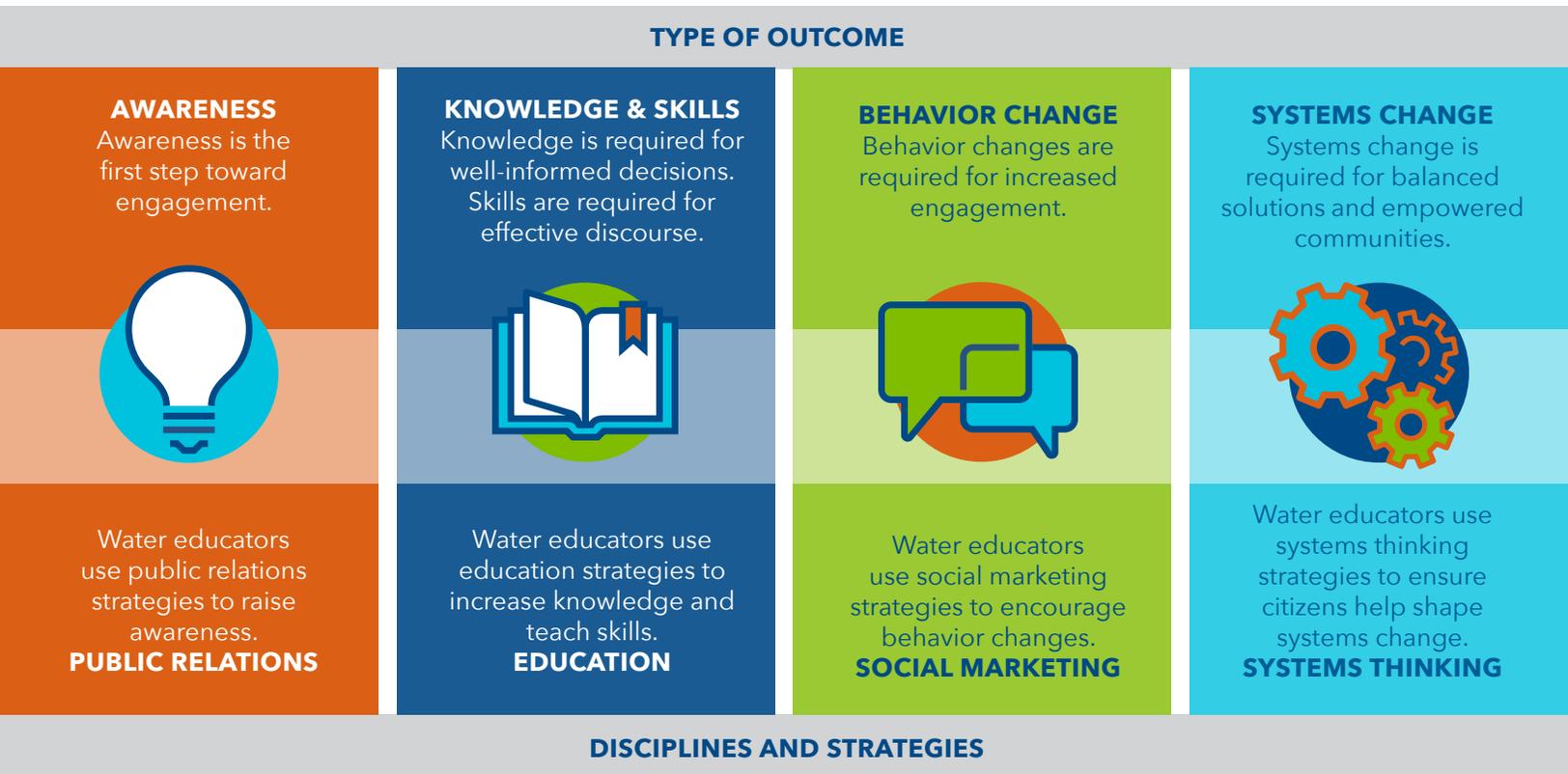
Photo Credit: Sarah Johnson



Photo Credit: Denver Public Works

THE WATER EDUCATION CONTINUUM

SWEAP outcomes are organized according to distinct disciplines, each of which relies on specific strategies to achieve outcomes. The continuum below demonstrates the relationships among SWEAP outcomes and their respective disciplines, including the strategies associated with each.



SWEAP OUTCOMES

Awareness

- The proportion of Coloradans in each river basin who can identify how water supports their quality of life, as well as the threats to and potential solutions for a sustainable water supply, increases.

