

Colorado WaterWise Board Meeting

Thursday, May 9th, 2019

Brendle Group, 212 W Mulberry St, Fort Collins, CO 80521

10:00 a.m. – 12:00 p.m.

P: Called-in via phone
X: Attended in-person

Board:

X	Amelia Nuding	Western Resource Advocates	amelia.nuding@westernresources.org
X	Amy Volckens	Brendle Group	avolckens@brendlegroup.com
	Alyssa Quinn	Platte Canyon W&S District	alquinn@plattecanyon.org
X	Brad Brady	Yearout Energy Solutions	brad.brady@yearoutenergy.com
X	Courtney Black	Headwaters Corporation	blackc@headwaterscorp.com
X	Diana Denwood	Aurora Water	ddenwood@auroragov.org
X	Eric Olson	City of Fort Collins	eolson@fcgov.com
X	Katie Helm	City of Fountain	khelm@fountaincolorado.org
X	Laura Wing	City of Thornton	laura.wing@cityofthornton.net
P	Lyndsey Lucia	Northern Water Conservancy	llucia@northernwater.org
	Nina Cudahy	Green Mountain Water	ncudahy@greenmountainwater.org
X	Quint Redman	Agriburbia	qredmond@agriburbia.com
X	Ruth Quade	City of Greeley	ruth.quade@greeleygov.com
	Thomas Riggle	City of Centennial	triggle@highlandsranch.org
X	Tyler Kesler	Boulder County	tkesler@bouldercounty.org
X	Melissa Walford	CWW Board Staff	admin@coloradowaterwise.org

Guests:

Natalie Miller – Evoque Communications
Melissa James – Brendle Group
Luke Stahmer – ARC Thrift
Ray Lamovec – IrriGreen LLC
Kim Ryle – Tinker Programs

Call to Order

Diana called the meeting to order at 10:06 AM

Board Business and Action Items

Approval of April Board Minutes. Ruth had two comments; one being Pam's last name is Wright and the location was Greeley Water & Sewer not the Municipal Court. With those changes Ruth motions, Amelia seconds. April minutes are approved.

Guest Presentation: IrriGreen Team Presentation

Kim Ryle with Tinker Programs thanked everyone for allowing them to present today and introduced Ray Lamovec with IrriGreen. IrriGreen is a digital sprinkler head manufacturer. As we all know, residential irrigation water is a big problem because most of the water is going to the lawn and a lot of that water is wasted. Most mechanical sprinklers have a 30-40% efficiency rate. The waste you typically see is from overspray accounting for approximately 15% water loss. Mechanical sprinklers are the problem because of decades-old technology, crude mechanical patterning and overlapping sprays causing wet and dry spots across the lawn. The practice of head to head coverage causes 75% overwatering of the turf. A diagram presented shows what's called a haystack effect – over watering in the middle and outside and underwatered areas

in between. Because these systems have a 50% efficiency rate means customers over water and waste up to 145,000 gallons per year.

How can we do better? By bringing in software and technology to “print” water in any shape. An example is shown of a conventional irrigation system with 40 heads compared to an IrriGreen system with 5 heads that sweeps the zone evenly in the shape of the landscaped area. The patented nozzle “prints” water evenly – as you spray further the head varies the speed to maintain the same precipitation amount throughout the entire zone. This system was validated by the Center for Irrigation Technology (CIT) and was compared with other “best in class” sprinkler heads. The IrriGreen heads provided equivalent soil moisture using 40% fewer gallons of water using one head versus 6-9 traditional heads when compared to other models.

An irrigation specialist in Twin Falls was using his home as a test site over the past 7 years with various technologies and tracked water use for each setup. He put in a Rain Bird smart controller in 2009 and saw a 20% water reduction, then added a soil moisture sensor in 2015 and saw a 20% water reduction. Then in 2016 he replaced his controller with a Rachio wi-fi controller and saw a 10% water reduction. And in 2017 he replaced his controller and mechanical system with the IrriGreen digital system and saw a 40% water reduction. His 2017 savings totaled 81,000 gallons on one house.

The IrriGreen system includes flow sensors, digital sprinkler heads, waterproof cabling, mobile app, and also controls standard irrigation valves. The software does all the work so instead of picking the right irrigation equipment to fit the landscape features the software calculates how much water to spray throughout the mapped zones. IrriGreen collects data on the systems including square foot and amount of water applied. The system does not have run times to set instead it has an input for inches of water to be applied for the zones and the software does the calculation to apply that amount of water to the landscape. IrriGreen is currently partnering with the Alliance for Water Efficiency for a \$400 manufacturers rebate for new IrriGreen installation in various markets across the US including Denver and Boulder.

