

waterwise

The official publication of Colorado WaterWise

Partnerships and Collaboration

Fall 2014

Photo by Laura Springer



The Voice of the Colorado
Water Conservation
Community

colorado
waterwise

www.coloradowaterwise.org

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From the editors

It's that time of year again – time to announce the 2014 Conservation Summit coming up in October. We really want you to attend because we are excited to share some projects we have been working on such as the Value of Water Toolkit and the Smart Phone App for the green industry. We will also have state representatives talking about the Colorado Water Plan and what it will mean to you. See the agenda on Page 8 of the newsletter.

As editors of the Colorado WaterWise newsletter our goal is to keep you engaged, informed, and interested in topics pertaining to water in Colorado. This issue is about utilizing partnerships and collaboration and you will read about several projects in which people or groups pooled their resources to accomplish their goals.

Colorado WaterWise is all about collaboration and we would like to invite more participation from our members. You may have participated in the recent survey sent out to solicit your input. Thank you for taking the time to answer our survey. Congratulations to Laura Chartlier from Group 14 Engineering for winning the Visa gift card. Below are some ways to get more involved:

- Join a committee
- Contribute articles/ideas to the newsletter (see below)
- Sponsor the Value of Water Toolkit – hurry, time is running out
- Contribute your case studies to the online library (more info to come)
- Help us plan some more networking/learning events
- Sponsor and/or attend the 2014 Colorado WaterWise Conservation Summit

We would love to hear from you – our readers. All of you have expertise that could be shared with other members of the Colorado WaterWise community. Perhaps you have been working on an innovative conservation tool or program. Maybe you know of a community effort that has achieved significant water savings. Maybe your school has been involved in some exciting projects. Or perhaps you know someone whose efforts should be spotlighted in the newsletter.

Some of you may love to write and we would love to have you submit an article for inclusion in the newsletter. Some of you may hate writing – that's okay – send us your ideas and we'll find ways to use them in the newsletter.

To become a contributor to the Colorado WaterWise newsletter please contact one of the editors:

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WaterWise is the official publication of Colorado WaterWise and is published four times a year (Mar, Jun, Sep, and Dec). Articles are due one month before the newsletter comes out.

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This newsletter is intended to spark dialogue about various issues concerning water conservation in Colorado. The viewpoints of the authors are not necessarily those of the Colorado WaterWise.

Colorado WaterWise Ongoing Meetings
Colorado WaterWise Board Meetings
Second Thursday of each month, 10 a.m.-noon

SOCIAL MEDIA TIPS FOR WATER CONSERVATION

By Natalie Stevens, City of Greeley

Earlier this year, the City of Greeley Water Conservation Program received notification of our fifth Twitter anniversary. This means that we have been promoting water conservation for five years on social media. Here are a few things that have helped in our social media success:

Ads Expand Reach

One thing that new social media accounts struggle with is finding an audience. Unless people are extremely interested in water, they just won't follow you, unless you make it easy for them.

One Facebook tactic that has worked for Greeley is advertising. We've been paying for boosted posts. When you have an important post, you can pay Facebook to pass it along to people who are not following you. For as little as \$15 dollars, you can get your message out to a target audience (geographic, demographic and by interest). Instead of hundreds of people viewing our posts they are seen by thousands of people. This is a way to gain followers through these boosted posts with people that have kept following our page.

Greeley Water Conservation
April 12 · 🌐

Fill your landscape with a Painted Prairie Garden in A Box it mirrors a mountain prairie littered with flowers of bright red, blue, and purple blooms from early summer through fall: <http://gardeninabox.co>

4,434 People Reached

99 Likes, Comments & Shares

89 Likes	76 On Post	13 On Shares
1 Comments	1 On Post	0 On Shares
9 Shares	1 On Post	8 On Shares

154 Post Clicks

60 Photo Views	94 Link Clicks	0 Other Clicks
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NEGATIVE FEEDBACK

- 0 Hide Post
- 0 Hide All Posts
- 0 Report as Spam
- 0 Unlike Page

4,434 people reached

Like Comment Share 76 1 1

Make it Easy and Fun

For a newbie, another hurdle to social marketing is figuring out what to say on a daily basis. You can promote your events and programs, but eventually your fans and followers will find it boring. You need to mix it up with tips on how to save water, but then that can get tedious too.

Greeley Water Dept. @greeleywater · Jun 12

Days when you use an umbrella are days when you don't need to water your lawn.

Try to mix up traditional conservation tips by finding ways to say it differently. Posting "days when you use an umbrella are days when you don't need to water your lawn" is more interesting than "don't irrigate when you get precipitation."

Find inspiration in your publications, PowerPoint presentations and information from others. It's great to share information from like-minded people, such as other cities or water districts. Programs such as the EPA WaterSense program or the Irrigation Association's Smart Irrigation Month have pre-written social media posts that you can use and personalize.

Twitter started the practice of using hashtags to group topics of a similar nature; other social media sites are now using it as well. Feel free to use things like #WaterConservation or #water in your messages. When discussing weather in Colorado use the hashtag, #cowx.

There are a few fun tags that are used on a particular day of the week and may help inspire your posts for the day. A popular one is #WaterWednesday. People that might not share water information everyday make a point to do it or seek out that information on Wednesdays. Use it on Wednesday when you have information that has a broad message that many, even those outside of your utility area will find interesting, such as a tip or a fact about water.

Another one that is popular, not just in water circles is #ThrowbackThursday or #TBT. This is an opportunity to share some historic photos or information about your organization. You can also have fun with it and caption an old photo with a modern interpretation. This can make your posts seem more interesting and diverse.