Knowledge & Skills

- The proportion of Coloradans in each river basin who can articulate at least three “Critical Water Concepts” increases.
- The proportion of Coloradans in each river basin who report confidence in having the knowledge necessary to take an active role in water stewardship in their community increases.
- The proportion of Coloradans in each river basin who report confidence in having the skills necessary to take an active role in water stewardship in their community increases.

Behavior Change

- Participation in community discourse and decision processes about water at the state, regional and local levels increases.
- Voters have access to factual information that addresses potential impacts to sustainable water resources in relevant issue areas.
- The proportion of Coloradans in each river basin that are demonstrating sustainable water behaviors increases.

Systems Change

- Where relevant, local and state policies and practices are supportive of advancing statewide water literacy.
- Where relevant, local and state policies, regulations, and practices demonstrate a consideration of impacts on sustainable water resources.
- Water decision-making bodies are increasingly representative of the demographic make-up of the area they serve.

Photo Credit: Courtesy of Yampatika

SWEAP STRATEGIES AND EXAMPLE LOCAL ACTIONS

SWEAP strategies are the few best methods, practices, or innovative ideas identified to achieve outcomes. Actions are the tasks to carry out those strategies.

SWEAP provides the strategic framework as a starting place, recognizing that individual water educators and educational organizations will continue to customize actions to reach specific audiences and meet the unique needs of their communities. The Example Local Actions chart below provides examples of actions that can be used to plan activities that align with the SWEAP strategic framework.

SWEAP Strategies

Local Actions: EXAMPLES ONLY*

Local= basin/watershed and community-scale

Outcome 1: The proportion of Coloradans in each river basin who can identify how water supports their quality of life, as well as the threats to and potential solutions for a sustainable water supply, increases.



1a. Implement a multi-channeled public relations and media campaign that can be applied at various scales throughout the state.

1a1. Work with Basin Roundtables/PEPO liaisons to adapt statewide messaging and campaign elements tailored to individual basins and audiences.

1a2. Work with local media outlets, community groups, nonprofit organizations and business to disseminate message and support campaign.

Outcome 2: The proportion of Coloradans in each river basin who can articulate at least three "Critical Water Concepts" increases.



2a. Produce and distribute information to support and clarify Critical Water Concepts.

2b. Facilitate incorporation of Critical Water Concepts in educational programming.

2a1. Work with local water educators to understand and incorporate Critical Water Concepts in their information and programs.

2b1. Outreach and work with district/local schools to build appreciation and incorporation of Critical Water Concepts in curricula.

2b2. Create local field programs to demonstrate Critical Water Concepts and provide them to schools.



Photo Credit: Water Education Colorado



Photo Credit: Andrew Kenney

Outcome 3: The proportion of Coloradans in each river basin who report confidence in having the knowledge necessary to take an active role in water stewardship in their community increases.

3a. Curate and promote a readily accessible source for current, factual information on a broad array of important water topics.

3b. Support hands-on and project-based learning and service opportunities for water-related issues.

3c. Incentivize and reduce barriers to participation in training for underrepresented groups and geographic areas.

3a1. Share water information throughout the community in multiple venues.

3b1. Facilitate student-led action projects as part of project-based learning.

3c1. Identify, reach out, and share information resources with underrepresented groups in the community.
3c2. Facilitate dialogue between traditional water professionals and decision-makers with underrepresented groups to remove barriers.

Outcome 4: The proportion of Coloradans in each river basin who report confidence in having the skills necessary to take an active role in water stewardship in their community increases.

4a. Train the trainers to build participants' skills in discourse and decision-making.

4b. Expand leadership development opportunities for adults and youth that foster skills for informed discourse and decision-making.

4a1. Host environmental issues forum moderator trainings.

4b1. Tailor programs that use role-play to build decision-making skills based on Colorado water scenarios.

Outcome 5: Participation in community discourse and decision processes about water at the state, regional and local levels increases.



5a. Curate a compendium of best practices for inclusive civic engagement.

5b. Ensure water discussions or decision-making processes are accessible, convenient, inclusive, and well-publicized.

5a1. Integrate best practices in all outreach activities.

5b1. Work with program organizers and meeting coordinators to utilize best practices.
5b2. Facilitate community-based, neighborhood-focused "fireside chats" to solicit input from broader local audience.

Outcome 6: Voters have access to factual information that addresses potential impacts to sustainable water resources in relevant issue areas.

6a. Provide factual information that can be used to analyze issues, policies or initiatives from a water perspective.

6b. Encourage the incorporation of water-related impacts in voter information and forums.

6a1. Ensure local voter information sources have and understand the water analyses.

