

June 16, 2020

Ben Wade

Project Manager Colorado Water Conservation Board 1313 Sherman St. Room 718 Denver, CO 80203

RE: Final report

Purchase Order No. POGG1 2019-2021

Dear Ben.

Please find attached our final report for the Colorado Water Plan Education and Innovation grant we received under Purchase Order No. POGG1 2019-2021, titled "Design and Build Statewide, Data-Based Strategic Water Education Action Plan and Associated Tools." Per grant guidelines, this report 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, and includes all grant deliverables as additional attachments. This report reflects the duration of the grant period, which began Jan. 12, 2018 and is now concluded. Please let me know if you have any questions or concerns. Thank you for your support!

Sincerely,

Jayla Poppleton **Executive Director**

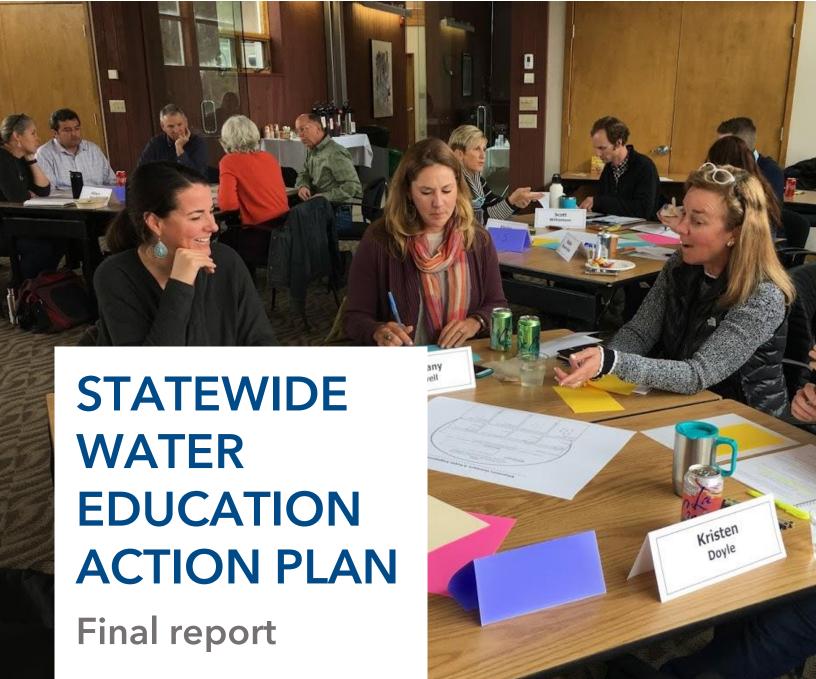
1600 Downing Street, Ste. 200, Denver CO 80218 :: P (303) 377-4433 :: F (303) 377-4360 :: WaterEducationColorado.org

Kevin McBride

Chris Treese

Alan Matlosz

Treasurer



JUNE 16, 2020

Grant POGG1 2019-2021



Statewide Water Education Action Plan (SWEAP) Final Report

Design and Build Statewide, Data-Based Strategic Water Education Action Plan and Associated Tools

CONTENTS

Introduction	p. 2
Grant Activities	p. 3
Outcomes and Impact	p. 6
Changes to the Initial Grant Proposal	p. 9
Challenges and Lessons Learned	p. 10
Future Plans and Sustainability	p. 11
Financial Information	p. 13
Appendices	p. 14

Introduction

Water Education Colorado received a \$47,000 grant from the Colorado Water Plan Engagement and Innovation Grant Fund, approved by the Colorado Water Conservation Board in January 2018, for the project "Design and Build Statewide, Data-Based Strategic Water Education Action Plan and Associated Tools." That project and all related grant activities are now complete, and all deliverables are being submitted with this final report. Those deliverables include:

- 1) Final Water Education Action Plan document
- 2) Final Water Education Colorado strategic plan document

Water Education Colorado's proposal to design and build a statewide, strategic Water Education Action Plan was intended to facilitate the expansion of public engagement and outreach efforts in Colorado through the creation of a cohesive framework that could be used to organize collaborative efforts to achieve greater collective impact in water education with improved tracking and measurement. Development of a data-based education plan is a stated goal in Colorado's Water Plan Ch. 9.5, and this project was

intended to fulfill that goal while also helping to guide further decision making related to program development and investments in education, engagement and innovation in Colorado. The plan was envisioned as a tool that could be used to amplify local efforts through the identification of common goals and resource needs and the mobilization of resources to fulfill them.

Outreach, education and engagement affects every aspect of the Colorado Water Plan. This grant allowed Water Education Colorado to work with more than 100 stakeholders to identify the tools, resources, and actions needed to advance understanding and support for water solutions, broadly, and for the plan's implementation, more specifically, among Colorado's community members.

In addition, this grant supported Water Education Colorado to update its own organizational strategic plan in alignment with taking a lead role in advancing the statewide strategy that is outlined in the Statewide Water Education Action Plan. The Water Educator Network, an affiliate group of water educators serving a broad range of audiences across Colorado and operating under WEco's leadership since 2014, will continue to play a critical role in both informing and implementing the action plan moving forward.

Grant Activities

The original grant request outlined the two primary tasks as well as correlating sub-tasks and methods to accomplish the grant's purpose.

Task 1 - Design and Build Statewide Water Education Action Plan

The outcome of this task was a strategic plan for statewide water education activities, developed with local input, to fulfill the objectives of the Colorado Water Plan. This plan was envisioned to serve as a comprehensive "playbook" for statewide and basin-wide water education, outreach and engagement for the next 3-5 years.

"This plan will serve as a comprehensive 'playbook' for water education, outreach and engagement for the next 3-5 years." The three sub-tasks included hosting a series of regional stakeholder meetings, conducting data analysis including a survey of existing basin Education Action Plans, and developing a plan with feedback loops.

Method/Procedure:

Water Education Colorado will lead the development of a statewide, strategic Water Education Action Plan by taking the following steps:

- Contract a strategic planning expert facilitator to assist with reviewing data, facilitating meetings and developing the plan.
- Gather and assess all available data, including from past surveys, the new 2018 OMNI public awareness survey, and the OWOW Water Education Asset Map.
- Survey the basin's Education Action Plans and identify common themes.
- Identify stakeholders that need to be at the table from each basin.
- Convene 4-5 meetings around the state, convenient to different regions or in conjunction with basin roundtable meetings in each basin to gather input.
- Convene 2-3 separate meetings with stakeholders dedicated to the strategic planning process.
- Design the plan.
- Get feedback on the plan and revise over multiple rounds until finished product is satisfactorily achieved.

WEco closely followed this procedure, with the exception of the number of stakeholder meetings held around the state (which will be discussed under the section "Changes to Initial Grant Proposal on p. 8), and successfully completed all sub-tasks with the endorsement of the new 2020-2025 Statewide Water Education Action Plan (SWEAP) by the WECo Board of Trustees on Nov. 12, 2019, and a presentation and delivery of the final plan document to Colorado Water Conservation Board directors on Nov. 20, 2019.

Consultant

We hired strategic planning expert facilitator Conservation Impact, a Denver-based firm with 24 years of experience working with hundreds of public agencies and conservation-based nonprofits across the country to develop and execute strategic plans. Conservation Impact guided the SWEAP planning process, which included collecting stakeholder input, conducting a rigorous analysis, and facilitating the SWEAP Coalition's strategic decision-making.

Situation Analysis

The research and situation analysis for SWEAP was informed by:

- 61 individual and small group phone interviews
- A coalition of 30 experts from around the state with diverse experience and

perspectives in water education; the Coalition built the strategic framework

- One World One Water, Water Education Asset Map Project, 2018
- 2008 Water Education Task Force Report
- ThinkWater Systems Analysis and ThinkWater staff
- A review of other related documents, data and surveys shared by the SWEAP Coalition, including but not limited to all of the Basin Education Action Plans, as well as past public surveys conducted by the CWCB and other agencies.

Task 2 - Update Weco Strategic Plan to Align with Statewide Water Education Action Plan

As the statewide leader in water education, Water Education Colorado will be instrumentally engaged in implementing the Statewide Water Education Action Plan once it is developed. To position the organization in such a way that its priorities align in step with the statewide plan, and so that it is prepared to execute successfully in conjunction with educators across the state, a new strategic plan update for WEco was developed in tandem with the development of the broader, inclusive statewide plan. Water Education Colorado's prior strategic plan was developed/adopted in September/October 2014.

The two sub-tasks were to update the WEco strategic plan, and to align the WEco strategic plan with the Statewide Water Education Action Plan.

Method/Procedure:

Water Education Colorado will update its strategic plan to align with the Statewide Water Education Action Plan by taking the following steps:

- Contract with a facilitator to lead the WEco board and staff in strategic planning process.
- Review available data, including that which is used to inform the statewide plan.
- Host board/staff retreat to engage in strategic planning discussions.
- Draft and finalize organizational plan that aligns with statewide strategy.

WEco followed this procedure and successfully completed both sub-tasks with the adoption of the new 2020-2025 WEco Strategic Plan by the WEco Board of Trustees on Jan. 24, 2020.

Consultant

WEco worked with the same consultant, Conservation Impact, to develop its own updated strategic plan. Working with the same consultant streamlined the process because they were already familiar with the statewide plan's outcomes and strategies, as well as vision for implementation. In addition, we were able to use much of the same situation analysis to inform WEco's Board of Trustees and staff as they tackled WEco's strategic objectives.

Outcomes and Impact

The ultimate outcomes and impact of the grant deliverables will come in the course of implementing both plans over the identified timetable they share: 2020-2025.

However, the result of this grant was the development of two very carefully considered strategic plans. One of those plans, the Statewide Water Education Action Plan, is now available to be used to guide the work of a statewide network of educators working to achieve collective impact in water education, enabling the success of the Colorado Water Plan and long-term benefits to the state's water future.

The other, WEco's new strategic plan, will be used to ensure the long-term viability and effectiveness of the state's leading organization for informing and engaging Coloradans on water. It also aligns with SWEAP by affirming the intent of the Board to take a lead role in implementation of SWEAP as a coordination tool as we continue to build and support the Water Educator Network and, in so doing, multiply our impact. Although not a part of this grant's scope of work, WEco also developed a correlating business plan, which provides a concrete roadmap for achieving the strategic goals.

In addition to the final outputs, or deliverables, produced with support from this grant, WEco observed several ancillary outcomes and impacts that were benefits of the process to complete the project:

Increased coordination with Public Education, Participation and Outreach (PEPO) liaisons

WEco worked with Conservation Impact and CWCB staff to coordinate multiple touchpoints with the PEPO liaisons, recognizing the immediate commonality of shared goals to educate around the Colorado Water Plan. WEco and Conservation Impact participated in an Aug. 21, 2018 meeting of the PEPO liaisons with agenda items to discuss the Statewide Water Education Action Plan (SWEAP), as well as to review existing Basin Education Action Plans developed by the Basin Roundtables and PEPO liaisons.

The discussion on the Education Action Plans included a review of their purpose and use, lessons learned, synergies or conflicts, and potential relationship to a statewide plan. It was clear that the EAPs vary significantly in scope and design from one basin to the next, making them difficult to compare. The meeting transcripts are included in Appendix D on page 26. Conservation Impact took feedback from the meeting and developed a template for CWCB to consider institutionalizing for Education Action Plan updates. That template is included in Appendix E on page 32.

This preliminary discussion with PEPO around SWEAP included the following questions: What would define success for this project? Input on desired outcomes? What will make

this actionable and useful for greatest number of people engaged in education/outreach activities across the state?

Following the Aug. 2018 meeting, all PEPO liaisons were invited to participate in the SWEAP Coalition, and the vast majority chose to do so. WEco has continued to coordinate with the liaisons, and sees them as key partners for the future implementation of SWEAP.

Coalescing around the guiding principles and Critical Water Concepts

Development of SWEAP included a full-day meeting of the SWEAP Coalition on April 19, 2019, in which a series of guiding principles were identified to undergird the approach educators agreed were important to being effective as a collective. These 8 guiding principles represent a foundational lens to keep educators focused on important values to bring to their work to be most effective, and include the principle of supporting the Colorado Water Plan vision, which was critical to aligning SWEAP to that broader state plan.