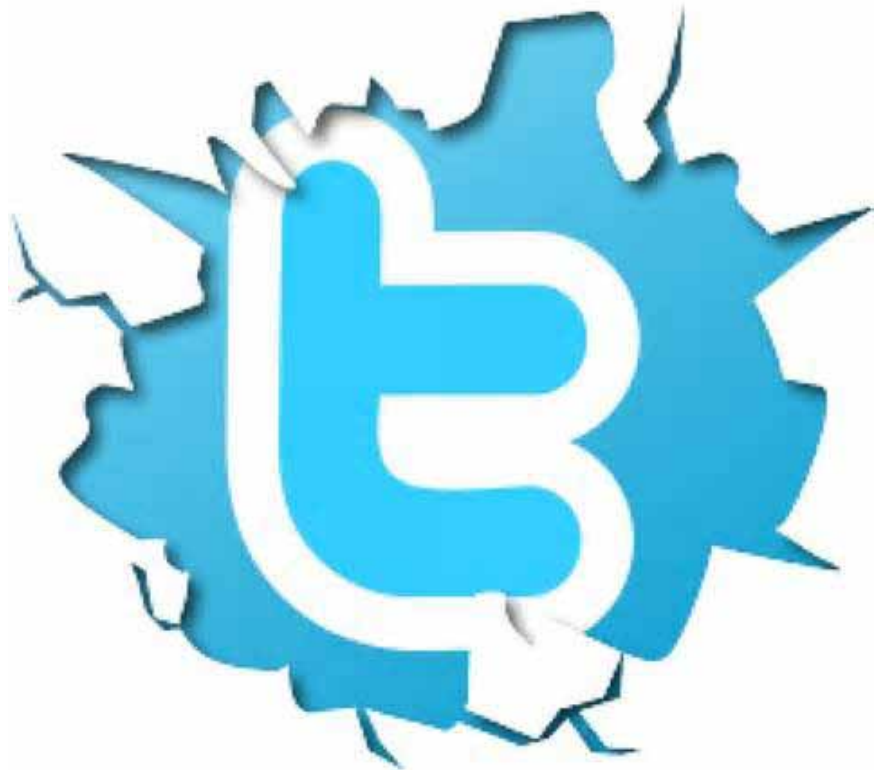
Greeley Water Dept. @greeleywater · Apr 17
It's a good thing that water pipes are no longer made out of wood. #TBT
#ThrowbackThursday



Hopefully these social media tips have been helpful. The best thing that you can do is “just do it”, not just for your organization, but personally, to learn the tools, what they do, and the types of posts and information that you like.

Here are a few Colorado Water accounts to follow on Twitter.

- @AWRACO
- @CFWEWater
- @CO_H2O
- @COWaterCongress
- @COWaterPlan
- @ColoWaterWise
- @CoWaterWorkshop
- @CoyoteGulch
- @CSUtilities
- @DenverWater
- @EagleWatershed
- @EPAwatersense
- @FCUtilities
- @greeleywater
- @H2OTracker
- @northern_water
- @OWOW_MSUD
- @rfconservancy
- @ThorntonWater
- @UGRWCD
- @wradv



RECYCLED WATER SYSTEM CELEBRATES 10 YEARS

By Ann Baker, Denver Water Communications and Marketing

When Denver Water's recycled water system opened a decade ago, it distributed water through nine miles of pipe to twelve large water users. Since then, the system has grown seven times that size, sending water through 65 miles of pipe to more than 80 customers, including parks and golf courses, the Denver Zoo, schools, homeowners associations and industrial complexes, and has plans to expand even farther — to Denver International Airport and through central Denver.

Denver Water now supplies about 7,000 acre-feet of recycled water a year, which can be used for irrigation, and industrial and commercial operations that do not

require drinking water. Once buildout is complete, in the next 10 to 15 years, the recycled water system will deliver 17,500 acre-feet of water each year, freeing up enough drinking water to serve more than 43,000 households. Each year, the system expands a bit farther. In 2013, Denver Water spent \$4.3 million expanding the system, and connecting recycled water to Congress and Cheesman parks, the Rocky Mountain Arsenal National Wildlife Refuge, as well as to 37 sites in the Montbello and Gateway Park neighborhoods and a few other sites along existing lines.

This year, Denver Water plans to work in areas that have major conduits leading to them but still need smaller distribution lines. That includes areas around Green Valley Ranch and North Stapleton. The cost for expanding the recycled system in 2014 is \$1.1 million.



The Denver Water Recycling Plant, as well as the recycled water distribution system, celebrates a decade of service this year.





ENERGY & WATER UTILITY PARTNERSHIP IN ACTION

By Amelia Nuding, Western Resource Advocates

This summer saw the launch of a new partnership between six Front Range water utilities and Xcel Energy on a commercial energy and water efficiency program. Conservation managers from Aurora Water, Centennial Water & Sanitation District, Denver Water, Greeley, Thornton, Westminster and Xcel Energy were brought together by Western Resource Advocates to collaborate on a joint efficiency program. The resulting Commercial Refrigeration Efficiency program helps commercial customers save energy and water through direct installation of water efficient aerators, pre-rinse spray nozzles, LED lights, and a fridge coil cleaning and tutorial. This partnership is premised by the fact that when water is saved energy is also saved. It takes energy to move, treat and heat water, so when you save water – especially hot water – you also save energy. While the utility staff understood this fact very well, this was the first time that they had worked together on a program to conserve both resources.

But a seven-party agreement isn't built in a day. For us it took closer to a year. We started our conversation by reviewing the existing efficiency programs offered by each utility to see if any would be suitable for joint implementation, or if a new program needed to be created. Our discussion resulted in the selection of Xcel's existing Commercial Refrigeration Efficiency program, which offers energy and water saving services to commercial customers with a refrigeration system. Together we developed three promotional flyers that highlight the water and energy saving benefits of this program. Xcel administers the program and the water utilities help to promote it to their commercial customers.