Diana asked how the on-site trial in Twin Falls accounted for weather. Ray described that the specialist did the trial independently and Ray went back and compared weather between years, and the weather was very similar year over year. The payback for an IrriGreen system is about 1 to 2 years. Diana asked what the typical price tag for the system looks like. Ray said the full system costs about \$4,000 - \$5,000. Eric asked about how the system handles high and low pressure and how the system adapts to changes in landscape growth. The pressure can be between 40-80 psi and is controlled by a ball valve inside each head. So as long as you have a good flow and consistent pressure the system will work well. When the landscape grows or changes you can reprogram the landscape shape at any time in the app to adapt to changes in landscape shape and growth. You can also set the irrigated area to stop at the tree’s dripline to prevent too much water from hitting the tree trunk. Diana asked about how the system handles slope differences. Ray mentioned that the system is already set up to cycle and soak and acts as a low flow head and each time the head goes around it applies 0.05 inches with each pass. Ruth asked if this is available to customers directly or wholesale only. IrriGreen is currently working with certified installers to install the system. Laura asked if they are working with builders. Ray said they are, but it is difficult because of the fast rate the houses go up and that irrigation is usually an afterthought of construction. Diana asked if they have partnerships with any utilities or districts for rebates. Ray said they only have the AWE marketplace rebate but are open to talking with utilities that may be interested in offering rebates. The slides and some videos will be shared with the board.

Lunch ‘n Learn

Amelia read an email from Nina with an update about Lunch ‘n Learns. There may be room for one more lunch ‘n learn event this year. We are still waiting for Thomas on RMSAWWA joint collaboration event and Ruth about Kevin doing a Lunch ‘n Learn. We also had someone reach out to us for a webinar or lunch ‘n learn as a potential speaker. Diana mentioned that RMSAWWA is interested in a joint collaboration event, but no topics have been brought up. Tyler asked what the attendance is at the lunch ‘n learn. Laura said we typically have about 30-40 people.

Annual Symposium

Melissa updated the board on recent progress. We have our first sponsor for the event – City of Fountain. We are continuing to reach out to organizations and if board members have ideas for organizations that may be interested in sponsoring the event, they can either reach out directly and start the conversation or pass that contact on to Melissa to

connect and share details. Sponsorship pricing and benefits have been updated this year and this information is available online already. Online payment is also an option for this year's sponsor sign ups. Melissa will be sending an email out next week announcing event registration has opened. Early bird pricing goes until September and the event is scheduled for Oct 30 at the Denver Museum of Nature and Science.

Melissa also shared the list of confirmed speaker topics; Water Budget Panel with Ruth (City of Greeley), Thomas (City of Centennial), and Nicole (Castle Rock), Aurora BMP Water Restriction Program with Jason Duff, LLYLI presentation with Jessica or Natalie, State Land Use Project with Kevin Reidy, and Pecha Kucha. We are hoping to get confirmation from ALCC on their sustainable landscape management guidelines as well. The Keynote is Mike Nelson discussing climate and weather. Diana asked if the agenda would be ready to go soon to help with promotion. Melissa said possibly and that the only thing holding that up is getting confirmed session titles from the speakers. Amy asked if there are any business-oriented speakers. Melissa said there is not but we only have one Pecha Kucha session so that might be an avenue to include those business discussions.

Melissa also discussed and went over the layout of the event space and vendor space for the board to better understand the layout for this year's event. Diana asked where lunch will be and if the presentation will take place during the lunch break. Melissa is still working on that detail and will need to confirm with the venue of the options available.

Katie discussed the sponsor passport idea that will be provided to attendees. The passport will require attendees to visit about five vendors to have conversations with them. In return for completing the passport, attendees will be entered for the grand prize drawing. This will hopefully encourage people to visit with the vendors and be a benefit to the sponsors as well.