In addition, the Coalition identified the Critical Water Concepts included in SWEAP, which represent the foundational knowledge educators agree is important for all Coloradans to understand. These 6 concepts can be further built out and supported by specific facts and resources as the place for any educator to start in teaching their audience about water. Having this common frame will help guide a holistic and balanced educational effort to increase Coloradans' water knowledge.

Identification of education "disciplines" to help frame the SWEAP outcomes

Through the literature review of best practices and work with the SWEAP Coalition, the concept of different categories for water education outcomes and strategies emerged. The group recognized that we use the term "water education" to refer to different kinds of work that accomplishes different goals or outcomes, including building awareness, developing knowledge and skills, fostering behavior change, and stimulating systems change. Each type of outcome is in turn associated with different "disciplines" or strategies to accomplish that outcome.

This concept helped the group frame the range of outcomes for SWEAP and identify associated strategies that were most likely to lead to those outcomes. Thinking in terms of these disciplines was an "aha" moment for many of the Coalition members, and an insight that they will hopefully incorporate into their methods whether or not they choose to participate in implementing SWEAP.

Focus on equity

Both SWEAP and the WEco 2020-2025 Strategic Plan put a focus on equity in water education, which is a big step forward.

One of the 8 guiding principles in the plan is that education be "Accessible, engaging and striving for equity." Because all Coloradans are directly affected by water-related decisions, water educators are strongly encouraged to take an inclusive and equitable approach, regularly evaluating strategies for their degree of success within marginalized communities. In addition. Water education materials and professional development opportunities should incorporate culturally responsive practices.

In addition, the WEco Strategic Plan includes a strategy to view all programmatic decisions through an equity lens. This is in line with one of our organizational values, that "Information is for All." This value asserts that, as educators, we have a responsibility to ensure our programs and services are accessible to anyone who wants to understand and engage, including diverse populations, rural communities, or what we might consider historically marginalized populations within Colorado, such as the Tribes.

In order to begin defining what it could look like for WEco to embrace an equity lens, the board in January also adopted a set of "equity principles," now available to view on our website at www.wateredco.org/about-us/strategy-policies. (The new strategic plan can also be found there.)

These four principles acknowledge that barriers to participation can exist for various people for different reasons, and that we will make an effort to understand and reduce those barriers wherever possible. This commitment has already spurred us to make adaptations, such as offering additional scholarships or translating resources to Spanish, to ensure our programs are available to assist diverse community members in understanding water well enough that they can confidently participate in the discourse around water issues at local, regional and state levels, for the benefit of current and future generations.

Connection to a national network of water educators through ThinkWater

With ThinkWater providing matching funds for the project, WEco became connected to a national network of water educators who were also sub-award recipients for a project initially funded by the National Institute for Agriculture to translate ThinkWater concepts into field work.

ThinkWater methods of program planning and evaluation were incorporated throughout work on this project, as best practices informing the development of SWEAP. In addition, the national network of participating entities met for two multi-day trainings during the course of the project to learn from the ThinkWater team and to provide feedback on each

other's projects. That network will continue to be a valuable resource for exchanging ideas and lessons learned in achieving similar outcomes.

Changes to the Initial Grant Proposal

The original grant anticipated broad stakeholder outreach to inform the Statewide Water Education Action Plan (SWEAP) that would be achieved through a series of 4-5 meetings held around the state as "listening sessions" to gather input, with another 2-3 meetings convened with a smaller group of educators committed to helping develop the plan.

However, once WEco began soliciting proposals as part of this step in the procedure, "contract a strategic planning expert facilitator to assist with reviewing data, facilitating meetings and developing the plan," it quickly became apparent that the budget was not sufficient to allow this degree of extensive, travel-dependent stakeholder outreach.

Instead, the process to develop SWEAP included the following stakeholder engagements:

- June 26, 2018 webinar to announce the beginning of the project, and to enroll the Water Educator Network in participating as collaborators
- Aug. 21, 2018 meeting with Public Education Participation and Outreach (PEPO) liaisons to get initial input on desired outcomes for the plan
- Jan. 22, 2019 teleconference with the SWEAP Coalition
- Group phone interviews with eight groups, including Basin Roundtable chairs, NGOs, state and federal agency staff, local government, municipal water utilities, water conservation and conservancy districts, formal educators, and private sector.
- Individual phone interviews with an additional 14 "key informants" plus Coalition and Steering Committee members
- April 19, 2019 full-day SWEAP Coalition meeting
- Numerous touch points with the SWEAP Steering Committee via phone conference
- Numerous touch points to vetted elements of the plan as they were drafted by the Steering Committee, Coalition, broader Water Educator Network, and WEco Board of Trustees

Members of the SWEAP Coalition, SWEAP Steering Committee, Interviewees and Water Educator Network members providing feedback are listed in Appendix A on page 14. Questions asked during interviews are included in Appendix B on page 16. The meeting summary and transcripts from the SWEAP Coalition meeting on 4/19/19 is included in Appendix C on page 17.

Additionally, the 2018 OMNI public awareness survey that was planned at the time the grant was developed, and referred to in the grant, was not completed during the course of

the project, and therefore we were not able to include data from that survey as part of our analysis to inform SWEAP. As the CWCB moves forward to administer a public awareness survey, updated from the 2018 draft developed by OMNI, we anticipate there will be an opportunity to align some of the questions with SWEAP outcomes in order to facilitate gathering baseline data that more directly aligns with SWEAP and helps to establish SWEAP baselines against which progress will be measured.

Lastly, the timing of the project's completion was behind schedule, in part due to a staffing transition at WEco, and also due to the number of rounds of revision SWEAP underwent to incorporate stakeholder input. Instead of completing the project by June 2019, Task 1 was completed just under five months later, in November 2019, and Task 2 was completed seven months later, in January 2020.

Challenges and Lessons Learned

One challenge with the project was that there are so many types of water educators, working to serve different audiences to achieve different goals. And they all work with varying programs and a range of capacities to do so. It took a lot of skillful facilitation by Conservation Impact, as well as careful and sensitive listening and responding to input by the WEco team, to find the sweet spots where we could identify overlapping values and objectives.

At the outset of the project, we envisioned the final SWEAP plan as a more specific list of actionable items that could begin being checked off by individual organizations and through partnerships. However, it quickly became clear that the appetite for a more "prescriptive" plan was not there. Educators clearly expressed a preference for a flexible plan that could be adapted to different regions, programs, audiences and circumstances.

Therefore, SWEAP was crafted as a strategic framework, which moved backward from the big-picture vision and impact, to specific outcomes and strategies, to example-only local actions that could begin to guide the work of local educators looking to demonstrate how their work aligns with statewide strategies and contributes to statewide impact.

We envision that WEco will play a coordinating, and in some cases a supporting, or even a "coaching" role, going forward into implementation as we work with the SWEAP Coalition, WEN, and other partnering educators to put more definition on statewide, regional and local actions that carry out the identified strategies.

Future Plans and Sustainability

With the adoption of the WEco strategic plan in January 2020, the WEco Board affirmed the value of WEco's role in providing statewide vision and leadership in water education through ongoing investment in the Water Educator Network and by taking a lead role in implementation of SWEAP.

WEco was successful in applying for, and receiving, a grant for SWEAP Phase I implementation from the Colorado Water Plan Engagement and Innovation Grant fund in November 2019, which funds a Scope of Work extending from Jan. 1, 2020-Dec. 31, 2020.

The first phase includes three new tasks:

- (1) Launch/rollout: This task gets SWEAP out into the world and initiates adoption by producing official plan for circulation, conducting official rollout/launch through a range of communications channels, and initiating partner/stakeholder outreach to share vision, answer questions, define roles and secure commitments.
- (2) Setting the stage: This task sets the stage for a successful beginning to SWEAP implementation by getting the necessary baselines for tracking in place, assessing opportunities for coordinating and combining resources within the water education community, clarifying roles, and developing a systems-level tracking tool to monitor SWEAP progress and activity.
- 3) Essential groundwork strategies: This task focuses on initial essential "groundwork" strategies to initiate implementation of SWEAP through coordination between lead entities responsible for water education planning related to the Colorado Water Plan, Basin Implementation Plans and Education Action Plans, development of initial priority toolkits, curriculum, and training opportunities, identification of funding opportunities, and integration with early planning phases for a Water 2022 education campaign.

The work done during Phase I implementation will help WEco gauge the level of involvement and needs from potential SWEAP co-implementers and further inform our process and guide our coordination efforts. A SWOT analysis will analyze gaps and help us determine what resources are needed to successfully achieve SWEAP's outcomes now and in the future.

Full implementation of SWEAP is critical to achieving the education, outreach, and public engagement measurable objective set forth in Colorado's Water Plan to "significantly improve the level of public awareness and engagement regarding water issues statewide by 2020, as determined by water awareness surveys."

In the near-term, we will be focused on engaging new partners and facilitating their involvement in SWEAP. It will take time for all partners to become familiar with SWEAP, and to consider whether and how to shift resources and approaches to align with SWEAP Outcomes and Strategies. WEco will focus on working with PEPO liaisons, Basin Roundtables, water utilities, state water agencies, university water centers, the Colorado Water Congress, the Colorado Watershed Assembly, the Colorado Department of Education, the Colorado Alliance for Environmental Education, and other water education providers from a broad spectrum of organizations who participate in the Water Educator Network. In order to facilitate participation, WEco will restructure the Water Educator Network so that it is an affiliate, rather than a membership, program and free to join.

In the long-term, the SWEAP Coalition stablished some high bars as expressed in the SWEAP Outcomes, and coordinating, tracking and ultimately accomplishing them in the timeframe identified (2020-2025) given current capacity constraints for WEco and many other nonprofit education institutions will be a challenge.

To be successful in carrying forward SWEAP implementation for the full five-year timeframe of the plan, WEco will be require additional funding and is actively exploring grant opportunities, including a future grant from the Colorado Water Plan grant funds.

Financial Information

The grant was for \$47,000, and 100 percent of those funds were expended to complete the project. In addition, another \$37,087 in match funds was identified in the grant application, with all of those match funds received and spent on the project, in addition to another \$25,356 of in-kind and funding from other sources than was initially anticipated.

Budget vs. Actual

Task 1 - Design and	d Build Statewide Water Education Action						
			Budget	Budget		CWCB	Actual
		Budget	CWCB	Matching	Actual	Funds	Matching
Sub-task	Item	Total	Funds	Funds	Total	Spent	Funds Spent
Regional Meetings	S						
	Facilitator fee	\$ 7,200	\$ 5,760	\$ 1,440	\$ 7,760	. ,	\$ 2,000
	Staff coordin/implement	\$ 19,200	\$ 13,056	\$ 6,144	\$ 18,838	\$ 7,838	\$ 11,000
	Stipend for PEPO/RT participation	\$ 3,750	\$ 3,750	\$ -	\$ 1,907		\$ -
	Supplies	\$ 250	\$ -	\$ 250	\$ -	\$ -	\$ -
	Mileage	\$ 520	\$ -	\$ 520	\$ 97	\$ -	\$ 97
	Lodging	\$ 1,500	\$ -	\$ 1,500	\$ 900	\$ -	\$ 900
	Catering	\$ 1,000	\$ 1,000	\$ -	\$ 1,699	\$ 489	\$ 1,210
	Venue rental/A/V	\$ 500	\$ -	\$ 500	\$ 595	\$ -	\$ 595
Data Analysis and	Basin EAP Survey						
	Facilitator fee	\$ 3,000	\$ 2,400	\$ 600	\$ 4,720	\$ 2,220	\$ 2,500
	3rd party sub-grantee (OWOW)	\$ 2,400	\$ 1,920	\$ 480	\$ 672	\$ 672	\$ -
	Staff coordin/implement	\$ 4,800	\$ 3,101	\$ 1,699	\$ 5,908	\$ 408	\$ 5,500
Develop Plan with	Feedback Loops						
	Facilitator fee	\$ 5,400	\$ 4,320	\$ 1,080	\$ 9,032	\$ 2,820	\$ 6,212
	Staff coordin/implement	\$ 7,680	\$ 5,222	\$ 2,458	\$ 29,967	\$ 18,399	\$ 11,569
	3rd party sub-grantee (OWOW)	\$ 1,632	\$ 1,306	\$ 326	\$ 1,344	\$ 1,344	\$ -
	TOTAL TASK 1	\$ 58,832	\$ 41,835	\$ 16,997	\$ 83,438	\$ 41,856	\$ 41,582
Task 2 - Update W	eco Strategic Plan to align with State Plan						
			Budget	Budget		CWCB	Actual
		Budget	CWCB	Matching	Actual	Funds	Matching
Sub-task	Item	Total	Funds	Funds	Total	Spent	Funds Spent
Update Weco Stra	tegic Plan						
	Facilitator fee	\$ 7,200	\$ -	\$ 7,200	\$ 7,600	\$ -	\$ 7,600
	Staff coordin/implement	\$ 11,040	\$ -	\$ 11,040	\$ 5,640	\$ -	\$ 5,640
	Catering	\$ 500	\$ -	\$ 500	\$ 1,516		\$ 1,516
	Venue rental/A/V	\$ 200	\$ -	\$ 200	\$ 104		\$ 104
Align Weco Strate	gic Plan with State Plan						
	Facilitator fee	\$ 2,880	\$ 2,880	\$ -	\$ 8,888	\$ 2,888	\$ 6,000
	Staff coordin/implement	\$ 3,360	\$ 2,285	\$ 1,075	\$ 2,256		\$ -
	Catering	\$ 75	\$ -	\$ 75	\$ -	\$ -	\$ -
	TOTAL TASK 2	\$ 25,255	\$ 5,165	\$ 20,090	\$ 26,004		\$ 20,860
TOTAL		\$ 84.087	\$ 47,000	\$ 37,087		\$ 47,000	\$ 62,443