This co-promotion is beneficial in several ways: it increases number of customers receiving information about this program (and therefore may increase participation), it helps water utilities to achieve more water conservation in their area at virtually no cost, and it forges new relationships between utilities with similar missions. This first collaboration has the potential to lead to other, even more robust, partnerships in the future.

Only a handful such inter-utility partnerships have been created in the U.S., but it is a growing trend as more utilities realize the benefits of partnership. To learn about other inter-utility partnerships and how they can be created, check out Western Resource Advocate's Conservation Synergy report. If your utility has taken on a similar kind of partnership, we'd love to hear about it! Please contact Amelia Nuding at amelia.nuding@westernresources.org.





MARK YOUR CALENDARS: THE 6TH ANNUAL COLORADO WATERWISE SUMMIT FRIDAY, OCTOBER 24, 2014

Colorado WaterWise is pleased to announce that the **Early Bird Registration is now open through September 26, 2014**. Conserve your funds and register now at www.coloradowaterwise.org and click on 2014 Water Conservation Summit tab.

The 2014 Water Conservation Summit will highlight new projects from Colorado WaterWise, updates on the Colorado Water Plan, and many other interesting water-related topics. Limited sponsorship opportunities are also available. Please view the sponsorship package and list of unique benefits crafted to meet any budget, and most of your marketing needs.



The 6th Annual Colorado WaterWise Water Conservation Summit

Friday, October 24, 2014
8:15 a.m. to 4:30 p.m.
Denver, Colorado

Support Participate Network

- \$150: Early Bird Member Rate
- \$200: Member Rate after 9/26/14
- \$200: Early Bird Non-Member Rate
- \$275: Non-Member Rate after 9/26/14

Register at www.coloradowaterwise.org



To sponsor this event, contact
brenda.obrien@comcast.net

colorado waterwise



Water Conservation Summit

Police Protective Association Event Center
2105 Decatur Street, Denver 80211
(303) 433-8247

Register at www.coloradowaterwise.org
Members: \$200.00
Non-Members: \$275.00

Friday, October 24, 2014 - 8:15 am to 4:30 pm

8:15 am - 9:00 am	Exhibits Open	REGISTRATION & CONTINENTAL BREAKFAST
9:00 am - 9:15 am		Welcome & Opening Remarks Frank Kinder, Colorado WaterWise Co-Chair
9:15 am - 10:00 am		Colorado Water: "Live Like You Love It" Communication Toolkit Lisa Sigler, Sigler Communications
10:00 am - 10:45 am		Smart Phone Application for Water in Colorado Lyle Whitney, Aurora Water and Frani Halperin, Halperin Creative
10:45 am - 11:00 am		MORNING BREAK
11:00 am - 11:30 am		WaterSense Green Plumber Training Frank Kinder, Colorado Springs Utilities and Amelia Nuding, Western Resource Advocates
11:30 am - 12:00 pm		Colorado WaterSense Legislation (SB14-103) Chris Piper, Denver Water
12:00 pm - 1:15 pm		LUNCH (provided) <i>Presentation of Colorado WaterWise Conservation Award</i>
1:15 pm - 1:45 pm		Rocky Mountain High: Efficient Water Use for a Budding Industry Jeff Tejral, Denver Water
1:45 pm - 2:15 pm		Quantification and Expected Benefits of Landscape Water Conservation Jane Clary, Wright Water Engineering, Inc.
2:15 pm - 2:45 pm		The Colorado Water Plan Lauren Ris, Colorado Department of Natural Resources
2:45 pm - 3:00 pm		AFTERNOON BREAK
3:00 pm - 3:40 pm		The Colorado Water Plan: What It Is and Is Not James Eklund, Colorado Water Conservation Board
3:40 pm - 4:15 pm		The Colorado Water Plan - Basin Implementation Plans Sean Cronin, South Platte Basin Roundtable, Jim Polkrandt, Colorado Basin Roundtable and Mark Koleber, Metro Roundtable
4:15 pm - 4:30 pm		DOOR PRIZES & CLOSING REMARKS Frank Kinder, Colorado WaterWise

WORKSHOP FOR COLORADO PLUMBERS – COMING THIS FALL!

By Amelia Nuding, Western Resource Advocates and Frank Kinder, Colorado Springs

Plumbing isn't usually a subject we think about until something goes wrong. And suddenly we become desperate, and grateful, for the services of a professional plumber who can fix the problem.

Plumbers are indeed our sanitation stewards, but if we only think of them that way we'd be missing the opportunity to have them also be our ambassadors of efficiency. Plumbers are the boots-on-the-ground water managers – they are in our homes and businesses, fixing running toilets, burst pipes, and switching out old fixtures with new ones. They have unique opportunities to talk about the benefits of efficiency to utility customers in person, during those few minutes in life when the average person is actually thinking about their plumbing and fixtures. They are also increasingly part of the high-performance new construction and retrofit puzzle, responsible for high efficiency hot water systems, new appliances and evolving water reuse options, such as graywater.

To make the most of this opportunity, several members of Colorado WaterWise decided to develop an event called Water Efficiency Workshop for Colorado Plumbing. This workshop brings together a broad set of water topics into a single consolidated session, and even includes the nation's top hot water demand expert, Gary Klein. It will give local utility conservation managers the opportunity to convey their objectives and programs, and forge new connections with the plumbing community. The workshop will feature state officials and industry experts speaking about the most important topics in Colorado plumbing today – like SB 103 (the 2014 WaterSense legislation) and upcoming graywater regulations. It will also provide training to plumbers about how to communicate the benefits of efficiency to their customers and how to meet specifications for high-performance buildings, like LEED, ENERGY STAR and WaterSense New Homes. As each of these measures contributes to the future of Colorado's water supply, the plumbing industry can be an important water efficiency advocate that helps all of us achieve our conservation goals, and help ensure a safe and vibrant water future.