6b1. Work with local citizen groups, nonprofit and education organizations to disseminate the information and include it in their materials.

Outcome 7: The proportion of Coloradans in each river basin that are demonstrating sustainable water behaviors increases.

7a. Identify sustainable water behaviors that are a priority for each basin.

7b. Develop and implement social marketing strategies for behaviors that are identified as priorities, statewide and at the basin level.

7c. Research and implement best practices for tracking the use of sustainable water behaviors in each region.

7a1. Convene local water educators to define behaviors important to the basin.

7a2. Define audience-specific opportunities and obstacles to desired behaviors.

7b1. Review (and then update) projects and activities to move from awareness to behavior change (increase incentives, remove barriers).

7c1. Track local behavior change.

Outcome 8: Where relevant, local and state policies and practices are supportive of advancing statewide water literacy.



8a. Collaborate with Colorado Department of Education and other partners to incorporate water literacy as part of implementation of Colorado Academic Standards.

8a1. Encourage local educators to express need and interest for this from the Department.

Outcome 9: Where relevant, local and state policies, regulations, and practices demonstrate a consideration of impacts on sustainable water resources.

9a. Support policy makers in developing the knowledge to evaluate trade-offs in water issues.

9b. Curate and provide guidance on tools and best practices for incorporating consideration of water impacts and trade-offs into policy-making.

9a1. Provide information and field experiences/ training to help policy makers evaluate trade-offs.

Outcome 10: Water decision-making bodies are increasingly representative of the demographic make-up of the area they serve.

10a. Provide trainings, leadership development, and mentorships tailored to underrepresented groups and geographies.

10b. Provide equity and inclusivity training for coordinators, chairs, and appointing agencies of decision-making bodies.

10c. Track metrics to ensure all demographics and geographies demonstrate progress in outcomes 1-7, and identify program changes to close gaps.

10a1. Target local outreach and programs to underrepresented groups in the community.

10b1. Adapt training to local needs and facilitate training opportunities.

10c1. Participate in regional and statewide surveys.

10c2. Solicit ongoing community input about what is working and not, adapt accordingly.



VISION FOR IMPLEMENTATION

Water education, outreach, and public engagement are critical to addressing Colorado's significant water challenges. To maximize impact, SWEAP-focused water educators embrace a holistic approach that empowers Coloradans to effectively participate in addressing these challenges. Creating and executing SWEAP, based on the common strategic framework described in this Plan, is an essential step toward achieving a sustainable water future for Colorado.

Many Entities Contributing to Implementation

- Water Education Colorado and other statewide groups: Use shared framework to guide a focused strategy, mobilize funding, and provide capacity-building opportunities.
- Public Education, Participation and Outreach (PEPO) workgroups and Basin Roundtables: Use SWEAP as a model for planning, building in alignment with Education Action Plans where possible, and as a framework to foster cross-pollination among and between basins.
- Organizations and Local Water Educators: Better align local and regional actions with statewide strategies; contribute to statewide impact; facilitate funding and reporting.

Building Capacity for Water Education

SWEAP is a basis for increasing funding and creating resources to build capacity toward effective and equitable implementation of this Plan. Curated or newly developed resources and toolkits will help to bring all implementation strategies to a common standard of practice. Toolkits will be supported by technical assistance programs that provide training, coaching, or mentoring at different locations throughout the state. The Water Educator Network, led by Water Education Colorado, will fill a critical role as a peer-to-peer learning network, sharing information about successes, lessons learned, and other training or informational resources.

Measuring Success and Filling Water Education Gaps

With shared outcomes and related metrics, progress at a statewide level can be documented and evaluated. In geographic areas where progress is slow, technical assistance can be provided to support local groups in adapting strategies that achieve better and more equitable results.



Photo Credit: Carolina Manriquez

An Iterative Process

SWEAP is a living document supported by coordinated, ongoing efforts. Mirroring the iterative process used in developing the Colorado Water Plan, SWEAP implementation is coordinated at the state, regional, watershed and local levels. An adaptive management approach will be used to:

- Guide actions that achieve shared outcomes and measurable objectives
- Develop, track, and assess specific metrics
- Evaluate and document progress based on outcomes
- Share learning and deliberately build capacity to support implementation of strategies
- Adapt priority strategies and actions based on documented results and identified gaps

For More Information

To view the full plan, visit wateredco.org/SWEAP. For more information, contact Water Education Colorado at info@wateredco.org or call (303) 377-4433.



Photo Credit: Donny Roush



1600 Downing Street | Suite 200
Denver, Colorado 80218
303.377.4433 | wateredco.org