Bike for Water

Natalie provided a recap of the Bike for Water event, which is a community event on August 3 where the community bikes to a local brewery to learn more about water in CO and the beer making process. **If board members have contacts at breweries, please let Melissa or Laura know so we can coordinate outreach.** Eric asked about having multiple tables in the same city and Natalie said it probably wouldn't be a good idea because of limited resources. Natalie said that sample designs for promotion and stickers are in the works. Eric has one brewery in Fort Collins secured for the date. Natalie is working with Colorado Water Trust as they work with Good River Brewing in Denver. Diana is reaching out to Dry Dock in Aurora though it might not be a great location to bike to. Luke from ARC Thrift Stores offered vouchers for attendees as an incentive.

Tools Committee – Webinar Update

Amy mentioned that the goal for webinars is four for the year and we are on track to hit that. Amy mentioned that Melissa is working on tracking attendee numbers a bit more to get a better understanding of registration versus attendees. Courtney asked when you register if it sends a calendar invite. Melissa mentioned that currently it does not and there is an option to integrate better with Zoom to allow for a "add to my calendar" option and is **looking into that before our next webinar announcement.** Melissa also discussed sending a reminder email a week before the event to make sure registrants have the event on their calendar.

We have a June 19 "Know Your Flow" webinar with Aurora. We are also planning for a Ft Collins and Rachio Part 2 webinar in Nov/Dec timeframe. Another idea that will require some additional planning is a landscaper training overview/showcase – "What is best for your service area?". Eric may be able to assist in planning this webinar. Diana brought up the concern of confusion amongst contractors between different areas and would love to see everyone adopt the same certification. Ruth mentioned this sounds larger than a webinar.

Amy discussed the Texas A&M Univ. extension office "Water University" program. They have developed video content and might be a good partnership with LLYLI. He may be a good symposium speaker or LLYLI partnership to gain some additional materials.

Eric wanted to talk about the H2O App status. The annual maintenance costs about \$550 annually and we are running low on resources for ownership. An idea was discussed about having 5 utilities contribute \$100 a year to maintain it. Courtney asked about the promotion of the app. Eric mentioned that Franny thinks that's the problem causing low use. Ruth

discussed that it is branded with LLYLI and may be good to promote through that channel. Diana mentioned that the app is geared toward contractors and that updating the app needs to happen from utilities. Katie mentioned that the utilities should also be the ones to push promotion of the app to contractors. Laura mentioned that there needs to be tech support for when issues arise from utilities. Laura also mentioned that there is a marketing plan that was created but not fully implemented. Diana said that there should be information on the website on how to update the information in the app. Eric talked with CWCB and they like the app but thought it might need more bells and whistles in order to gain traction. Ruth would like to see the app allow zip code search instead of the current scroll feature. Laura said that we need an intern and Amy said she has talked with Margo about assisting with data entry. **Eric will ask for some more time from Franny to get the path forward figured out.** Diana recapped that we need money, potential help from Margo, info from Frank on access, utilities to update info, LLYLI integration. Ruth also mentioned that we need to make sure this is available on Android and Apple devices.

Communication Exercise

Push to next meeting due to delay in schedule.

Round Robin

- Luke discussed their recent economic impact study with DU discussing the over a billion-dollar economic impact in Colorado over that last decade. Keeping a billion garments out of the landfill has saved Colorado \$34 million in future space in landfills. Luke also discussed some negative feedback because of their practice of shipping unwanted materials in the United States to overseas countries. ARC is currently working with Micro Financing to understand the economic impact from outsourcing materials and how that is impacting and benefiting those local economies. They are also working with water conservation in other countries. ARC is also working with Denver Waste Management on textile recycling. ARC is hosting an event for down syndrome event on June 22 at Valor Christian School with Ed McCaffrey. Ruth mentioned that once the water savings information is calculated then we might be able to have Luke be a symposium speaker or webinar speaker.
- Laura asked about if any utilities/municipalities have requirements for new builds to require backyard landscaping. Katie and Diana both mentioned that they do not require it. Eric has a water budget limit on commercial properties but not residential. Diana mentioned that Aurora requires a permit to be pulled for turf installation projects.
- Quint is talking at the New Mexico Next Generation Water Summit event about using more water to eat better/more local foods which will actually reduce water use through micro drip irrigation.
- Tyler asked if anyone knows about studies on compost application and soil water retention. Diana mentioned that there is information available but not conclusive recommendations. Ruth mentioned that A1 may have something and Tyler mentioned they are in conversations with them already.

Wrap up and Adjourn

Diana adjourned the meeting at 12:01 PM.

Submitted by:
Melissa Brasfield