Appendix A - Contributors

SWEAP Coalition

(*Steering Committee members)

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 Davenhill 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 and 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

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 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, CSU

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

Thank you to all who provided input to the final draft and shared their ideas and example actions:

Matt BondSteve MalersNatalie Brower-KirtonKatie NavinElaine ChickEllen OlsonHannah HolmDonny RoushBarb HornAllison SchuchBethany HowellAmber WeberSarah JohnsonLacey Williams

Appendix B - Interview Questions

SWEAP INTERVIEW QUESTIONS JANUARY 2019

- 1. Can you give me a big picture snapshot/your analysis of water education in Colorado today?
- 2. Why do we (collectively) do water education and more specifically what outcome do we want from our efforts?
- 3. What are significant accomplishments we have achieved in water education at the state-wide level so far?
- 4. Who in CO is perceived as leaders/influencers in water education and why?
- 5. What do you see as future trends and issues in water education?
- 6. As a practitioner (or educator) are there particular frameworks, models, guidelines, best practices or policies that define how you do water education?
- 7. What do water educators need to do more of or less of or differently in order to be as effective as possible?
- 8. What is your vision of success for water education? What would a successful statewide water education effort look like?
- 9. If we come out of this process with a successful, focused plan to guide water education work in Colorado, what would it accomplish? What would it do? What would it not do?
- 10.If we could do <u>ONE</u> thing in water education to make the biggest impact, what would it be?
- 11. Is there anything else you want to tell me that I haven't asked you about?

Appendix C - Summary and Transcripts from Coalition meeting on 4/18/2019

COALITION PLANNING MEETING SUMMARY & TRANSCRIPTS

Statewide Water Education Action Plan (SWEAP) Water Education Colorado | April 18, 2019

Introduction

The SWEAP Coalition met on April 18, for a full day working session to provide input in the process to create a Statewide Water Education, Outreach, and Public Engagement Action Plan. The plan is a strategic framework that defines the contribution education, outreach, and public engagement will make to Colorado's Water Plan and the goal of water sustainability by 2050.

Summary

The Coalition came to the table ready to roll up their sleeves, take off their organizational hats, and bring their unique expertise to the process. They were prepared and enthusiastic to approach the challenge from a holistic, systems level.

The Coalition identified current frames as a way to think critically about assumptions around water education and to be open to new frames and ways of thinking.

We discussed common terms that may hold different meaning for different people (e.g. water education means a variety of things – awareness, public relations, behavior change, etc.). The Coalition found the Water Education Continuum (included in the working session handouts on page 6) to be a helpful framework for understanding and distinguishing the disciplines of awareness, knowledge, behavior change, and systems change, along with their related outcomes and strategies. Recognizing these distinctions and using the disciplines appropriately will be critical to achieving effective education that advances water sustainability in Colorado.

There was concern by some that our conversation was missing other key pieces of Colorado's Water Plan (e.g. storage, agriculture, etc.). The Coalition agreed to focus their work on areas they can influence within the context of Colorado's Water Plan (e.g. we cannot control the creation of new storage projects, but we can educate citizens about the tradeoffs, benefits and costs of new storage projects).

The Coalition agreed that the problem we are working to solve through SWEAP (as defined in Colorado's Water Plan), is ensuring a sustainable supply of water by 2050 in a way that protects and preserves Colorado's other water values, and that changing behavior will be critical to reaching this goal.

They also agreed that the analysis derived from the 60+ interviews and review of literature and best practices was largely accurate. However, missing from the context were the values and attitudes Coloradans have toward water. They expressed a desire to include the water values and attitudes identified through past public surveys, such as the 2009 CSU "Public Perceptions, Preferences and Values for Water in the West," the 2013 Public Opinion Strategies and Keating Research "Survey of Colorado Voters Regarding Water Supply and Rivers, and the 2013 CWCB "Value of Water Public Survey," in SWEAP, which will be done.

The Coalition refined the proposed vision and impact for SWEAP. They engaged in an initial conversation to list critical water facts (the few facts about Colorado's water that are most important for citizens to understand), and to identify guiding principles (rules or values that underlie this work). These critical facts and guiding principles will be further discussed and clarified with the SWEAP Steering Committee and the Coalition.

They broke into small groups and identified a few potential outcomes, strategies, and metrics for each educational discipline: awareness, knowledge, behavior change, and systems change. Then they reconvened as a large group and discussed the outcomes, strategies, and metrics. There were similarities between the groups. However, there was some uncertainty on the matter of scale for the outcomes we want to set (e.g. do we have an outcome focused on urban areas only?).

The Coalition came together for a productive working session, demonstrating collegiality and a strong commitment to water education. They provided substantive input that will help to inform the creation of SWEAP.

Observations

Strong Similarity Among Outcomes

The outcomes defined by the small groups had some similarities, and five or six solid outcomes emerged from the discussion. Those outcomes will be refined by the Steering Committee and the consultants before they are sent back out to the Coalition.

More Work is Needed on Knowledge Outcomes

When it came to identifying outcomes for increasing knowledge, it was challenging for the Coalition to identify a concise set of specific facts or information that people need to

increase their knowledge because potential topics that could be educated around are vast. Some Coalition members looked to the State to identify those facts and information.

Need to Identify Best Practices, Standards, and Methods

This group of experts was not able to readily point to best practices, standards, or generally accepted methods for strategies in the time allotted. It will require additional work to identify these practices, standards, and methods. However, this provides an opportunity to develop greater consistency and learning within the education community. Along with best and promising practices, there is a desire to try new and innovative strategies.

Desire to Connect and Share

There is a strong desire among Coalition members to connect with, share information, and learn from one another, and to find greater efficiencies and synergies.

We are More Similar Than Different

Some Coalition members acknowledged that they came to the session thinking their basin or issues were very different from the others. They left feeling as though they were more similar than different, and they expressed excitement and gratitude for having connected with other water education experts during the working session.

Next Steps

The consultants will refine concepts and language that emerged from the working session and create a draft plan that will be shared with Water Education Colorado and the Steering Committee for review and discussion. The consultants will revise the draft plan accordingly and present proposed outcomes. The Coalition, Water Education Colorado's Water Educator Network, and other stakeholders will provide input to define current, state-of-theart strategies and also to develop innovative strategies towards outcomes and impact. The plan will be designed to be adapted and customized at a local and basin level. It will also address gaps and solutions and actions necessary to implement SWEAP.

Conclusion

While it may not have seemed that there was a cohesive, clear direction at the end of the meeting, the progress that was made is substantial and provides a strong basis for SWEAP. There is more work to be done on outcomes, strategies, and metrics but the foundation of the plan has been laid.

Transcripts

(These are unedited notes taken during the meeting)

Current Assumptions - Frames

- Nobody understands water
- Different perspective based on where you live
- People are selfish regarding water
- ▲ Those people! (Us vs Them)
- ▲ If we reach 5th graders this will be solved
- Providing information only will change behavior
- Cooler to learn from NGO or a nonprofit than from the government
- More than one way to learn about water

Do we agree to vision, impact and situation?

- How do we sustain existing capacity? How do we understand growth?
- Don't get myopic on municipal issues
- ▲ It may be ok to do education locally
- Is the goal of the plan (education) to change behavior or just for people to know and understand?
- If we want impact, we need to change behavior need systems to make behavioral change
- Too many of us to coordinate
- ▲ The growth is the issue
- From interviews our goal is to change behavior since we can't change growth
- Different outputs, but struggle to evaluate/qualify outcomes
- Behavioral change at a systems level (systemic level) can't continue to do things the same way, water use, water delivery, etc. - it can't be business as usual
- ▲ Who is "they" in the water community? (state level nonprofits, and regional)
- How do we shift social norms vs individuals or groups?
- ▲ Utilities/infrastructures are old and need updates, look to large water users, how can we increase the knowledge with them. Need to fix them now.
- ▲ What is engagement goal? What does that look like?
- Educators are confused by all the diverse information needing to be taught
- Water ed. is decentralized (fragmented sounds like a problem), could be a benefit
- How to build relationship with policy makers. Are our policy makers knowledgeable? We can't change systems if they don't know.
- ▲ We are missing values water planning/conservation movement (river health, etc.)
- Co Water Plan, watershed health, forest health
- ▲ Where are citizen's values in the plan
- Water Quality
- We are looking at supply, education
- Grant is based on water plan, so must keep in mind
- Broad knowledge and lots of misconceptions regarding water use and attitudes
- Audience a lot of them are disillusioned. Worried about losing their water lifestyle
- ▲ Co academic standards (k-12) are they properly represented?
- As an educator, we use standards differently, whatever we decided can be adapted
- Water ed can be adapted to many different courses, however resources are being cut back

Definitions

- What does discourse mean?
 - Having conversation with elected officials rate payers, tax payers, citizens and policy makers
 - Well-informed (balanced and factual information)
 - Balanced=not emotional, unbiased (is that possible?)
 - Starts at the roundtable level local basin civil discussion with all the stakeholders [multiple stakeholders, coming together with fact-based (well informed) information, collaborative discussion, multiple perspectives]
 - How do we get citizens engaged? Discourse should not be limited to the stakeholders only
- If citizens are engaged, what does that mean?
 - I want a legislator that shares my water values
 - It is a 2-way process (see page 1)
- What kind of conversation and to what end?
 - A mutual decision-making process that reflects the values of the community
 - Use the water plan to keep us focused
- ▲ Well informed, includes practical/relevant
- ▲ Balanced = objective, everyone's needs taken into account
- Not us vs them, all stakeholder's needs taken into consideration
- Unbiased
- Take away the 2nd part of the vision statement? Are we trying to bite off too much?
- Do we want to include all citizens?
- In education piece, are we just about informing or are we about making behavior change?
- Across the spectrum but not everyone is involved in every part of the process
- Engagement
- ▲ If everyone has the knowledge, it that good enough? We want them to do something.
- This plan needs to be something that I can use as an educator
- A How does this engage with the youth? (referring to audience and strategy)
- Visioning discusses funding perhaps should be removed, highlights a shortfall in the documents - capacity must be addressed
- ▲ Impact is citizen engagement must include accessibility (guiding principles)

Critical Water Facts

- ▲ Water is scarce/supply is less than our demand
- Drought happens/water is not consistent/water is from snowmelt and we have no control over it, and precipitation is variable
- ▲ Getting water from source to use takes a large investment (water law, rights, etc.)
- ▲ It is a complicated, large, expensive system to get water from source to use
- Water is a public resource, provided for in the state constitution
- ▲ Water is limited, there is no new water, must be kept clean for users downstream
- Water is part of our obligations to other states
- Knowing water's complexity/chemistry is important
- We don't own the water, but we have rights to it
- Water is impacted by land use and our actions impact water quality

1. Limited resource, 2. Comes from precipitation which is variable 3. Complex structure to get it to you

Critical Water Facts (Shelli's reduction)

- Water is scarce, a public resource, a right
- We don't make water, water is a unique compound
- Water supply is derived from precipitation, which is driven by climate and largely unpredictable.
- Water usage in Colorado is managed through a highly complex legal system, with complex and far-reaching infrastructure. Source -> Use
- Land use and human actions impact water quality and quantity.