Plumbers who complete the workshop will have their company listed on PHCC's (Plumbing-Heating-Cooling Contractor's Association) website to demonstrate they have learned about water efficiency in Colorado and understand options and solutions to maximize water use. Plumbing suppliers, manufacturers, building department officials, property and facilities owners and managers, and others are all welcome to attend.

This half day workshop will take place in three locations this fall: Denver, Colorado Springs and Fort Collins. We have partnered with the PHCC and others to help promote this workshop, and have lined up a stellar list of presenters and instructors. Please contact us Amelia Nuding (amelia.nuding@westernresources.org) if you are interested in learning more about this program, hosting a workshop, and/or promoting it to your members.

“Without the plumber, where would we be? Truly they are the unsung heroes of polite society.”

Mike Rowe, Host of “Dirty Jobs”

Water Efficiency Workshop for Colorado Plumbing

Noon - 4:00 pm

DENVER - September 17, 2014: Construction Industry Training Council (CITC) Building, 646 Mariposa St., Room 101

COLORADO SPRINGS - September 18, 2014: Rampart Supply & Water Systems, 1801 N. Union Blvd.

8:00 am - Noon

FORT COLLINS - October 15, 2014: Location TBD

This 1/2 day workshop is an opportunity for you to get up to speed on the latest water topics in Colorado. You will have an opportunity to network with your local water utility representatives, building and code officials and other industry professionals.

Why attend?:

- Learn about the latest graywater regulations.
- Participate in a hands-on efficient hot-water design demo with Gary Klein.
- Discover the latest on WaterSense programs, products and the 2014 Colorado law.
- Learn about high-performance construction including LEED, EnergyStar and WaterSense.
- Connect with utility and state officials who will share information about local programs, water supplies and issues.
- Learn how to communicate the value of water efficiency and high performance construction standards with your customers.



Who should attend:

- Plumbing Companies, engineers, suppliers, building department officials, facility and property managers, housing officials, developers, specifiers, remodelers.

Speakers:

- Gary Klein (the "guru" of efficient hot water) and representatives from: Denver Water, Colorado Dept. of Regulatory Agencies (DORA); Colorado Dept. of Public Health and Environment (CDPHE); Environmental Protection Agency; Energy Logic

Register online in the Registration Section of the Events and Education tab at www.PHCCColorado.org.

PHCC Members: \$10/ Non-Members: \$20

Program will be followed by a beer and bites reception.





TOTO PLUMBING COMPANY AMERICAS' PRESIDENT VISITS COLORADO

By Frank Kinder, Colorado Springs Utilities

Bill Strang, President of TOTO Plumbing Company Americas, met with Colorado Springs Utilities' staff, learned about Colorado WaterWise, and visited commercial customers for an information exchange as part of a larger visit to Colorado in June. Strang is President of TOTO Operations Group and Chairman of TOTO Mexico; he is responsible for all operations, including Supply Chain, Product Design and Development Engineering, Quality, Environmental Sustainability. In addition he manages the five TOTO North America plants in Morrow, GA; Lakewood, GA; Fairburn, GA; Ontario, CA, and Monterrey, Mexico. TOTO makes both commercial and residential products including toilets, urinals, showerheads, faucets, washlets, and various other fixtures, with a history of innovation and conservation. Under Strang's leadership, TOTO has received awards for 5S1 Lean Manufacturing implementation, US EPA Water Efficiency Leadership Award, Georgia Governor Sonny Perdue's Water Conservation Leadership Award, the Argon Award, the City of Atlanta Phoenix Award, and Chattahoochee Riverkeeper Sustainability Award. At 50%, TOTO is the largest percentage user of green energy² from Georgia Power. TOTO is working with multiple code bodies such as CALGreen and Living Building Challenge, to align manufacturing and development with evolving conservation codes in an effort to determine product Life Cycle Assessments and generate healthier buildings overall.

TOTO has also worked with the US Green Building Council on LEED Version 4.3 to update the water efficiency credits to reflect updates in achievements as well as Environmental Product Declarations (EPDs). These efforts serve to ensure that upstream and downstream effects of building components are considered and seek to improve triple bottom line sustainability impacts from manufacturers, suppliers and services. For example TOTO USA has developed secondary uses or recycling channels for the waste streams from the manufacturing process, converting them from waste to raw material feed stocks for other manufacturers. All of these endeavors, from cradle to end of life recycling are tracked using Life Cycle Assessment methodologies to measure and reduce the impacts that TOTO products have on the environment.

TOTO is also the inventor of accessory water closet fixtures, called washlets, that reduce demand for paper and water while serving the needs of regular bathroom users, but especially the elderly, infirm, disabled, and hospitalized. These solutions are a nexus of water conservation, health care, and sanitation, and represent both dignified and responsible water use. Although they may represent new cultural norms in North America, washlets have been used in other countries for decades.

“TOTO is also the inventor of accessory water closet fixtures, called washlets, that reduce demand for paper and water while serving the needs of regular bathroom users, but especially the elderly, infirm, disabled, and hospitalized. These solutions are a nexus of water conservation, health care, and sanitation, and represent both dignified and responsible water use.”