Guiding Principles

- Inclusivity; honor diverse perspectives/attitudes; diversity, equity and inclusion; and accessibility
- At a minimum, must support Colorado Water Plan's goals
- Balanced approach fact-based and objective
- Mutual respect and bringing together/honor diverse viewpoints (WEco)
- Evaluate equity impacts of decisions (Diversity, Equity and Inclusion)
- Adaptive Management The path needs to be regularly re-evaluated to ensure effectiveness and usefulness in a changing environment.

Guiding Principles (Shelli's reduction)

- Aligned with the Colorado Water Plan
- Objective and fact-based
- ▲ Honors diversity, equity, inclusion
- Adaptive mgt (evaluative and adaptable))

Group Exercise

Groups were given 45 minutes to develop one possible outcome for each education "discipline" and to identify correlating strategies that could lead to that outcome, including proven strategies and at least one "innovative" strategy.

Table 1

Awareness Outcomes - X% of Coloradoans understand and appreciate that our present and future quality of life is critically dependent on a clean, accessible and sustainable water supply

Public Relations Strategies

- Voluntary, "turn off the tap" campaign go a full day without using your faucet
- Water 2022 (building off of Water 2012 model)
- Get in front of existing public events sporting, concerts
- ▲ "hug a treatment plant operator" off kilter attn getting campaign
- Music video with celebrities

Knowledge Outcomes - X% of Coloradoans have the baseline water knowledge (10 key principles) to effectively engage in respectful civil discourse

Education Strategies

- "How to be a good water citizen in Colorado" guide disseminated
- "How to have difficult conversations" taught to different audiences to build communication skills
- Build Colorado baseline water knowledge into Project WET & Forests to Faucets curriculum
- Water is a state recognized issue that must be taught (Colo Dept of Ed)

Behavior Outcomes - X% increase in non-water professional's participation in water related forums where their views are respected

Social Marketing Strategies

- Inclusive accessible meetings that are well publicized (language, webcam, video recorded)
- Hold public forums in all basins
- Discount on ski tickets as incentive
- "roundtable rafting" or meetings at ski mountain or brewery, fishing

Table 2

Awareness Outcomes - 80% of urban citizens will know what a watershed is, which watershed they live in, and how their urban water actions effect it.

Public Relations Strategies

- Consistent use of facts, terminology, language
- Consistent maps and resources
- Getting stakeholders and public funding groups like utilities, roundtables, PEPO, etc. on board
- Have balanced representation

Knowledge Outcomes - 80% of urban citizens will understand the impact of water use to watershed and how watersheds affect the water web in Colorado

Education Strategies

- Customizable and differentiated "train the trainer" program, with flexible delivery method, which will reach K-12, Higher ED, & adult learners within 80% urban communities
 - Mobile labs

Behavior Outcomes - 80% of urban citizens will apply best management water practices, which are incentivized by cities

Social Marketing Strategies

- Create an app and/or handbook of best management practices specifically for urban areas
 - Utilize utilities to distribute
- Implement a student driven water saver program where they identify and advocate for urban BMPs in their communities and partner with practitioners
 - Use cities conservation plans

Systems Outcomes - 80% of urban/residential communities will implement a best management practices plan for water use in their communities

Table 3

Awareness Outcomes - Greater awareness that we are all part of a watershed

Metrics - 75% of all citizens surveyed can identify the watershed their water supply comes from

Public Relations Strategies

- Increased access to waterways
- Water messaging in public spaces
- Social media campaigns, etc.

Knowledge Outcomes - Citizens have a toolbox and know what they can do to protect their watershed

Metrics - majority of citizens know 1) where my water comes from 2) what impacts I have on water 3) Where my water goes 4) Who do I call

Education Strategies

- K-12 Students have at least 3 opportunities to take civic action in their watershed
- A State will fund the creation of credible water education information
- Provide a "toolbox"

Behavior Outcomes - Individuals and groups take collective action to minimize pollution and HOA's require water conservation practices

Metrics - all dog owners pick up the poop

Social Marketing Strategies

- ▲ Utilize existing networks to provide improved land use and watership practices
- Promote existing water sustainability awards and recognitions
- Incentives for cluster development and water sustainability practices

Systems Outcomes - Land use policies and decisions incorporate development practices that foster watershed health and sustainability

Metrics - #of jurisdictions that adopt land, # of communities that create incentives

Systems Change Strategies

- State will administer a water literacy test to all legislators
- ▲ Grants and credits for water smart land use
- Stormwater credits

Table 4

Awareness Outcomes - Citizens are aware of the critical water facts **Public Relations Strategies**

- Holistic communications channels
 - Digital
 - Print
 - In person events

Knowledge Outcomes - Citizens understand water uses and their interconnectedness and every graduating student understands watershed sciences

Education Strategies

- Robust programming
 - Forums
 - "Redefine" current programs and develop objective education toolbox
 - Accessibility
 - Inclusivity
 - Flexible, balanced
- ▲ 3-5 years 18-year olds will be voters!!

Behavior Outcomes - Consider water resources when they vote

Metrics - when polled and outcomes analyzed, voters confirm water resource considerations and support

Social Marketing Strategies

- Different voices
- Develop strong water communication campaign with statewide broad representation opportunities
- "Travel road show"
- Media pieces showcasing statewide water users

Systems Outcomes - Colorado prioritized sustainable funding for water education as demonstrated by a use item in the state budget (projects bill)

Metrics - Did they add a line item?

Systems Change Strategies

- Stakeholders taking the message to legislators
- Decision makers to understand water education funding needs
 - Advocacy
 - Lobbying

Table 5

Awareness Outcomes - X% of people in Colorado are aware of the "Critical Water Facts" of Colorado

Metrics

Public Relations Strategies

- Targeted Social Media Campaign
- Billboard campaigns
- Journalistic and media relations
- Superbowl Commercial

Knowledge Outcomes - 60% of people in Colorado have knowledge of the details and consequences of personal actions

Education Strategies

- Co. Department of Education partnership with school districts in curriculum
- Projects students take knowledge to <u>action</u>
- ▲ More relevant water curriculum in state education system
- Recreation education (interpretive signs at recreation sites)
- Workplace education provided/partnerships with conservation

Behavior Outcomes - water consumption per capita in Colorado decreases by __% Metrics - people don't pollute water

Social Marketing Strategies

- Financial rebates on bill
- Vouchers for car washes

Next steps

- Synthesize today's work
- Work with WEco and Steering Committee to refine top outcomes that emerged.
- Re-engage Coalition to help refine and identify additional correlating strategies to support the outcomes.
- Engage full Water Educator Network to submit feedback, including correlating strategies

Appendix D - Transcripts from PEPO meeting on 8/21/2018

COALITION PLANNING MEETING SUMMARY & TRANSCRIPTS

Public Education, Participation and Outreach Workgroup Statewide Water Education Action Plan (SWEAP) discussion Water Education Colorado | August 21, 2018

These are unedited notes intended to represent the focus group with the public education, participation and outreach workgroup (PEPO) to solicit input about the Statewide Water Education and Action Plan (SWEAP).

Tell me about the plans that you use or refer to relative to Water education and outreach?

Basin implementation plan and the priorities there, things that fit members, Education Action Plan (EAP) and resources we have available

What about best practices, education specific language in other plans,

\$500 implementation isn't very much, so we have roundtable funds and that is bigger plan, actual education plan, scope of work Water Supply Reserve funds, is more money \$150K over 3 years We started talking about EAPs there weren't other plans, EAPs =\$6500 and other plans are part of other grants; Mismatch between grants and plans

How do you use Plans?

Use \$6,500 to support our members, pay for costs for CWCB and roundtable members and electronically integrating websites, and PEPO coordinator to update with minutes and presentations and cataloguing information so EAP funds to support that

Have other grants and identified the projects for basin implementation plan projects and how we use funds, and children's waters festival

Use our plans in same way, a set of things people can expect from roundtable and then written for water supply reserve funds and other funds, our \$6500 is huge compared to what we had, so funds for water education, website redesign and guides where we go and education action plan is broad and flexible so roundtable members can see what we do

Identified projects in grants and didn't work out, so submit pretty broad plans so not tied to specific projects, projects come for us, using executive committee, use funds for resources for transportation, we use funds for citizen guide book, so when we have roundtable members we use those books, we also sponsored a funding series

EAPS to help get the \$6500, and that is the minimum funds to do other stuff, we all apply for other funds, but we use EAPs as guiding document for our work with the roundtable, grant application for Water Reserve fund is what drives our work

From metro and S Platte perspective we think it is a priority to educate new roundtable people, what we use PEPO funds for, there are other plans we use in 2010 i.e. PEPO education survey, told us what roundtable members thought

PEPO requirement is a communication strategy and it is more of a strategy, we don't know what message you are willing to stand behind; so just the process of having a plan for the roundtable,

we have a functioning education committee – whole influx of fab folks, EAP driven by what BRT wants In CO basin there are sub-watershed plans like Roaring Fork, lots of watershed councils and they are used

State one tangible outcome you want from your efforts?

We want water projects done, implement the basin implementation plan if need education and general awareness by variety of folks across the basin so that as we bring projects forward for funding people understand what it is about

General support of wide variety of projects i.e. irrigation people supporting environmental projects and building cohesiveness so there aren't factions

A clear message, people in the roundtable are talking about the same thing in the same way, to get past conflict and how to get past it, people using roundtables

People are actively participating, self-identified watershed groups and conservation groups and see the roundtable as a resource

Back up from the messaging, people don't know the roundtable exists, in the industry they know High % know about the roundtables and be more engaged in the process,— they know they can participate and voice to be heard

Is there is specific segment of public? segment that is educated about water and their message is different from the general public

People have no idea that the roundtable exists, awareness among people in the industry but general public Target market? No we don't know market share

If we go to public what is success?

Impact is people who heard term roundtable and why it is different than conservation group Maybe 15 - 20 % are aware of what we do

Good updating and newspapers and reach out to environmental and consumptive uses and not near the pressure

We are reaching into other groups, the piece we have touched the least is the municipal water folks because small use among municipal users; people need to understand water supply

We want community to be aware of roundtable but not general public; getting information to general public and different people to participate, like CO river compact is a big deal

We are targeting tourists

Roundtables are not very inviting place for the public, need to have a certain level of understanding, to feel welcome, not well done for a community member

Who are we really talking to, it isn't really the "public"

In metro area and S Platte in general, we are not the trusted messenger that will be listened to by interested citizens, lots of programs with lots of constituents in the metro area

The Roundtable and constituencies, not just the general public, who is the trusted voice and get the message out

Regionally and at local scale-harder when we have a wide mandate

We all struggle with it- what is the standard metric

Who is the audience (who will implement it?) for a statewide water education Plan

A little bit of a difference in audience and implementers

Plan and what people just need to know

Implement- the watershed groups that have education staff or roundtables; our watersheds don't have staff, who the roundtable contracts, community leaders in each basin doing great stuff,

Recommended action is to be a leveraging tool

It depends, whoever is stronger in each area-

Need to keep personality of watershed in mind i.e. front range vs. has to be community specific

Need flexibility, and players might be very different, has to be variable, different challenges and issues change each year

Who are the trusted messengers in each community

If there was a single comprehensive water education plan, what would it look like?

Needs to have funding attached to it

Budget and who cares

Is the audience the people who fund it

What is the justification

Would have some basic tenets, ie. M & I component, watershed component, recreation etc. to serve diverse community

Can't have same single message and same 5 things but that doesn't work, PEPOs are about what works in their community

3 guiding goals and value statement and template for each basin could make their own

Make it place based and a tracking mechanism, and everyone inputs, coordinated database and tracking for evaluation

IBCC and funding conversations going on, aimed at filling gap in the water plan

We are trying to develop a data base and need flexibility and meets gaps in the basis

All the partners do what they say they were going to do

Every resource and how I would work with them and data base, water education network,

Colorado env education resource, don't have a database, need SEO make it findable

Funding and resources and incentives and how people change behavior how do local governments provide incentives for municipalities what can we help people do or not, incentives

Cool logo look so we all claim it and have to reflect everything

Inclusivity to make sure people identify with it and examples people can connect

What do we need a Statewide water education plan to do that we don't have now?

The standard metrics for water education

The CO environmental education plan should be leveraged

Shared outcomes and major metrics (include env education)

Cross pollination, what everyone else is doing, we want people to know about Steamboat

Advocate for water education in k-12 and teachers

Why did basins need education, in beginning it was to educate roundtable people but took years for CWCB to understand that there is a bigger audience, even from Rio Grande- and we think K-12 is a different animal, we have to focus on water constituents

Transparency is a big issue, we with roundtables and education people we have to be transparent, as liaison for 4 of 9 roundtables, share what others are doing, roundtables get motivated by what others are doing, sharing information

What do you NOT want in the plan?

Danger in calling something a statewide plan

Don't be top down, in our basin the water 2012 logo didn't like it

Don't squish us into one state, we are all different

Have framework and be flexible

Balance between too rigid or too flexible, I would like a logo

Each roundtable wants their own logo, master or logo or not

How would a good statewide plan save PEPO's time or money?

If it defined certain goals and objectives and stay on the right road

How can we stay creative

Project needs to come from WEco

Clear objectives and statewide branding and messaging and flexible

Need a clear education action plan

We will get where we need to get as a group

Is there some criteria that will get us funding or not i.e. metrics to make it a fundable activity

How do we really activate local communities and how does it activate

Not a grand vision of where we are trying to go, plan doesn't have to solve everything

Metrics is huge

The plan has to support CWCB to talk to legislature

We facilitate the message for specific projects, projects is used lots of different ways

What is the problem we are really trying to solve?

How to get folks to support the CO water plan goals in our region

In public education and outreach, what are the plans that people don't get and who tells the story best

We facilitate the project people to get the word out

The strategic marketing and communication, and the public education and outreach

Need public engagement piece and action step, using project to get people involved

What is the action we want people to take?

Outreach writ large can be useful, what impact we want

At a high level what is the effect and what are we trying to get at, there is awareness of supply and demand issue and we think we should do something about it and the public awareness and engagement piece is essential to get people to activate, and a resource to go to, need long term activation

If we had a great statewide plan, what are the obstacles to implementation?

Need something simple, like a template

Clearer and concise message, elevator speech that is statewide, need to refocus

Where our water comes from, "all water in this state falls from the sky", need a simple message

Statewide plan can't prescribe what is needed in a local plan

Integration, understand the target markets, how to educate people, the overall message

Tasks or actions currently in your plans?

Water festivals, playbook and resources

Websites and logo designs, all doing separately, how to share

Videos

Communicating about the gap

Story mapping

People doing things about fishing closures-

Creek week

Forums

Gunnison citizen guide book

Facilitating meetings among engineers and agriculture

Acequias is very Rio Grande specific

Metro have the water center, and One world One water and Denver Water/ Aurora Water, each with own constituencies and existing messaging; unique challenge in metro is the engagement

S Platte and metro- we do tours not unique but water themes

Concept of appreciative inquiry

Change?

Mandated water restrictions effected change

What is the role of PEPOs - Basin Implementation Plans

Support for funding, why they have to pay for water whether it is a statewide ballot initiative and to streamline permitting process

Roundtables

To take guidance from state water plan and basin plan and take the gap and bring that locally and the development of subdistricts

Moving things along in a timely way

Day zero, keep timeliness at forefront of people's mind, strict timeline with the state, have to move projects along

Awareness and forum to communicate

Challenge, and each figured out what works in their basin

Leveraging existing resources

Need groups to think about water plan

Catalyst for Change?

Duplicate and replicate because have tandem approach

What is really effective, what can we get metrics on or not

And leave room for flexibility

Crisis, supply and demand when no water comes out of tap!

2002, drought year and a crisis motivated people

Be careful in using the term change, want to maintain the status quo, not change for change sakes Opinions on water quality

Other?

Who is the plan for

In some ways government works, how do you get water people engaged, don't want people coming to my water facility to tell me how to do it

Engage but don't just raise awareness

Policy maker-

Ag feels like it has a target on its back when it comes to water, has to be cooperative, not front range vs. western slope, not urban vs. rural

Plan needs to be sustainable and something people can be invested in, younger audiences

Inner agency coordination is important

CDPHE and CWCB, all the players cross agency

Would help urban areas understand rural communities and vice versa

Civics of water, special districts are influential and how it works

Water planning is really complicated, how do people get through meetings without an argument

All have values about water

Do we worry about western region outside of Colorado

Compact issues, how does that effect what we do, need to get understanding among folks

Get people engaged and invested

SWEAP is the acton plan for the basins and we all spoke to it, but what is it

A statewide education plan looking at lots of players

SWEAP as different from EAP process and two different things

Opportunities to leverage and partner for funding, who could bring in funds to do education

When originally talked about SWEAP, how do we integrate systems thinking

Systems thinking and how to bridge ag and metro and how to leverage and how to grow local food and be kind to ag industry if want to eat local

Outcome from the plan is to provide metrics to support sustainable funding for water education projects

Cooperation is important

Public opinion research

There is a difference in how different communities receive messages

As taxpayer and rate payer, it is not intuitive as to why water quality should be separated to water quantity, the water plan brings those two things closer together, have to have policy that allows agencies to change the way they do business and so it is more responsive

Need to have the IBCC history and history of water

Need to understand relationship

Appendix E - PEPO Education Action Plans (as used for annual \$6,500 SOWs)

SUGGESTED TEMPLATE TO BE MORE STRATEGIC AND COMPARABLE, RECOMMENDED BY CONSERVATION IMPACT DELIVERED TO CWCB 9/4/2018

Contact information:

Name, phone, email, mailing address, etc.

Introduction:

Describe the entity that is submitting this plan.

Accomplishments:

Describe what you have achieved in water education over the past year. Be as specific as possible and speak to outcomes, not just activities.

Problem to be solved:

Explain what problem or need you are addressing in your community with education and outreach.

Approach:

Describe your approach to solving the problem, or filling the need. Please cite or explain any literature, data or documentation that has informed this approach.

Goal:

State the one goal you hope to achieve in the next year. The goal is a specific, realistic outcome or end result of your activities.

Actions:

List the few primary activities you will implement to achieve the goal.

Resources:

Define who will complete the activities and outline a correlating budget.

Request:

State the financial request.

Evaluation:

I agree that by (date), we will report that we carried out the activities, and will describe how we have made progress to our goal.

Name:	
Signature:	Date:

Statewide Water Education Action Plan (SWEAP) for Colorado 2020-2025



TABLE OF CONTENTS

Introduction	3
Background	5
Water Education in Colorado	8
Strategic Framework Design	10
Strategic Framework	12
Actions	17
Indicators of Success	20
Implementation	21
Conclusion	22
Contributors	23
Appendix	26

Prepared by Water Education Colorado under grant POGG12019-2021 from the Colorado Water Conservation Board Photo credit cover page Matt Cascade

INTRODUCTION

What is SWEAP?

The Statewide Water Education Action Plan (SWEAP) aims to guide water educators working individually and collectively to meaningfully realize a set of shared outcomes that align with the "Outreach, Education and Public Engagement" goals set forth in Ch. 9.5 of the Colorado Water Plan. Those goals focus on ensuring Coloradans have access to accurate information and are empowered to participate in stakeholder decision-making processes.

"Education, Outreach, and Innovation" is one of eight focus areas in the Colorado Water Plan (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 issues that have been obstacles to a coordinated, more consistently defined approach in which unique regional and local activities move toward similar outcomes and metrics to make progress on a statewide level.

Colorado's Diverse Water Education Community

This Plan recognizes that there are numerous organizations, agencies, and individuals that make up Colorado's water education community. It is intended to help guide the efforts of all water educators in the categories described in the Colorado Water Plan (CWP) and more!

Each of these entities serves unique audiences, possesses distinct skills and expertise, and represents different perspectives relative to water. While this Plan does not outline, compare or contrast the numerous activities carried out by Colorado's diverse group of water educators, it is

CWP Categories of Water Educators (pp. 9-55 to 9-57)

State agencies: State agencies both provide education directly and fund the educational efforts of others

Statewide NGOs: Many statewide nonprofit organizations provide water education programming for a variety of target audiences

Universities: The involvement of institutions of higher education in water education includes research, programming for the greater community, and degree and certificate programs for water professionals

Regional/local: Water educators at the regional or local level include conservancy and conservation districts, water providers and utilities, nonprofit organizations, and community groups that reach a variety of audiences

K-12: Many regional and local water educators offer programs tailored to specific grades and teachers

intended to establish a common agenda that can be promoted through activities and projects that are customized for different audiences.

How to Use this Plan

Statewide organizations can strengthen the work of local water educators by using this shared framework to mobilize funding and provide capacity-building opportunities where most needed. Water Education Colorado will use SWEAP to help guide a focused vision and strategy across Colorado, in partnership with the Colorado Water Conservation Board (CWCB) and other statewide organizations.

Water educators working at a regional, river basin (watershed), or local level can use this Plan to demonstrate how their actions align with statewide strategies and contribute to a statewide impact. In addition, the outcomes and strategies in SWEAP can be used to guide organizational strategic planning, program and curriculum development, and funding requests.

With youth audiences, the Colorado Department of Education and K-12 educators statewide can use SWEAP to guide professional development and the use of curriculum guides that help incorporate water literacy as part of implementation of Colorado Academic Standards.

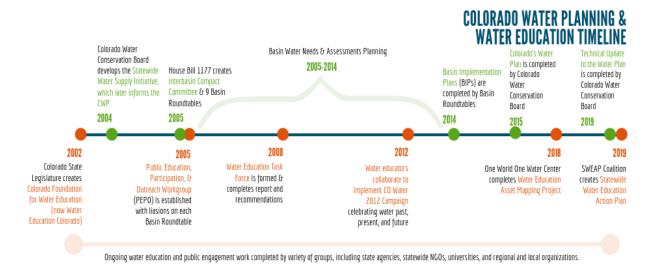
For the purposes of the Basin Roundtables and Colorado Water Plan itself, SWEAP outcomes and strategies can be incorporated into Education Action Plans and future iterations of Basin Implementation Plans and the CWP.

BACKGROUND

Water Education's Role in the Colorado Water Plan

Spurred by devastating droughts in the early 2000s, Colorado began a journey to define the impending water resource challenges of the 21st century and to identify strategies and decisive actions to address those challenges. The culmination of that effort was the Colorado Water Plan (CWP), which was adopted by the Colorado Water Conservation Board (CWCB) in 2015.

The state's water education community played an important role in the development of the CWP. They worked to educate the public about the role of the Basin Roundtables and created mechanisms for public input via the Public Education, Participation, and Outreach Workgroup (PEPO). The CWP includes water education as a core component of achieving water sustainability by 2050, as outlined in Chapter 9.5 of the CWP. Recognizing the important role of water education, each Basin Roundtable's Basin Implementation Plan (BIP) also includes long-term goals and strategies related to cultivating an educated and engaged citizenry.



The Challenge of Sustainable Water by 2050

The Colorado Water Plan (CWP) projects a water supply shortfall of more than 500,000 acre-feet annually by 2050 if current trends continue. This supply gap is exacerbated by population growth and climate change. In addition to this growing water supply gap, the CWP describes the other "big water challenges facing Colorado" as:

- Agricultural dry-up: The purchase and permanent transfer of agricultural water rights to support growing communities threatens the state and rural communities with significant reductions in irrigated agriculture and local food production.
- Critical environmental concerns: The need to protect and restore water quality, watershed
 health, and ecosystem resilience in the face of increasing water demands and climate change
 is as critical as ever.

- Variable climatic conditions: Forecasts show Colorado could face diminished precipitation
 and shrinking water supplies as well as increased demand associated with hotter
 temperatures and a longer growing season.
- *Inefficient regulatory processes:* Lengthy, expensive and inefficient permitting processes have stalled water providers' ability to respond to changing conditions.
- *Increasing funding needs*: Absent adequate investment, Colorado cannot effectively address its environmental, recreational, agricultural, and community needs for water.

A Comprehensive Solution that Recognizes Colorado's Values

The Colorado Water Plan (CWP) serves as a foundation for Colorado to address the state's core water values, as articulated by Gov. John Hickenlooper in the 2013 executive order directing the Colorado Water Conservation Board to develop the CWP:

- A productive economy that supports vibrant and sustainable cities, viable and productive agriculture, and a robust skiing, recreation, and tourism industry;
- Efficient and effective water infrastructure promoting smart land use; and
- A strong environment that includes healthy watersheds, rivers and streams, and wildlife

The CWP recognizes the availability and management of water as a far-reaching, interrelated system facing complex challenges. Therefore, the CWP outlines a comprehensive solution comprised of eight measurable objectives. SWEAP specifically addresses the "Education, Outreach, and Innovation" objective.