In Colorado Springs, Strang met with key accounts, toured Colorado Springs Utilities’ Conservation and Environmental Center Indoor Demo area where TOTO fixtures are used to compare and contrast ULF and HET products for public education. One special visit was to the University of Colorado, Colorado Springs dormitories, where he met students and staff that had just completed a student-funded and student-led, staff-supported HET toilet retrofit of 1990’s 3.5 GPF toilets with 221 TOTO 1.28 GPF products. Strang was impressed by the students’ involvement in researching fixtures, choosing products, removing and recycling old fixtures, and coordinating much of the project. The students learned about TOTO’s innovations in sustainability, water efficiency and product design, and got to meet the president of the company that made the products they chose.

Strang and TOTO are impressed with the water efficiency projects and achievements Colorado is making and with the varied efforts by Colorado WaterWise members. We were happy to have the opportunity to meet him and share with him how water efficient products are serving to meet today’s resource needs and act as primary components of educational projects for future students.





FALL FIELD DAY AT NORTHERN WATER

By Zach Allen, Communication Specialist at Northern Water

Northern Water is hosting a Fall Field Day Friday, Sept. 5, from 10 a.m. – 2 p.m. at Northern Water’s headquarters, 220 Water Ave. in Berthoud.

The Fall Field Day will feature seminars, highlight many of the ongoing turf/garden studies and share results to date. The Fall Field Day will also include a tour of the Conservation Gardens, where more than 700 plants and 60 turf grasses showcase landscapes that thrive in Colorado’s semiarid climate.

New studies on display include Gradient Subsurface Drip Irrigation and Xeric Garden Irrigation Comparison. Information regarding current studies will be presented.

Fall Field Day will include information on rain shut-off systems and smart controllers. “Technology has aided in water conservation when it comes to outdoor water use,” said Lyndsey Lucia, field instrumentation and outreach technician. “Adding and monitoring a smart controller with the addition of a rain shut-off to an irrigation system does promote water conservation.”

“The Fall Field Day is geared to industry professionals and individuals with significant experience in horticulture and water conservation practices,” Lucia said.

Northern Water provides water conservation information to the general public, landscapers, municipalities, agricultural users and Northern Water allottees. Water conservation is an integral part of Northern Water’s strategic plan and long-range planning to encourage wise water use and stewardship. Northern Water welcomes input and inquiries about its water conservation activities.

The field day is free and includes lunch. RSVP to Veronica Gomez by email at registration@northernwater.org or calling 970-622-2220.



A NEW WATER CONSERVATION TOOL FOR THE COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL SECTOR

By Becky Fedak, Brendle Group

Tackling water conservation in the commercial, industrial, and institutional (CII) sector can be challenging – a large and disparate customer base with varied water uses makes it difficult to develop cost effective, streamlined programs that achieve meaningful savings. To help address this challenge, in 2005 a number of Northern Colorado water providers collaborated to evaluate CII water users and develop a toolkit to benchmark water consumption in high priority sectors.

Since 2011, the City of Boulder, with support from Brendle Group, has been working to build off of this initial study and develop an Excel-based CII Water Assessment Tool (Tool) that provides a template for conducting basic water conservation assessments of CII customers. The Tool's simplified user interface allows end-users and building owners to easily assess their water use and find opportunities for savings. This also allows more advanced auditors, like utility staff and professional engineers, the option to change assumptions and customize fields for a more robust assessment. The goal is to help fill a need in the CII sector by developing a tool that can lend credibility to water assessments.

The Tool combines separate water conservation calculators and tools from a variety of sources with a common interface and assumptions that can be customized to a particular user. Data input requirements for the Tool include general facility information and an inventory of water-using appliances and end-use fixtures for the facility. This information is compiled into a report summary of the facility's water use, water savings opportunities, cost savings, installed cost, and simple payback, as well as the estimated energy savings to incorporate the water-energy nexus. The Tool draws heavily on water and energy resources from U.S. Environmental Protection Agency's (EPA's) WaterSense® CII Best Management Practices and ENERGY STAR programs. It also has a benchmarking component that may eventually link to EPA's Portfolio Manager Program. While the Tool is not intended to identify recommended projects, it can be used to screen for potential water conservation opportunities.

On August 1st the City wrapped up a three month pilot phase to test the Tool across a diverse range of stakeholders and gather feedback on how the Tool can be improved. Pilot participants ranged from water utility staff to CII customers to water conservation practitioners. Outcomes from the pilot and a revised Tool will be presented at the Water Smart Innovations conference this fall in Las Vegas, Nevada. If you're interested in receiving a copy of the tool or wanting to learn more about this initiative, please contact Russ Sands with the City of Boulder (sandsr@bouldercolorado.gov) or Becky Fedak with Brendle Group (bfedak@brendlegroup.com).



New Law Helps Conserve Water



By Lindsay Weber, Planning Department at Denver Water

Recently passed legislation will help combat an upcoming water shortage to the tune of 13 billion gallons per year. Earlier this summer, Governor Hickenlooper signed Senate Bill 103, which will phase out the sale of toilets, urinals, lavatory faucets and showerheads that aren't certified by the federal WaterSense program. Denver Water played a lead role in researching, developing and promoting this bill.

Allowing only efficient fixtures in the marketplace is expected to save the state roughly 13 billion gallons of water per year by 2050. That's important, especially because Colorado's population is predicted to double by 2050 — stressing the state's already-tapped water resources.

WaterSense, the water equivalent to the well-known Energy Star label, certifies that a fixture has been independently tested through a public/private partnership to meet high standards for performance. WaterSense-labeled products come in a wide range of prices and are competitive with conventional fixtures. These efficient fixtures help customers save not only on their water bill, but also on their wastewater and energy bills. Phasing out the sale of inefficient fixtures will be complete by fall 2016.





SLOW THE FLOW, VERSION 2.0

“During the 10th year of the Slow the Flow Irrigation Audit Program, things are looking a little different.”

By Kate Gardner, Sr. Manager of Water Programs and Morgan Shimabuku, Sr. Manager of Sustainability Programs

During the 10th year of the Slow the Flow Irrigation Audit Program, things are looking a little different. Rather than the auditors heading out into the field with their pencils, paper-filled clipboards, and calculators, this summer they headed out armed with tablets and new, custom auditing software. The new software and real-time data entry transformed the way that the auditors conducted audits and communicated with homeowners and utility partners. Slow the Flow, an irrigation inspection program, was founded in 2004 by the City of Boulder and the Center for ReSource Conservation (CRC) with seed money from the Colorado Water Conservation Board. The program has since provided over 12,000 homeowners with comprehensive sprinkler inspections, in partnership with over 20 municipalities. The service provides practical tips and recommendations for making irrigation systems more efficient as well as a customized watering schedule for each home.

The CRC has long been discussing the efficiency and environmental gains that we could achieve by utilizing tablets and going paperless. After the largest and most successful season in the program’s 10-year history in 2013, the CRC decided that it was time for a large-scale technology upgrade for the program. But the process wasn’t simple and involved several steps along the way to ensure that it was done right. The first step was to put together a Request for Proposal and send it out to a variety of web development firms in the Boulder/Denver area. After interviewing several companies, the CRC decided to work with the talented team of developers at Pivotal Labs, also based in Boulder.

Software development began in January of 2014. The goal was to build a custom solution that integrated the scheduling, auditing, and reporting systems. After a decade of inputting data from paper forms, working in a multitude of Excel spreadsheets, and creating complex systems to track the 2,000+ audits performed yearly, there was a need for connecting all aspects of the program. The software and systems had to be rigid enough to standardize all the processes, as well as flexible enough to handle the variety of properties and customers encountered. The team at Pivotal Labs had to begin with researching and documenting all aspects of the program, from scheduling procedures to field data collection. After the research phase, the team began to develop the software. This step was where the majority of the work took place, and for seven weeks the CRC devoted an entire staff member to support the software development team at all times.



In June, the first team of Slow the Flow auditors began the season 100% paper free. As with any piece of software, glitches were identified and the development process continued. However, the season and custom software were a huge success! We were able to eliminate over 15 minutes of auditor time spent calculating landscape area and recopying information per audit, which allowed the auditors to spend more time educating the homeowner. On the back end of the program we anticipate saving around 30,000 pieces of paper and close to 300 staff hours of tracking and data entry just this year. Additionally, we have improved the communications with our utility partners, providing them with real-time information on the season's progress and immediate access to each of their resident's audit reports. We look forward to continuing Slow the Flow v. 2.0 and the opportunities that it provides us to scale the program to the Front Range and beyond.

For more information on the Slow the Flow program please contact Kate Gardner at the Center for ReSource Conservation at 303-999-3820, or visit ConservationCenter.org.



THE GREAT DIVIDE – AN UPDATE

By Alysha Havey, Havey Productions.

Production has begun on *The Great Divide*, a feature length documentary film from the Emmy award-winning team of Havey Productions, in association with Colorado Humanities. The film will illustrate the timeless influence of water in both connecting and dividing an arid state and region.

Production on *The Great Divide*, due to premiere in the spring of 2015, will cover every corner of Colorado and all of its major river basins. The crew has already completed over 20 shoots on location and conducted 29 interviews with water experts and stakeholders around the state.

“The destiny of the west is written in the headwaters of Colorado,” filmmaker Jim Havey said. “We are shooting this film to raise public understanding and appreciation of Colorado’s water heritage and hope to inspire a more informed public discussion concerning the vital challenges confronting our state and region with increasing urgency.”

Images in this article were produced during filming in the San Luis Valley.

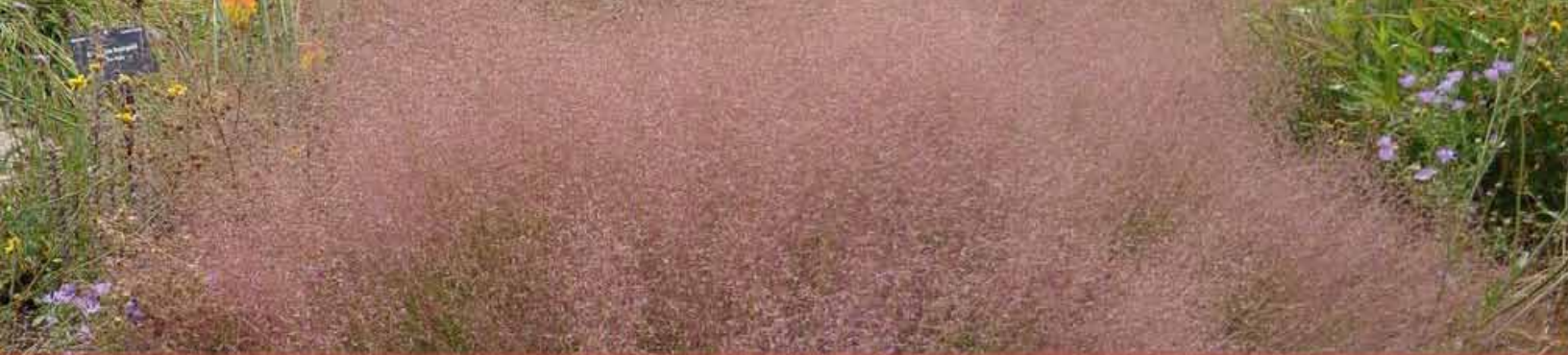
Before the water flows each spring, community members in the town of San Luis gather to clean brush and debris from the People’s Ditch, established in 1852 and the oldest water right in Colorado.