CWP Measurable Objectives (pp. 10-5 to 10-7)

Supply-Demand Gap: Reduce projected 2050 municipal and industrial gap in water supply from as much as 560,000 acre-feet to zero acre-feet by 2030.

Conservation: Achieve 400,000 acre-feet of municipal and industrial water conservation by 2050. **Land Use**: By 2025, 75 percent of Coloradans will live in communities that have incorporated watersaving actions into land-use planning.

Agriculture: Agricultural economic productivity will keep pace with growing state, national, and global needs, even if some acres go out of production.

Storage: Attain 400,000 acre-feet of water storage in order to manage and share conserved water and the yield of identified projects and processes by 2050.

Watershed Health, Environment, and Recreation: Cover 80 percent of the locally prioritized lists of rivers with stream management plans, and 80 percent of critical watersheds with watershed protection plans, all by 2030.

Funding: Investigate options to raise additional revenue in the amount of \$100 million annually (\$3 billion by 2050) starting in 2020.

Education, Outreach, and Innovation: Significantly improve the level of public awareness and engagement regarding water issues statewide by 2020, as determined by water awareness surveys, and engage Coloradans statewide on at least five key water challenges (identified by CWCB) that should be addressed by 2030.

How Water Education Advances the Colorado Water Plan

The Colorado Water Plan's (CWP) success depends upon an educated citizenry that is actively engaged in discussing, funding, and implementing balanced water solutions. This dynamic relies upon robust, sustainable water education that focuses on and delivers the following education objective identified in the CWP:

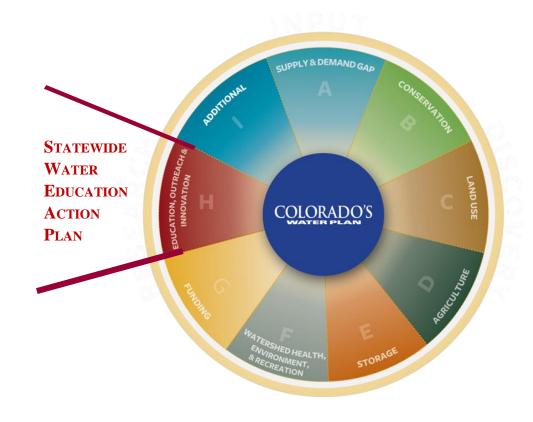
• Significant improvement of public awareness and engagement regarding water issues statewide by 2020*, as determined by water awareness surveys.

A Plan for Water Education

In Chapter 9.5, the Colorado Water Plan (CWP) calls for the creation of "a data-based water education plan" as one of three critical actions to achieve the measurable objective. SWEAP is that plan.

Further, the CWP requires that the plan be based on an assessment of water education so that it "addresses critical gaps in water education, advances efforts in the Colorado Water Plan, and supports Basin Roundtable work." While the state has not completed the statewide assessment contemplated in the CWP, an important corollary was accomplished when the One World One Water Center completed the "2018 Water Education Asset Map."

In addition to reviewing the results of the 2018 Asset Map and other early reports, the SWEAP drafting process included an analysis informed by more than 60 water industry and water education experts. Systems-thinking materials developed by ThinkWater were also considered, as were past survey instruments used to measure Coloradan's attitudes. perceptions, values, and knowledge of water and water issues.



^{*}SWEAP was completed in 2019; as a result, SWEAP's target for this objective has been extended to 2025.

WATER EDUCATION IN COLORADO

What is Water Education?

Water education has multiple connotations. It traditionally refers to formal and non-formal education programs that build awareness and knowledge of a wide variety of water topics. Yet it can also refer to activities that foster public engagement, behavior change and even systems change. Each of these activities is associated with distinct disciplines that rely on specific principles and practices to achieve outcomes.

The continuum below demonstrates both the strategies associated with each discipline, based on the intended outcome, and the "tiered" relationships that exist between disciplines. For example, an increase in awareness lays the foundation for subsequent increases in knowledge that are necessary for an individual to effect meaningful behavioral and even systems changes. Not all individuals will have the opportunity or choose to act on their water knowledge. Achieving the Impact envisioned in SWEAP requires that individuals move from basic awareness to knowledge to behavior change, including participation in discourse and informed decision making. This, in turn, requires both individual initiative and the enabling and/or empowering conditions that water education can help provide through social marketing and systems thinking strategies.

WATER EDUCATION CONTINUUM



2020 Water Education Situation

Water education in Colorado is highly localized and decentralized. With diverse interests, audiences and resources, it tends toward a fragmented, poorly coordinated approach when it comes to realizing statewide impact.

In 2008, the Colorado Water Education Task Force assessed the status of water education in Colorado. The resulting report included nine recommendations that are all important precursors

to SWEAP. The Task Force's final recommendation called for the creation of a detailed action plan. SWEAP is the framework of this plan. In addition, the Task Force recommended fostering collaborative opportunities among water educators, which led to the establishment of the Water Educator Network, coordinated by Water Education Colorado. The Water Educator Network has included more than 100 educators from different institutions across Colorado since 2014. The Network has fostered good communication and strong partnerships among water educators, yet certain limitations to understanding and sharing of best practices remain.

Research by the One World One Water Center and others finds that funding, staffing, skills, and access to resources is either lacking or highly variable around the state. Some educators are also constrained by a lack of clarity about how to connect specific strategies to vision and outcomes for their work. Without clear outcomes, it is difficult to define and track the metrics that are critical to documenting success and return on investment.

In addition, feedback from both formal and non-formal educators consistently stresses the importance of educating youth and engaging licensed professional educators, with their students, in actively promoting water education and action. To this end, SWEAP recognizes the necessity of strong support from the Colorado Department of Education and the importance of incorporating water literacy as part of implementation of Colorado Academic Standards. The invitation from, and participation of, local schools and school districts is also critical to successful implementation of SWEAP.

Greater clarity on the desired impact and outcomes will enable water educators to more easily and confidently convey the value of their work in connection to the greater whole. This will help them attract the necessary financial and policy support to ensure they have sufficient resources, tools, and expertise to achieve important water education outcomes.

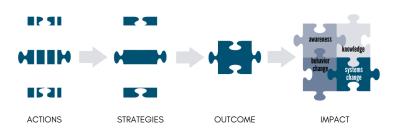
STRATEGIC FRAMEWORK DESIGN

The strategic framework is the backbone of SWEAP. With a shared vision, guiding principles, and a core set of shared outcomes, individualized actions will achieve the greatest possible impact statewide. Success will be measured in terms of achieving the impact initially laid out by the Colorado Water Plan (CWP) Ch. 9.5.

By focusing on shared outcomes, this framework allows water educators to adapt strategies and actions to their unique audiences and focused on-the-ground actions, while contributing to statewide impact.

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), critical water concepts, and guiding principles define the Plan's overall context.

Strategic Framework Definitions				
Vision	The future state once the problem is solved or outcomes are achieved			
Impact	The difference (water educators) make, what outcomes add up to			
Guiding Principles	The rules or values that underlie or guide all work			
Outcome	The goal, or end result, to be achieved, in specific, time-framed, detectable terms (3-5 yrs.)			
Strategy	The few best methods, approaches, best practices, or innovative ideas to achieve outcomes			
Action	The tasks to carry out strategies (1 yr.)			
Metric	The measurable indicator used to track progress towards an outcome			



Locally Adapted Action, Based on Proven & Innovative Strategies, Achieving Outcomes & Statewide Collective Impact

SUSTAINABLE WATER 2050

COLORADO'S 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 outcomes 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

2020 Situation **Critical Water Concepts Guiding Principles** SYSTEMS CHANGE BEHAVIOR CHANGE KNOWLEDGE AWARENESS OUTCOMES OUTCOMES OUTCOMES **OUTCOMES** Metrics Metrics Metrics Metrics Strategies **Strategies** Strategies **Strategies**

BASIN & LOCAL ACTIONS

(to be developed in response to local needs and audiences)

STRATEGIC FRAMEWORK

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.

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

(See Appendix A for more information)

- 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.

Guiding Principles

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

Balanced and reflective of tradeoffs

Balanced decisions require an assessment of trade-offs and opportunity costs, and consideration of a range of perspectives stemming from geographic, economic, professional, and value- or interest-based differences. Therefore, water educators participating in SWEAP 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

The Colorado Water Plan (CWP) was the culmination of a decade of work by hundreds of thousands of stakeholders working to envision and map the road to a sustainable water future. Water educators pursuing the outcomes in SWEAP 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 CWP objectives.

Objective and fact-based

Trusted, reliable information is critical to equipping Coloradans to participate in effective discourse and decision making. Water educators participating in SWEAP will advance informed decisions and sustainable solutions by striving to present fair, objective, and instructionally sound information.

Achieved with strong partnerships and collaboration

The outcomes and strategies envisioned in SWEAP cannot be achieved by a single organization. Water educators participating in SWEAP 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, where the natural connections and mutual impacts of decisions made or actions taken in one part of the watershed resonate throughout. Water educators participating in SWEAP recognize that using a watershed approach is foundational to teaching the Critical Water Concepts discussed in this Plan.

Accessible, engaging, and striving for equity

Because all Coloradans are directly affected by water-related decisions, water educators participating in SWEAP will take an inclusive and equitable approach and will regularly evaluate strategies for their degree of success within marginalized communities. Training and events will be accessible and follow best practices for community engagement. In addition, water education materials and professional development opportunities will incorporate culturally responsive education practices. Participants engaged by water education activities build stronger connections within their communities and an enhanced appreciation for water, as well as new knowledge and skills to apply toward taking thoughtful action regarding critical water challenges.

Implemented across Colorado

Water educators participating in SWEAP help ensure that water education is accessible across the geographic diversity of Colorado. Water educators will strive to make content accessible and relevant in the various communities in which they work and identify opportunities to expand the reach of water education in underrepresented geographies.

Adaptive and iterative in response to changing conditions

Because conditions are consistently changing, water educators participating in SWEAP will approach implementation in an adaptive fashion. 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. As results are evaluated, highly effective strategies and new, innovative strategies will likely emerge. Subsequent updates to this plan will

address gaps and new opportunities identified in the evaluation cycle and will incorporate the best available information at the time.

Outcomes (to be achieved by 2025)

The outcomes below will be measured statewide. "Proportion" refers to the proportion of Coloradans within each river basin.

- The proportion of Coloradans 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.
- The proportion of Coloradans who can articulate at least three Critical Water Concepts increases.
- The proportion of Coloradans who report confidence in having the knowledge necessary to take an active role in water stewardship in their community increases.
- The proportion of Coloradans who report confidence in having the skills necessary to take an active role in water stewardship in their community increases.
- 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 that are demonstrating sustainable water behaviors increases.
- 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.

Strategies by Outcome

Outcomes		Strategies	
AWARENESS	1. The proportion of Coloradans 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.	relations and media campaign that can be applied at various scales throughout the	
	2. The proportion of Coloradans 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.	
KNOWLEDGE & SKILL	3. The proportion of Coloradans 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.	
	4. The proportion of Coloradans who report confidence in having the skills necessary to take an active role in water stewardship in their community increases.	4a. Train the trainer to build participants' skills in discourse and decision-making.	
IOR CHANGE	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.	
	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.	

BEHAVIOR CHANGE	7. The proportion of Coloradans 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.
	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.
щ	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.
SYSTE	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 that Coloradans from all demographics and geographic areas demonstrate progress in outcomes 1-7 and identify program changes needed to close any gaps.

Behaviors, issues, concepts, etc. referenced in outcomes will be further defined and developed as part of SWEAP implementation.

ACTIONS

Actions Customized at Regional, Watershed, and Local Levels

Strategies are carried out at many levels, by diverse organizations, agencies and institutions for a wide variety of audiences. It is not likely, nor anticipated, that any individual water educator or any one organization will have the depth and scope to address every outcome or embrace every strategy included in this plan.

SWEAP provides the strategic framework for collective impact 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 and interests of their communities. The Sample Local Actions below (page 21) provide examples for linking actions to strategies to outcomes that can be used across the state to plan activities that align with the SWEAP strategic framework. For implementation of SWEAP to be successful, actions under each strategy will need to be targeted to specific audiences. In this way, water educators retain control and flexibility for their on-the-ground work, while also supporting collective outcomes and a more coordinated, statewide approach.