Near Center, CO, massive combines guided by GPS bring modern technology to a long-time tradition of planting potatoes in the San Luis Valley.

The mighty Rio Grande snakes south from the snow-crested peaks of the Sangres de Christo mountains on it’s nearly 2000 mile journey through southern Colorado to the Gulf of Mexico.

To find out more, sign up for notifications on this important project watch the trailer:
<http://www.thegreatdividefilm.com/>





BREATHTAKING FALL BEAUTY OF UNDAUNTED® RUBY MUHLENBERGIA

Photo by Panayoti Kelaidis

By Pay Hayward, Plant Select®

The cooler nights and shorter days of fall bring out the beauty of many ornamental grasses. This spring, Plant Select® introduced a new grass, UNDAUNTED® Ruby Muhly. The species is one of North America's most beautiful native grasses, but back in 2003, noted horticulturists Scott Ogden and Lauren Springer Ogden selected this form from an exceptionally robust population of *Muhlenbergia reverchonii* discovered in north central Texas (that population has since been plowed under).

UNDAUNTED® Ruby Muhly is a long-lived, low-maintenance clumping grass with lovely ruby-red clouds of flowers late in the season that dry after frost and remain attractive throughout winter. Expanded trials have established UNDAUNTED® Ruby Muhly's hardiness at a solid Zone 5. Its heat tolerance makes it a fine choice for the warmest climates as well.

UNDAUNTED® Ruby Muhly thrives in most soils including alkaline clay, and adapts to water-logging as well as drought; in the wild it often grows on hardpan that is briefly saturated and then dries out entirely. Its well-known relative, Gulf Muhly (*Muhlenbergia capillaris*), bears similar showy pinkish-red flowers, but has a coarser, less compact habit and is not as drought-tolerant or cold hardy.

The original trial plants performed exceptionally well in trials at Colorado State University and Denver Botanic Gardens. They have also thrived in the Ogdens' Fort Collins garden, and remain dense and vigorous a decade after planting with no dieback in the center, unusual for a bunch grass. The plant's well-behaved, fine-textured, soft green foliage mound is handsome throughout the growing season before the stunning bloom takes the stage, lasting well through winter.

Size: 15"-18", to 30" in bloom x 18"-24" wide

Light: Full sun

Culture: Moderate to dry

Blooms: Autumn

Hardiness: USDA Hardiness Zones 5 to 10

Design tips: When backlit by autumnal sunlight the flower effect is breathtaking, like a raspberry-red halo hovering over the plant. Use as an accent with asters and colchicums or other autumn-flowering companions, or go for the wow factor with a mass planting, or blend into a naturalistic meadow-inspired matrix.



Photo by Mike Kintgen





INNOVATIVE TOOL TO BRIDGE WATER CONSERVATION AND COMMUNITY-DRIVEN ENVIRONMENTAL ENHANCEMENT

By Brittany Xiu, Outreach Coordinator, University of Arizona

What happens to the water that I conserve? Where does the saved water go? Although most recognize that conserving water is “the right thing to do”, some have questioned why they should conserve water if that savings is directed to growth. It was this very question that motivated the University of Arizona Water Resources Research Center (WRRC) to develop the Conserve2Enhance™ (C2E) program. The C2E program connects water conservation with the desire to enhance natural systems and demonstrates how collective community action can lead to meaningful environmental benefits. C2E offers a conservation solution that gives people an opportunity to decide exactly where their water savings are going.

The concept behind C2E is simple. Participants implement conservation measures in their home or business and keep track of their water use with the help of the C2E Water Use Dashboard (www.conserve2enhance.org). The Dashboard then associates a monetary value to the saved water, which serves as the basis for voluntary donations to a fund for environmental enhancement projects. By associating a monetary value to the water conservation, C2E ensures that participant savings directly benefit environmental projects of value to local communities or organizations. C2E has been helping connect water conservation with community action since 2010, when a pilot project was launched in Tucson, Arizona. Since that time the WRRC has developed a suite of tools to help communities across the Southwest develop their own C2E programs to encourage water conservation and raise funds for local projects. Existing C2E participants have already conserved millions of gallons of water and invested tens of thousands of dollars into community-identified project sites that enhance local washes, reduce flooding, and increase wildlife habitat.

With the Water Use Dashboard any community group, be it a local non-profit, a water utility or business, can start a C2E program. If you are interested in bringing C2E to your community it is now simpler than ever with the new C2E Program Development Toolkit. This electronic resource contains all the materials you need to initiate, implement, manage, and market a new C2E program. Even if you are just curious about the C2E mechanism, the Toolkit will be of interest as it allows you to explore how much water your community could save and contains information about existing programs you can use to investigate the potential benefits of a C2E program. Once you decide to start your own C2E program, the toolkit provides a step-by-step checklist and guidelines for implementing a successful program as well as the resources to customize everything from magazine advertisements to social media posts to signage for your C2E project sites. The Toolkit has already received rave reviews from new C2E program managers: “We cannot say ‘thank you’ enough for your tremendous support. We have taken off in a very organized fashion thanks to your enabling materials.”

The complete electronic C2E Toolkit is available at no cost to communities interested in developing their own C2E program, simply download the Toolkit at conserve2enhance.org/create-program or send an email request to info@conserve2enhance.org. C2E staff time is also available to help interested Colorado River Basin communities start a program —contact us to learn more.