While educators' programs and activities will certainly vary, they can begin to tell a similar story of working with tested and innovative strategies to achieve shared outcomes that are deliberately designed to contribute to the success of the Colorado Water Plan and a sustainable water future.

Example Actions

Some SWEAP strategies will require state-level action to complete, such as partnering with the Colorado Department of Education. The following chart outlines example local actions by individual water educators or organizations that would support the strategies identified in SWEAP.

SWEAP Strategies	Local Actions: EXAMPLES ONLY* Local = basin/watershed and community-scale					
Outcome 1: The proportion of Coloradans 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 who can articulate at least three "critical water concepts" increases.

- 2a. Produce and distribute information to support and clarify Critical Water Concepts.
- 2a1. Work with local water educators to understand and incorporate Critical Water Concepts in their information and programs.
- 2b. Facilitate incorporation of Critical Water Concepts in educational programming.
- 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 to schools.

Outcome 3: The proportion of Coloradans 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.
- 3a1. Share water information throughout the community in multiple venues.
- 3b. Support hands-on and project-based learning and service opportunities for water-related issues.
- 3b1. Facilitate student-led action projects as part of project-based learning.
- 3c. Incentivize and reduce barriers to participation in training for underrepresented groups and geographic areas.
- 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 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.
- 4a1. Host environmental issues forum moderator trainings.
- 4b. Expand leadership development opportunities for adults and youth that foster skills for informed discourse and decision-making.
- 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.
- 5a1. Integrate best practices in all outreach activities.
- 5b. Ensure water discussions or decision-making processes are accessible, convenient, inclusive, and well-publicized.
- 5b1. Work with program organizers and meeting coordinators to utilize best practices.
- 5b2. Facilitate community-based, neighborhoodfocused "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.	6a1. Ensure local voter information sources have and understand the water analyses.				
6b. Encourage the incorporation of water-related impacts in voter information and forums.	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 that are demonstrating sustainable water behaviors increases.					
7a. Identify sustainable water behaviors that are a priority for each basin.	7a1. Convene local water educators to define behaviors important to the basin. 7a2. Define audience-specific opportunities and obstacles to desired behaviors.				
7b. Develop and implement social marketing strategies for behaviors that are identified as priorities, statewide and at the basin level.	7b1. Review (and then update) projects and activities to move from awareness to behavior change (increase incentives, remove barriers).				
7c. Research and implement best practices for tracking the use of sustainable water behaviors in each region.	7c1. Track local behavior change.				
Outcome 8: Where relevant, local and state po advancing statewide water literacy.	licies and practices are supportive of				
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 po consideration of impacts on sustainable water	licies, regulations, and practices demonstrate a resources.				
9a. Support policy makers in developing the knowledge to evaluate trade-offs in water issues.	9a1. Provide information and field experiences/ training to help policy makers evaluate trade-offs.				
9b. Curate and provide guidance on tools and best practices for incorporating consideration of water impacts and trade-offs into policy-making.					
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.	10a1. Target local outreach and programs to underrepresented groups in the community.				
10b. Provide equity and inclusivity training for coordinators, chairs, and appointing agencies of decision-making bodies.	10b1. Adapt training to local needs and facilitate training opportunities.				
10c. Track metrics to ensure all demographics and geographies demonstrate progress in outcomes 1-7, and identify program changes to close gaps.	10c1. Participate in regional and statewide surveys. 10c2. Solicit ongoing community input about what is working and not, adapt accordingly.				

INDICATORS OF SUCCESS

The Dashboard

The cumulative impact of SWEAP can be defined by a few key indicators of success, which will be built on specific metrics for each outcome during the implementation phase.

In order to assist with evaluating the effectiveness of strategies and actions in accomplishing SWEAP outcomes, the state will implement a statewide public awareness survey in 2020. The envisioned survey effort will collect baseline data on water issues and follow up with periodic surveys to measure progress. In addition to a statewide survey effort, SWEAP will work with partners to develop and implement assessments to evaluate the effectiveness of local and regional education activities.

Key indicators will be summarized in the SWEAP "dashboard" to help reflect progress toward achieving the collective SWEAP Outcomes.

Increase in awareness of	Increase in knowledge	Increase in diverse	Decision-making bodies
critical water concepts,	and skills necessary to	participation in	are increasingly
plus threats and	take an active role in	community discourse	representative of the
solutions to sustainability	water stewardship	and decision- making	demographic make-up
			of Colorado
Awareness	Knowledge & Skills	Behavior Change	Systems Change

IMPLEMENTATION

Capacity Building

SWEAP serves as a common agenda for a coordinated, well-funded, outcome-based water education effort that will support sustainable water by 2050, aligning with the outcomes of the Colorado Water Plan. It is a basis for increasing funding and creating resources to build capacity in water education toward effective and equitable implementation of this Plan.

Water Education Colorado (WEco), in cooperation with funders and other statewide partners, will play an important role in building capacity for Colorado water educators working at all levels. WEco and others can develop and curate collections of strategy-specific resources to be broadly used by water educators. This Plan also envisions adopting or creating toolkits that provide step-by-step guidance in the implementation of particularly effective and innovative strategies. Toolkits and similar guides or models not only build capacity as training tools, they help to institutionalize learning within organizations, independent of individuals' knowledge, and eliminate duplication of effort.

Resources and toolkits help to bring all implementation strategies to a common standard of practice, thus supporting standardized assessment across the state. Toolkits can be supported by technical assistance programs at different locations throughout the state that provide training, coaching, or mentoring for those skills that are most critical for implementation. The Water Educator Network, led by WEco, can fill a critical role as a peer-to-peer learning network, sharing information about successes, lessons learned, and other training or informational resources related to SWEAP.

Further, with this Plan, WEco and other statewide groups, can more effectively seek government, corporate, and private funding to support statewide capacity building and to fund local activities.

Filling Water Education Gaps

This Plan meets a need as identified by water educators and the Water Educator Network to have clearer, more coordinated vision, purpose (impact), outcomes, and metrics. While the Plan encourages customized actions at the local level, it provides some standardization and consistency so that local actions contribute to a greater whole.

With shared outcomes and related metrics, progress at a statewide level can be evaluated and documented. In contrast, lack of progress in particular areas can also be analyzed. For example, in geographic areas where participation is not increasing (See Outcome 5), organizations providing technical assistance can support local groups in adapting strategies to achieve better results.

As particularly effective strategies are identified and new innovative strategies emerge, WEco can provide training programs to ensure water educators have the necessary skills to maximize impact. Similarly, if certain strategies are not being effectively implemented, informational resources and skill building programs can be developed and disseminated. During the implementation phase of this Plan, WEco and others can begin to decipher patterns and prioritize the development of tools, resources, and technical assistance, further adapting the educational components of the Colorado Water Plan and Basin Implementation Plans based on real data.

An Iterative Process

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

- Guide actions that achieve outcomes and measurable objectives
- Develop, track, and monitor 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 outcome data and identified gaps

CONCLUSION

Water education, outreach, and public engagement is critical to addressing Colorado's significant water challenges. To maximize impact, SWEAP-focused water educators must embrace a holistic approach to empowering Coloradans to participate in effectively 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.

This Plan addresses Colorado's water education needs in support of achieving the goal of sustainable water by 2050, as envisioned by the Colorado Water Plan; it supports a common agenda for water education, defines a set of shared outcomes, fosters effective practices, and hopefully inspires innovation at the state, regional, watershed, and local levels.

CONTRIBUTORS

SWEAP Coalition

(*Steering Committee members)

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 Davenhill 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 and 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

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 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, CSU
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

Thank you to all who provided input to the final draft and shared their ideas and example actions:

Matt Bond

Natalie Brower-Kirton

Elaine Chick

Hannah Holm

Barb Horn

Bethany Howell Sarah Johnson Steve Malers

Katie Navin

Ellen Olson

Donny Roush

Allison Schuch

Amber Weber

Lacey Williams

Sponsors

Colorado Water Conservation Board ThinkWater

Coordinator

Water Education Colorado

Consultants

Conservation Impact

Analysis

The research and analysis for SWEAP was informed by:

- 61 individual and small group phone interviews
- A coalition of 30 experts from around the state with diverse experience and perspectives in water education; the Coalition came together to build the strategic framework
- One World One Water, Water Education Asset Mapping Project, 2018
- 2008 Water Education Task Force Report
- ThinkWater Systems Analysis and ThinkWater staff
- A review of related documents, data and surveys shared by the SWEAP Coalition

APPENDIX A - CRITICAL WATER CONCEPTS

The following concepts represent foundational understandings for water education throughout Colorado. Although this list was reviewed by the SWEAP Coalition during development of this plan, it will remain a working list of concepts. To have a credible, comprehensive list of academic concepts that helps achieve the impacts envisioned in SWEAP, this list will be subject to ongoing refinement. This Plan envisions discussions with the Colorado Department of Education and others to ensure maximum alignment with Colorado Academic Standards and applicable national standards. At this time, water educators are encouraged to use this list, but to be mindful of potential future refinements.

The physical and chemical properties of water are unique and constant.

Water is often taken for granted because it is so common, but water is a very unusual substance.

Its most spectacular property is that ice floats on water. Water is one of only a few substances whose solid form floats on its own liquid phase. This characteristic is responsible for the fact that oceans and lakes develop a layer of ice on top, rather than freezing solid from the bottom up.

Water is very unusual in other ways as well. For example, the heat capacity of water is higher than just about any other substance. The heat capacity of a substance is the amount of heat it will absorb to raise its temperature by a given amount. The heat capacity of water is more than twice the heat capacity of natural mineral and rock materials. This tends to mellow out temperature differences around the globe, from day to night and from summer to winter.

Water is also the best all-around natural solvent we know of. More substances dissolve in water than in any other liquid. This is due largely to water's unique "bipolar" structure, which allows water molecules to interact with many different substances - both polar and non-polar.

Water's molecular structure also generates strong inter-molecular attraction between the water molecules themselves. This gives rise to surface tension, which results in the spherical shape of raindrops and forms the "skin" that allows insects to walk on the surface of a lake or stream. Another effect of surface tension is the ability of water to rise, of its own accord, within a thin tube. This phenomenon is known as capillary action, and it is essential for the survival of trees and other plants that rely on this property of water to bring life-giving water and nutrients into their root system.

Water is essential for life, our economy, and a key component of healthy ecosystems.

All living organisms need water to grow and survive. As humans, about 60 percent of our body is made up of water and we can only live three to five days without fluids. For other animals and plants, including those we rely on for food, a reliable supply of clean water is just as critical.

Economically, the direct use of water is concentrated in major sectors around the world, including agriculture, forestry, mining, energy resource extraction, manufacturing, electric power production, and public water supply. The output from these sectors supports activity elsewhere in the economy, creating a ripple effect as goods and services are produced and transferred through supply chains until they reach the final consumer.

In an ecosystem, water cycles through the atmosphere, soil, rivers, lakes, and oceans. Some water is stored deep in the earth. Surface water, on the other hand, is the source that sustains the majority of life on land. In many cases, water also structures the physical habitat of an ecosystem. Many small mammals, for example, rely on snow cover to forage and survive the winter out of view of predators. Rivers, lakes, and other bodies of water divide environments into different habitats, effectively creating unique systems where some organisms can live and others cannot. What's more, most of the life on Earth actually lives completely submerged in the waters of the oceans. Water is truly a powerful factor in all ecosystems.

Water is a scarce resource, limited and variable.

Water covers 70 percent of our planet, and since many of us refer to water as a "renewable resource," it is easy to think that it will always be plentiful. However, the freshwater that we drink, bathe in, and use for irrigation is limited and finite. Only 3 percent of the world's water is freshwater, and two-thirds of that is tucked away in frozen glaciers or otherwise unavailable for our use.

As a result, at least 1.1 billion people worldwide lack access to fresh water, and a total of 2.7 billion find water scarce for at least one month of the year. Inadequate sanitation is also a problem for 2.4 billion people—they are exposed to diseases, such as cholera and typhoid fever, and other water-borne illnesses. Two million people, mostly children, die each year from diarrheal diseases alone.

Colorado's population is increasing rapidly. According to the Colorado Demography Office, the 2019 statewide population is 5.6 million people and is projected to grow to 8.1 million by the year 2050. Supplies of available fresh water are predicted to decrease due to the effects of climate change, which include more droughts and hotter temperatures.