GARDEN IN A BOX GROWS ACROSS COLORADO

By Rachael Jaffe, GIAB Coordinator and Morgan Shimabuku, Sr. Manager of Sustainability Programs

The 2014 season of the Center for ReSource Conservation's (CRC) Garden In A Box (GIAB) program was the most successful season to date. For many years, the CRC has partnered with professional landscape designers to create xeric gardens that are convenient for any level of gardener and will flourish in our Colorado climate. These GIAB kits are made available in partnership with water municipalities throughout the state, allowing for residents to purchase the gardens at a discount. GIAB products provide an easy option for planting low-water gardens that come with everything customers need to install beautiful xeric landscapes. This season was notable for a website upgrade, record sales, a new partnership with the City of Aspen, as well as a high elevation garden option.

Beginning early in 2014 the CRC partnered with a web design team to create the program's new website. Not only is the website more attractive and appealing, but it also greatly improved the back-end processes of managing orders and distributing gardens. The increased efficiency gained by the improved website design allowed the program to flourish, with 2,100 gardens sold (meaning over 172,000 sq ft of xeriscape potential), the program's highest number yet.

Another new addition to GIAB this year was the CRC's partnership with the City of Aspen Water Department. In order to offer a garden option that would flourish at Aspen's high elevation, the CRC partnered with Julie Hauser, landscape designer, to create the Alpine Meadows Garden. The Alpine Meadows Garden was a 100 sq ft, part shade garden that was hardy to 8,000 feet of elevation. While the garden was designed in conjunction with Aspen's partnership, many homeowners from across the State were also happy to see a garden option that would survive in a high elevation climate.



In addition to the Alpine Meadows Garden, the CRC offered three other xeriscape garden designs and a vegetable garden. The xeric garden options included two, full-sun gardens, one 70 sq ft and the other 100 sq ft, and also a 100 sq ft part shade garden. The vegetable garden, called the Spaghetti Dinner Garden, provided gardeners with all of the vegetables and herbs they might need to make a spaghetti squash meal. Also new this year, Boulder residents were eligible for the “Ag In A Bag” product which included a Spaghetti Dinner Garden, as well as gardening tools, recipes from local restaurants and a reusable grocery bag.

The CRC is happy with the outcome of 2014 and are already excited about the 2015 season. For more information about Garden In A Box, or to sign up for the 2015 GIAB waitlist go to www.gardeninaboxco.org.

Image of the new website, www.gardeninaboxco.org :

The screenshot shows the website for the Center for ReSource Conservation. At the top, there is a navigation bar with the organization's logo, social media icons for Facebook, Twitter, and Pinterest, and a shopping cart icon. Below the navigation bar is a prominent banner with the text "Click here to sign up for the 2015 Garden In A Box Waitlist." and a large photograph of a garden filled with orange and purple flowers. Below the banner is a section titled "Reimagine your Landscape" featuring a "GARDEN IN A BOX" logo, a butterfly graphic, and text announcing that the 2014 gardens have sold out and providing a link to the 2015 waitlist. At the bottom, there are three featured garden designs: "Summer Shadows Garden" (100 sq ft), "Painted Prairie" (100 sq ft), and "Sunset Garden" (70 sq ft), each with a small image and a brief description.

Conservation News Updates

By Laurie D'Audney, Fort Collins Utilities

Center for Neighborhood Technology (rainready.org)

- Rain Ready is an initiative designed to help individuals, businesses and communities approach the challenges of flooding, water shortage and/or water pollution in customized and cost-effective ways.

University of Arizona Water Resources Research Center (conserve2enhance.org)

- The C2E Conserve to Enhance program has launched an innovative online Water Use Dashboard to help water customers track their water use

Green Plumbers Training and QWEL Unite (gpqwel.org)

- IAPMO Green Plumbers Training and Qualified Water Efficient Landscaper (QWEL) have joined forces to make it easier for water agencies to become certifying organizations for local plumbing and landscaping water use efficiency trainings.

U.S. Global Change Research Program (globalchange.gov)

- The National Climate Assessment summarizes the water supply challenges associated with climate change in the U.S., now and in the future.

Alliance for Water Efficiency (www.a4we.org)

- AWE released a new white paper, Sustainable Utilities: Financial Instruments to Manage Weather-Related Revenue Risk, that examines strategies for water utilities to manage revenue risks associated with unpredictable wet and dry years.

Mayor's Water Challenge for Water Conservation (mywaterpledge.com)

- Colorado cities that placed in 2014 include Greeley 2nd place, Fort Collins 3rd place and Denver 3rd place in their respective categories based on population size.

From April 1-13, residents from 3,600 cities took the water conservation pledge. Over 23,000 people across the U.S. are taking 277,742 specific actions over the next year to change the way they use water in their home and community. According to the Wyland Foundation, these actions will conserve 1.4 billion gallons of water, and reduce landfill waste by 179,000 pounds and greenhouse gas emissions by 5.3 billion pounds.

Public Meeting for Legislators to Hear from Citizens

(<http://www.colorado.gov/lcs/WRRC>)

- Members of the Colorado Legislature's Interim Water Resources Review Committee want to hear from you Wednesday, September 17, 1-4pm.

Water Smart Innovations Conference (watersmartinnovations.com)

- The 2014 Water Smart Innovations Conference will be held Oct. 8-10 in Las Vegas. Sandra Postel, founder of the Global Water Policy Project and Freshwater Fellow of the National Geographic Society, will deliver the keynote address at the opening session.

U.S. EPA WaterSense (www.epa.gov/watersense)

- WaterSense partners have helped save \$14.2 billion in water and energy costs and 757 billion gallons of water since the program's inception in 2006.

- EPA just released the final WaterSense Professional Certification Program Labeling System, revised specifications for professional certification programs and version 1.2 of the WaterSense New Home Specification.