By 2050, we're predicted to have a shortage in Colorado of half a million acre-feet per year. That's enough water for 2.5 million families, or the amount of water that can be stored in Granby Reservoir, the fourth-largest reservoir in Colorado.

Many of the natural water systems that maintain Colorado's unique ecosystems have become stressed. Rivers, lakes and aquifers are threatened by pollution or subject to large depletions that

affect the water cycle, both upstream and down. Since Colorado became a state in the late 1800s, we have lost approximately 50 percent of our state's original wetlands through drainage, fill, and excavation. With each instance of degraded water quality and each acre of lost wetland, we also lose associated wildlife habitat, usable water supply, and water storage functions.

Water cycles naturally through Colorado's watersheds, often intercepted and manipulated through an extensive infrastructure system built by people.

As a headwaters state, the waters flowing through and leaving Colorado are part of extensive river basins and aquifers of nationwide significance: the Colorado, the Rio Grande, and the Mississippi Rivers and the Ogallala Aquifer. These waters eventually cross many state lines and join with more tributaries as they flow toward their historic outlets in the Gulf of California and the Gulf of Mexico.

Along this journey, waters within Colorado are intercepted and manipulated by a complex system of dams, diversions and conveyance structures that store and redirect native flows to serve agriculture, municipal, industrial, and ecological needs.

The quality and quantity of water, and the timing of its availability, are all directly impacted by human actions and natural events.

Human actions have a measurable effect on the water cycle at every geographic scale, altering the amount, distribution, timing, and quality of both surface water and groundwater. Colorado's communities, industries, and ecosystems are consequently affected, because all our activities and functions depend, either directly or indirectly, on water.

With large scale changes such as climate change, the water cycle is projected to undergo significant change. According to many models, Colorado can expect less precipitation, especially in the warm months, and longer, more severe droughts as storm tracks shift northward leaving arid areas increasingly dry.

The form that our precipitation takes is also likely to change: projections for many regions of North America, including Colorado, suggest less snow overall, and more rain. In areas dependent on the gradual melting of snowpack to supply surface water through the warm months, this means lower flows and greater water stress in summer – a trend already in evidence in Colorado and other parts of the western U.S. While the effects of climate change on groundwater are not fully understood, rising water competition and stress at the surface are likely to drive greater use – and potentially overuse – of groundwater.

Impacts to water quality are another consequence of human actions. Water temperature, for example, generally rises in streams, lakes, and reservoirs in urban areas or deforested areas. This tends to lead to lower levels of dissolved oxygen in water, hence more stress on the aquatic animals that rely on dissolved oxygen to live. As a consequence of untreated runoff in many areas, pollutants such as nutrients, sediment, and pathogens can be washed into our waterways, resulting in degraded aquatic habitat, decreased reservoir storage, and higher treatment costs for potable water supplies.

Human actions are also responsible for many positive impacts on Colorado's water resources. Effective wastewater treatment, for example, is an essential feature of every residential development, and is largely responsible for protecting water quality throughout the state. Many farming practices, both ancient and modern, are also essential for minimizing negative water quality impacts due to irrigation. By consciously managing toward sustainable supplies and high-quality water, we can mitigate many of the potentially damaging effects of human actions.

Water is a public resource governed by water law.

Colorado water law rests on a strong foundation of territorial and state law, which prove a basic proposition time and again: Water is a public resource and water law evolves with the customs and values of the people.

The Colorado Doctrine is a set of laws regarding water use and land ownership, adopted by the people of Colorado starting in the 1960s. It defines the essential principles of Colorado water law, which include that all surface and groundwater in the state is considered a public resource, and that water rights are the right to use a portion of that resource. It also states that water is subject to appropriation on a "first in time, first in right," basis, where those who were first to put water to a beneficial use have seniority during times of shortage, and junior water right holders are subject to being curtailed during those times.

Efficient water diversion and storage, beneficial use without waste, and recognition of all beneficial uses that Coloradans value—these have always been fundamental precepts of Colorado water law.

Over time, Colorado water law has adapted to recognize new beneficial uses in response to changing economic and community values, such as the protection of streamflows for the environment and for recreation.



STRATEGIC FRAMEWORK - 2020-2025 Water Education Colorado Prepared by Conservation Impact

Legislative Mandate

"To promote a better understanding of water issues through educational opportunities and resources so Colorado citizens will understand water as a limited resource and will make informed water decisions." (HB 02-1152)

Mission

We ensure Coloradans are informed on water issues and equipped to make decisions that guide our state to a sustainable water future.

Vision

A vibrant, sustainable, and water-aware Colorado.

We envision a Colorado in which newcomers, long-time residents, and natives alike appreciate and understand water, and that people of all backgrounds and perspectives, in all localities, are learning, listening, engaging, and working together on collaborative water solutions.

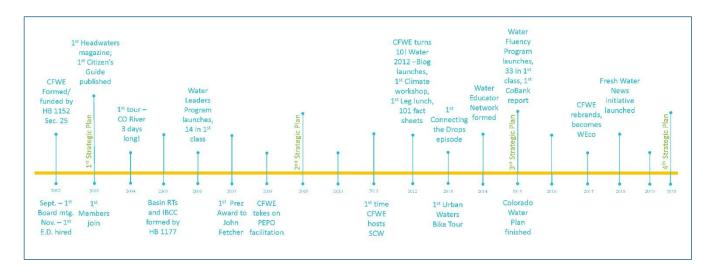
We see a Colorado in which people make individual and institutional decisions and demonstrate thoughtful water stewardship in their behaviors and actions.

We see a WEco that is an inspiring and authentic partner for water educators, water leaders and water users, and whose audience is representative of the state's demographic and geographic diversity.

Impact

Coloradans from all backgrounds and perspectives understand and appreciate water; decisions at all levels are based on factual information, exposure to different perspectives, and understanding of the tradeoffs inherent in any action; and both water professionals and community members from a wide cross-section of backgrounds and perspectives reflective of Colorado's population are engaged in well-informed discussion, debate and problem solving about water issues.

WEco Timeline



Values

▲ Water is Life

In Colorado and across the globe, our lives literally depend on water. Water sustains our economies, our way of life, and our very existence, therefore we must celebrate it and protect it. We believe that a clean and sustainable water supply must be our communities' top priority.

▲ Information is for All

We believe that everyone—no matter background, status or belief—has a right to accurate, impartial, timely and transparent information about water, and we are committed to making our programs accessible to anyone who wants to understand and engage.

▲ Objectivity is Fundamental

Water doesn't take sides and neither do we. As an independent voice, Water Education Colorado is an active leader in bringing together all perspectives and advancing balanced decision-making and outcomes.

▲ Knowledge is Progress

For centuries, humans have developed smart water solutions by learning truths about our world and then applying knowledge through inspired leadership. We empower Coloradans, from caring individuals to veteran water professionals, to learn and then boldly lead toward progress.

▲ Collaboration is Powerful

Just as a river is more formidable than individual drops of water, we foster collaboration and innovation among our members, community, partners, and the public to have the greatest impact in ensuring a sustainable water future for Colorado.

Distinctive Competence

- ▲ Provisioner of high quality, factual, policy-neutral, stylish and relevant content and programs
- ▲ Facilitator of meaningful and compelling experiences and conversations
- ▲ Comprehensive resource and connector with the "global" statewide perspective and the ability to "connect the dots"

Next-Level Strategy

WEco capitalizes on reputation, quality, position, brand, influence and power to fully occupy the Colorado water education leadership role.

- ▲ WEco has the status to tackle the hard issues and catalyzes and facilitates compelling conversations that incorporate diverse perspectives (the "edgy" factor)
- ▲ WEco optimizes and leverages current products and services for new audiences and to deliver information and programs through multiple channels
- ▲ WEco continues to distinguish itself as highly relationship oriented, customized, and constituent-centric, demonstrating a deep understanding and respect for diverse perspectives
- ▲ WEco's growth is deliberate and intentional to maintain relationships and quality
- ▲ WEco integrates an equity lens across all program planning, design and implementation

Audience

All audience outreach will focus on deepening to core audiences, then expanding demographic and geographic diversity, with a particular focus on underserved communities.

- ▲ Water professionals remain a core audience
 - In all sectors and at all levels.
- ▲ Decision-makers and influencers
 - Federal, state, regional, local
 - Appointed, elected, positional
- ▲ Water education and outreach professionals and volunteers
 - Formal educators: K-12, Higher Ed
 - Nonformal educators: NGOs, government, utilities
- ▲ Leaders and emerging leaders
 - New generation of leaders in companies, agencies, communities
 - Those in leadership roles in the water industry and those in leadership roles that influence water decisions, or are water consumers, outside of the water industry (e.g. HOA managers)

- ▲ Wholesalers (or distributors) those who work directly with the public
 - Associations and neighborhood groups
 - Media outlets
 - Museums or other public venues

Imperatives

- ▲ Stay current on water issues and have staff present for ongoing water dialogue at various levels
- ▲ Produce high quality, factual, compelling, relevant products and programs
- ▲ Deepen penetration within existing audiences and markets
- A Broaden reach to more diversified audiences and serve underserved audiences by making programs more accessible
- ▲ Stay current on latest technologies for information exchange and engagement
- ▲ Establish and maintain loyal, productive, long-term partnerships
- ▲ Have empowered, happy, valued staff team
- ▲ Engage board and consider composition of the board relative to fundraising
- ▲ Have financial resources from diverse sources for long-term sustainability
- ▲ Continue to serve and engage existing base of professionals and supporters
- ▲ Cultivate position of influence for the National Western Center water center 2022.

Goals: The "Bucket List," Objectives and Strategies

- ▲ Efficacy: WEco's audiences¹ demonstrate a factual understanding of Colorado's water and have the knowledge and skills for water-informed actions, decisions, and programs
 - Review and update content and programs for effectiveness.
 - Update and, where absent, incorporate evaluation on programs, including through the development of logic models.
 - Maintain high standards for content and quality.
- Outreach: WEco has increased its core audiences by 20% as average across all categories to be more representative of Colorado demographics and geographic scope
 - Utilize the most current or relevant technologies to disseminate information and to reach a broader, more diverse audience.
 - Target outreach to at least three underserved audiences or geographic areas.
 - Solicit financial support for diversifying participation in programs.

¹ Audience refers to those people touched by WEco's materials and programs, to include but not limited to members, alumni, subscribers, followers, networks, partners, and participants; audiences include the public to the extent that the public reads or hears or participates with WEco information or activities.

- ▲ Brand and reputation: WEco has an exemplary brand that is seen as trustworthy and well-regarded for its level of excellence and policy-neutral voice
 - Protect the quality of the WEco brand through highest-level commitment to excellence in production and delivery of content and programs.
 - Protect the integrity of the WEco brand through scrupulous attention to brand voice and values.
- ▲ Partners: WEco has expanded and maintained long-lasting, collaborative relationships with partners across the state working together to advance water education through a shared strategy
 - Maintain loyal, long-term relationships by taking excellent care of people and always following up.
 - Continue to build and support the Water Educator Network.
 - Take a lead role in implementation of the 2020-2025 Statewide Water Education Action Plan as a coordination tool.
- ▲ Staff: WEco has retained and supported an equitable, competitively compensated, inclusive, highly skilled, empowered, productive staff team
 - Review, update and maintain salaries and benefits to be competitive with like positions in other nonprofit organizations.
 - Provide professional development opportunities in line with staff goals.
 - Develop equal opportunity policy.
- Board: WEco has a high-functioning board of directors with the skills, abilities, and resources (time, contacts and/or funds), as well as the structure, to fully support the organization in both an internal governance role and an external public relations role
 - Board composition to be representative of audiences served and to include a diversity of skills and abilities to meet needs of the organization.
 - Board committees re-envisioned to align with supporting strategic goals.
 - Board succession and mentorship program (to ensure ongoing engagement on par with historical level of engagement and commitment).
- ▲ Finance: WEco has diverse and sustainable revenues to cover annual operating costs, special projects, and to maintain a reserve of a minimum of three months expenses
 - Review and develop, as necessary, the capacity/infrastructure to support diverse revenue streams.
 - Through the budget process, set and attain specific goals by income category to ensure a diverse portfolio.
 - Include board members with fundraising capabilities.
 - Seek funds to support strategic business plan and be disciplined in not letting grants drive programs or activities.
 - Create and adhere to a plan to meet and exceed three-month reserve.
 - Consider an endowment campaign.